

1. Identification

Product identifier TACK-IT

Other means of identification

SDS number 573N-12A

Product code HIL00458

Recommended use Floor Cleaner

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Manufacturer

Company name HILLYARD INDUSTRIES

Address 302 North Fourth St.
St. Joseph, MO 64501

Contact person Regulatory Affairs

Telephone number (816) 233-1321 (Ext. 8285)

Fax (816) 383-8485

E-mail regulatoryaffairs@hillyard.com

Emergency telephone # (800) 424-9300
(Only in the event of chemical emergency involving a spill, leak, fire, exposure, or accident involving chemicals.)

2. Hazard(s) identification

Physical hazards Flammable liquids Category 4

Health hazards Acute toxicity, oral Category 5
Acute toxicity, inhalation Category 5

Environmental hazards Not classified.

OSHA defined hazards Not classified.

Label elements

Hazard symbol None.

Signal word Warning

Hazard statement Combustible liquid. May be harmful if swallowed. May be harmful if inhaled.

Precautionary statement

Prevention Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Avoid contact with eyes

Response If in eyes, flush with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell. IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

Storage Store in a well-ventilated place. Keep cool.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC) None known.

Supplemental information None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Ethylene glycol monobutyl ether		111-76-2	1 - < 3
Isopropyl Alcohol		67-63-0	1 - < 3
Other components below reportable levels			90 - 100

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation	If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
Skin contact	Wash off with soap and water. Get medical attention if irritation develops and persists.
Eye contact	Rinse with water. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Get medical advice/attention if you feel unwell.
Most important symptoms/effects, acute and delayed	Direct contact with eyes may cause temporary irritation.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

5. Fire-fighting measures

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO ₂).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	The product is combustible, and heating may generate vapors which may form explosive vapor/air mixtures. During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	Combustible liquid.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Avoid inhalation of vapors and spray mists. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	<p>Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. This product is miscible in water.</p> <p>Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.</p> <p>Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.</p> <p>Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.</p>
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling	Keep away from open flames, hot surfaces and sources of ignition. Do not get in eyes, on skin, or on clothing. Avoid inhalation of vapors and spray mists. Avoid prolonged exposure. Do not taste or swallow. When using, do not eat, drink or smoke. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities	Keep away from heat, sparks and open flame. Store in a cool, dry place out of direct sunlight. Store in original tightly closed container. Store in a well-ventilated place. Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Ethylene glycol monobutyl ether (CAS 111-76-2)	PEL	240 mg/m3
Isopropyl Alcohol (CAS 67-63-0)	PEL	50 ppm 980 mg/m3 400 ppm

US. ACGIH Threshold Limit Values

Components	Type	Value
Ethylene glycol monobutyl ether (CAS 111-76-2)	TWA	20 ppm
Isopropyl Alcohol (CAS 67-63-0)	STEL	400 ppm
	TWA	200 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Ethylene glycol monobutyl ether (CAS 111-76-2)	TWA	24 mg/m3
Isopropyl Alcohol (CAS 67-63-0)	STEL	5 ppm 1225 mg/m3 500 ppm
	TWA	980 mg/m3 400 ppm

Biological limit values

ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
Ethylene glycol monobutyl ether (CAS 111-76-2)	200 mg/g	Butoxyacetic acid (BAA), with hydrolysis	Creatinine in urine	*
Isopropyl Alcohol (CAS 67-63-0)	40 mg/l	Acetone	Urine	*

* - For sampling details, please see the source document.

Exposure guidelines

US - California OELs: Skin designation

Ethylene glycol monobutyl ether (CAS 111-76-2) Can be absorbed through the skin.

US - Minnesota Haz Subs: Skin designation applies

Ethylene glycol monobutyl ether (CAS 111-76-2) Skin designation applies.

US - Tennessee OELs: Skin designation

Ethylene glycol monobutyl ether (CAS 111-76-2) Can be absorbed through the skin.

US NIOSH Pocket Guide to Chemical Hazards: Skin designation

Ethylene glycol monobutyl ether (CAS 111-76-2) Can be absorbed through the skin.

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Ethylene glycol monobutyl ether (CAS 111-76-2) Can be absorbed through the skin.

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

Eye/face protection Where splashing of concentrate is a concern, use protective glasses with side shield.

Skin protection

Hand protection Not normally needed.

Other Not normally needed.

Respiratory protection	If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.
Thermal hazards	None known.
General hygiene considerations	When using do not smoke. Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance	Clear, transparent liquid
Physical state	Liquid.
Form	Liquid.
Color	Colorless
Odor	Butyl cellosolve odor
Odor threshold	Not available
pH	7 - 8
Melting point/freezing point	Not applicable / Not available
Initial boiling point and boiling range	208 °F (97.78 °C)
Flash point	> 141.0 °F (> 60.6 °C) Tag Closed Cup
Evaporation rate	< 1 (ethyl ether = 1)
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	17.61 mm Hg
Vapor density	0.712 AIR=1
Relative density	0.99 at 77°F
Solubility(ies)	
Solubility (water)	Complete
Partition coefficient (n-octanol/water)	Not available
Auto-ignition temperature	Not available
Decomposition temperature	Not available
Viscosity	Not available
Other information	
Density	8.28 Not available
Percent volatile	> 99 %
VOC (Weight %)	4 %

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation	May be harmful if inhaled.
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Skin contact 2-Butoxy ethanol may be absorbed through the skin in toxic amounts if contact is repeated and prolonged. These effects have not been observed in humans.

Eye contact Direct contact with eyes may cause temporary irritation.

Ingestion May be harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics Direct contact with eyes may cause temporary irritation.

Information on toxicological effects

Acute toxicity May be harmful if swallowed. May be harmful if inhaled.

Product	Species	Test Results
TACK-IT		
Acute		
<i>Dermal</i>		
LD50	Rabbit	23880.5977 mg/kg estimated
<i>Inhalation</i>		
LC50	Mouse	43750 ppm, 7 Hours estimated
	Rat	28125 ppm, 4 Hours estimated
<i>Oral</i>		
LD50	Guinea pig	75 g/kg estimated
	Mouse	75 g/kg estimated
	Rabbit	18.2577 g/kg estimated
	Rat	35000 mg/kg estimated
Components	Species	Test Results
Ethylene glycol monobutyl ether (CAS 111-76-2)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	400 mg/kg
<i>Inhalation</i>		
LC50	Mouse	700 ppm, 7 Hours
	Rat	450 ppm, 4 Hours
<i>Oral</i>		
LD50	Guinea pig	1.2 g/kg
	Mouse	1.2 g/kg
	Rabbit	0.32 g/kg
	Rat	560 mg/kg
<i>Other</i>		
LD50	Mouse	1130 mg/kg
	Rabbit	280 mg/kg
	Rat	340 mg/kg
Isopropyl Alcohol (CAS 67-63-0)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	12800 mg/kg
<i>Oral</i>		
LD50	Mouse	3600 mg/kg
	Rabbit	5.03 g/kg
	Rat	4.7 g/kg
<i>Other</i>		
LD50	Mouse	1509 mg/kg

Components	Species	Test Results
	Rat	1099 mg/kg
* Estimates for product may be based on additional component data not shown.		
Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.	
Serious eye damage/eye irritation	Direct contact with eyes may cause temporary irritation.	
Respiratory or skin sensitization		
Respiratory sensitization	Not a respiratory sensitizer.	
Skin sensitization	This product is not expected to cause skin sensitization.	
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.	
Carcinogenicity	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.	
IARC Monographs. Overall Evaluation of Carcinogenicity		
Ethylene glycol monobutyl ether (CAS 111-76-2)	3 Not classifiable as to carcinogenicity to humans.	
US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)		
Not listed.		
Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.	
Specific target organ toxicity - single exposure	Not classified.	
Specific target organ toxicity - repeated exposure	Not classified.	
Aspiration hazard	Prolonged inhalation may be harmful.	
Chronic effects	May be harmful if absorbed through skin. Prolonged inhalation may be harmful.	
	2-Butoxy ethanol may be absorbed through the skin in toxic amounts if contact is repeated and prolonged. These effects have not been observed in humans.	

12. Ecological information

Ecotoxicity	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
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Product	Species		Test Results
TACK-IT			
Aquatic			
Fish	LC50	Fish	64283.6563 mg/l, 96 hours estimated
Components	Species		Test Results
Ethylene glycol monobutyl ether (CAS 111-76-2)			
Aquatic			
Fish	LC50	Inland silverside (Menidia beryllina)	1250 mg/l, 96 hours
Isopropyl Alcohol (CAS 67-63-0)			
Aquatic			
Fish	LC50	Bluegill (Lepomis macrochirus)	> 1400 mg/l, 96 hours

* Estimates for product may be based on additional component data not shown.

Persistence and degradability	No data is available on the degradability of this product.
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Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

Ethylene glycol monobutyl ether	0.83
Isopropyl Alcohol	0.05

Mobility in soil	No data available.
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Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.
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13. Disposal considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT

Not regulated as dangerous goods.

15. Regulatory information

US federal regulations	This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. All components are on the U.S. EPA TSCA Inventory List.
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TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories	Immediate Hazard - No Delayed Hazard - No Fire Hazard - Yes Pressure Hazard - No Reactivity Hazard - No
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SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting)
Not regulated.

Other federal regulations

Safe Drinking Water Act (SDWA)	Not regulated.
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US state regulations

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)
Not listed.

US. Massachusetts RTK - Substance List

Ethylene glycol monobutyl ether (CAS 111-76-2)
Isopropyl Alcohol (CAS 67-63-0)

US. New Jersey Worker and Community Right-to-Know Act

Ethylene glycol monobutyl ether (CAS 111-76-2)
Isopropyl Alcohol (CAS 67-63-0)

US. Pennsylvania Worker and Community Right-to-Know Law

Ethylene glycol monobutyl ether (CAS 111-76-2)
Isopropyl Alcohol (CAS 67-63-0)

US. Rhode Island RTK

Isopropyl Alcohol (CAS 67-63-0)

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 11-24-2014

Version # 01

HMIS® ratings Health: 1
Flammability: 2
Physical hazard: 0

Disclaimer No representations or warranties, either express or implied, of merchantability, fitness for a particular purpose, or of any nature are made with respect to the product(s) or information contained in this material safety data sheet. The information and recommendations contained in this Material Safety Data Sheet are supplied pursuant to 29 CFR 1910.1200 of the Occupational Safety and Health Standards Hazard Communication Rule. All information contained herein is presented in good faith and is believed to be appropriate and accurate. The buyer or user assumes all risks associated with the use, misuse or disposal of this product. The buyer or user is responsible to comply with all federal, state or local regulations concerning the use, misuse or disposal of these products.

1. Identification

Product identifier TAKE DOWN (FRESH AND CLEAN)

Other means of identification

SDS number 545N-40B

Product code HIL00468

Recommended use General Cleaner

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Manufacturer

Company name HILLYARD INDUSTRIES

Address 302 North Fourth St.
St. Joseph, MO 64501

Contact person Regulatory Affairs

Telephone number (816) 233-1321 (Ext. 8285)

Fax (816) 383-8485

E-mail regulatoryaffairs@hillyard.com

Emergency telephone # (800) 424-9300
(Only in the event of chemical emergency involving a spill, leak, fire, exposure, or accident involving chemicals.)

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Not classified.

Environmental hazards Not classified.

OSHA defined hazards Not classified.

Label elements

Hazard symbol None.

Signal word None.

Hazard statement Avoid prolonged contact with skin. Avoid contact with open wounds or broken skin.

Precautionary statement

Prevention Observe good industrial hygiene practices.

Response Wash hands after handling.

Storage Store away from incompatible materials.

Disposal Dispose of waste and residues in accordance with local authority requirements.

Hazard(s) not otherwise classified (HNOC) None known.

Supplemental information Not applicable.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Alcohols, C9-11, ethoxylated		68439-46-3	5 - < 10
Other components below reportable levels			90 - 100

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact	Wash off with soap and water. Get medical attention if irritation develops and persists.
Eye contact	Rinse with water. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. Get medical attention if symptoms occur.
Most important symptoms/effects, acute and delayed	Direct contact with eyes may cause temporary irritation.
Indication of immediate medical attention and special treatment needed	Treat symptomatically.
General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.
5. Fire-fighting measures	
Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO ₂).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	No unusual fire or explosion hazards noted.
6. Accidental release measures	
Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	<p>This product is miscible in water.</p> <p>Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water.</p> <p>Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.</p> <p>Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.</p>
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.
7. Handling and storage	
Precautions for safe handling	Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities	Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).
8. Exposure controls/personal protection	
Occupational exposure limits	No exposure limits noted for ingredient(s).
Biological limit values	No biological exposure limits noted for the ingredient(s).
Appropriate engineering controls	Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.
Individual protection measures, such as personal protective equipment	
Eye/face protection	Wear safety glasses with side shields (or goggles).
Skin protection	
Hand protection	For prolonged or repeated skin contact use suitable protective gloves.
Other	Not normally needed.

Respiratory protection	No personal respiratory protective equipment normally required.
Thermal hazards	None known.
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance	Pale-yellow, translucent liquid
Physical state	Liquid.
Form	Liquid.
Color	Clear colorless or nearly colorless
Odor	Fresh and clean
Odor threshold	Not available
pH	8 - 9
Melting point/freezing point	Not applicable / Not available
Initial boiling point and boiling range	209 °F (98.33 °C)
Flash point	> 209.0 °F (> 98.3 °C) Tag Closed Cup
Evaporation rate	< 1 (ethyl ether = 1)
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	17.7 mm Hg
Vapor density	0.6 AIR=1
Relative density	1.004 at 77°F
Solubility(ies)	
Solubility (water)	100 complete
Partition coefficient (n-octanol/water)	Not available
Auto-ignition temperature	Not available
Decomposition temperature	Not available
Viscosity	Not available
Other information	
Density	8.35 lb/gal
Percent volatile	91 - 92 %
VOC (Weight %)	0 %

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation	No adverse effects due to inhalation are expected.
Skin contact	No adverse effects due to skin contact are expected.
Eye contact	Direct contact with eyes may cause temporary irritation.

Ingestion	Expected to be a low ingestion hazard.
Symptoms related to the physical, chemical and toxicological characteristics	Direct contact with eyes may cause temporary irritation.
Information on toxicological effects	
Acute toxicity	Not available.
Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.
Serious eye damage/eye irritation	Direct contact with eyes may cause temporary irritation.
Respiratory or skin sensitization	
Respiratory sensitization	Not available.
Skin sensitization	This product is not expected to cause skin sensitization.
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.
US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)	
	Not listed.
Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.
Specific target organ toxicity - single exposure	Not classified.
Specific target organ toxicity - repeated exposure	Not classified.
Aspiration hazard	Not available.

12. Ecological information

Ecotoxicity	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
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Components		Species	Test Results
Alcohols, C9-11, ethoxylated (CAS 68439-46-3)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	2.9 - 8.5 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas)	6 - 12 mg/l, 96 hours

* Estimates for product may be based on additional component data not shown.

Persistence and degradability	No data is available on the degradability of this product.
Bioaccumulative potential	No data available.
Mobility in soil	No data available.
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not contaminate ponds, waterways or ditches with chemical or used container. Buyer assumes all risk and liability associated with disposal of this product (original concentration or dilution) in violation of applicable law.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company. None known.
Waste from residues / unused products	Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions). Waste from normal product use may be sewer to a public owned treatment works (POTW) in compliance with applicable Federal, State, and local pretreatment requirements.
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Triple rinse (or equivalent). Then offer clean, dry container for recycling or reconditioning.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

15. Regulatory information

US federal regulations This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - No
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting)
Not regulated.

Other federal regulations

Safe Drinking Water Act (SDWA) Not regulated.

US state regulations

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)
Not listed.

US. Massachusetts RTK - Substance List
Not regulated.

US. New Jersey Worker and Community Right-to-Know Act
Not listed.

US. Pennsylvania Worker and Community Right-to-Know Law
Not listed.

US. Rhode Island RTK
Not regulated.

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 04-02-2015

Version # 01

HMIS® ratings Health: 1
Flammability: 0
Physical hazard: 0

Disclaimer No representations or warranties, either express or implied, of merchantability, fitness for a particular purpose, or of any nature are made with respect to the product(s) or information contained in this material safety data sheet. The information and recommendations contained in this Material Safety Data Sheet are supplied pursuant to 29 CFR 1910.1200 of the Occupational Safety and Health Standards Hazard Communication Rule. All information contained herein is presented in good faith and is believed to be appropriate and accurate. The buyer or user assumes all risks associated with the use, misuse or disposal of this product. The buyer or user is responsible to comply with all federal, state or local regulations concerning the use, misuse or disposal of these products.

MATERIAL SAFETY DATA SHEET

T B E BUFFER
CAROLINA BIOLOGICAL

Revised: 05/15/08
Replaces: 11/09/07
Printed: 05/20/08

1. PRODUCT DESCRIPTION

Product Name: T B E Buffer
Product Code(s): 21-9025, 21-9027
Size: 150 mL, 500ml
Chemical Name: Tris Borate EDTA
CAS Number: Product is a mixture, See section 2
Formula: See section 2
Synonyms: Electrophoresis Buffer
Distributor: Carolina Biological Supply Company
2700 York Road
Burlington, NC 27215

Chemical Information: 800-227-1150 (8am-5pm (ET) M-F)
Chemtrec (Transportation Spill Response 24 hours): 800-424-9300

2. COMPOSITION/INFORMATION ON INGREDIENTS

Principal Hazardous Components:

Boric acid (CAS# 10043-35-3) 5.5%
Tris (hydroxymethyl) aminomethane (CAS# 77-86-1) 10.8%
Sodium hydroxide (CAS# 1310-73-2) .10%
Ethylenediaminetetraacetic acid (EDTA)disodium salt, 0.5M
(CAS# 139-33-3) .7%

TLV and PEL units:

Boric Acid: ACGIH-TLV: 2 mg/m3 (TWA) (inhalable fraction -
listed under Borate Compounds, inorganic),
6 mg/m3 (STEL) (inhalable fraction -
listed under Borate Compounds, inorganic)
Sodium hydroxide: ACGIH-TLV: 2 mg/m3 (Ceiling)
OSHA-PEL: 2 mg/m3 (TWA)

3. HAZARD IDENTIFICATION

Emergency Overview: This product is not considered hazardous under normal conditions of use.

Potential Health Effects:

Eyes: May cause irritation.

Skin: May cause irritation.

Ingestion: May cause gastrointestinal discomfort.

Inhalation: May cause irritation to respiratory tract.

4. FIRST AID MEASURES

Emergency and First Aid Procedures:

Eyes - Flush thoroughly with water. Seek medical attention if irritation persists.

Skin - Wash exposed area with soap and water. Seek medical attention if irritation persists.

Ingestion - In quantities normally handled, symptoms would not be expected. If swallowed, if conscious, give water. Seek medical attention if gastrointestinal irritation or other unexpected symptoms develop.

Inhalation - Not expected to present a problem. However, if the exposed person is having trouble breathing, remove to fresh air. Give oxygen if breathing is difficult; give artificial respiration if breathing has stopped. Keep person warm and quiet, and get medical attention.

5. FIREFIGHTING PROCEDURES

Flash Point(Method Used): No information available

MATERIAL SAFETY DATA SHEET

T B E BUFFER
CAROLINA BIOLOGICAL

Revised: 05/15/08
Replaces: 11/09/07
Printed: 05/20/08

NFPA Rating: None assigned

Extinguisher Media:

Use dry chemical, CO2 or appropriate foam.

Flammable Limits in Air % by Volume: No information available

Autoignition Temperature: No information available

Special Firefighting Procedures:

Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.

Unusual Fire and Explosion Hazards: None expected

6. SPILL OR LEAK PROCEDURES

Steps to be Taken in Case Material is Released or Spilled:

Ventilate area of spill. Eliminate all sources of ignition.

Remove all non-essential personnel from area. Clean-up personnel should wear proper protective equipment and clothing. Absorb material with suitable absorbent and containerize for disposal.

7. SPECIAL PRECAUTIONS

Precautions to be Taken in Handling or Storing: Store tightly closed at room temperature.

8. SPECIAL PROTECTION INFORMATION

Respiratory Protection(Specify Type):

A NIOSH/MSHA chemical cartridge respirator should be worn if PEL or TLV is exceeded.

Ventilation:

Local Exhaust: Yes

Mechanical(General): Yes

Special: No

Other: No

Protective Gloves:

Rubber, neoprene, PVC, or equivalent.

Eye Protection:

Splash proof chemical safety goggles should be worn at all times.

Other Protective Clothing or Equipment:

Lab apron, eye wash, and safety shower.

9. PHYSICAL DATA

Molecular Weight: No information available

Melting Point: No information available

Boiling Point: No information available

Vapor Pressure: No information available

Vapor Density(Air=1): No information available

Specific Gravity(H2O=1): No information available

Percent Volatile by Volume: No information available

Evaporation Rate(H2O=1): No information available

Solubility in Water: Complete

Appearance and Odor: Colorless liquid, odorless

10. REACTIVITY DATA

Stability: Stable

Conditions to Avoid: No information available

Incompatibility(Materials to Avoid): Water reactive materials

Hazardous Decomposition Products: No information available

Hazardous Polymerization: Will not occur

MATERIAL SAFETY DATA SHEET

T B E BUFFER
CAROLINA BIOLOGICAL

Revised: 05/15/08
Replaces: 11/09/07
Printed: 05/20/08

11. TOXICITY DATA

Toxicity Data: Boric Acid - Oral Rat LD50: 2660 mg/kg
Tris - Oral Rat LD50: 5900 mg/kg
Sodium Hydroxide - Dermal Rabbit LD50: 1350 mg/kg
EDTA - Oral Rat LD50: 1658 mg/kg

Effects of Overexposure:

Acute: See section 3

Chronic: Boric acid and Ethylenediaminetetraacetic acid (EDTA) disodium salt 0.5M: Mutation and reproductive data cited, not listed as causing cancer by IARC, NTP, or OSHA. Sodium hydroxide, Mutation data cited. Not listed as causing cancer by IARC, NTP, or OSHA.

Conditions Aggravated by Overexposure: No information available

Target Organs: No information available

Primary Route(s) of Entry: Ingestion, skin

12. ECOLOGICAL DATA

EPA Waste Numbers: None

13. DISPOSAL INFORMATION

Waste Disposal Methods: Dispose in accordance with all applicable Federal, State and Local regulations.

Always contact a permitted waste disposer (TSD) to assure compliance.

14. TRANSPORT INFORMATION

Not regulated

15. REGULATORY INFORMATION

EPA TSCA Status: On TSCA Inventory

Hazard Category for SARA Section 311/312 Reporting: Acute

Product or Components	SARA EHS Sec. 302 TPQ	SARA Sec. 313 Chemicals		CERCLA Sec. 103 RQ lbs.	RCRA Sec. 261.33
		Name	Chemical		
		List	Category		
Boric acid	No	No	No	No	No
Tris (hydroxymethyl) aminomethane	No	No	No	No	No
Sodium hydroxide	No	No	No	1000	No
Ethylenediaminetetraacetic acid (EDTA),disodium salt	No	No	No	No	No

16. ADDITIONAL INFORMATION

The information provided in this Material Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the Material Safety Data Sheet. Any employer must carefully assess the applicability of any information contained herein in regards to the particular use to which the employer puts the material.

Glossary

ACGIH.....American Conference of Governmental Industrial Hygienists

CAS Number..Chemical Abstracts Service Number

MATERIAL SAFETY DATA SHEET

T B E BUFFER
CAROLINA BIOLOGICAL

Revised: 05/15/08
Replaces: 11/09/07
Printed: 05/20/08

CERCLA.....Comprehensive Environmental Response, Compensation, and
Liability Act
DOT.....U.S. Department of Transportation
IARC.....International Agency of Research on Cancer
mppcf.....million particles per cubic foot
N/A.....Not Available
NTP.....National Toxicology Program
OSHA.....Occupational Safety and Health Administration
PEL.....Permissible Exposure Limit
ppm.....parts per million
RCRA.....Resource Conservation and Recovery Act
SARA.....Superfund Amendments and Reauthorization Act
TLV.....Threshold Limit Value
TSCA.....Toxic Substances Control Act

Print Date: 03-12-2015

TEC SS ADHESIVE REMOVER
835015PM**SAFETY DATA SHEET**

REVISION DATE: 02-12-2015

SUPERSEDES: 11-28-2012

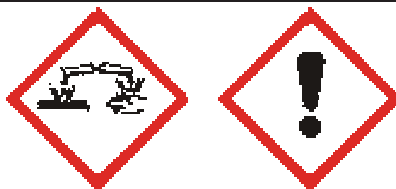
SECTION 1: IDENTIFICATION OF THE PRODUCT AND SUPPLIER**PRODUCT INFORMATION**

PRODUCT: TEC SS ADHESIVE REMOVER
PRODUCT DESCRIPTION: Cleaner
INTENDED USE: Cleaner
PRODUCT IDENTIFIER: 835015PM

COMPANY INFORMATION

H.B. Fuller Construction Products Inc.
1105 S. Frontenac Street
Aurora, IL 60504
Phone: 1-800-552-6225

Medical Emergency Phone Number (24 Hours): 1-888-853-1758
Transport Emergency Phone Number (CHEMTREC): 1-800-424-9300

SECTION 2: HAZARDS IDENTIFICATION**GHS Hazard Symbols:**

GHS Signal Word: Danger
GHS Classification: Skin Corrosion/Irritation Category 1B; Serious Eye Damage/Eye Irritation Category 1; Acute Toxicity - Dermal Category 4
GHS Hazard Phrases: Harmful in contact with skin.; Causes severe skin burns and eye damage.; Causes serious eye damage.
GHS Precautions:
Safety Precautions: Do not breathe dust/fume/gas/mist/vapours/spray. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.
First Aid Measures: IF SWALLOWED: rinse mouth. Do NOT induce vomiting. IF ON SKIN: Wash with plenty of soap and water. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician. Call a POISON CENTER or doctor/physician if you feel unwell. Specific measures (see ... on this label). Wash contaminated clothing before reuse.
Storage: Store locked up.
Disposal: Dispose of contents/container in accordance with local/regional/national/international regulation for hazardous wastes.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS #	PERCENT	Classification	Note
Butoxyethanol, 2-	111-76-2	10 - 30	Acute Tox. 3; H311 Acute Tox. 4; H302 Eye Irrit. 2; H319	

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Ethanol amine	141-43-5	10 - 30	Skin Irrit. 2; H315 Acute Tox. 3; H311 Acute Tox. 4; H302 Acute Tox. 4; H332 Skin Corr. 1B; H314	
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Unlisted ingredients are not 'hazardous' per the Occupational Safety and Health Administration Hazard Communication Standard (29 CFR 1910.1200) and/or are not found on the Canadian Workplace Hazardous Materials Information System ingredient disclosure list. See Section 8 for exposure limit guidelines.

SECTION 4: FIRST AID MEASURES

IF IN EYES: Immediately flush eyes with plenty of water for at least 20 minutes retracting eyelids often. Tilt the head to prevent chemical from transferring to the uncontaminated eye. Get immediate medical attention and monitor the eye daily as advised by your physician.

IF ON SKIN: Wash with soap and water. Remove contaminated clothing and launder. Get medical attention if irritation develops or persists.

IF INHALED: Remove to fresh air. Restore breathing, if necessary. Call a physician if symptoms persist.

IF SWALLOWED: Severely irritating. Do not induce vomiting. Seek medical attention immediately. Drink 2 glasses of water or milk to dilute. Do not give anything by mouth to an unconscious person. Induced vomiting may lead to aspiration of the material into the lungs potentially causing chemical pneumonitis that may be fatal.

SECTION 5: FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Use water spray, foam, dry chemical or carbon dioxide.

UNUSUAL FIRE AND EXPLOSION HAZARDS: There is a possibility of pressure buildup in closed containers when heated. Water spray may be used to cool the containers.

SPECIAL FIRE FIGHTING INSTRUCTIONS: Persons exposed to products of combustion should wear self-contained breathing apparatus and full protective equipment.

HAZARDOUS COMBUSTION PRODUCTS: Carbon dioxide, Carbon monoxide Nitrogen containing gases

SECTION 6: ACCIDENTAL RELEASE MEASURES

SPECIAL PROTECTION: Exposure to the spilled material may be irritating or harmful. Follow personal protective equipment recommendations found in Section 8 of this MSDS. Additional precautions may be necessary based on special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred.

METHODS FOR CLEAN-UP: Dike if necessary, contain spill with inert absorbent and transfer to containers for disposal. Keep spilled product out of sewers, watersheds, or water systems.

Transport Emergency Phone Number (CHEMTREC): 1-800-424-9300

SECTION 7: HANDLING AND STORAGE

Handling: Avoid contacting and avoid breathing the material. Use only in a well ventilated area.

Storage: Store in a cool, dry place. Protect from freezing
Consult the Technical Data Sheet for specific storage instructions.

Print Date: 03-12-2015

 TEC SS ADHESIVE REMOVER
 835015PM

SAFETY DATA SHEET

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE LIMITS:

Chemical Name	Note	ACGIH EXPOSURE LIMITS	OSHA PEL
Butoxyethanol, 2-		20 ppm TWA	50 ppm TWA; 240 mg/m ³ TWA Skin absorption may potentially contribute to the overall exposure to this material.
Ethanol amine		3 ppm TWA 6 ppm STEL	3 ppm TWA; 6 mg/m ³ TWA

ENGINEERING CONTROL METHODS:

VENTILATION:	Use local exhaust ventilation or other engineering controls to minimize exposures.
EYE PROTECTION:	Wear safety glasses with side shields when handling this product. Wear additional eye protection such as chemical splash goggles and/or face shield when the possibility exists for eye contact with splashing or spraying liquid, or airborne material. Have an eye wash station available.
SKIN PROTECTION:	Avoid skin contact by wearing chemically resistant gloves and long sleeved shirt. An apron may be appropriate if splashing can occur. Skin absorption may potentially contribute to the overall exposure to this material. Appropriate measures should be taken to prevent absorption so that the TLV is not invalidated.
GLOVES:	Nitrile
RESPIRATORY PROTECTION:	Respiratory protection may be required to avoid overexposure when handling this product. Use a respirator if general room ventilation is not available or sufficient to eliminate symptoms. NIOSH approved air purifying respirator with organic vapor cartridge. Respirators should be selected by and used following requirements found in OSHA's respirator standard (29 CFR 1910.134).

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE:	Liquid
COLOR:	Colorless
ODOR:	Solvent Mild
ODOR THRESHOLD:	Not established
pH:	12.5
FREEZING/MELTING POINT (deg. C):	Not established
BOILING POINT (deg. C):	Not established
FLASH POINT:	Non flammable
EVAPORATION RATE:	Not established
FLAMMABILITY:	Not a flammable solid or gas
UPPER EXPLOSIVE LIMIT (% in air):	Not established
LOWER EXPLOSIVE LIMIT (% in air):	Not established
VAPOR PRESSURE (mm Hg):	Not established
VAPOR DENSITY:	Not established
WEIGHT PER GALLON (lbs.):	8.26
SPECIFIC GRAVITY:	0.990
SOLUBILITY:	Not established
OCTANOL/WATER COEFFICIENT:	Not established
AUTOIGNITION TEMPERATURE:	Not established

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DECOMPOSITION TEMPERATURE:	Not established
VISCOSITY:	No data available.
SOLIDS (% by weight):	0.2
VOC, weight percent	Not determined
VOC, U.S. EPA Method 24, less water and exempt solvents (theoretically determined)	217g/liter of material

SECTION 10: STABILITY AND REACTIVITY

STABILITY:	Stable under normal conditions.
CHEMICAL INCOMPATIBILITY:	Not established
HAZARDOUS POLYMERIZATION:	Will not occur.
HAZARDOUS DECOMPOSITION PRODUCTS:	Carbon monoxide, carbon dioxide Nitrogen containing gases

SECTION 11: TOXICOLOGICAL INFORMATION**Component Toxicity / Toxicology Data:**

COMPONENT NAME	LD50/LC50
Butoxyethanol, 2-	ORAL LD50 RAT 470 MG/KG INHALATION LC50-4H RAT 450.00 PPM DERMAL LD50 RABBIT 220.00 MG/KG
Ethanol amine	ORAL LD50 RAT 1,720 MG/KG DERMAL LD50 RABBIT 1.00 ML/KG

This product is a mixture. Unless noted, the information below is based on components.

Skin corrosion / irritation: Can cause moderate skin irritation, defatting, and dermatitis. Not likely to cause permanent damage.

Serious eye damage / irritation :Can cause severe irritation. Eye contact may result in corneal injury. Symptoms may include discomfort or pain, excessive blinking and tear production, with marked redness and swelling of the conjunctiva. Temporary vision impairment (cloudy or blurred vision) is possible.

Respiratory / skin sensitization: No data available.

Germ cell mutagenicity: No data available.

Carcinogenicity: Possible cancer hazard based on tests with laboratory animals.

Reproductive toxicity: Contains a substance that is a possible reproductive hazard based on animal studies.

Specific target organ toxicity-single exposure: No data available.

Respiratory irritation / Narcotic effects: No data available.

Specific target organ toxicity-repeated exposure: No data available.

Target organs potentially affected by exposure: Blood Hemato System

Aspiration hazard: No data available.

Medical Conditions Aggravated by Exposure: Blood disorders (like anemia)

SECTION 12: ECOLOGICAL INFORMATION

OVERVIEW:	No ecological information available for this product.
MOBILITY:	No data available.
PERSISTENCE:	No data available.
BIOACCUMULATION:	No data available.

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This product has not been tested for ecological effects. Relevant information for components is listed below:

Component:	Ecotoxicity values:
Butoxyethanol, 2-	Acute Toxicity (Fish): 96 Hr LC50 <i>Lepomis macrochirus</i> : 1490 mg/L [static]; 96 Hr LC50 <i>Lepomis macrochirus</i> : 2950 mg/L Acute Toxicity (Daphnia): 24 Hr EC50 <i>Daphnia magna</i> : 1698 - 1940 mg/L; 48 Hr EC50 <i>Daphnia magna</i> : >1000 mg/L Acute Toxicity (Algae): Not established
Ethanol amine	Acute Toxicity (Fish): 96 Hr LC50 <i>Pimephales promelas</i> : 227 mg/L [flow-through]; 96 Hr LC50 <i>Brachydanio rerio</i> : 3684 mg/L [static]; 96 Hr LC50 <i>Lepomis macrochirus</i> : 300 - 1000 mg/L [static]; 96 Hr LC50 <i>Oncorhynchus mykiss</i> : 114 - 196 mg/L [static]; 96 Hr LC50 <i>Oncorhynchus mykiss</i> : >200 mg/L [flow-through] Acute Toxicity (Daphnia): 48 Hr EC50 <i>Daphnia magna</i> : 65 mg/L Acute Toxicity (Algae): 72 Hr EC50 <i>Desmodesmus subspicatus</i> : 15 mg/L

SECTION 13: DISPOSAL CONSIDERATIONS

To the best of our knowledge, this product does not meet the definition of hazardous waste under the U.S. EPA Hazardous Waste Regulations 40 CFR 261. Disposal via incineration at an approved facility is recommended as industry best practice. Consult state, local or provincial authorities for more restrictive requirements.

SECTION 14: TRANSPORT INFORMATION

Consult Bill of Lading for transportation information.

US DOT: UN1760, CORROSIVE LIQUIDS, N.O.S. (ETHANOLAMINE), 8, III
 [HOWEVER, MAY BE SHIPPED AS LIMITED QUANTITY IF IN CONTAINERS 5 LITERS OR LESS]

IATA: UN1760, CORROSIVE LIQUIDS, N.O.S. (ETHANOLAMINE), 8, III
 [HOWEVER, MAY BE SHIPPED AS LIMITED QUANTITY IF IN CONTAINERS 5 LITERS OR LESS]

SECTION 15: REGULATORY INFORMATION

INVENTORY STATUS

U.S. EPA TSCA: This product is in compliance with the Toxic Substances Control Act's Inventory requirements.

CANADIAN CEPA DSL: The components of this product are included on the DSL or are exempt from DSL requirements.

EUROPEAN REACH: As a result of the introduction of REACH into Europe, this product cannot be imported into Europe unless the REACH requirements are met.

AUSTRALIA AICS: This product is in compliance with the Australian Inventory of Chemical Substances requirements.

JAPAN ENCS: This product is in compliance with the Japanese Existing and New Chemical Substances requirements.

KOREAN TCCL: This product is in compliance with the Korean Existing Chemicals List requirements.

PHILIPPINES: This product is in compliance with the Philippine Inventory of Chemicals and Chemical Substances requirements.

CHINA IECSC INVENTORY: This product is in compliance with the Inventory of Existing Chemical Substances in China (IECSC) requirements.

If you need more information about the inventory status of this product call 651-236-5858.

This product may contain chemical substances that are regulated for export by various government agencies (such as the Environmental Protection Agency, the Bureau of Industry and Security, or the Drug Enforcement Administration, among others). Before exporting this product from the USA or Canada, we recommend you contact us at reg.request@hbfuller.com to request an export review.

Print Date: 03-12-2015

TEC SS ADHESIVE REMOVER
835015PM**SAFETY DATA SHEET****FEDERAL REPORTING****EPA SARA Title III Section 313**

Unless listed below, this product does not contain toxic chemical(s) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) and 40 CFR part 372. EPA has advised that when a percentage range is listed the midpoint may be used to fulfill reporting obligations.

Chemical Name	CAS#	%
Glycol ethers	111-76-2	10 - 30

WHMIS STATUS: Unless listed below, this product is not controlled under the Canadian Workplace Hazardous Materials Information System.

D2A D2B D1A

E

STATE REPORTING

Proposition 65, The Safe Drinking Water and Toxic Enforcement Act of 1986:

Unless listed below, this product does not contain known levels of any chemical known to the State of California to cause cancer or reproductive harm.

Chemical Name/List	CAS	Percent
2,2'-Iminodiethanol (Carcinogen)	111-42-2	0.001 - 0.01

Substances of Very High Concern (SVHC) Content:

Unless listed below, this product does not contain SVHC's.

SECTION 16: OTHER INFORMATION

SDS VERSION DATE: 02-12-2015

This Safety Data Sheet is prepared to comply with the United States Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (29 CFR 1910.1200) and the Canadian Workplace Hazardous Materials Information System (WHMIS).

HMIS RATING: HEALTH -- 2 FLAMMABILITY -- 0 REACTIVITY -- 0

See SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for personal protective equipment recommendations.

Prepared by: The Global Regulatory Department

Phone: 651-236-5842

The information and recommendations set forth herein are believed to be accurate. Because some of the information is derived from information provided to H.B. Fuller Construction Products, Inc. from its suppliers, and because H.B. Fuller Construction Products, Inc. has no control over the conditions of handling and use, H.B. Fuller Construction Products, Inc. makes no warranty, expressed or implied, regarding the accuracy of the data or the results to be obtained from the use thereof. The information is supplied solely for your information and consideration, and H.B. Fuller Construction Products, Inc. assumes no responsibility for use or reliance thereon. It is the responsibility of the user of H.B. Fuller Construction Products, Inc. products to comply with all applicable federal, state and local laws and regulations.

Print Date: 06-08-2015

 TEC RTU GROUT - PEARL
 836900PM

SAFETY DATA SHEET

REVISION DATE: 04-17-2015

SUPERSEDES: 09-03-2013

SECTION 1: IDENTIFICATION OF THE PRODUCT AND SUPPLIER

PRODUCT INFORMATION

PRODUCT: TEC RTU GROUT - PEARL
 PRODUCT DESCRIPTION: Sanded polymer grout
 INTENDED USE: Adhesive
 PRODUCT IDENTIFIER: 836900PM

COMPANY INFORMATION

H.B. Fuller Construction Products Inc.
 1105 S. Frontenac Street
 Aurora, IL 60504
 Phone: 1-800-552-6225

Medical Emergency Phone Number (24 Hours): 1-888-853-1758
 Transport Emergency Phone Number (CHEMTREC): 1-800-424-9300

SECTION 2: HAZARDS IDENTIFICATION

GHS Hazard Symbols:



GHS Signal Word: Warning
GHS Classification: Skin Sensitisation Category 1A
GHS Hazard Phrases: May cause an allergic skin reaction.

GHS Precautions:

Safety Precautions: Avoid breathing dust/fume/gas/mist/vapours/spray. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection.

First Aid Measures: IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

Disposal: Dispose of contents/container in accordance with local/regional/national/international regulation for hazardous wastes.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS #	PERCENT	Classification	Note
Crystalline silica	14808-60-7	30 - 50	Carc. 1A; H350 STOT RE 1; H372	* (see below)
Ethylene glycol	107-21-1	1 - 5	Acute Tox. 4; H302	
Titanium dioxide	13463-67-7	0.1 - 1	Carc. 2; H351	* (see below)
Hexahydro-1,3,5-tris(2-hydroxyethyl)-S-triazine	4719-04-4	0.1 - 1	Acute Tox. 4; H302 Skin Sens. 1; H317	

*This product contains one or more materials that may be hazardous when present as an airborne dust. During normal handling of the product, the material is encapsulated within the product and will not present an exposure risk. Once the product has reached its final state and is abraded or disturbed, dusting and exposure may occur.

Print Date: 06-08-2015

TEC RTU GROUT - PEARL
836900PM**SAFETY DATA SHEET**

Unlisted ingredients are not 'hazardous' per the Occupational Safety and Health Administration Hazard Communication Standard (29 CFR 1910.1200) and/or are not found on the Canadian Workplace Hazardous Materials Information System ingredient disclosure list. See Section 8 for exposure limit guidelines.

SECTION 4: FIRST AID MEASURES

IF IN EYES: Flush eye with water for 20 minutes. Get medical attention.

IF ON SKIN: Wash with soap and water. Get medical attention if irritation develops or persists.

IF INHALED: Remove to fresh air. Call a physician if symptoms persist.

IF SWALLOWED: Do not induce vomiting. Seek medical attention if symptoms develop. Provide medical care provider with this MSDS.

SECTION 5: FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Use water spray, foam, dry chemical or carbon dioxide.
UNUSUAL FIRE AND EXPLOSION HAZARDS: There is a possibility of pressure buildup in closed containers when heated. Water spray may be used to cool the containers.
SPECIAL FIRE FIGHTING INSTRUCTIONS: Persons exposed to products of combustion should wear self-contained breathing apparatus and full protective equipment.
HAZARDOUS COMBUSTION PRODUCTS: Carbon dioxide, Carbon monoxide

SECTION 6: ACCIDENTAL RELEASE MEASURES

SPECIAL PROTECTION: No adverse health effects expected from the clean-up of spilled material. Follow personal protective equipment recommendations found in Section 8 of this MSDS.
METHODS FOR CLEAN-UP: Dike if necessary, contain spill with inert absorbent and transfer to containers for disposal. Keep spilled product out of sewers, watersheds, or water systems.

Transport Emergency Phone Number (CHEMTREC): 1-800-424-9300

SECTION 7: HANDLING AND STORAGE

Handling: No special handling instructions due to toxicity. Avoid breathing material. This product contains an ingredient that may release formaldehyde when in contact with strong acids.

Storage: Store in a cool, dry place. Protect from freezing
Consult the Technical Data Sheet for specific storage instructions.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**EXPOSURE LIMITS:**

Chemical Name	Note	ACGIH EXPOSURE LIMITS	OSHA PEL
Crystalline silica	* (see below)	0.025 mg/m ³ TWA (respirable fraction)	((250)/(%SiO ₂ + 5) mppcf TWA (respirable)); ((10)/(%SiO ₂ + 2) mg/m ³ TWA (respirable)); ((30)/(%SiO ₂ + 2) mg/m ³ TWA (total dust))
Calcium carbonate	* (see below)	No data available.	15 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable fraction)

Print Date: 06-08-2015

TEC RTU GROUT - PEARL
836900PM

SAFETY DATA SHEET

Ethylene glycol		TWA Not established 100 mg/m ³ Ceiling (aerosol only)	Not established
Titanium dioxide	* (see below)	10 mg/m ³ TWA	15 mg/m ³ TWA (total dust)

*This product contains one or more materials that may be hazardous when present as an airborne dust. During normal handling of the product, the material is encapsulated within the product and will not present an exposure risk. Once the product has reached its final state and is abraded or disturbed, dusting and exposure may occur.

ENGINEERING CONTROL METHODS:

VENTILATION: Use local exhaust ventilation or other engineering controls to minimize exposures.

EYE PROTECTION: Wear safety glasses when handling this product.

SKIN PROTECTION: Not normally required. Wear chemically resistant gloves to prevent prolonged or repeated contact.

GLOVES: Not normally required. Use nitrile gloves if conditions warrant.

RESPIRATORY PROTECTION: Respiratory protection may be required to avoid overexposure when handling this product. Use a respirator if general room ventilation is not available or sufficient to eliminate symptoms. NIOSH approved air purifying respirator with dust/mist filter.
Respirators should be selected by and used following requirements found in OSHA's respirator standard (29 CFR 1910.134).

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE:	Semi-solid
COLOR:	Off-white
ODOR:	Mild Sweet
ODOR THRESHOLD:	Not established
pH:	9.3
FREEZING/MELTING POINT (deg. C):	Not established
BOILING POINT (deg. C):	Not established
FLASH POINT:	Non flammable
EVAPORATION RATE:	Not established
FLAMMABILITY:	Not a flammable solid or gas
UPPER EXPLOSIVE LIMIT (% in air):	Not established
LOWER EXPLOSIVE LIMIT (% in air):	Not established
VAPOR PRESSURE (mm Hg):	Not established
VAPOR DENSITY:	Not established
WEIGHT PER GALLON (lbs.):	12.80
SPECIFIC GRAVITY:	1.520
SOLUBILITY:	Not established
OCTANOL/WATER COEFFICIENT:	Not established
AUTOIGNITION TEMPERATURE:	Not established
DECOMPOSITION TEMPERATURE:	Not established
VISCOSITY:	No data available.
SOLIDS (% by weight):	87.5
VOC, weight percent	2.70
VOC, U.S. EPA Method 24, less water and exempt solvents (theoretically determined)	28.1g/liter of material

SECTION 10: STABILITY AND REACTIVITY

Print Date: 06-08-2015

 TEC RTU GROUT - PEARL
 836900PM

SAFETY DATA SHEET

STABILITY:	Stable under normal conditions.
CHEMICAL INCOMPATIBILITY:	Not established
HAZARDOUS POLYMERIZATION:	Will not occur.
HAZARDOUS DECOMPOSITION PRODUCTS:	Carbon monoxide, carbon dioxide

SECTION 11: TOXICOLOGICAL INFORMATION

Component Toxicity / Toxicology Data:

COMPONENT NAME	LD50/LC50
Crystalline silica	ORAL LD50 RAT 500 MG/KG
Calcium carbonate	ORAL LD50 RAT 6,450 MG/KG
Ethylene glycol	ORAL LD50 RAT 4,000 MG/KG

This product is a mixture. Unless noted, the information below is based on components.

Skin corrosion / irritation: Can cause minor skin irritation, defatting, and dermatitis.

Serious eye damage / irritation :Can cause minor irritation, tearing and reddening.

Respiratory / skin sensitization: May cause an allergic skin reaction.

Germ cell mutagenicity: No data available.

Carcinogenicity: Contains a material that may cause cancer.

Reproductive toxicity: Contains a substance(s) that is a possible reproductive system hazard based on high dose tests with laboratory animals.

Specific target organ toxicity-single exposure: No data available.

Respiratory irritation / Narcotic effects: No data available.

Specific target organ toxicity-repeated exposure: No data available.

Target organs potentially affected by exposure: Lungs Central nervous system Kidneys Liver

Aspiration hazard: No data available.

Medical Conditions Aggravated by Exposure: Lung disease, Liver disease, Kidney disease

SECTION 12: ECOLOGICAL INFORMATION

OVERVIEW:	No ecological information available for this product.
MOBILITY:	No data available.
PERSISTENCE:	No data available.
BIOACCUMULATION:	No data available.

This product has not been tested for ecological effects. Relevant information for components is listed below:

Component:	Ecotoxicity values:
Ethylene glycol	Acute Toxicity (Fish): 96 Hr LC50 Oncorhynchus mykiss: 41000 mg/L; 96 Hr LC50 Oncorhynchus mykiss: 14 - 18 mL/L [static]; 96 Hr LC50 Lepomis macrochirus: 27540 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: 40761 mg/L [static]; 96 Hr LC50 Pimephales promelas: 40000 - 60000 mg/L [static]; 96 Hr LC50 Poecilia reticulata: 16000 mg/L [static] Acute Toxicity (Daphnia): 48 Hr EC50 Daphnia magna: 46300 mg/L Acute Toxicity (Algae): 96 Hr EC50 Pseudokirchneriella subcapitata: 6500 - 13000 mg/L

Print Date: 06-08-2015

 TEC RTU GROUT - PEARL
 836900PM

SAFETY DATA SHEET

SECTION 13: DISPOSAL CONSIDERATIONS

To the best of our knowledge, this product does not meet the definition of hazardous waste under the U.S. EPA Hazardous Waste Regulations 40 CFR 261. Solidify and dispose of in an approved landfill. Consult state, local or provincial authorities for more restrictive requirements.

SECTION 14: TRANSPORT INFORMATION

Consult Bill of Lading for transportation information.

US DOT: NOT REGULATED
 IATA: NOT REGULATED

SECTION 15: REGULATORY INFORMATION

INVENTORY STATUS

U.S. EPA TSCA:	This product is in compliance with the Toxic Substances Control Act's Inventory requirements.
CANADIAN CEPA DSL:	This product contains a component that is not on the DSL. If you are the importer of this product into Canada, contact H.B. Fuller for chemical tracking and notification information.
EUROPEAN REACH:	As a result of the introduction of REACH into Europe, this product cannot be imported into Europe unless the REACH requirements are met.
AUSTRALIA AICS:	This product is in compliance with the Australian Inventory of Chemical Substances requirements.
KOREAN TCCL:	This product is in compliance with the Korean Existing Chemicals List requirements.
PHILIPPINES:	This product is in compliance with the Philippine Inventory of Chemicals and Chemical Substances requirements.
CHINA IECSC INVENTORY:	This product is in compliance with the Inventory of Existing Chemical Substances in China (IECSC) requirements.

If you need more information about the inventory status of this product call 651-236-5858.

This product may contain chemical substances that are regulated for export by various government agencies (such as the Environmental Protection Agency, the Bureau of Industry and Security, or the Drug Enforcement Administration, among others). Before exporting this product from the USA or Canada, we recommend you contact us at reg.request@hbfuller.com to request an export review.

FEDERAL REPORTING

EPA SARA Title III Section 313

Unless listed below, this product does not contain toxic chemical(s) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) and 40 CFR part 372. EPA has advised that when a percentage range is listed the midpoint may be used to fulfill reporting obligations.

Chemical Name	CAS#	%
Ethylene glycol	107-21-1	1 - 5

STATE REPORTING

Proposition 65, The Safe Drinking Water and Toxic Enforcement Act of 1986:

Unless listed below, this product does not contain known levels of any chemical known to the State of California to cause cancer or reproductive harm.

Chemical Name/List	CAS	Percent
Quartz (Carcinogen)	14808-60-7	30 - 50
Titanium dioxide (Carcinogen)	13463-67-7	0.1 - 1
Formaldehyde (Carcinogen)	50-00-0	0.001 - 0.01
Carbon black (Carcinogen)	1333-86-4	0.001 - 0.01

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836900PM**SAFETY DATA SHEET**

Nickel	(Carcinogen)		< 10 ppm
Lead	(Carcinogen)	7439-92-1	< 10 ppm
Methanol	(Developmental toxin)	67-56-1	< 10 ppm
Lead	(Developmental toxin)	7439-92-1	< 10 ppm
Lead	(Female reproductive toxin)	7439-92-1	< 10 ppm
Lead	(Male reproductive toxin)	7439-92-1	< 10 ppm

Substances of Very High Concern (SVHC) Content:

Unless listed below, this product does not contain SVHC's.
tert-Octylphenol, ethoxylated

SECTION 16: OTHER INFORMATION

SDS VERSION DATE: 04-17-2015

This Safety Data Sheet is prepared to comply with the United States Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (29 CFR 1910.1200) and the Canadian Workplace Hazardous Materials Information System (WHMIS).

HMIS RATING: HEALTH -- 0 FLAMMABILITY -- 0 REACTIVITY -- 0

See SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for personal protective equipment recommendations.

Prepared by: The Global Regulatory Department

Phone: 651-236-5842

The information and recommendations set forth herein are believed to be accurate. Because some of the information is derived from information provided to H.B. Fuller Construction Products, Inc. from its suppliers, and because H.B. Fuller Construction Products, Inc. has no control over the conditions of handling and use, H.B. Fuller Construction Products, Inc. makes no warranty, expressed or implied, regarding the accuracy of the data or the results to be obtained from the use thereof. The information is supplied solely for your information and consideration, and H.B. Fuller Construction Products, Inc. assumes no responsibility for use or reliance thereon. It is the responsibility of the user of H.B. Fuller Construction Products, Inc. products to comply with all applicable federal, state and local laws and regulations.

Print Date: 03-12-2015

SKILL SET SLU
829145PM**SAFETY DATA SHEET**

REVISION DATE: 02-13-2015

SUPERSEDES: 10-30-2012

SECTION 1: IDENTIFICATION OF THE PRODUCT AND SUPPLIER**PRODUCT INFORMATION**

PRODUCT: SKILL SET SLU
PRODUCT DESCRIPTION: Cement
INTENDED USE: Adhesive
PRODUCT IDENTIFIER: 829145PM

COMPANY INFORMATION

H.B. Fuller Construction Products Inc.
1105 S. Frontenac Street
Aurora, IL 60504
Phone: 1-800-552-6225

Medical Emergency Phone Number (24 Hours): 1-888-853-1758
Transport Emergency Phone Number (CHEMTREC): 1-800-424-9300

SECTION 2: HAZARDS IDENTIFICATION

**GHS Hazard
Symbols:**



GHS Signal Word:

Danger

GHS Classification:

Skin Corrosion/Irritation Category 1B; Serious Eye Damage/Eye Irritation Category 1;
Skin Sensitisation Category 1; Carcinogenicity Category 1A; Specific Target Organ
Systemic Toxicity (STOT) - Repeated Exposure Category 1

GHS Hazard

Phrases:

Causes severe skin burns and eye damage.; May cause an allergic skin reaction.; Causes
serious eye damage.; May cause cancer.; Causes damage to organs through prolonged or
repeated exposure.

GHS Precautions:

Safety Precautions:

Obtain special instructions before use. Do not handle until all safety precautions have
been read and understood. Do not breathe dust/fume/gas/mist/vapours/spray. Wash
thoroughly after handling. Do not eat, drink or smoke when using this product.
Contaminated work clothing should not be allowed out of the workplace. Wear protective
gloves/protective clothing/eye protection/face protection.

First Aid Measures:

IF SWALLOWED: rinse mouth. Do NOT induce vomiting. IF ON SKIN: Wash with
plenty of soap and water. IF ON SKIN (or hair): Remove/Take off immediately all
contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove victim to
fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: Rinse
cautiously with water for several minutes. Remove contact lenses, if present and easy to
do. Continue rinsing. IF exposed or concerned: Get medical advice/attention.
Immediately call a POISON CENTER or doctor/physician. Get medical advice/attention
if you feel unwell. If skin irritation or rash occurs: Get medical advice/attention. Wash
contaminated clothing before reuse.

Storage:

Store locked up.

Disposal:

Dispose of contents/container in accordance with local/regional/national/international
regulation for hazardous wastes.

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SAFETY DATA SHEET

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS #	PERCENT	Classification	Note
Crystalline silica	14808-60-7	30 - 50	Carc. 1A; H350 STOT RE 1; H372	* (see below)
Alumina cement	65997-16-2	5 - 10	Eye Dam. 1; H318 Skin Irrit. 2; H315	
Calcium oxide, CaO	1305-78-8	5 - 10	Acute Tox. 4; H302 Eye Dam. 1; H318 Skin Irrit. 2; H315 STOT SE 3; H335	* (see below)
Calcium sulfate, hemihydrate	26499-65-0	1 - 5	Eye Irrit. 2; H319 Skin Irrit. 2; H315 STOT SE 3; H335	* (see below)
Portland cement	65997-15-1	1 - 5	Eye Dam. 1; H318 Skin Irrit. 2; H315 Skin Sens. 1; H317 STOT SE 3; H335	* (see below)
Potassium oxide	12136-45-7	1 - 5	Skin Corr. 1B; H314	
Sulfur trioxide	7446-11-9	1 - 5	Acute Tox. 2; H330 Eye Dam. 1; H318 Skin Corr. 1A; H314 STOT SE 3; H335	
Sodium oxide	1313-59-3	1 - 5	Skin Corr. 1B; H314	

Unlisted ingredients are not 'hazardous' per the Occupational Safety and Health Administration Hazard Communication Standard (29 CFR 1910.1200) and/or are not found on the Canadian Workplace Hazardous Materials Information System ingredient disclosure list. See Section 8 for exposure limit guidelines.

SECTION 4: FIRST AID MEASURES

IF IN EYES: Flush eyes with plenty of water for at least 20 minutes retracting eyelids often. Tilt the head to prevent chemical from transferring to the uncontaminated eye. Get immediate medical attention.

IF ON SKIN: Wash with soap and water. Remove contaminated clothing and launder. Get medical attention if irritation develops or persists.

IF INHALED: Remove to fresh air. Restore breathing, if necessary. Call a physician if symptoms persist.

IF SWALLOWED: Corrosive. Do not induce vomiting! Drink one glass of water followed by milk if available. Seek medical attention immediately. Do not give anything by mouth to an unconscious person.

SECTION 5: FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA:	Use water spray, foam, dry chemical or carbon dioxide.
UNUSUAL FIRE AND EXPLOSION HAZARDS:	Material will not burn.
SPECIAL FIRE FIGHTING INSTRUCTIONS:	Persons exposed to products of combustion should wear self-contained breathing apparatus and full protective equipment.
HAZARDOUS COMBUSTION PRODUCTS:	Carbon dioxide, Carbon monoxide Aluminum oxide Sulfur containing gases

SECTION 6: ACCIDENTAL RELEASE MEASURES

SPECIAL PROTECTION:	Exposure to the spilled material may be irritating or harmful. Follow personal protective equipment recommendations found in Section 8 of this MSDS. Additional precautions may be necessary based on special
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SAFETY DATA SHEET

circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred.

METHODS FOR CLEAN-UP: Avoid creating dusts. Eliminate ignition sources. If a vacuum is used, ensure that the material is wetted or otherwise treated so an explosive dust atmosphere is not created within the vacuum.

Transport Emergency Phone Number (CHEMTREC): 1-800-424-9300

SECTION 7: HANDLING AND STORAGE

Handling: Avoid contacting and avoid breathing the material. Use only in a well ventilated area. Avoid breathing material.

Storage: Store in a cool, dry place.
Consult the Technical Data Sheet for specific storage instructions.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE LIMITS:

Chemical Name	Note	ACGIH EXPOSURE LIMITS	OSHA PEL
Crystalline silica	* (see below)	0.025 mg/m ³ TWA (respirable fraction)	((250)/(%SiO ₂ + 5) mppcf TWA (respirable)); ((10)/(%SiO ₂ + 2) mg/m ³ TWA (respirable)); ((30)/(%SiO ₂ + 2) mg/m ³ TWA (total dust))
Aluminum oxide	* (see below)	No data available.	15 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable fraction)
Calcium oxide, CaO	* (see below)	2 mg/m ³ TWA	5 mg/m ³ TWA
Calcium carbonate	* (see below)	No data available.	15 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable fraction)
Iron oxide	* (see below)	5 mg/m ³ TWA (respirable fraction)	10 mg/m ³ TWA (as fume)
Calcium sulfate, hemihydrate	* (see below)	No data available.	15 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable fraction)
Portland cement	* (see below)	1 mg/m ³ TWA (particulate matter containing no asbestos and <1% crystalline silica, respirable fraction)	15 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable fraction)
Calcium sulfate	* (see below)	10 mg/m ³ TWA (inhalable fraction)	15 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable fraction)
Magnesium Oxide	* (see below)	10 mg/m ³ TWA (inhalable fraction)	15 mg/m ³ TWA (total particulate) (as fume)

ENGINEERING CONTROL METHODS:

VENTILATION: Use local exhaust ventilation or other engineering controls to minimize exposures.

EYE PROTECTION: Wear safety glasses with side shields when handling this product.
Wear additional eye protection such as chemical splash goggles and/or face shield when the possibility exists for eye contact with splashing or spraying liquid, or airborne material. Have an eye wash

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SKIN PROTECTION:	station available. Avoid skin contact by wearing chemically resistant gloves and long sleeved shirt. An apron may be appropriate if splashing can occur.
GLOVES:	Nitrile
RESPIRATORY PROTECTION:	Respiratory protection may be required to avoid overexposure when handling this product. Use a respirator if general room ventilation is not available or sufficient to eliminate symptoms. NIOSH approved air purifying respirator with dust/mist filter. Respirators should be selected by and used following requirements found in OSHA's respirator standard (29 CFR 1910.134).

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE:	Solid
COLOR:	Gray
ODOR:	Odorless
ODOR THRESHOLD:	Not established
pH:	Not established
FREEZING/MELTING POINT (deg. C):	Not established
BOILING POINT (deg. C):	Not established
FLASH POINT:	Non flammable
EVAPORATION RATE:	Not established
FLAMMABILITY:	Not a flammable solid or gas
UPPER EXPLOSIVE LIMIT (% in air):	Not established
LOWER EXPLOSIVE LIMIT (% in air):	Not established
VAPOR PRESSURE (mm Hg):	Not established
VAPOR DENSITY:	Not established
WEIGHT PER GALLON (lbs.):	11.20
SPECIFIC GRAVITY:	1.340
SOLUBILITY:	Not established
OCTANOL/WATER COEFFICIENT:	Not established
AUTOIGNITION TEMPERATURE:	Not established
DECOMPOSITION TEMPERATURE:	Not established
VISCOSITY:	No data available.
SOLIDS (% by weight):	100.0
VOC, weight percent	0.00

SECTION 10: STABILITY AND REACTIVITY

STABILITY:	Stable under normal conditions.
CHEMICAL INCOMPATIBILITY:	Not established
HAZARDOUS POLYMERIZATION:	Will not occur.
HAZARDOUS DECOMPOSITION PRODUCTS:	Carbon monoxide, carbon dioxide Aluminum oxide Sulfur containing gases

SECTION 11: TOXICOLOGICAL INFORMATION

Component Toxicity / Toxicology Data:

COMPONENT NAME	LD50/LC50
Crystalline silica	ORAL LD50 RAT 500 MG/KG
Fly ash	ORAL LD50 RAT > 2,000 MG/KG
Aluminum oxide	ORAL LD50 RAT > 5,000 MG/KG

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Calcium oxide, CaO	ORAL LD50 RAT 500 MG/KG
Calcium carbonate	ORAL LD50 RAT 6,450 MG/KG
Iron oxide	ORAL LD50 RAT > 10,000 MG/KG
Sulfur trioxide	INHALATION LC50-4H RAT 0.38 MG/L
Carbon, activated	ORAL LD50 RAT > 10,000 MG/KG
Calcium sulfate	ORAL LD50 RAT > 3,000 MG/KG

This product is a mixture. Unless noted, the information below is based on components.

Skin corrosion / irritation: Can cause moderate skin irritation, defatting, and dermatitis. Not likely to cause permanent damage.

Serious eye damage / irritation :Can cause moderate irritation, tearing and reddening.

Respiratory / skin sensitization: May cause an allergic skin reaction.

Germ cell mutagenicity: No data available.

Carcinogenicity: Contains a material that may cause cancer.

Reproductive toxicity: No data available.

Specific target organ toxicity-single exposure: No data available.

Respiratory irritation / Narcotic effects: May cause respiratory irritation.

Specific target organ toxicity-repeated exposure: Causes damage to organs through prolonged or repeated exposure.

Target organs potentially affected by exposure: Lungs

Aspiration hazard: No data available.

Medical Conditions Aggravated by Exposure: Lung disease

SECTION 12: ECOLOGICAL INFORMATION

OVERVIEW:	No ecological information available for this product.
MOBILITY:	No data available.
PERSISTENCE:	No data available.
BIOACCUMULATION:	No data available.

This product has not been tested for ecological effects. Relevant information for components is listed below:

Component:	Ecotoxicity values:
Calcium oxide, CaO	Acute Toxicity (Fish): 96 Hr LC50 Cyprinus carpio: 1070 mg/L [static] Acute Toxicity (Daphnia): Not established Acute Toxicity (Algae): Not established
Calcium sulfate	Acute Toxicity (Fish): 96 Hr LC50 Lepomis macrochirus: 2980 mg/L [static]; 96 Hr LC50 Pimephales promelas: >1970 mg/L [static] Acute Toxicity (Daphnia): Not established Acute Toxicity (Algae): Not established

SECTION 13: DISPOSAL CONSIDERATIONS

To the best of our knowledge, this product does not meet the definition of hazardous waste under the U.S. EPA Hazardous Waste Regulations 40 CFR 261. Dispose of in an approved landfill. Consult your state, local or provincial authorities and your local waste vendor for more restrictive requirements.

Print Date: 03-12-2015

SKILL SET SLU
829145PM**SAFETY DATA SHEET****SECTION 14: TRANSPORT INFORMATION**

Consult Bill of Lading for transportation information.

US DOT: NOT REGULATED
IATA: NOT REGULATED**SECTION 15: REGULATORY INFORMATION****INVENTORY STATUS**

U.S. EPA TSCA: This product is in compliance with the Toxic Substances Control Act's Inventory requirements.

CANADIAN CEPA DSL: The components of this product are included on the DSL or are exempt from DSL requirements.

EUROPEAN REACH: As a result of the introduction of REACH into Europe, this product cannot be imported into Europe unless the REACH requirements are met.

AUSTRALIA AICS: This product contains a component that is not on the Australian Inventory (AICS).

If you need more information about the inventory status of this product call 651-236-5858.

This product may contain chemical substances that are regulated for export by various government agencies (such as the Environmental Protection Agency, the Bureau of Industry and Security, or the Drug Enforcement Administration, among others). Before exporting this product from the USA or Canada, we recommend you contact us at reg.request@hbfuller.com to request an export review.

FEDERAL REPORTING**EPA SARA Title III Section 313**

Unless listed below, this product does not contain toxic chemical(s) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) and 40 CFR part 372. EPA has advised that when a percentage range is listed the midpoint may be used to fulfill reporting obligations.

Chemical Name	CAS#	%
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WHMIS STATUS: Unless listed below, this product is not controlled under the Canadian Workplace Hazardous Materials Information System.

D2A D2B

STATE REPORTING

Proposition 65, The Safe Drinking Water and Toxic Enforcement Act of 1986:

Unless listed below, this product does not contain known levels of any chemical known to the State of California to cause cancer or reproductive harm.

Chemical Name/List		CAS	Percent
Quartz	(Carcinogen)	14808-60-7	30 - 50
Titanium dioxide	(Carcinogen)	13463-67-7	0.01 - 0.1
Acetaldehyde	(Carcinogen)	75-07-0	< 10 ppm
Chromium VI	(Carcinogen)		< 10 ppm
Nickel	(Carcinogen)		< 10 ppm
Lead compounds	(Carcinogen)		< 10 ppm
Cadmium compounds	(Carcinogen)		< 10 ppm
Lithium carbonate	(Developmental toxin)	554-13-2	0.01 - 0.1
Methanol	(Developmental toxin)	67-56-1	< 10 ppm

Substances of Very High Concern (SVHC) Content:

Unless listed below, this product does not contain SVHC's.

Print Date: 03-12-2015

SKILL SET SLU
829145PM**SAFETY DATA SHEET**

SECTION 16: OTHER INFORMATION

SDS VERSION DATE: 02-13-2015

This Safety Data Sheet is prepared to comply with the United States Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (29 CFR 1910.1200) and the Canadian Workplace Hazardous Materials Information System (WHMIS).

HMIS RATING: HEALTH -- 2 FLAMMABILITY -- 0 REACTIVITY -- 0

See SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for personal protective equipment recommendations.

Prepared by: The Global Regulatory Department

Phone: 651-236-5842

The information and recommendations set forth herein are believed to be accurate. Because some of the information is derived from information provided to H.B. Fuller Construction Products, Inc. from its suppliers, and because H.B. Fuller Construction Products, Inc. has no control over the conditions of handling and use, H.B. Fuller Construction Products, Inc. makes no warranty, expressed or implied, regarding the accuracy of the data or the results to be obtained from the use thereof. The information is supplied solely for your information and consideration, and H.B. Fuller Construction Products, Inc. assumes no responsibility for use or reliance thereon. It is the responsibility of the user of H.B. Fuller Construction Products, Inc. products to comply with all applicable federal, state and local laws and regulations.

MATERIAL SAFETY DATA SHEET

REVISION DATE: 11-01-2013

SUPERSEDES: 05-07-2013

SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**COMPANY INFORMATION**

H.B. Fuller Construction Products Inc.
1105 S. Frontenac Street
Aurora, IL 60504
Phone: 1-800-552-6225

Medical Emergency Phone Number (24 Hours): 1-888-853-1758

Transport Emergency Phone Number (CHEMTREC): 1-800-424-9300

PRODUCT INFORMATION

PRODUCT NUMBER:	DESIGN COLOR TINTABLE GROUT
PRODUCT DESCRIPTION:	Cement
PRODUCT IDENTIFIER:	836137PM

SECTION 2: HAZARDS IDENTIFICATION**EMERGENCY OVERVIEW**

PHYSICAL STATE:	Solid
COLOR:	Opaque White
ODOR:	Odorless

Moderate eye irritant.

Causes skin irritation.

Moderate respiratory tract irritant.

Harmful if swallowed.

Cancer hazard.

POTENTIAL HEALTH EFFECTS BY ROUTE OF ENTRY**EYE:** Can cause moderate irritation, tearing and reddening.**SKIN:** Can cause moderate skin irritation, defatting, and dermatitis. Not likely to cause permanent damage.**INHALATION:** Can cause moderate respiratory irritation. Inhalation of dusts produced during cutting, grinding or sanding of this product may cause irritation of the respiratory tract.

Nasal perforation is possible from a single large or repeated smaller inhalation overexposures.

Overexposure to crystalline silica may cause silicosis. Overexposure to iron oxide dust/fume may cause siderosis.

Inhalation of high concentrations may result in central nervous system (CNS) effects such as dizziness, weakness, fatigue, nausea, headache, and lack of coordination. Overexposure to nickel dust may cause perforated nasal septum, chest pain, coughing, lung disease, cyanosis, and blood disorders.

INGESTION: Ingestion is not an anticipated route of exposure. Harmful if swallowed. Severely irritating to mouth, throat, and stomach.**LONG-TERM (CHRONIC) HEALTH EFFECTS****TARGET ORGAN(S):** Lungs Central nervous system Skin**REGULATED CARCINOGEN STATUS:**

Unless noted below, this product does not contain regulated levels of NTP, IARC, ACGIH, or OSHA listed carcinogens.

Crystalline silica

Titanium dioxide

Nickel compounds

EXISTING HEALTH CONDITIONS AFFECTED BY EXPOSURE: Lung disease; Skin disease including eczema and sensitization

MATERIAL SAFETY DATA SHEET**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name	CAS #	PERCENT
Calcium carbonate	471-34-1	30 - 50
Crystalline silica	14808-60-7	30 - 50
Portland cement	65997-15-1	10 - 30
Iron oxide	1309-37-1	1 - 5
Calcium sulfate	7778-18-9	1 - 5
Calcium oxide, CaO	1305-78-8	1 - 5
Magnesium Oxide	1309-48-4	1 - 5
Titanium dioxide	13463-67-7	0.1 - 1
Nickel compounds		0.1 - 1

Unlisted ingredients are not 'hazardous' per the Occupational Safety and Health Administration Hazard Communication Standard (29 CFR 1910.1200) and/or are not found on the Canadian Workplace Hazardous Materials Information System ingredient disclosure list. See Section 8 for exposure limit guidelines.

SECTION 4: FIRST AID MEASURES

IF IN EYES: Flush eyes with plenty of water for at least 20 minutes retracting eyelids often. Tilt the head to prevent chemical from transferring to the uncontaminated eye. Get immediate medical attention.

IF ON SKIN: Wash with soap and water. Remove contaminated clothing and launder. Get medical attention if irritation develops or persists.

IF VAPORS INHALED: Remove to fresh air. Restore breathing, if necessary. Call a physician if symptoms persist.

IF SWALLOWED: Severely irritating. Do not induce vomiting. Seek medical attention immediately. Drink 2 glasses of water or milk to dilute. Do not give anything by mouth to an unconscious person.

SECTION 5: FIRE FIGHTING MEASURES

FLASH POINT:	Non flammable
AUTOIGNITION TEMPERATURE:	Not established
LOWER EXPLOSIVE LIMIT (% in air):	Not established
UPPER EXPLOSIVE LIMIT (% in air):	Not established
EXTINGUISHING MEDIA:	Use water spray, foam, dry chemical or carbon dioxide.
UNUSUAL FIRE AND EXPLOSION HAZARDS:	There is a possibility of pressure buildup in closed containers when heated. Water spray may be used to cool the containers. Material will burn in a fire.
SPECIAL FIRE FIGHTING INSTRUCTIONS:	Persons exposed to products of combustion should wear self-contained breathing apparatus and full protective equipment.
HAZARDOUS COMBUSTION PRODUCTS:	Carbon dioxide, Carbon monoxide Sulfur containing gases

SECTION 6: ACCIDENTAL RELEASE MEASURES

SPECIAL PROTECTION: Exposure to the spilled material may be irritating or harmful. Follow personal protective equipment recommendations found in Section 8 of this MSDS. Additional precautions may be necessary based on special circumstances created by the spill including; the material spilled, the quantity

MATERIAL SAFETY DATA SHEET

CLEAN-UP: of the spill, the area in which the spill occurred.
Avoid creating dusts. Cover material with absorbent and moisten and collect for disposal.

Transport Emergency Phone Number (CHEMTREC): 1-800-424-9300

SECTION 7: HANDLING AND STORAGE

Handling: Harmful or irritating material. Avoid contacting and avoid breathing the material. Use only in a well ventilated area. Avoid breathing material.
This product contains an ingredient that may release formaldehyde at heated cure temperatures.

Storage: Store in a cool, dry place.
Consult the Technical Data Sheet for specific storage instructions.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

EYE PROTECTION: Wear safety glasses with side shields when handling this product. Wear additional eye protection such as chemical splash goggles and/or face shield when the possibility exists for eye contact with splashing or spraying liquid, or airborne material. Have an eye wash station available.

SKIN PROTECTION: Avoid skin contact by wearing chemically resistant gloves and long sleeved shirt. An apron may be appropriate if splashing can occur.

GLOVES: Nitrile

RESPIRATORY PROTECTION: Respiratory protection may be required to avoid overexposure when handling this product. Use a respirator if general room ventilation is not available or sufficient to eliminate symptoms. NIOSH approved air purifying respirator with dust/mist filter.
Respirators should be selected by and used following requirements found in OSHA's respirator standard (29 CFR 1910.134).

VENTILATION: Use local exhaust ventilation or other engineering controls to minimize exposures.

EXPOSURE LIMITS:

Chemical Name	ACGIH EXPOSURE LIMITS	OSHA PEL
Calcium carbonate	Not established	15 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable fraction)
Crystalline silica	0.025 mg/m ³ TWA (respirable fraction)	((250)/(%SiO ₂ + 5) mppcf TWA (respirable)); ((10)/(%SiO ₂ + 2) mg/m ³ TWA (respirable)); ((30)/(%SiO ₂ + 2) mg/m ³ TWA (total dust))
Portland cement	1 mg/m ³ TWA (particulate matter containing no asbestos and <1% crystalline silica, respirable fraction)	15 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable fraction)
Iron oxide	5 mg/m ³ TWA (respirable fraction)	10 mg/m ³ TWA (as fume)
Calcium sulfate	10 mg/m ³ TWA (inhalable fraction)	15 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable fraction)
Calcium oxide, CaO	2 mg/m ³ TWA	5 mg/m ³ TWA
Magnesium Oxide	10 mg/m ³ TWA (inhalable fraction)	15 mg/m ³ TWA (total particulate) (as fume)

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Titanium dioxide	10 mg/m3 TWA	15 mg/m3 TWA (total dust)
Nickel compounds	0.1 mg/m3 TWA (inhalable fraction, as Ni, soluble inorganic compounds); 0.1 mg/m3 TWA (inhalable fraction, as Ni, insoluble inorganic compounds)	1 mg/m3 TWA (as Ni)

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE:	Solid
COLOR:	Opaque White
ODOR:	Odorless
ODOR THRESHOLD:	Not established
WEIGHT PER GALLON (lbs.):	10.98
SPECIFIC GRAVITY:	1.320
SOLIDS (% by weight):	100.0
pH:	Not applicable
FLASH POINT:	Not established
BOILING POINT (deg. C):	Non flammable
FREEZING/MELTING POINT (deg. C):	Not established
VAPOR PRESSURE (mm Hg):	Not established
VAPOR DENSITY:	Not established
EVAPORATION RATE:	Not established
OCTANOL/WATER COEFFICIENT:	Not established
VOC, weight percent	0.00

SECTION 10: STABILITY AND REACTIVITY

STABILITY:	Stable under normal conditions.
CHEMICAL INCOMPATIBILITY:	Not established
HAZARDOUS POLYMERIZATION:	Will not occur.
HAZARDOUS DECOMPOSITION PRODUCTS:	Carbon monoxide, carbon dioxide Sulfur containing gases

SECTION 11: TOXICOLOGICAL INFORMATION

COMPONENT	LD50 ORAL	LC50 INHALATION	LD50 DERMAL
Calcium carbonate	Oral LD50 Rat = 6450 mg/kg		
Crystalline silica	Not established		
Portland cement	Not established		
Iron oxide	Not established		
Calcium sulfate	Not established		
Calcium oxide, CaO	Not established		
Magnesium Oxide	Not established		
Titanium dioxide	Not established		
Nickel compounds	Not established		

TOXICOLOGY SUMMARY: No additional health information available.

MATERIAL SAFETY DATA SHEET**SECTION 12: ECOLOGICAL INFORMATION**

OVERVIEW: No ecological information available for this product.

SECTION 13: DISPOSAL CONSIDERATIONS

To the best of our knowledge, this product does not meet the definition of hazardous waste under the U.S. EPA Hazardous Waste Regulations 40 CFR 261. Dispose of in an approved landfill. Consult your state, local or provincial authorities and your local waste vendor for more restrictive requirements.

SECTION 14: TRANSPORTATION INFORMATION

Consult Bill of Lading for transportation information.

DOT: NOT REGULATED

IATA: NOT REGULATED

SECTION 15: REGULATORY INFORMATION**INVENTORY STATUS**

- U.S. EPA TSCA: This product is in compliance with the Toxic Substances Control Act's Inventory requirements.
- CANADIAN CEPA DSL: The components of this product are included on the DSL or are exempt from DSL requirements.
- EUROPEAN REACH: As a result of the introduction of REACH into Europe, this product cannot be imported into Europe unless the REACH requirements are met.
- AUSTRALIA AICS: This product is in compliance with the Australian Inventory of Chemical Substances requirements.
- KOREAN TCCL: This product is in compliance with the Korean Existing Chemicals List requirements.

If you need more information about the inventory status of this product call 651-236-5858.

This product may contain chemical substances that are regulated for export by various government agencies (such as the Environmental Protection Agency, the Bureau of Industry and Security, or the Drug Enforcement Administration, among others). Before exporting this product from the USA or Canada, we recommend you contact us at 651-236-5858 (USA) or 450-651-5498 x4 (Canada) to request an export review.

FEDERAL REPORTING**EPA SARA Title III Section 313**

Unless listed below, this product does not contain toxic chemical(s) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) and 40 CFR part 372. EPA has advised that when a percentage range is listed the midpoint may be used to fulfill reporting obligations.

Chemical Name	CAS#	%
Nickel compounds		0.1 - 1

WHMIS STATUS: Unless listed below, this product is not controlled under the Canadian Workplace Hazardous Materials Information System.

D2A D2B

STATE REPORTING

Proposition 65, The Safe Drinking Water and Toxic Enforcement Act of 1986:

Unless listed below, this product does not contain known levels of any chemical known to the State of California to cause cancer or reproductive harm.

Chemical Name/List	CAS	Percent
Quartz (Carcinogen)	14808-60-7	30 - 50
Titanium dioxide (Carcinogen)	13463-67-7	0.1 - 1
Nickel (Carcinogen)		0.1 - 1
Lead compounds (Carcinogen)		< 10 ppm
Chromium VI (Carcinogen)		< 10 ppm
Methanol (Developmental toxin)	67-56-1	< 10 ppm

MATERIAL SAFETY DATA SHEET

SECTION 16: ADDITIONAL INFORMATION

This Material Safety Data Sheet is prepared to comply with the United States Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (29 CFR 1910.1200) and the Canadian Workplace Hazardous Materials Information System (WHMIS).

HMIS RATING: HEALTH -- 2 FLAMMABILITY -- 0 REACTIVITY -- 0

See SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for personal protective equipment recommendations.

Prepared by: The Global Regulatory Department

Phone: 651-236-5842

The information and recommendations set forth herein are believed to be accurate. Because some of the information is derived from information provided to H.B. Fuller Construction Products, Inc. from its suppliers, and because H.B. Fuller Construction Products, Inc. has no control over the conditions of handling and use, H.B. Fuller Construction Products, Inc. makes no warranty, expressed or implied, regarding the accuracy of the data or the results to be obtained from the use thereof. The information is supplied solely for your information and consideration, and H.B. Fuller Construction Products, Inc. assumes no responsibility for use or reliance thereon. It is the responsibility of the user of H.B. Fuller Construction Products, Inc. products to comply with all applicable federal, state and local laws and regulations.

Print Date: 04-14-2015

SKILL SET FAST SETTING MORTAR
829154PM**SAFETY DATA SHEET**

REVISION DATE: 04-14-2015

SUPERSEDES: 03-26-2013

SECTION 1: IDENTIFICATION OF THE PRODUCT AND SUPPLIER**PRODUCT INFORMATION**

PRODUCT: SKILL SET FAST SETTING MORTAR
PRODUCT DESCRIPTION: Cement
INTENDED USE: Adhesive
PRODUCT IDENTIFIER: 829154PM

COMPANY INFORMATION

H.B. Fuller Construction Products Inc.
1105 S. Frontenac Street
Aurora, IL 60504
Phone: 1-800-552-6225

Medical Emergency Phone Number (24 Hours): 1-888-853-1758
Transport Emergency Phone Number (CHEMTREC): 1-800-424-9300

SECTION 2: HAZARDS IDENTIFICATION

**GHS Hazard
Symbols:**



GHS Signal Word:

Danger

GHS Classification:

Serious Eye Damage/Eye Irritation Category 1; Skin Sensitisation Category 1; Carcinogenicity Category 1A; Specific Target Organ Systemic Toxicity (STOT) - Repeated Exposure Category 1; Skin Corrosion/Irritation Category 2; Acute Toxicity - Inhalation Dust / Mist Category 4

GHS Hazard

Phrases:

Causes skin irritation.; May cause an allergic skin reaction.; Causes serious eye damage.; Harmful if inhaled.; May cause cancer.; Causes damage to organs through prolonged or repeated exposure.

GHS Precautions:

Safety Precautions:

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapours/spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection.

First Aid Measures:

IF ON SKIN: Wash with plenty of soap and water. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF exposed or concerned: Get medical advice/attention. Immediately call a POISON CENTER or doctor/physician. Call a POISON CENTER or doctor/physician if you feel unwell. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.

Storage:

Store locked up.

Disposal:

Dispose of contents/container in accordance with local/regional/national/international regulation for hazardous wastes.

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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS #	PERCENT	Classification	Note
Crystalline silica	14808-60-7	50 - 70	Carc. 1A; H350 STOT RE 1; H372	* (see below)
Alumina cement	65997-16-2	10 - 30	Eye Dam. 1; H318 Skin Irrit. 2; H315	
Portland cement	65997-15-1	10 - 30	Eye Dam. 1; H318 Skin Irrit. 2; H315 Skin Sens. 1; H317 STOT SE 3; H335	* (see below)
Calcium oxide, CaO	1305-78-8	1 - 5	Acute Tox. 4; H302 Eye Dam. 1; H318 Skin Irrit. 2; H315 STOT SE 3; H335	* (see below)
Potassium oxide	12136-45-7	1 - 5	Skin Corr. 1B; H314	
Sulfur trioxide	7446-11-9	1 - 5	Acute Tox. 2; H330 Eye Dam. 1; H318 Skin Corr. 1A; H314 STOT SE 3; H335	
Sodium oxide	1313-59-3	1 - 5	Skin Corr. 1B; H314	

Unlisted ingredients are not 'hazardous' per the Occupational Safety and Health Administration Hazard Communication Standard (29 CFR 1910.1200) and/or are not found on the Canadian Workplace Hazardous Materials Information System ingredient disclosure list. See Section 8 for exposure limit guidelines.

SECTION 4: FIRST AID MEASURES

IF IN EYES: Flush eyes with plenty of water for at least 20 minutes retracting eyelids often. Tilt the head to prevent chemical from transferring to the uncontaminated eye. Get immediate medical attention.

IF ON SKIN: Wash with soap and water. Remove contaminated clothing and launder. Get medical attention if irritation develops or persists.

IF INHALED: Remove to fresh air. Restore breathing, if necessary. Call a physician if symptoms persist.

IF SWALLOWED: Severely irritating. Do not induce vomiting. Seek medical attention immediately. Drink 2 glasses of water or milk to dilute. Do not give anything by mouth to an unconscious person.

SECTION 5: FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA:	Use water spray, foam, dry chemical or carbon dioxide.
UNUSUAL FIRE AND EXPLOSION HAZARDS:	Material will burn in a fire.
SPECIAL FIRE FIGHTING INSTRUCTIONS:	Persons exposed to products of combustion should wear self-contained breathing apparatus and full protective equipment.
HAZARDOUS COMBUSTION PRODUCTS:	Carbon dioxide, Carbon monoxide Aluminum oxide Sulfur containing gases

SECTION 6: ACCIDENTAL RELEASE MEASURES

SPECIAL PROTECTION:	Exposure to the spilled material may be irritating or harmful. Follow personal protective equipment recommendations found in Section 8 of this MSDS. Additional precautions may be necessary based on special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred.
METHODS FOR CLEAN-UP:	Avoid creating dusts. Eliminate ignition sources. If a vacuum is used,

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ensure that the material is wetted or otherwise treated so an explosive dust atmosphere is not created within the vacuum.

Transport Emergency Phone Number (CHEMTREC): 1-800-424-9300

SECTION 7: HANDLING AND STORAGE

Handling: Avoid contacting and avoid breathing the material. Use only in a well ventilated area. Avoid breathing material.

Storage: Store in a cool, dry place.
Consult the Technical Data Sheet for specific storage instructions.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE LIMITS:

Chemical Name	Note	ACGIH EXPOSURE LIMITS	OSHA PEL
Crystalline silica	* (see below)	0.025 mg/m ³ TWA (respirable fraction)	((250)/(%SiO ₂ + 5) mppcf TWA (respirable)); ((10)/(%SiO ₂ + 2) mg/m ³ TWA (respirable)); ((30)/(%SiO ₂ + 2) mg/m ³ TWA (total dust))
Diatomaceous earth	* (see below)	No data available.	20 mppcf TWA; ((80)/(% SiO ₂) mg/m ³ TWA)
Portland cement	* (see below)	1 mg/m ³ TWA (particulate matter containing no asbestos and <1% crystalline silica, respirable fraction)	15 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable fraction)
Aluminum oxide	* (see below)	No data available.	15 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable fraction)
Calcium sulfate	* (see below)	10 mg/m ³ TWA (inhalable fraction)	15 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable fraction)
Calcium oxide, CaO	* (see below)	2 mg/m ³ TWA	5 mg/m ³ TWA
Iron oxide	* (see below)	5 mg/m ³ TWA (respirable fraction)	10 mg/m ³ TWA (as fume)
Magnesium Oxide	* (see below)	10 mg/m ³ TWA (inhalable fraction)	15 mg/m ³ TWA (total particulate) (as fume)
Calcium carbonate	* (see below)	No data available.	15 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable fraction)

ENGINEERING CONTROL METHODS:

VENTILATION: Use local exhaust ventilation or other engineering controls to minimize exposures.

EYE PROTECTION: Wear safety glasses with side shields when handling this product. Wear additional eye protection such as chemical splash goggles and/or face shield when the possibility exists for eye contact with splashing or spraying liquid, or airborne material. Have an eye wash station available.

SKIN PROTECTION: Avoid skin contact by wearing chemically resistant gloves and long sleeved shirt. An apron may be appropriate if splashing can occur.

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GLOVES: Nitrile

RESPIRATORY PROTECTION: Respiratory protection may be required to avoid overexposure when handling this product. Use a respirator if general room ventilation is not available or sufficient to eliminate symptoms. NIOSH approved air purifying respirator with dust/mist filter.
Respirators should be selected by and used following requirements found in OSHA's respirator standard (29 CFR 1910.134).

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE:	Solid
COLOR:	Gray
ODOR:	Odorless
ODOR THRESHOLD:	Not established
pH:	Not established
FREEZING/MELTING POINT (deg. C):	Not established
BOILING POINT (deg. C):	Not established
FLASH POINT:	Non flammable
EVAPORATION RATE:	Not established
FLAMMABILITY:	Not a flammable solid or gas
UPPER EXPLOSIVE LIMIT (% in air):	Not established
LOWER EXPLOSIVE LIMIT (% in air):	Not established
VAPOR PRESSURE (mm Hg):	Not established
VAPOR DENSITY:	Not established
WEIGHT PER GALLON (lbs.):	11.20
SPECIFIC GRAVITY:	1.340
SOLUBILITY:	Not established
OCTANOL/WATER COEFFICIENT:	Not established
AUTOIGNITION TEMPERATURE:	Not established
DECOMPOSITION TEMPERATURE:	Not established
VISCOSITY:	No data available.
SOLIDS (% by weight):	100.0
VOC, weight percent	0.00

SECTION 10: STABILITY AND REACTIVITY

STABILITY: Stable under normal conditions.

CHEMICAL INCOMPATIBILITY: Not established

HAZARDOUS POLYMERIZATION: Will not occur.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide Aluminum oxide
Sulfur containing gases

SECTION 11: TOXICOLOGICAL INFORMATION**Component Toxicity / Toxicology Data:**

COMPONENT NAME	LD50/LC50
Crystalline silica	ORAL LD50 RAT 500 MG/KG
Fly ash	ORAL LD50 RAT > 2,000 MG/KG
Aluminum oxide	ORAL LD50 RAT > 5,000 MG/KG
Calcium sulfate	ORAL LD50 RAT > 3,000 MG/KG
Calcium oxide, CaO	ORAL LD50 RAT 500 MG/KG

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Iron oxide	ORAL LD50 RAT > 10,000 MG/KG
Calcium carbonate	ORAL LD50 RAT 6,450 MG/KG
Sulfur trioxide	INHALATION LC50-4H RAT 0.38 MG/L
Carbon, activated	ORAL LD50 RAT > 10,000 MG/KG

This product is a mixture. Unless noted, the information below is based on components.

Skin corrosion / irritation: Can cause moderate skin irritation, defatting, and dermatitis. Not likely to cause permanent damage.

Serious eye damage / irritation :Can cause moderate irritation, tearing and reddening.

Respiratory / skin sensitization: May cause an allergic skin reaction.

Germ cell mutagenicity: No data available.

Carcinogenicity: Contains a material that may cause cancer.

Reproductive toxicity: No data available.

Specific target organ toxicity-single exposure: No data available.

Respiratory irritation / Narcotic effects: May cause respiratory irritation.

Specific target organ toxicity-repeated exposure: Causes damage to organs through prolonged or repeated exposure.

Target organs potentially affected by exposure: Lungs

Aspiration hazard: No data available.

Medical Conditions Aggravated by Exposure: Lung disease

SECTION 12: ECOLOGICAL INFORMATION

OVERVIEW:	No ecological information available for this product.
MOBILITY:	No data available.
PERSISTENCE:	No data available.
BIOACCUMULATION:	No data available.

This product has not been tested for ecological effects. Relevant information for components is listed below:

Component:	Ecotoxicity values:
Calcium sulfate	Acute Toxicity (Fish): 96 Hr LC50 <i>Lepomis macrochirus</i> : 2980 mg/L [static]; 96 Hr LC50 <i>Pimephales promelas</i> : >1970 mg/L [static] Acute Toxicity (Daphnia): Not established Acute Toxicity (Algae): Not established
Calcium oxide, CaO	Acute Toxicity (Fish): 96 Hr LC50 <i>Cyprinus carpio</i> : 1070 mg/L [static] Acute Toxicity (Daphnia): Not established Acute Toxicity (Algae): Not established

SECTION 13: DISPOSAL CONSIDERATIONS

To the best of our knowledge, this product does not meet the definition of hazardous waste under the U.S. EPA Hazardous Waste Regulations 40 CFR 261. Dispose of in an approved landfill. Consult your state, local or provincial authorities and your local waste vendor for more restrictive requirements.

SECTION 14: TRANSPORT INFORMATION

Consult Bill of Lading for transportation information.

US DOT: NOT REGULATED

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IATA: NOT REGULATED

SECTION 15: REGULATORY INFORMATION**INVENTORY STATUS**

U.S. EPA TSCA: This product is in compliance with the Toxic Substances Control Act's Inventory requirements.

CANADIAN CEPA DSL: The components of this product are included on the DSL or are exempt from DSL requirements.

EUROPEAN REACH: As a result of the introduction of REACH into Europe, this product cannot be imported into Europe unless the REACH requirements are met.

AUSTRALIA AICS: This product contains a component that is not on the Australian Inventory (AICS).

If you need more information about the inventory status of this product call 651-236-5858.

This product may contain chemical substances that are regulated for export by various government agencies (such as the Environmental Protection Agency, the Bureau of Industry and Security, or the Drug Enforcement Administration, among others). Before exporting this product from the USA or Canada, we recommend you contact us at reg.request@hbfuller.com to request an export review.

FEDERAL REPORTING**EPA SARA Title III Section 313**

Unless listed below, this product does not contain toxic chemical(s) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) and 40 CFR part 372. EPA has advised that when a percentage range is listed the midpoint may be used to fulfill reporting obligations.

Chemical Name	CAS#	%
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STATE REPORTING

Proposition 65, The Safe Drinking Water and Toxic Enforcement Act of 1986:

Unless listed below, this product does not contain known levels of any chemical known to the State of California to cause cancer or reproductive harm.

Chemical Name/List		CAS	Percent
Quartz	(Carcinogen)	14808-60-7	50 - 70
Titanium dioxide	(Carcinogen)	13463-67-7	0.01 - 0.1
Chromium VI	(Carcinogen)		< 10 ppm
Nickel	(Carcinogen)		< 10 ppm
Lead compounds	(Carcinogen)		< 10 ppm
Cadmium compounds	(Carcinogen)		< 10 ppm
Lithium carbonate	(Developmental toxin)	554-13-2	0.01 - 0.1
Methanol	(Developmental toxin)	67-56-1	0.001 - 0.01

Substances of Very High Concern (SVHC) Content:

Unless listed below, this product does not contain SVHC's.

SECTION 16: OTHER INFORMATION

SDS VERSION DATE: 04-14-2015

This Safety Data Sheet is prepared to comply with the United States Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (29 CFR 1910.1200) and the Canadian Workplace Hazardous Materials Information System (WHMIS).

HMIS RATING: HEALTH -- 2 FLAMMABILITY -- 0 REACTIVITY -- 0

Print Date: 04-14-2015

SKILL SET FAST SETTING MORTAR
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See SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for personal protective equipment recommendations.

Prepared by: The Global Regulatory Department

Phone: 651-236-5842

The information and recommendations set forth herein are believed to be accurate. Because some of the information is derived from information provided to H.B. Fuller Construction Products, Inc. from its suppliers, and because H.B. Fuller Construction Products, Inc. has no control over the conditions of handling and use, H.B. Fuller Construction Products, Inc. makes no warranty, expressed or implied, regarding the accuracy of the data or the results to be obtained from the use thereof. The information is supplied solely for your information and consideration, and H.B. Fuller Construction Products, Inc. assumes no responsibility for use or reliance thereon. It is the responsibility of the user of H.B. Fuller Construction Products, Inc. products to comply with all applicable federal, state and local laws and regulations.

Print Date: 09-04-2015

TEC SS SKIMCOAT AND PATCH
835026PM**SAFETY DATA SHEET**

REVISION DATE: 06-10-2015

SUPERSEDES: 11-30-2012

SECTION 1: IDENTIFICATION OF THE PRODUCT AND SUPPLIER**PRODUCT INFORMATION**

PRODUCT: TEC SS SKIMCOAT AND PATCH
PRODUCT DESCRIPTION: Underlayment
INTENDED USE: Adhesive
PRODUCT IDENTIFIER: 835026PM

COMPANY INFORMATION

H.B. Fuller Construction Products Inc.
1105 S. Frontenac Street
Aurora, IL 60504
Phone: 1-800-552-6225

Medical Emergency Phone Number (24 Hours): 1-888-853-1758
Transport Emergency Phone Number (CHEMTREC): 1-800-424-9300

SECTION 2: HAZARDS IDENTIFICATION

**GHS Hazard
Symbols:**



GHS Signal Word: Danger

GHS Classification: Serious Eye Damage/Eye Irritation Category 1; Skin Sensitisation Category 1; Carcinogenicity Category 1A; Specific Target Organ Systemic Toxicity (STOT) - Repeated Exposure Category 1; Skin Corrosion/Irritation Category 2; Specific Target Organ Systemic Toxicity (STOT) - Single Exposure Category 3

GHS Hazard Phrases: Causes skin irritation.; May cause an allergic skin reaction.; Causes serious eye damage.; May cause respiratory irritation.; May cause cancer.; Causes damage to organs through prolonged or repeated exposure.

GHS Precautions:

Safety Precautions: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapours/spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection.

First Aid Measures: IF ON SKIN: Wash with plenty of soap and water. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF exposed or concerned: Get medical advice/attention. Immediately call a POISON CENTER or doctor/physician. Call a POISON CENTER or doctor/physician if you feel unwell. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.

Storage: Store in a well-ventilated place. Keep container tightly closed. Store locked up.

Disposal: Dispose of contents/container in accordance with local/regional/national/international regulation for hazardous wastes.

Print Date: 09-04-2015

TEC SS SKIMCOAT AND PATCH
835026PM**SAFETY DATA SHEET****SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name	CAS #	PERCENT	Classification	Note
Alumina cement	65997-16-2	10 - 30	Eye Dam. 1; H318 Skin Irrit. 2; H315	
Portland cement	65997-15-1	10 - 30	Eye Dam. 1; H318 Skin Irrit. 2; H315 Skin Sens. 1; H317 STOT SE 3; H335	* (see below)
Calcium sulfate, hemihydrate	26499-65-0	5 - 10	Eye Irrit. 2; H319 Skin Irrit. 2; H315 STOT SE 3; H335	* (see below)
Attapulgite	12174-11-7	1 - 5	Carc. 2; H351	* (see below)
Crystalline silica	14808-60-7	1 - 5	Carc. 1A; H350 STOT RE 1; H372	* (see below)

*This product contains one or more materials that may be hazardous when present as an airborne dust. During normal handling of the product, the material is encapsulated within the product and will not present an exposure risk. Once the product has reached its final state and is abraded or disturbed, dusting and exposure may occur.

Unlisted ingredients are not 'hazardous' per the Occupational Safety and Health Administration Hazard Communication Standard (29 CFR 1910.1200) and/or are not found on the Canadian Workplace Hazardous Materials Information System ingredient disclosure list. See Section 8 for exposure limit guidelines.

SECTION 4: FIRST AID MEASURES

IF IN EYES: Flush eyes with plenty of water for at least 20 minutes retracting eyelids often. Tilt the head to prevent chemical from transferring to the uncontaminated eye. Get immediate medical attention.

IF ON SKIN: Wash with soap and water. Remove contaminated clothing and launder. Get medical attention if irritation develops or persists.

IF INHALED: Remove to fresh air. Restore breathing, if necessary. Call a physician if symptoms persist.

IF SWALLOWED: Severely irritating. Do not induce vomiting. Seek medical attention immediately. Drink 2 glasses of water or milk to dilute. Do not give anything by mouth to an unconscious person.

SECTION 5: FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA:

Use water spray, foam, dry chemical or carbon dioxide.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Material will not burn.

SPECIAL FIRE FIGHTING INSTRUCTIONS:

Persons exposed to products of combustion should wear self-contained breathing apparatus and full protective equipment.

HAZARDOUS COMBUSTION PRODUCTS:

Carbon dioxide, Carbon monoxide Sulfur containing gases

SECTION 6: ACCIDENTAL RELEASE MEASURES

SPECIAL PROTECTION:

Exposure to the spilled material may be irritating or harmful. Follow personal protective equipment recommendations found in Section 8 of this MSDS. Additional precautions may be necessary based on special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred.

METHODS FOR CLEAN-UP:

Avoid creating dusts. Cover material with absorbent and moisten and collect for disposal.

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Transport Emergency Phone Number (CHEMTREC): 1-800-424-9300

SECTION 7: HANDLING AND STORAGE

Handling: Avoid contacting and avoid breathing the material. Use only in a well ventilated area.

Storage: Store in a cool, dry place.
Consult the Technical Data Sheet for specific storage instructions.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**EXPOSURE LIMITS:**

Chemical Name	Note	ACGIH EXPOSURE LIMITS	OSHA PEL
Calcium carbonate	* (see below)	No data available.	15 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable fraction)
Portland cement	* (see below)	1 mg/m ³ TWA (particulate matter containing no asbestos and <1% crystalline silica, respirable fraction)	15 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable fraction)
Calcium sulfate, hemihydrate	* (see below)	No data available.	15 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable fraction)
Crystalline silica	* (see below)	0.025 mg/m ³ TWA (respirable fraction)	((250)/(%SiO ₂ + 5) mppcf TWA (respirable)); ((10)/(%SiO ₂ + 2) mg/m ³ TWA (respirable)); ((30)/(%SiO ₂ + 2) mg/m ³ TWA (total dust))
Cellulose	* (see below)	10 mg/m ³ TWA	15 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable fraction)
Calcium sulfate	* (see below)	10 mg/m ³ TWA (inhalable fraction)	15 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable fraction)

*This product contains one or more materials that may be hazardous when present as an airborne dust. During normal handling of the product, the material is encapsulated within the product and will not present an exposure risk. Once the product has reached its final state and is abraded or disturbed, dusting and exposure may occur.

ENGINEERING CONTROL METHODS:

VENTILATION: Use local exhaust ventilation or other engineering controls to minimize exposures.

EYE PROTECTION: Wear safety glasses with side shields when handling this product. Wear additional eye protection such as chemical splash goggles and/or face shield when the possibility exists for eye contact with splashing or spraying liquid, or airborne material. Have an eye wash station available.

SKIN PROTECTION: Avoid skin contact by wearing chemically resistant gloves and long sleeved shirt. An apron may be appropriate if splashing can occur.

GLOVES: Nitrile

RESPIRATORY PROTECTION: Respiratory protection may be required to avoid overexposure when handling this product. Use a respirator if general room ventilation is not available or sufficient to eliminate symptoms.

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TEC SS SKIMCOAT AND PATCH
835026PM**SAFETY DATA SHEET**

Respirators should be selected by and used following requirements found in OSHA's respirator standard (29 CFR 1910.134).

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE:	Solid
COLOR:	Gray
ODOR:	Odorless
ODOR THRESHOLD:	Not established
pH:	Not established
FREEZING/MELTING POINT (deg. C):	Not established
BOILING POINT (deg. C):	Not established
FLASH POINT:	Not applicable
EVAPORATION RATE:	Not established
FLAMMABILITY:	Not a flammable solid or gas
UPPER EXPLOSIVE LIMIT (% in air):	Not established
LOWER EXPLOSIVE LIMIT (% in air):	Not established
VAPOR PRESSURE (mm Hg):	Not established
VAPOR DENSITY:	Not established
WEIGHT PER GALLON (lbs.):	9.20
SPECIFIC GRAVITY:	1.100
SOLUBILITY:	Not established
OCTANOL/WATER COEFFICIENT:	Not established
AUTOIGNITION TEMPERATURE:	Not established
DECOMPOSITION TEMPERATURE:	Not established
VISCOSITY:	No data available.
SOLIDS (% by weight):	100.0
VOC, weight percent	0.00

SECTION 10: STABILITY AND REACTIVITY

STABILITY:	Stable under normal conditions.
CHEMICAL INCOMPATIBILITY:	Not established
HAZARDOUS POLYMERIZATION:	Will not occur.
HAZARDOUS DECOMPOSITION PRODUCTS:	Carbon monoxide, carbon dioxide Sulfur containing gases

SECTION 11: TOXICOLOGICAL INFORMATION**Component Toxicity / Toxicology Data:**

COMPONENT NAME	LD50/LC50
Calcium carbonate	ORAL LD50 RAT 6,450 MG/KG
Crystalline silica	ORAL LD50 RAT 500 MG/KG
Cellulose	INHALATION LC50-4H RAT > 5,800.00 MG/M3
Calcium sulfate	ORAL LD50 RAT > 3,000 MG/KG

This product is a mixture. Unless noted, the information below is based on components.

Skin corrosion / irritation: Can cause moderate skin irritation, defatting, and dermatitis. Not likely to cause permanent damage.

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835026PM**SAFETY DATA SHEET**

Serious eye damage / irritation :Can cause moderate irritation, tearing and reddening.

Respiratory / skin sensitization: May cause an allergic skin reaction.

Germ cell mutagenicity: No data available.

Carcinogenicity: Contains a material that may cause cancer.

Reproductive toxicity: No data available.

Specific target organ toxicity-single exposure: No data available.

Respiratory irritation / Narcotic effects: May cause respiratory irritation.

Specific target organ toxicity-repeated exposure: Causes damage to organs through prolonged or repeated exposure.

Target organs potentially affected by exposure: Lungs

Aspiration hazard: No data available.

Medical Conditions Aggravated by Exposure: Lung disease

SECTION 12: ECOLOGICAL INFORMATION

OVERVIEW:	No ecological information available for this product.
MOBILITY:	No data available.
PERSISTENCE:	No data available.
BIOACCUMULATION:	No data available.

This product has not been tested for ecological effects. Relevant information for components is listed below:

Component:	Ecotoxicity values:
Calcium sulfate	Acute Toxicity (Fish): 96 Hr LC50 <i>Lepomis macrochirus</i> : 2980 mg/L [static]; 96 Hr LC50 <i>Pimephales promelas</i> : >1970 mg/L [static] Acute Toxicity (Daphnia): Not established Acute Toxicity (Algae): Not established

SECTION 13: DISPOSAL CONSIDERATIONS

To the best of our knowledge, this product does not meet the definition of hazardous waste under the U.S. EPA Hazardous Waste Regulations 40 CFR 261. Dispose of in an approved landfill. Consult your state, local or provincial authorities and your local waste vendor for more restrictive requirements.

SECTION 14: TRANSPORT INFORMATION

Consult Bill of Lading for transportation information.

US DOT:	NOT REGULATED
IATA:	NOT REGULATED

SECTION 15: REGULATORY INFORMATION**INVENTORY STATUS**

U.S. EPA TSCA:	This product is in compliance with the Toxic Substances Control Act's Inventory requirements.
CANADIAN CEPA DSL:	The components of this product are included on the DSL or are exempt from DSL requirements.
EUROPEAN REACH:	As a result of the introduction of REACH into Europe, this product cannot be imported into Europe unless the REACH requirements are met.

Print Date: 09-04-2015

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AUSTRALIA AICS: This product is in compliance with the Australian Inventory of Chemical Substances requirements.

KOREAN TCCL: This product is in compliance with the Korean Existing Chemicals List requirements.

CHINA IECSC INVENTORY: This product is in compliance with the Inventory of Existing Chemical Substances in China (IECSC) requirements.

If you need more information about the inventory status of this product call 651-236-5858.

This product may contain chemical substances that are regulated for export by various government agencies (such as the Environmental Protection Agency, the Bureau of Industry and Security, or the Drug Enforcement Administration, among others). Before exporting this product from the USA or Canada, we recommend you contact us at reg.request@hbfuller.com to request an export review.

FEDERAL REPORTING**EPA SARA Title III Section 313**

Unless listed below, this product does not contain toxic chemical(s) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) and 40 CFR part 372. EPA has advised that when a percentage range is listed the midpoint may be used to fulfill reporting obligations.

Chemical Name	CAS#	%
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STATE REPORTING

Proposition 65, The Safe Drinking Water and Toxic Enforcement Act of 1986:

Unless listed below, this product does not contain known levels of any chemical known to the State of California to cause cancer or reproductive harm.

Chemical Name/List	CAS	Percent
Quartz (Carcinogen)	14808-60-7	1 - 5
Acetaldehyde (Carcinogen)	75-07-0	0.01 - 0.1
Benzene (Carcinogen)	71-43-2	0.01 - 0.1
Nickel (Carcinogen)		< 10 ppm
Chromium VI (Carcinogen)		< 10 ppm
Lead compounds (Carcinogen)		< 10 ppm
Cadmium compounds (Carcinogen)		< 10 ppm
Benzene (Developmental toxin)	71-43-2	0.01 - 0.1
Toluene (Developmental toxin)	108-88-3	0.01 - 0.1
Methanol (Developmental toxin)	67-56-1	0.01 - 0.1
Benzene, methyl- (Female reproductive toxin)	108-88-3	0.01 - 0.1
Benzene (Male reproductive toxin)	71-43-2	0.01 - 0.1

Substances of Very High Concern (SVHC) Content:

Unless listed below, this product does not contain SVHC's.

SECTION 16: OTHER INFORMATION

SDS VERSION DATE: 06-10-2015

This Safety Data Sheet is prepared to comply with the United States Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (29 CFR 1910.1200) and the Canadian Workplace Hazardous Materials Information System (WHMIS).

HMIS RATING: HEALTH -- 2 FLAMMABILITY -- 0 REACTIVITY -- 0

See SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for personal protective equipment recommendations.

Print Date: 09-04-2015

TEC SS SKIMCOAT AND PATCH
835026PM**SAFETY DATA SHEET**

Prepared by: The Global Regulatory Department

Phone: 651-236-5842

The information and recommendations set forth herein are believed to be accurate. Because some of the information is derived from information provided to H.B. Fuller Construction Products, Inc. from its suppliers, and because H.B. Fuller Construction Products, Inc. has no control over the conditions of handling and use, H.B. Fuller Construction Products, Inc. makes no warranty, expressed or implied, regarding the accuracy of the data or the results to be obtained from the use thereof. The information is supplied solely for your information and consideration, and H.B. Fuller Construction Products, Inc. assumes no responsibility for use or reliance thereon. It is the responsibility of the user of H.B. Fuller Construction Products, Inc. products to comply with all applicable federal, state and local laws and regulations.

Print Date: 04-06-2015

TEC SS UNSANDED CAULK
839039PM**SAFETY DATA SHEET**

REVISION DATE: 04-01-2015

SUPERSEDES: None

SECTION 1: IDENTIFICATION OF THE PRODUCT AND SUPPLIER**PRODUCT INFORMATION**

PRODUCT: TEC SS UNSANDED CAULK
PRODUCT DESCRIPTION: Sealant
INTENDED USE: Sealant
PRODUCT IDENTIFIER: 839039PM

COMPANY INFORMATION

H.B. Fuller Construction Products Inc.
1105 S. Frontenac Street
Aurora, IL 60504
Phone: 1-800-552-6225

Medical Emergency Phone Number (24 Hours): 1-888-853-1758
Transport Emergency Phone Number (CHEMTREC): 1-800-424-9300

SECTION 2: HAZARDS IDENTIFICATION

GHS Classification: This product is not classified as hazardous under GHS criteria.
GHS Precautions:
First Aid Measures: IF SWALLOWED: Do not induce vomiting. Seek medical attention if symptoms develop. IF IN EYES: Use an eye wash to remove chemical from the eye. IF ON SKIN: Wash with soap and water. IF INHALED: Remove individual to fresh air after an airborne exposure if any symptoms develop.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS #	PERCENT	Classification	Note
Titanium dioxide	13463-67-7	0.1 - 1	Carc. 2; H351	* (see below)
Crystalline silica	14808-60-7	0.1 - 1	Carc. 1A; H350 STOT RE 1; H372	* (see below)

*This product contains one or more materials that may be hazardous when present as an airborne dust. During normal handling of the product, the material is encapsulated within the product and will not present an exposure risk. Once the product has reached its final state and is abraded or disturbed, dusting and exposure may occur.

Unlisted ingredients are not 'hazardous' per the Occupational Safety and Health Administration Hazard Communication Standard (29 CFR 1910.1200) and/or are not found on the Canadian Workplace Hazardous Materials Information System ingredient disclosure list. See Section 8 for exposure limit guidelines.

SECTION 4: FIRST AID MEASURES

IF IN EYES: Use an eye wash to remove a chemical from your eye regardless of the level of hazard. Flush the affected eye for at least twenty minutes. Tilt the head to prevent chemical from transferring to the uncontaminated eye. Seek medical advice after flushing.

IF ON SKIN: Wash with soap and water. Get medical attention if irritation develops or persists.

IF INHALED: Remove to fresh air. Call a physician if symptoms persist.

IF SWALLOWED: Do not induce vomiting. Seek medical attention if symptoms develop. Provide medical care provider with this MSDS.

Print Date: 04-06-2015

TEC SS UNSANDED CAULK
839039PM**SAFETY DATA SHEET****SECTION 5: FIRE FIGHTING MEASURES**

EXTINGUISHING MEDIA: Use water spray, foam, dry chemical or carbon dioxide.

UNUSUAL FIRE AND EXPLOSION HAZARDS: There is a possibility of pressure buildup in closed containers when heated. Water spray may be used to cool the containers.

SPECIAL FIRE FIGHTING INSTRUCTIONS: Persons exposed to products of combustion should wear self-contained breathing apparatus and full protective equipment.

HAZARDOUS COMBUSTION PRODUCTS: Carbon dioxide, Carbon monoxide

SECTION 6: ACCIDENTAL RELEASE MEASURES

SPECIAL PROTECTION: No adverse health effects expected from the clean-up of spilled material. Follow personal protective equipment recommendations found in Section 8 of this MSDS.

METHODS FOR CLEAN-UP: Dike if necessary, contain spill with inert absorbent and transfer to containers for disposal. Keep spilled product out of sewers, watersheds, or water systems.

Transport Emergency Phone Number (CHEMTREC): 1-800-424-9300

SECTION 7: HANDLING AND STORAGE

Handling: No special handling instructions due to toxicity.

Storage: Store in a cool, dry place. Protect from freezing

Consult the Technical Data Sheet for specific storage instructions.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**EXPOSURE LIMITS:**

Chemical Name	Note	ACGIH EXPOSURE LIMITS	OSHA PEL
Calcium carbonate	* (see below)	No data available.	15 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable fraction)
Titanium dioxide	* (see below)	10 mg/m ³ TWA	15 mg/m ³ TWA (total dust)
Crystalline silica	* (see below)	0.025 mg/m ³ TWA (respirable fraction)	((250)/(%SiO ₂ + 5) mppcf TWA (respirable)); ((10)/(%SiO ₂ + 2) mg/m ³ TWA (respirable)); ((30)/(%SiO ₂ + 2) mg/m ³ TWA (total dust))

*This product contains one or more materials that may be hazardous when present as an airborne dust. During normal handling of the product, the material is encapsulated within the product and will not present an exposure risk. Once the product has reached its final state and is abraded or disturbed, dusting and exposure may occur.

ENGINEERING CONTROL METHODS:

VENTILATION: Use local exhaust ventilation or other engineering controls to minimize exposures.

EYE PROTECTION: Wear safety glasses when handling this product.

SKIN PROTECTION: Not normally required. Wear chemically resistant gloves to prevent prolonged or repeated contact.

GLOVES: Not normally required. Use nitrile gloves if conditions warrant.

RESPIRATORY PROTECTION: Respiratory protection may be required to avoid overexposure when

Print Date: 04-06-2015

TEC SS UNSANDED CAULK
839039PM**SAFETY DATA SHEET**

handling this product. Use a respirator if general room ventilation is not available or sufficient to eliminate symptoms. NIOSH approved air purifying respirator with organic vapor cartridge and dust/mist filter.

Respirators should be selected by and used following requirements found in OSHA's respirator standard (29 CFR 1910.134).

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE:	Semi-solid
COLOR:	White
ODOR:	Neutral
ODOR THRESHOLD:	Not established
pH:	7.4
FREEZING/MELTING POINT (deg. C):	Not established
BOILING POINT (deg. C):	Not established
FLASH POINT:	Non flammable
EVAPORATION RATE:	Not established
FLAMMABILITY:	Not a flammable solid or gas
UPPER EXPLOSIVE LIMIT (% in air):	Not established
LOWER EXPLOSIVE LIMIT (% in air):	Not established
VAPOR PRESSURE (mm Hg):	Not established
VAPOR DENSITY:	Not established
WEIGHT PER GALLON (lbs.):	12.50
SPECIFIC GRAVITY:	1.500
SOLUBILITY:	Not established
OCTANOL/WATER COEFFICIENT:	Not established
AUTOIGNITION TEMPERATURE:	Not established
DECOMPOSITION TEMPERATURE:	Not established
VISCOSITY:	No data available.
SOLIDS (% by weight):	78.5
VOC, weight percent	1.60
VOC, U.S. EPA Method 24, less water and exempt solvents (theoretically determined)	27g/liter of material

SECTION 10: STABILITY AND REACTIVITY

STABILITY:	Stable under normal conditions.
CHEMICAL INCOMPATIBILITY:	Not established
HAZARDOUS POLYMERIZATION:	Will not occur.
HAZARDOUS DECOMPOSITION PRODUCTS:	Carbon monoxide, carbon dioxide

SECTION 11: TOXICOLOGICAL INFORMATION**Component Toxicity / Toxicology Data:**

COMPONENT NAME	LD50/LC50
Calcium carbonate	ORAL LD50 RAT 6,450 MG/KG

This product is a mixture. Unless noted, the information below is based on components.

Skin corrosion / irritation: Can cause minor skin irritation, defatting, and dermatitis.

Serious eye damage / irritation :Can cause minor irritation, tearing and reddening.

Respiratory / skin sensitization: No data available.

Print Date: 04-06-2015

TEC SS UNSANDED CAULK
839039PM**SAFETY DATA SHEET**

Germ cell mutagenicity: No data available.
Carcinogenicity: Contains a material that may cause cancer.
Reproductive toxicity: No data available.
Specific target organ toxicity-single exposure: No data available.
Respiratory irritation / Narcotic effects: No data available.
Specific target organ toxicity-repeated exposure: No data available.
Target organs potentially affected by exposure: Lungs
Aspiration hazard: No data available.

Medical Conditions Aggravated by Exposure: Lung disease

SECTION 12: ECOLOGICAL INFORMATION

OVERVIEW: No ecological information available for this product.
MOBILITY: No data available.
PERSISTENCE: No data available.
BIOACCUMULATION: No data available.

This product has not been tested for ecological effects. Relevant information for components is listed below:

Component:	Ecotoxicity values:
No data available.	Acute Toxicity (Fish): Acute Toxicity (Daphnia): Acute Toxicity (Algae):

SECTION 13: DISPOSAL CONSIDERATIONS

To the best of our knowledge, this product does not meet the definition of hazardous waste under the U.S. EPA Hazardous Waste Regulations 40 CFR 261. Solidify and dispose of in an approved landfill. Consult state, local or provincial authorities for more restrictive requirements.

SECTION 14: TRANSPORT INFORMATION

Consult Bill of Lading for transportation information.

US DOT: NOT REGULATED
IATA: NOT REGULATED

SECTION 15: REGULATORY INFORMATION**INVENTORY STATUS**

U.S. EPA TSCA: This product is in compliance with the Toxic Substances Control Act's Inventory requirements.
CANADIAN CEPA DSL: The components of this product are included on the DSL or are exempt from DSL requirements.
EUROPEAN REACH: As a result of the introduction of REACH into Europe, this product cannot be imported into Europe unless the REACH requirements are met.
AUSTRALIA AICS: This product is in compliance with the Australian Inventory of Chemical Substances requirements.

If you need more information about the inventory status of this product call 651-236-5858.

Print Date: 04-06-2015

TEC SS UNSANDED CAULK
839039PM**SAFETY DATA SHEET**

This product may contain chemical substances that are regulated for export by various government agencies (such as the Environmental Protection Agency, the Bureau of Industry and Security, or the Drug Enforcement Administration, among others). Before exporting this product from the USA or Canada, we recommend you contact us at reg.request@hbfuller.com to request an export review.

FEDERAL REPORTING**EPA SARA Title III Section 313**

Unless listed below, this product does not contain toxic chemical(s) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) and 40 CFR part 372. EPA has advised that when a percentage range is listed the midpoint may be used to fulfill reporting obligations.

Chemical Name	CAS#	%
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STATE REPORTING

Proposition 65, The Safe Drinking Water and Toxic Enforcement Act of 1986:

Unless listed below, this product does not contain known levels of any chemical known to the State of California to cause cancer or reproductive harm.

Chemical Name/List	CAS	Percent
Titanium dioxide (Carcinogen)	13463-67-7	0.1 - 1
Quartz (Carcinogen)	14808-60-7	0.1 - 1
Ethyl acrylate (Carcinogen)	140-88-5	< 10 ppm
Carbon black (Carcinogen)	1333-86-4	< 10 ppm
Methanol (Developmental toxin)	67-56-1	< 10 ppm

Substances of Very High Concern (SVHC) Content:

Unless listed below, this product does not contain SVHC's.

tert-Octylphenol, ethoxylated

SECTION 16: OTHER INFORMATION

SDS VERSION DATE: 04-01-2015

This Safety Data Sheet is prepared to comply with the United States Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (29 CFR 1910.1200) and the Canadian Workplace Hazardous Materials Information System (WHMIS).

HMIS RATING: HEALTH -- 0 FLAMMABILITY -- 0 REACTIVITY -- 0

See SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for personal protective equipment recommendations.

Prepared by: The Global Regulatory Department

Phone: 651-236-5842

The information and recommendations set forth herein are believed to be accurate. Because some of the information is derived from information provided to H.B. Fuller Construction Products, Inc. from its suppliers, and because H.B. Fuller Construction Products, Inc. has no control over the conditions of handling and use, H.B. Fuller Construction Products, Inc. makes no warranty, expressed or implied, regarding the accuracy of the data or the results to be obtained from the use thereof. The information is supplied solely for your information and consideration, and H.B. Fuller Construction Products, Inc. assumes no responsibility for use or reliance thereon. It is the responsibility of the user of H.B. Fuller Construction Products, Inc. products to comply with all applicable federal, state and local laws and regulations.

Material Safety Data Sheet U.S. Department of Labor
 May be used to satisfy OSHA's Hazard Communication Standard, (Non-Mandatory Form)
 29 CFR 1910.1200. Standard must be Form Approved
 consulted for specific requirements. OMB No. 1218-0072

IDENTITY (As THIC LIQUID WASHABLE TEMPERA Note: Blank spaces
 Section I

Manufacturer's Emergency Telephone Number 570-454-3596

Address (Number for Information 570-454-3596

100 E Diamond Avenue Date Prepared 7-26-2008

Hazleton PA 18201 Signature of Preparer (optional)

Section II - Hazard Ingredients/Identity Information Hazardous Cor)

ALL CP/AP PRODUCTS ARE CERTIFIED
 BY A NATIONAL RECOGNIZED AUTHORITY ON TOXICOLOGY ASSOCIATED WITH
 A LEADING UNIVERSITY TO CONTAIN
 NO KNOWN TOXIC MATERIALS IN SUFFICIENT QUANTITIES TO BE
 INJURIOUS TO THE HUMAN BODY EVEN
 IF INGESTED.
 CONFORMS TO ASTM-D 4236.

Section III - Physical/Chemical Characteristics

Boiling Point (°C) = 1) N/A

Vapor Pressure (mm Hg.) Melting Point N/A

Vapor Density (Butyl Acetate = 1) N/A

Solubility in Water (g/l) Dispersible

Appearance and Odor Initially Odorless

Section IV - Fire and Explosion Hazard Data

Flash Point (Method) UEL NONE NONE

Extinguishing Media WATER, FOAM

Special Fire Fighting

APPARATUS

Unusual Fire and Explosion Hazards NONE

Section V - Reactivity Data

Stability Unstable Conditions to Avoid

Stable X None Known

Incompatibilities Strong oxidizers and acids

Hazardous Decomposition or Byproducts

Hazardous May Be None Known

Polymerization Will Not Occur X

Section VI - Health Hazard Data

Route(s) of Entry Possible

Health Hazards (Acute and Chronic)

This product is quantities to be
toxic or injurious to humans.

Carcinogenicity: NTP? OSHA Regulated? No

Signs and Symptoms of Exposure None Known

Medical Conditions Aggravated by Exposure None Known

Emergency and First Aid Measures
Call physician.

Section VII - Precautions for Safe Handling and Use

Steps to Be Taken in Case of Spill or Leak
according to local regulations.

Waste Disposal Method

In accordance with local regulations.

Precautions to Be Taken in Handling and Storing

Keep in cool, dry area.

Other Precautions

None Known

Section VIII - Control Measures

Respiratory Protection (Specify Type) Not Required.

Ventilation Local Exhaust Not Required Special None

Mechanical (General)

Not Required Other

None

Protective Gloved

Other Protective Clothing or Equipment

Not Required

Work/Hygienic Practices

Clean, safe work practices

Page 2

are not permitted. If any item is not applicable, or no information is available, the space

NONE

e must be marked to indicate that.

FLINN SCIENTIFIC, INC.

Safety Data Sheet (SDS)

SDS #: 183.00

Revision Date: June 25, 2015

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

tert-Butyl Alcohol

Flinn Scientific, Inc. P.O. Box 219, Batavia, IL 60510 (800) 452-1261

CHEMTREC Emergency Phone Number: (800) 424-9300

Signal Word **DANGER**

Pictograms



SECTION 2 — HAZARDS IDENTIFICATION

Hazard class: Flammable liquids (Category 2). Highly flammable liquid and vapor (H225). Keep away from heat, sparks, open flames, and hot surfaces. No smoking (P210).

Hazard class: Serious eye damage or irritation (Category 2A). Causes serious eye irritation (H319).

Hazard class: Specific target organ toxicity, single exposure; respiratory tract irritation (Category 3). May cause respiratory irritation (H335). Avoid breathing mist, vapors or spray (P261).

Hazard class: Specific target organ toxicity, single exposure; Narcotic effects (Category 3). May cause drowsiness or dizziness (H336). Avoid breathing mist, vapors or spray (P261).

SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
tert-Butyl alcohol	75-65-0	(CH ₃) ₃ COH	74.12	
Synonym: 2-methyl-2-propanol				

SECTION 4 — FIRST AID MEASURES

Call a POISON CENTER or physician if you feel unwell (P312). **If inhaled:** Remove victim to fresh air and keep at rest in a position comfortable for breathing (P304+P340). **If in eyes:** Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing (P305+P351+P338). **If eye irritation persists:** Get medical advice or attention (P337+P313). **If on skin (or hair):** Immediately remove all contaminated clothing. Rinse skin with water (P303+P361+P353). **If skin irritation occurs:** Get medical advice or attention (P332+P313). **If swallowed:** Rinse mouth. Call a POISON CENTER or physician if you feel unwell.

SECTION 5 — FIRE FIGHTING MEASURES

Class 1B flammable liquid; dangerous fire risk.

Flash point: 11 °C Flammable limits: Lower: 2.4% Upper: 8.0% Autoignition Temperature: 478 °C

When heated to decomposition, may emit toxic fumes.

In case of fire: Use a tri-class dry chemical fire extinguisher (P370+P378).

NFPA CODE

H-2

F-3

R-0

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Remove all ignition sources and ventilate area. Contain the spill with sand or other inert absorbent material; deposit in sealed bag or container. See Sections 8 and 13 for further information.

SECTION 7 — HANDLING AND STORAGE

Flinn Suggested Chemical Storage Pattern: Organic #2. Store with alcohols, glycols, amines and amides. Store in a dedicated flammables cabinet. If a flammables cabinet is not available, store in Flinn Saf-Stor™ can. Keep container tightly closed (P233). Keep cool (P235). Use only in a hood or well-ventilated area (P271).

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Wear protective gloves, protective clothing, and eye protection (P280). Wash hands thoroughly after handling (P264). Use only in a hood or well-ventilated area (P271).

Exposure guidelines: PEL/TLV 100 ppm (OSHA/ACGIH). IDLH 1600 ppm (NIOSH)

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Colorless, mobile liquid. Camphor-like odor. May be solid at room temperature.

Soluble: Water. Miscible in alcohol.

Boiling point: 82.4 °C

Melting point: 25.7 °C

Specific gravity: 0.7885

Vapor density: 2.5

SECTION 10 — STABILITY AND REACTIVITY

Avoid contact with acids, acid chlorides, acid anhydrides, oxidizers, and heat.

Shelf life: Fair.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Eye, skin, and respiratory tract irritation. Nausea, dizziness, and headache.

Chronic effects: N.A.

Target organs: Eyes, skin, respiratory system, and central nervous system.

ORL-RAT LD₅₀: 2743 mg/kg

IHL-RAT LC₅₀: >10,000 ppm/4H

SKN-RBT LD₅₀: >2 g/kg

N.A. = Not available, not all health aspects of this substance have been fully investigated.

SECTION 12 — ECOLOGICAL INFORMATION

Data not yet available.

SECTION 13 — DISPOSAL CONSIDERATIONS

Please review all federal, state and local regulations that may apply before proceeding.

Flinn Suggested Disposal Method #26b is one option.

SECTION 14 — TRANSPORT INFORMATION

Shipping name: Butanols. Hazard class: 3, Flammable liquid. UN number: UN 1120.

N/A = Not applicable

SECTION 15 — REGULATORY INFORMATION

TSCA-listed, EINECS-listed (200-889-7), RCRA code D001.

SECTION 16 — OTHER INFORMATION

This Safety Data Sheet (SDS) is for guidance and is based upon information and tests believed to be reliable. Flinn Scientific, Inc. makes no guarantee of the accuracy or completeness of the data and shall not be liable for any damages relating thereto. The data is offered solely for your consideration, investigation, and verification. The data should not be confused with local, state, federal or insurance mandates, regulations, or requirements and CONSTITUTE NO WARRANTY. Any use of this data and information must be determined by the science instructor to be in accordance with applicable local, state or federal laws and regulations. The conditions or methods of handling, storage, use and disposal of the product(s) described are beyond the control of Flinn Scientific, Inc. and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THIS PRODUCT(S).

Consult your copy of the *Flinn Science Catalog/Reference Manual* for additional information about laboratory chemicals.

Revision Date: June 25, 2015



MATERIAL SAFETY DATA SHEET

LPS® ThermaPlex® Hi-Load Bearing Grease

Revision Date: August 8, 2011

Supersedes: July 25, 2008

Section 1 • Product and Company Identification

Product Name: LPS® ThermaPlex® Hi-Load Bearing Grease

Part Number(s): 70414, 70406, 70435, 70455, C70414, C70406, C70435, C70455

Chemical Name: Petroleum Hydrocarbon

Product Use: A lubricating grease intended for bearings in industrial applications involving extreme loads.

Manufacturer Information: LPS Laboratories, 4647 Hugh Howell Road, Tucker, GA, USA 30084
TEL: USA & Canada: 1 800 241-8334
Outside USA and Canada: +1 770 243-8800
FAX: USA & Canada: 1 800 543-1563
Outside USA and Canada: +1 770 243-8899

Emergency Telephone Number: Chemtrec: USA & Canada: 1 800 424-9300
Outside USA and Canada: +1 703 527-3887

Website: <http://www.lpslabs.com>

Section 2 • Hazards Identification

This material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200). This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

Emergency Overview:

Aerosol: Not applicable

Bulk: WARNING: Prolonged or repeated skin contact may cause irritation.

Primary route(s) of entry: Skin and eye contact.

Potential Acute Health Effects:

Eyes: Irritating to eyes.

Skin: Repeated exposure may cause skin dryness or defatting of the skin.

Inhalation: Oil mist may cause irritation of the respiratory tract.

Ingestion: Product has a low order of acute oral toxicity, but ingestion of large quantities may cause nausea, vomiting, and gastrointestinal irritation.

Potential Chronic Health Effects:

Carcinogenic Effects: NTP: No IARC: No OSHA: No ACGIH: No

Mutagenic Effects: None

Teratogenic Effects: None

Target Organs: None

Medical conditions aggravated by exposure:

None known from normal exposure.

Signs and Symptoms

Stinging in eyes. Repeated or prolonged skin contact can cause redness, irritation, and scaling of the skin (dermatitis).



MATERIAL SAFETY DATA SHEET

LPS® ThermaPlex® Hi-Load Bearing Grease

Revision Date: August 8, 2011

Supersedes: July 25, 2008

Section 3 • Composition / Information on Ingredients

Component	CASRN	Weight Percent
Distillates (Petroleum), Hydrotreated Heavy Naphthenic	64742-52-5	60 - 100%

Section 4 • First Aid Measures

Eyes:	Check for and remove contact lenses. Immediately, flush eyes with cool, clean, low-pressure water for at least 15 minutes. Hold eyelids apart to ensure complete irrigation of the eye and eyelid tissue. DO NOT use eye ointment. Seek medical attention if irritation persists.
Skin:	Remove contaminated shoes and clothing. Clean affected area thoroughly with mild soap and water. DO NOT use ointments. Seek medical attention if irritation persists.
Inhalation:	Immediately move victim to fresh air. If victim is not breathing, immediately begin rescue breathing. If heart has stopped, immediately begin cardiopulmonary resuscitation (CPR). If breathing is difficult, seek medical attention immediately.
Ingestion:	DO NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If spontaneous vomiting is about to occur, place victim's head below knees. If victim is drowsy or unconscious, place on the left side with head down. DO NOT leave victim unattended. Seek medical attention immediately.

Section 5 • Fire Fighting Measures

Products of Combustion:	Carbon monoxide and carbon dioxide.		
General Fire Hazards:	High heat will cause product to boil, evolving vapor that could cause explosive rupture of closed containers.		
Firefighting media:	SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use CO2, water spray, fog or foam.		
Sensitivity to Impact:	None	Sensitivity to Static Discharge:	None
Protection Clothing (Fire):	Firefighters must use full bunker gear including NIOSH-approved positive pressure self-contained breathing apparatus to protect against potential hazardous combustion or decomposition products and oxygen deficiencies.		
Special Remarks on Explosion Hazards:	None		

Section 6 • Accidental Release Measures

Containment Procedures:	Small Spill and Leak:	Absorb with an inert material and dispose of properly.
	Large Spill and Leak:	Prevent material from entering sewers and drains. Pick up for disposal using absorbant pads, sand or other inert non-combustible materials. Place into appropriate waste containers for later disposal.
Clean-Up Procedures:	Recover free product and place in a suitable container for disposal.	
Evacuation Procedures:	Ventilate area of leak or spill. Keep unnecessary and unprotected people away.	
Special Procedures:	Remove all sources of ignition. Ventilate area. Wear personal protective equipment during cleanup. Be aware of spilled material on walking surfaces - this product is slippery.	

Section 7 • Handling and Storage

Handling:	Avoid contact with skin and eyes. Wash thoroughly after handling.
Storage:	Keep container sealed until ready for use. Keep container in a cool, well-ventilated area. Store between 40°F and 120°F (4.4°C and 49°C).
Precautions to be taken in handling and storage:	
Keep container in a cool, well-ventilated area. Avoid breathing vapors.	



MATERIAL SAFETY DATA SHEET
LPS® ThermaPlex® Hi-Load Bearing Grease

Revision Date: August 8, 2011

Supersedes: July 25, 2008

Section 8 • Exposure Controls / Personal Protection

Engineering Controls: Provide general and/or local exhaust ventilation to keep exposures below 5 mg/m³ oil mist in air.

Personal protective equipment

Eye protection: Safety glasses with side shields conforming to appropriate regulations. Eye wash fountain and emergency shower facilities are recommended.

Hand protection: Normally no hand protection is required; however, using chemical resistant gloves is recommended.

Respiratory protection: Typical use of this product under normal conditions does not require the use of respiratory protection. If airborne concentrations are above the applicable exposure limits (listed above), use NIOSH approved respiratory protection (i.e. organic vapor cartridge).

General Hygiene Wash thoroughly after handling. Have eye-wash facilities immediately available.

Section 9 • Physical and Chemical Properties

Appearance:	Paste	Color:	Blue / Black
Odor:	Petroleum	Evaporation Rate:	< 1 (BuAc = 1)
Solubility Description:	Not soluble in water	Flash Point:	> 230°C (446°F)
Boiling Point:	Not established	Flash Point Method:	Tag-Closed Cup
Specific Gravity (H₂O=1):	0.89 - 0.94 @ 20°C	Decomposition Temperature:	Not established
Vapor Density (air = 1):	> 1	Auto ignition temperature:	Not established
Vapor Pressure:	Not established	Flammable limits (estimated):	LOWER: N.E. UPPER: N.E.
Rule 1171 PPc:	Not applicable	Partition Coefficient (octanol/water):	Not established
V.O.C. Content:	Aerosol: Not applicable Bulk: 0% per State & Federal Consumer Product Regulations	Odor Threshold:	Not established
Melting Point:	Not established	Viscosity:	Not established
pH:	Not applicable	Volatiles:	0%
Heat of combustion:	Aerosol: Not applicable Bulk: Not established		

Section 10 • Stability and Reactivity

Chemical Stability: Product is stable under recommended storage conditions.

Conditions to Avoid: No specific measures to avoid.

Incompatibility: Reactive or incompatible with oxidizing agents.

Hazardous Decomposition: These products are carbon oxides (CO, CO₂).

Hazardous Polymerization: Will not occur.



MATERIAL SAFETY DATA SHEET

LPS® ThermaPlex® Hi-Load Bearing Grease

Revision Date: August 8, 2011

Supersedes: July 25, 2008

Section 11 • Toxicological Information

Acute and Chronic Toxicity

A: General Product Information

An acute toxicity study of this product has not been conducted. Information given in this section relates only to individual constituents contained in this preparation.

B: Component Analysis

Component	CASRN	LC-50	LD-50
Distillates (Petroleum), Hydrotreated Heavy Naphthenic	64742-52-5	2.18 mg/L / rat / 4 hr	> 5000 mg/kg / oral / rat > 2000 mg/kg / dermal / rabbit

* Supplier Data

Section 12 • Ecological Information

Mobility: Non-volatile. Absorbed only slowly into soil. **Persistence / Degradability:** Only slightly biodegradable

Bioaccumulative potential: No bioaccumulation potential **Other adverse effects:** None known

Section 13 • Disposal Considerations

Waste Status: In its purchased form, this material does not meet the definition of a RCRA hazardous waste (40 CFR 261).

Disposal: Waste must be disposed of in accordance with any and all applicable environmental control rules and/or regulations.

Note: Chemical additions to, processing of, or otherwise altering this material may make this waste management information inaccurate, incomplete, or otherwise inappropriate. Furthermore, state and local waste disposal requirements may be more restrictive than federal laws and regulations.

Section 14 • Transport Information

This product is not regulated by any mode of transportation.

The preceding information is subject to change and must be verified prior to shipment. It is the responsibility of anyone offering hazardous materials for shipment to ensure compliance with all applicable regulations.



MATERIAL SAFETY DATA SHEET
LPS® ThermaPlex® Hi-Load Bearing Grease

Revision Date: August 8, 2011

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Section 15 • Regulatory Information

U.S. Federal Regulations

RCRA Hazardous Waste No.: None

Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA):

None

Toxic Substances Control Act (TSCA):

All components of this product are TSCA inventory listed and/or are exempt.

Superfund Amendments and Reauthorization Act (SARA) Title III SARA Section 311/312 (40 CFR 370) Hazard Categories:

None

This product contains the following toxic chemical(s) subject to reporting requirements of SARA Section 313 (40 CFR 372):

No individual section 313 component is present at or above 1%.

Section 112 Hazardous Air Pollutants (HAPs): None

State Regulations

California: This product does not contain chemical(s) known to the State of California to cause cancer, birth defects or other reproductive harm.

California and OTC States: This product is not regulated by consumer product regulations.

New Jersey Right to Know:

Aerosol: Not applicable

Bulk: Petroleum Oil 64742-52-5 • Calcium Carbonate 471-34-1 • Lithium 12-Hydroxystearate 7620-77-1 • Molybdenum Disulfide 1317-33-5 • Olefin Sulfide
NJTSR No. 800969-5422P

International Regulations

Canadian Environmental Protection Act (CEPA):

All of the components of this product are included on the Canadian Domestic Substances list (DSL).

Canadian Workplace Hazardous Materials Information System WHMIS:

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

WHMIS Classification:

NOT WHMIS controlled

Other Regulations:

Montreal Protocol listed ingredients: None

Stockholm Convention listed ingredients: None

Rotterdam Convention listed ingredients: None

RoHS Compliant: Yes



MATERIAL SAFETY DATA SHEET
LPS® ThermaPlex® Hi-Load Bearing Grease

Revision Date: August 8, 2011

Supersedes: July 25, 2008

Section 16 • Other Information

MSDS#: 70414 MSDS Preparation Responsible Name: Elena Badiuzzi Compliance Manager Telephone: +1 770 243-8800	HMIS 1996	HMIS III	<div>NFPA Flammability</div> <div>Health 1 1 0 Reactivity</div> <div>Special</div>	
	Health: 1	Health: [1] 1		
	Flammability: 1	Flammability Aerosol: NA Flammability Bulk: 1		
	Reactivity: 0	Physical Hazard Aerosol: NA Physical Hazard Bulk: 0		

Notice to Reader:

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Elena Badiuzzi, Compliance Manager
LPS Laboratories, a division of Illinois Tool Works

MATERIAL SAFETY DATA SHEET

SECTION 1

PRODUCT AND COMPANY IDENTIFICATION

Trade Name: OATEY CLEAR THREAD CUTTING OIL
Product No.: 30200, 30201, 30202
Product Use: Oil for thread cutting
Formula: Not known
Synonyms: Thread cutting oil
Firm Name & Mailing Address: OATEY CO. 4700 West 160th Street P.O. Box 35906 Cleveland, Ohio 44135, U.S.A. <http://www.oatey.com>
Oatey Phone Number: (216) 267-7100 or (800) 321-9532
Emergency Phone Numbers: For Emergency First Aid call 1-303-623-5716 COLLECT. For chemical transportation emergencies ONLY, call Chemtrec at 1-800-424-9300. Outside the U.S. 1-703-527-3887.
Prepared By: Corporate Director - Safety and Environmental Compliance
Preparation Date: February 6, 2011

SECTION 2

COMPOSITION/INFORMATION ON INGREDIENTS

<u>INGREDIENTS:</u>	<u>%wt/wt:</u>	<u>CAS NUMBER:</u>	<u>ACGIH TLV TWA:</u>	<u>OSHA PEL TWA:</u>	<u>OTHER:</u>
Petroleum hydrocarbon Mixture	100%	Mixture	5 mg/m3	5 mg/m3	None

OSHA Hazard Classification: Not hazardous.

SECTION 3

HAZARDS IDENTIFICATION

Emergency Overview:
Transparent amber fluid. Mild eye, skin, inhalation and ingestion irritant.

SECTION 4

FIRST AID MEASURES

CALL 1-303-623-5716 COLLECT

Skin: Remove contaminated clothing immediately. Wash all exposed areas with soap and water. Get medical attention if irritation develops.

Eyes: If material gets into eyes or if fumes cause irritation, immediately flush eyes with plenty of water until chemical is removed. If irritation persists, get medical attention immediately.

Inhalation: If respiratory irritation develops, remove to fresh air. If breathing becomes difficult, administer oxygen. Administer artificial respiration if breathing has stopped. Seek immediate medical attention.

Ingestion: **DO NOT INDUCE VOMITING.** Never give anything by mouth to a person who is unconscious or drowsy. Get immediate medical attention by calling a Poison Control Center, or hospital emergency room. If medical advice cannot be obtained, then take the person and product to the nearest medical emergency treatment center or hospital.

SECTION 5 FIRE FIGHTING MEASURES

Flashpoint / Method: 330 Degrees F (166 Degrees C) / C.O.C.
Flammability: LEL = Not available, UEL = Not available
Extinguishing: Use dry chemical, CO2, or foam to extinguish fire.
Media:
Special Fire: Firefighters should wear positive pressure self-contained
Fighting: breathing apparatus and full protective clothing for fires in
Procedure: areas where chemicals are used or stored
Unusual Fire and
Explosion
Hazards: None
Hazardous
Decomposition
Products: Combustion will produce oxides of carbon, phosphorus and sulfur
& smoke.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Spill or: Contain spill, stop source of leak, pump spilled material into salvage
Leak: container, soak up remaining material with absorbent such as sand or
Procedures: clay. Prevent product from entering potable or natural water systems.

SECTION 7 HANDLING AND STORAGE

Handling: Avoid prolonged and repeated skin contact. Launder contaminated
clothing before reuse.
Storage: Store away from direct heat source and strong oxidizing agents.
Other: Do not pressurize, cut, weld, braze, drill, grind or heat empty
containers as some flammable, hazardous or combustible residue may be
present. Avoid breathing mist. For industrial use only.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Ventilation: Recommended to maintain mist below TLV limit.
Respiratory: For operations where the exposure limit may be exceeded, a NIOSH
Protection: approved organic vapor respirator or supplied air respirator is
recommended. Equipment selection depends on contaminant type and
concentration, select in accordance with 29 CFR 1910.134 and good
industrial hygiene practice.
Skin
Protection: Oil/Chemical resistant gloves to minimize skin contact.
Eye: Splash protection.
Protection:
Other: Eye wash and safety shower should be available.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point: 500 Degrees F / 260 Degrees C
Melting Point: Not applicable
Vapor Pressure: Not available
Vapor Density: Not available
Volatile Components: Nil.
Solubility In Water: Negligible
pH: Not available
Specific Gravity: 0.91
Evaporation Rate: Not available
Appearance: Transparent amber fluid
Odor: Mild petroleum
Will Dissolve In: Oil and organic solvents
Material Is: Liquid

SECTION 10 STABILITY AND REACTIVITY

Stability: Stable.
Conditions To Avoid: Avoid heat, sparks, flames and other sources of ignition.
Hazardous
Decomposition
Products: Oxides of carbon, phosphorus, and sulfur & smoke.
Incompatibility/
Materials To Avoid: Avoid contact with strong oxidizers.
Hazardous
Polymerization: Will not occur.

SECTION 11 TOXICOLOGICAL INFORMATION

Inhalation: Excessive exposure to mist may irritate respiratory tract.
Skin: May cause irritation.
Eye: May cause irritation.
Ingestion: May irritate gastrointestinal tract.
Chronic Prolonged continued skin contact may cause dermatitis, mist may
Toxicity: irritate respiratory tract.
Toxicity Data: Not available
Sensitization: None of the components are known to cause sensitization.
Carcinogenicity: None of the components are listed as a carcinogen or suspect
carcinogen by NTP, IARC or OSHA.
Mutagenicity: Not available
Reproductive
Toxicity: Not available
Medical
Conditions
Aggravated By
Exposure: Not available

SECTION 12 ECOLOGICAL INFORMATION

VOC
Information: Unknown
VOC Level: Unknown

SECTION 13 DISPOSAL CONSIDERATIONS

Waste Disposal: Dispose in accordance with current local, state and federal
regulations.
RCRA Hazardous Waste Number: Not applicable
EPA Hazardous Waste ID Number: Not applicable
EPA Hazard Waste Class: Not applicable

SECTION 14 TRANSPORT INFORMATION

DOT
Proper Shipping Name: Not applicable
Hazard Class/Packing Group: Not applicable
UN/NA Number: Not applicable
Hazard Labels: Not applicable
IMDG
Proper Shipping Name: Not applicable
Hazard Class/Packing Group: Not applicable
UN Number: Not applicable
Label: Not applicable

SECTION 15 REGULATORY INFORMATION

Hazard Category for Section 311/312: None

Section 302 Extremely Hazardous Substances (TPQ): This product does not contain chemicals regulated under SARA Section 302.

Section 313 Toxic Chemicals: This product contains no chemicals subject to SARA Title III Section 313 Reporting requirements.

CERCLA 103 Reportable: None

California Proposition 65: None known

TSCA Inventory: All of the components of this product are listed on the TSCA inventory.

Canadian WHMIS Classification: Not a controlled product. This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

SECTION 16 OTHER INFORMATION

NFPA and HMIS:

NFPA Hazard Signal: Health: 1 Flammability: 1 Reactivity: 0 Special: None

HMIS Hazard Signal: Health: 1 Flammability: 1 Reactivity: 0 PPE: B

Disclaimer:

The information herein has been compiled from sources believed to be reliable, up-to-date, and is accurate to the best of our knowledge. However, Oatey cannot give any guarantees regarding information from other sources, and expressly does not make warranties, nor assumes any liability for its use.



MATERIAL SAFETY DATA SHEET

Section 1: Product & Company Identification

Product Name: Throttle Body and Air Intake Cleaner (aerosol)

Product Number (s): 05078, 05678, 85078, 85078AZ

Product Use: Fuel-Injection Air Intake Cleaner

Manufacturer / Supplier Contact Information:

In United States:

CRC Industries, Inc.

885 Louis Drive

Warminster, PA 18974

www.crcindustries.com

1-215-674-4300 (General)

(800) 521-3168 (Technical)

(800) 272-4620 (Customer Service)

In Canada:

CRC Canada Co.

2-1246 Lorimar Drive

Mississauga, Ontario L5S 1R2

www.crc-canada.ca

1-905-670-2291

In Mexico:

CRC Industries Mexico

Av. Benito Juárez 4055 G

Colonia Orquídea

San Luís Potosí, SLP CP 78394

www.crc-mexico.com

52-444-824-1666

24-Hr Emergency – CHEMTREC: (800) 424-9300 or (703) 527-3887

Section 2: Hazards Identification

Emergency Overview

DANGER: Extremely Flammable. Vapors May Cause Flash Fires. Harmful if Inhaled or Swallowed.
Eye and Skin Irritant. Contents Under Pressure.

As defined by OSHA's Hazard Communication Standard, this product is hazardous.

Appearance & Odor: Clear, colorless liquid; ketone odor

Potential Health Effects:

ACUTE EFFECTS:

EYE: Moderate eye irritant. Exposure can cause irritation including stinging, tearing, redness, blurred vision, and swelling of the eyes.

SKIN: Moderate skin irritant. Prolonged or repeated contact may dry the skin. Symptoms may include redness, burning, drying and cracking of the skin. Passage of this material into the body through the skin is possible, but it is unlikely that this would result in harmful effects.

INHALATION: Breathing large amounts of this material may be harmful. Symptoms include irritation of the nose and throat and central nervous system depression (dizziness, drowsiness, weakness, headache, nausea, disorientation, unconsciousness).

INGESTION: Main hazard is aspiration. This material can enter lungs during swallowing or vomiting and cause lung inflammation and damage. Swallowing this material may also cause nausea and diarrhea. Acetone poisoning may result in liver and kidney damage.

CHRONIC EFFECTS: Exposure to high concentrations of this material may increase the sensitivity of the heart to certain drugs. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

TARGET ORGANS: liver, kidneys, central nervous system

Medical Conditions Aggravated by Exposure: skin sensitivities, respiratory (asthma-like) disorders

Product Name: Throttle Body and Air Intake Cleaner (aerosol)

Product Number (s): 05078, 05678, 85078, 85078AZ

See Section 11 for toxicology and carcinogenicity information on product ingredients.

Section 3: Composition/Information on Ingredients

COMPONENT	CAS NUMBER	% by Wt.
Acetone	67-64-1	75 - 85
Heptane isomers	142-82-5	4 – 8
Toluene	108-88-3	2 – 5
Diacetone alcohol	123-42-2	< 1
Carbon dioxide	124-38-9	5 - 15

Section 4: First Aid Measures

Eye Contact: Immediately flush with plenty of water for 15 minutes. Call a physician if irritation persists.

Skin Contact: Remove contaminated clothing and wash affected area with soap and water. Call a physician if irritation persists. Wash contaminated clothing prior to re-use.

Inhalation: Remove person to fresh air. Keep person calm. If not breathing, give artificial respiration. If breathing is difficult give oxygen. Call a physician.

Ingestion: Seek medical attention. Do not induce vomiting unless instructed by medical personnel. Have victim drink a glass of water if conscious.

Note to Physicians: This material is an aspiration hazard. This material (or a component) has produced hyperglycemia and ketosis following substantial ingestion. Epinephrine and other sympathomimetic drugs may initiate cardiac arrhythmias in persons exposed to high concentrations of hydrocarbon solvents. The use of other drugs with less arrhythmogenic potential should be considered.

Section 5: Fire-Fighting Measures

Flammable Properties: This product is extremely flammable in accordance with aerosol flammability definitions. (See 16 CFR 1500.3(c)(6)).

Flash Point:	< 0°F / < -18°C (TCC)	Upper Explosive Limit:	12.8
Autoignition Temperature:	869°F / 465°C	Lower Explosive Limit:	2.5

Fire and Explosion Data:

Suitable Extinguishing Media: Dry chemical, carbon dioxide, alcohol-resistant foam, Class B extinguishers

Products of Combustion: Oxides of carbon

Explosion Hazards: Aerosol containers, when exposed to heat from fire, may build pressure and rupture. Vapors may accumulate in a confined space and create a flammable atmosphere.

Protection of Fire-Fighters: Firefighters should wear self-contained, NIOSH-approved breathing apparatus for protection against suffocation and possible toxic decomposition products. Proper eye and skin protection should be provided. Use water spray to keep fire-exposed containers cool and to knock down vapors which may result from product decomposition.

Product Name: Throttle Body and Air Intake Cleaner (aerosol)

Product Number (s): 05078, 05678, 85078, 85078AZ

Section 6: Accidental Release Measures

Personal Precautions: Use personal protection recommended in Section 8.

Environmental Precautions: Take precautions to prevent contamination of ground and surface waters. Do not flush into sewers or storm drains.

Methods for Containment & Clean-up: Eliminate sources of ignition. Dike area to contain spill. Ventilate the area with fresh air. If in confined space or limited air circulation area, clean-up workers should wear appropriate respiratory protection. Recover or absorb spilled material using an absorbent designed for chemical spills. Place used absorbents into proper waste containers.

Section 7: Handling and Storage

Handling Procedures: Do not use near potential sources of ignition. Wash thoroughly after use and before handling food. Use caution around energized equipment. The metal container will conduct electricity if it contacts a live source. This may result in injury to the user from electrical shock and/or flash fire. For product use instructions, please see the product label.

Storage Procedures: Use and store this material in cool, dry, well-ventilated areas away from heat, direct sunlight, hot metal surfaces, and all sources of ignition. Aerosol cans must be maintained below 120 F to prevent cans from rupturing. Keep away from incompatible materials.

Aerosol Storage Level: III

Section 8: Exposure Controls/Personal Protection

Exposure Guidelines:

COMPONENT	OSHA		ACGIH		OTHER		UNIT
	TWA	STEL	TWA	STEL	TWA	SOURCE	
Acetone	1000	NE	500	750	NE		ppm
Heptane	500	NE	400	500	NE		ppm
Toluene	200	300 (c)	20	NE	NE		ppm
Diacetone alcohol	50	NE	50	NE	NE		ppm
Carbon dioxide	5000	30000(v)	5000	30000	NE		ppm
N.E. – Not Established (c) – ceiling (s) – skin (v) – vacated							

Controls and Protection:

Engineering Controls: Area should have ventilation to provide fresh air. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at the source, preventing dispersion into the general work area. Use mechanical means if necessary to maintain vapor levels below the exposure guidelines. If working in a confined space, follow applicable OSHA regulations.

Respiratory Protection: None required for normal work where adequate ventilation is provided. If engineering controls are not feasible or if exposure exceeds the applicable exposure limits, use a NIOSH-approved cartridge respirator with organic vapor cartridge. Air monitoring is needed to determine actual employee exposure levels. Use a self-contained breathing apparatus in confined spaces and for emergencies.

Product Name: Throttle Body and Air Intake Cleaner (aerosol)

Product Number (s): 05078, 05678, 85078, 85078AZ

Eye/face Protection: For normal conditions, wear safety glasses. Where there is reasonable probability of liquid contact, wear splash-proof goggles.

Skin Protection: Use protective gloves such as nitrile, PVA, or neoprene. Also, use full protective clothing if there is prolonged or repeated contact of liquid with skin.

Section 9: Physical and Chemical Properties

Physical State: liquid

Color: clear, colorless

Odor: ketone

Odor Threshold: ND

Specific Gravity: 0.785

Initial Boiling Point: 132° / 56°C

Freezing Point: < -100°F / -73°C

Vapor Pressure: ND

Vapor Density: 2 (air = 1)

Evaporation Rate: fast

Solubility: slightly soluble in water

Coefficient of water/oil distribution: ND

pH: NA

Volatile Organic Compounds: wt %: 9.1 g/L: 71.4 lbs./gal: 0.6

Section 10: Stability and Reactivity

Stability: Stable

Conditions to Avoid: Sources of ignition; temperature extremes

Incompatible Materials: Avoid contact with alkalis, reducing agents, acids and oxidizers such as chlorine and other halogens, chromates, perchlorates, peroxides and oxygen.

Hazardous Decomposition Products: Oxides of carbon, various hydrocarbons

Possibility of Hazardous Reactions: No

Section 11: Toxicological Information

Long-term toxicological studies have not been conducted for this product. The following information is available for components of this product.

Acute Toxicity:

<u>Component</u>	<u>Oral LD50 (rat)</u>	<u>Dermal LD50 (rabbit)</u>	<u>Inhalation LC50 (rat)</u>
Acetone	5800 mg/kg	No data	50,100 mg/m ³ /8H
Heptane	No data	No data	103 g/m ³ /4H
Toluene	636 mg/kg	14,100 µL/kg	49 g/m ³ /4H
Diacetone alcohol	2520 mg/kg	13,500 mg/kg	No data
Carbon dioxide	No data	No data	470,000 ppm/30M

Product Name: Throttle Body and Air Intake Cleaner (aerosol)

Product Number (s): 05078, 05678, 85078, 85078AZ

Chronic Toxicity:

<u>Component</u>	<u>OSHA Carcinogen</u>	<u>IARC Carcinogen</u>	<u>NTP Carcinogen</u>	<u>Irritant</u>	<u>Sensitizer</u>
Acetone	No	No	No	E & S (moderate) / R (mild)	Yes
Heptane	No	No	No	E & R (mild) / S (moderate)	Unknown
Toluene	No	No	No	E, S & R (mild)	Unknown
Diacetone alcohol	No	No	No	E (moderate) / R (mild)	Unknown
Carbon dioxide	No	No	No	No	No

E – Eye S – Skin R - Respiratory

Reproductive Toxicity: No information available

Teratogenicity: No information available

Mutagenicity: No information available

Synergistic Effects: No information available

Section 12: Ecological Information

Ecological studies have not been conducted for this product. The following information is available for components of this product.

Ecotoxicity: Acetone – 48H LC50 Daphnia: 10 mg/l
Persistence / Degradability: No information available
Bioaccumulation / Accumulation: No information available
Mobility in Environment: No information available

Section 13: Disposal Considerations

Waste Classification: The dispensed liquid product is a RCRA hazardous waste for the characteristic of ignitability with the following potential waste code(s) D001. Pressurized containers may be a D003 reactive waste. (See 40 CFR Part 261.20 – 261.33)
Empty aerosol containers may be recycled.

All disposal activities must comply with federal, state, provincial and local regulations. Local regulations may be more stringent than state, provincial or national requirements.

Section 14: Transport Information

US DOT (ground): Consumer Commodity, ORM-D
ICAO/IATA (air): Consumer Commodity, ID8000, 9
IMO/IMDG (water): Aerosols, UN1950, 2.1, Limited Quantity
Special Provisions: None

Product Name: Throttle Body and Air Intake Cleaner (aerosol)

Product Number (s): 05078, 05678, 85078, 85078AZ

Section 15: Regulatory Information

U.S. Federal Regulations:

Toxic Substances Control Act (TSCA):

All ingredients are either listed on the TSCA inventory or are exempt.

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA):

Reportable Quantities (RQ's) exist for the following ingredients: Acetone (5000 lbs), Toluene (1000 lbs)

Spills or releases resulting in the loss of any ingredient at or above its RQ require immediate notification to the National Response Center (800-424-8802) and to your Local Emergency Planning Committee.

Superfund Amendments Reauthorization Act (SARA) Title III:

Section 302 Extremely Hazardous Substances (EHS): None

Section 311/312 Hazard Categories:	Fire Hazard	Yes
	Reactive Hazard	No
	Release of Pressure	Yes
	Acute Health Hazard	Yes
	Chronic Health Hazard	No

Section 313 Toxic Chemicals: This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:
Toluene (2.5%)

Clean Air Act:

Section 112 Hazardous Air Pollutants (HAPs): Toluene

U.S. State Regulations:

California Safe Drinking Water and Toxic Enforcement Act (Prop 65):

This product may contain the following chemicals known to the state of California to cause cancer, birth defects or other reproductive harm: Toluene

Consumer Products VOC Regulations: In states with consumer products VOC regulations, this product is compliant as a Fuel-Injection Air Intake Cleaner.

State Right to Know:

New Jersey:	67-64-1, 108-88-3, 142-82-5, 124-38-9, 123-42-2
Pennsylvania:	67-64-1, 108-88-3, 142-82-5, 124-38-9, 123-42-2
Massachusetts:	67-64-1, 108-88-3, 142-82-5, 124-38-9, 123-42-2
Rhode Island :	67-64-1, 108-88-3, 142-82-5, 124-38-9, 123-42-2

Canadian Regulations:

Controlled Products Regulations:

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

WHMIS Hazard Class: A, B5, D2B

Canadian DSL Inventory: All ingredients are either listed on the DSL Inventory or are exempt.

Product Name: Throttle Body and Air Intake Cleaner (aerosol)

Product Number (s): 05078, 05678, 85078, 85078AZ

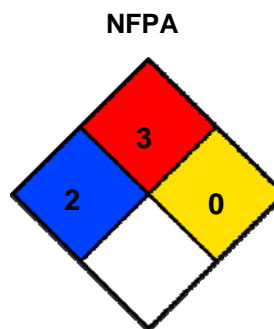
European Union Regulations:

RoHS Compliance: This product is compliant with Directive 2002/95/EC of the European Parliament and of the Council of 27 January 2003. This product does not contain any of the restricted substances as listed in Article 4(1) of the RoHS Directive.

Additional Regulatory Information: None

Section 16: Other Information

HMIS® (II)	
Health:	2
Flammability:	3
Reactivity:	0
PPE:	B



Ratings range from 0 (no hazard) to 4 (severe hazard)

Prepared By: Michelle Rudnick
CRC #: 464K
Revision Date: 09/10/2010

Changes since last revision: Formula change to reduce VOC content

The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. This information is accurate to the best of CRC Industries' knowledge or obtained from sources believed by CRC to be accurate. Before using any product, read all warnings and directions on the label. For further clarification of any information contained on this MSDS consult your supervisor, a health & safety professional, or CRC Industries.

ACGIH: American Conference of Governmental Industrial Hygienists
CAS: Chemical Abstract Service
CFR: Code of Federal Regulations
DOT: Department of Transportation
DSL: Domestic Substance List
g/L: grams per Liter
HMIS: Hazardous Materials Identification System
IARC: International Agency for Research on Cancer
IATA: International Air Transport Association
ICAO: International Civil Aviation Organization
IMDG: International Maritime Dangerous Goods
IMO: International Maritime Organization
lbs./gal: pounds per gallon
LC: Lethal Concentration
LD: Lethal Dose

NA: Not Applicable
ND: Not Determined
NIOSH: National Institute of Occupational Safety & Health
NFPA: National Fire Protection Association
NTP: National Toxicology Program
OSHA: Occupational Safety and Health Administration
PMCC: Pensky-Martens Closed Cup
PPE: Personal Protection Equipment
ppm: Parts per Million
RoHS: Restriction of Hazardous Substances
STEL: Short Term Exposure Limit
TCC: Tag Closed Cup
TWA: Time Weighted Average
WHMIS: Workplace Hazardous Materials Information System

SAFETY DATA SHEET

Section 1: IDENTIFICATION

1.1 PRODUCT IDENTIFIER

Product Name: TileLab® Grout and Tile Sealer

Product Code: Not Available

1.2 RECOMMENDED USE OF CHEMICAL AND RESTRICTIONS ON USE

Product Use: Sealer

1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEETS

Name/Address: Custom Building Products
3490 Piedmont Road, Suite 1300
Atlanta, GA 30329

Telephone Number: (562)-598-8808

1.4 EMERGENCY TELEPHONE NUMBER

Emergency Telephone Number: INFOTRAC 1-800-535-5053 (US and Canada)
INTERNATIONAL + 1-352-323-3500

Section 2: HAZARD(S) IDENTIFICATION

2.1 CLASSIFICATION OF THE CHEMICAL IN ACCORDANCE WITH PARAGRAPH (d) OF 29 CFR

1910.1200 (OSHA HAZCOM2012)

Eye Irritation	Category 2B
Skin Irritation	Category 2

2.2 LABEL ELEMENTS ACCORDING TO OSHA HAZCOM2012

2.2a SIGNAL WORD:
Warning

2.2b HAZARD STATEMENTS
Causes eye irritation
Causes skin irritation

2.2c HAZARD PICTOGRAMS



SAFETY DATA SHEET

2.2d PRECAUTIONARY STATEMENTS

i. PREVENTION	Wash hands thoroughly after handling. Wear impervious gloves/protective clothing/eye protection
ii. RESPONSE	If on skin: Wash with plenty of water. Take off contaminated clothing and wash it before reuse. If skin irritation or rash occurs: Get medical advice/attention. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
iii. STORAGE	Store in a well-ventilated place. Keep container tightly closed.
iv. DISPOSAL	Dispose of contents/containers in accordance with all local, state, provincial, and federal regulations.

2.3 ADDITIONAL INFORMATION

2.3a HNOC – HAZARDS NOT OTHERWISE CLASSIFIED

Not applicable

2.3b UNKNOWN ACUTE TOXICITY

0% of the mixture consists of ingredient(s) of unknown acute toxicity.

2.3c WHMIS CLASSIFICATION

Class D2B – Skin/Eye Irritant

2.3d LABEL ELEMENTS ACCORDING TO WHMIS

i. WHMIS HAZARD SYMBOLS



ii. SIGNAL WORD

CAUTION

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 MIXTURES

This product does NOT contain any reportable “classified substances” or “hazardous chemicals” as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200

SAFETY DATA SHEET

Section 4: FIRST-AID MEASURES

4.1 DESCRIPTION OF THE FIRST-AID MEASURES

ROUTES OF EXPOSURE	DESCRIPTION
Eye Contact:	In case of contact, immediately flush eyes with plenty of water for several minutes. If easy to do, remove contact lenses, if worn. Get medical attention immediately.
Skin Contact:	In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Call a physician if irritation develops and persists.
Inhalation:	If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.
Ingestion:	If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical advice/attention.

4.2 MOST IMPORTANT SYMPTOMS/EFFECTS, ACUTE AND DELAYED

ROUTES OF EXPOSURE	DESCRIPTION
Eye Contact:	Causes eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.
Skin Contact:	Causes skin irritation. Handling can cause dry skin, discomfort, irritation, and dermatitis.
Inhalation:	May cause respiratory tract irritation.
Ingestion:	May be harmful if swallowed. Ingestion may cause discomfort and/or distress, nausea or vomiting.

4.3 INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

Not applicable

Section 5: FIRE-FIGHTING MEASURES

5.1 FLAMMABILITY

SAFETY DATA SHEET

Flammability: Not Flammable by WHMIS/OSHA HAZCOM2012 Criteria

5.2 EXTINGUISHING MEDIA

5.2a. Suitable Extinguishing Media:

Treat for surrounding material.

5.2b. Unsuitable Extinguishing Media:

Not available.

5.3 SPECIFIC HAZARDS ARISING FROM THE CHEMICAL

5.3a. Products of Combustion:

May include, and are not limited to: oxides of carbon

5.3b. Explosion Data

i. Sensitivity to Mechanical Impact:

Not available.

ii. Sensitivity to Static Discharge:

Not available.

Section 6: ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT, AND EMERGENCY PROCEDURES

Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

6.2 METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP

Methods for Containment:

Recover all usable material. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).

Methods for Cleaning-Up:

Dispose of unwanted material properly in accordance with all local, regional, national and international regulations.

Section 7: HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING

Handling:

Use in well-ventilated areas. Wear impervious gloves and eye protection. Do not mix with other chemical products, except as indicated by the manufacturers. Do not get in eyes. Do not get on

SAFETY DATA SHEET

skin or clothing. Do not breathe fumes. Do not take internally. Good housekeeping is important to prevent accumulation of dust.

General Hygiene Advice:

Use good industrial hygiene practices and wear recommended personal protection. Launder contaminated clothing before reuse. Wash hands before eating, drinking, or smoking.

7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Storage:

Keep out of the reach of children. Keep container tightly closed. Store at room temperature and keep containers closed when not in use. Avoid any dust buildup by frequent cleaning and suitable construction of the storage area. Keep dry until use.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 CONTROL PARAMETER

No data available

8.2 EXPOSURE CONTROLS

Engineering Controls:

Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.

8.3 INDIVIDUAL PROTECTION MEASURES

8.3a. Personal Protective Equipment:

- i. **Eye/Face Protection:** Wear approved eye protection [properly fitted dust- or splash-proof chemical safety goggles/face (face shield)]
- ii. **Skin Protection:**
 1. **Hand Protection:** Wear impervious gloves, such as nitrile.
 2. **Body Protection:** Wear suitable protective clothing
- iii. **Respiratory Protection:** A NIOSH approved dust mask or filtering face piece is recommended in poorly ventilated areas or when permissible exposure limits may be exceeded. Respirators should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134) and ANSI's standard for respiratory protection (Z88.2).

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- iv. **General Health and Safety Measures:** Handle according to established industrial hygiene and safety practices.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, color, etc.):	Clear
Odor:	Characteristic
Odor Threshold:	Not available
pH:	10.5 – 11.5
Melting point/Freezing point:	Not available
Initial boiling point and boiling range:	>212°F
Flash point:	>200°F
Evaporation rate (Water=1):	Not available
Flammability:	Not flammable
Upper Flammability/Explosive Limit:	Not available
Lower Flammability/Explosive Limit:	Not available
Vapor Pressure	Not available
Vapor Density:	Not available
Relative Density:	1 – 2 g/cc
Solubility in Water:	Miscible
Partition coefficient: n-octanol/water:	Not available
Auto-ignition temperature:	Not available
Decomposition Temperature:	Not available
Viscosity (cps):	Not available
VOC Content:	1 g/L

Section 10: STABILITY AND REACTIVITY

10.1. REACTIVITY

No dangerous reaction known under conditions of normal use.

10.2. CHEMICAL STABILITY

Stable under normal storage conditions. Keep dry in storage.

10.3. POSSIBILITY OF HAZARDOUS REACTION

No dangerous reaction known under conditions of normal use.

10.4. CONDITIONS TO AVOID

Heat. Incompatible materials.

10.5. INCOMPATIBLE MATERIALS

Strong acids. Strong Oxidizers.

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10.6. HAZARDOUS DECOMPOSITION PRODUCTS

Upon decomposition, this product may yield oxides of carbon.

Section 11: TOXICOLOGICAL INFORMATION

11.1. LIKELY ROUTES OF EXPOSURE:

Skin contact, eye contact, inhalation, and ingestion.

11.2. SYMPTOMS RELATED TO PHYSICAL/CHEMICAL/TOXICOLOGICAL CHARACTERISTICS:

Eye Contact: Causes eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.

Skin Contact: Causes skin irritation. Handling can cause dry skin, discomfort, irritation, and dermatitis.

Inhalation: May cause respiratory tract irritation.

Ingestion: May be harmful if swallowed. Ingestion may cause discomfort and/or distress, nausea or vomiting.

11.3. DELAYED, IMMEDIATE, AND CHRONIC EFFECTS OF SHORT AND LONG-TERM EXPOSURE

SHORT-TERM	
Skin Corrosion/Irritation:	Causes skin irritation
Serious Eye Damage/Irritation:	Causes eye irritation
Respiratory Sensitization:	Not classified
Skin Sensitization:	Not classified
STOT-Single Exposure:	Not classified
Aspiration Hazard:	Not classified
LONG-TERM	
Carcinogenicity:	Not classified
Germ Cell Mutagenicity:	Not classified
Reproductive Toxicity:	Not classified
STOT-Repeated Exposure:	Not classified
Synergistic/Antagonistic Effects:	Not classified

Section 12: ECOLOGICAL INFORMATION

12.1. ECOTOXICITY

No additional information available

SAFETY DATA SHEET

12.2. PERSISTENCE AND DEGRADABILITY

Not available

12.3. BIOACCUMULATIVE POTENTIAL

Not available

12.4. MOBILITY IN SOIL

Not available

12.5. OTHER ADVERSE EFFECTS

Not available

Section 13: DISPOSAL CONSIDERATIONS

13.1. DISPOSAL METHOD

Dispose of contents/containers in accordance with all local, state, provincial, and federal regulations

13.2. OTHER DISPOSAL CONSIDERATIONS

Not available

Section 14: TRANSPORT INFORMATION

DOT (U.S.)	TDG (CANADA)
UN NUMBER:	UN NUMBER:
Not regulated	Not regulated
UN PROPER SHIPPING NAME:	UN PROPER SHIPPING NAME:
Not regulated	Not regulated
TRANSPORT HAZARD CLASS (ES):	TRANSPORT HAZARD CLASS (ES):
Not regulated	Not regulated
PACKING GROUP (if applicable):	PACKING GROUP (if applicable):
Not regulated	Not regulated

SUMMARY: Product is NOT regulated under DOT/TDG and other transportation regulations.

14.1. ENVIRONMENTAL HAZARDS

Not available

14.2. TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL 73/78 AND THE IBC CODE

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Not available

14.3. SPECIAL PRECAUTIONS FOR USER

Do not handle until all safety precautions have been read and understood.

Section 15: REGULATORY INFORMATION

15.1 U.S Federal Regulations

All components of this product are listed on the Toxic Substances Control Act (TSCA) inventory

This product or mixture does not contain a toxic chemical or chemicals in excess of the applicable concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

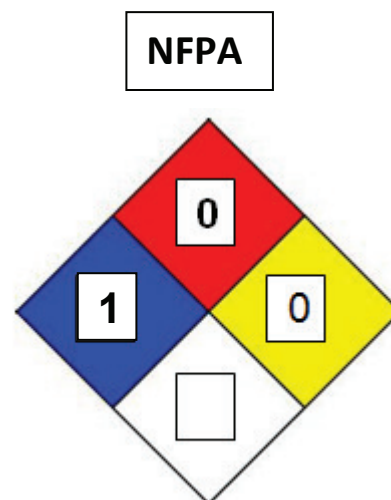
15.2 U.S State Regulation:

California Proposition 65: This product does not contain any substances known to the state of California to cause cancer and/or reproductive harm


































SAFETY DATA SHEET

15.1. NFPA AND HMIS RATINGS:

<p align="center">HEALTH HAZARD</p> <p>4 EXTREME - Highly toxic - May be fatal on short-term exposure.</p> <p>3 SERIOUS - Toxic - Full protective suit and breathing apparatus should be worn.</p> <p>2 MODERATE - Breathing apparatus and face mask must be worn.</p> <p>1 SLIGHT - Breathing apparatus may be worn.</p> <p>0 MINIMAL - No precautions necessary.</p>	<p align="center">FLAMMABILITY HAZARD</p> <p>4 EXTREME - Extremely flammable gas or liquid. Flash Point below 73°F.</p> <p>3 SERIOUS - Flammable. Flash Point 73°F to 100°F.</p> <p>2 MODERATE - Combustible. Requires moderate heating to ignite. Flash Point below 200°F.</p> <p>1 SLIGHT - Slightly combustible. Requires strong heating to ignite.</p> <p>0 MINIMAL - Will not burn under normal conditions.</p>
<p align="center">SPECIFIC HAZARD</p> <p>OXIDIZER OXY</p> <p>ACID ACID</p> <p>ALKALI ALK</p> <p>CORROSIVE COR</p> <p>Use NO WATER W</p> <p>RADIATION ☢</p>	<p align="center">INSTABILITY HAZARD</p> <p>4 EXTREME - Explosive at room temperature.</p> <p>3 SERIOUS - May detonate if shocked or heated under confinement or mixed with water.</p> <p>2 MODERATE - Unstable. May react with water.</p> <p>1 SLIGHT - May react if heated or mixed with water.</p> <p>0 MINIMAL - Normally stable. Does not react with water.</p>



HMIS

<p>1 HEALTH</p> <p>0 FLAMMABILITY</p> <p>0 REACTIVITY</p> <p>0 PERSONAL PROTECTION</p> <p>B</p>	<p align="center">PROTECTIVE EQUIPMENT INDEX</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>A </td> <td>G </td> </tr> <tr> <td>B </td> <td>H </td> </tr> <tr> <td>C </td> <td>I </td> </tr> <tr> <td>D </td> <td>J </td> </tr> <tr> <td>E </td> <td>K </td> </tr> <tr> <td>F </td> <td>X Ask your supervisor for special handling instructions.</td> </tr> </table>	A 	G 	B 	H 	C 	I 	D 	J 	E 	K 	F 	X Ask your supervisor for special handling instructions.
A 	G 												
B 	H 												
C 	I 												
D 	J 												
E 	K 												
F 	X Ask your supervisor for special handling instructions.												

Hazard Index	
4	Severe Hazard
3	Serious Hazard
2	Moderate Hazard
1	Slight Hazard

15.2. SOURCE AGENCY CARCINOGEN CLASSIFICATIONS:

CP65	California Proposition 65
OSHA (O)	Occupational Safety and Health Administration
ACGIH (G)	American Conference of Governmental Industrial Hygienists <ul style="list-style-type: none"> A1 – Confirmed human carcinogen

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	<ul style="list-style-type: none"> • A2 – Suspected human carcinogen • A3 – Animal carcinogen • A4 – Not classifiable as a human carcinogen • A5 – Not suspected a human carcinogen
IARC (I)	International Agency for Research on Cancer <ul style="list-style-type: none"> • 1 – The agent (mixture) is carcinogenic to humans • 2A – The agent (mixture) is probably carcinogenic to humans; there is limited evidence of carcinogenicity in humans and sufficient evidence of carcinogenicity in experimental animals. • 2B – The agent (mixture) is possibly carcinogenic to humans; there is limited evidence of carcinogenicity in humans in the absence of sufficient evidence of carcinogenicity in experimental animals. • 3 – The agent (mixture, exposure circumstance) is not classifiable as to its carcinogenicity to humans. • 4 – The agent (mixture, exposure circumstance) is probably not carcinogenic to humans.
NTP (N)	National Toxicology Program <ul style="list-style-type: none"> • 1 – Known to be carcinogens • 2 – Reasonably anticipated to be carcinogens

Section 16: OTHER INFORMATION

Date of Preparation: September 28, 2015

Version: 4.0

Disclaimer: The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, express or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to silica contained in our products.

Prepared by: Custom Building Products
 Phone: (562)-968-2980
www.custombuildingproducts.com

End of Safety Data Sheet



Safety Data Sheet

TILEMATEFW
Tile Mate F/W Series

Revision Date 19-May-2016
Supersedes Date: No information available
Version 1

Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product Identifier

Product Name Tile Mate F/W Series
Product Code TILEMATEFW
Product(s) Covered See section 16 for more information

1.2. Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Recommended use No information available.
Uses Advised Against No information available

1.3. Details of the Supplier of the Safety Data Sheet

Company Name

Bostik, Inc.
11320 W. Watertown Plank Road
Wauwatosa, Wisconsin 53226 USA
Phone: +1 (800) 843-0844 (Domestic Toll Free)
Phone: +1 (414) 774-2250 (International)
Fax: +1 (414) 774-8075
Email: msds@bostik-us.com

1.4. Emergency Telephone Number

Emergency Telephone Telephone: 1-800-227-0332
(Outside U.S.) 1-703-527-3887

Section 2: HAZARD IDENTIFICATION

2.1. Classification of the Substance or Mixture

Acute toxicity - Oral	Category 4
Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 1
Skin sensitization	Category 1
Carcinogenicity	Category 1A
Specific target organ toxicity (single exposure)	Category 3
Specific target organ toxicity (repeated exposure)	Category 1

2.2. Label Elements

EMERGENCY OVERVIEW

DANGER

Hazard statements

Harmful if swallowed
Causes skin irritation
Causes serious eye damage
May cause an allergic skin reaction

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May cause cancer
May cause respiratory irritation
Causes damage to organs through prolonged or repeated exposure



Appearance No information available

Physical State Solid

Odor No information available

Precautionary Statements - Prevention

Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Contaminated work clothing should not be allowed out of the workplace
Wear protective gloves
Do not breathe dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention
Specific treatment (see first aid measures on this label)
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Immediately call a POISON CENTER or doctor/physician.
IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash before reuse. If skin irritation or rash occurs: Get medical advice/attention.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth.

Precautionary Statements - Storage

Store locked up
Store in a well-ventilated place. Keep container tightly closed

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards Not Otherwise Classified (HNOC)

Not applicable

Unknown Toxicity

2% of the mixture consists of ingredient(s) of unknown toxicity

2.3. Other Information

Product dust may be irritating to eyes, skin and respiratory system. When cement reacts with water a strong alkaline solution is produced. Prolonged contact with wet cement or wet concrete may cause serious burns because they develop without pain being felt e.g. when kneeling in wet cement even when wearing trousers. Frequent inhalation of large quantities of cement dust over a long period of time increases the risk of developing lung disease.

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

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3.1 Substances

This product is a mixture. Health hazard information is based on its components.

3.2 Mixtures

Chemical Name	CAS No	Weight-%
Quartz	14808-60-7	40 - 70
Cement, portland, chemicals	65997-15-1	10 - 30
Limestone	1317-65-3	1 - 5
Gypsum (Ca(SO ₄).2H ₂ O)	13397-24-5	1 - 5
Aluminum oxide	1344-28-1	0.1 - 1

The exact percentage (concentration) of composition has been withheld as a trade secret.

Section 4: FIRST AID MEASURES

4.1. Description of First Aid Measures

General Advice	If symptoms persist, call a physician.
Eye contact	In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.
Skin Contact	Brush off loose particles from skin. Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.
Inhalation	Remove to fresh air. If symptoms persist, call a physician.
Ingestion	Do NOT induce vomiting. If swallowed, seek medical advice immediately and show this container or label. Rinse mouth.
Self-protection of the First Aider	Use personal protective equipment as required.

4.2. Most Important Symptoms and Effects, Both Acute and Delayed

Symptoms	No information available.
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4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

Note to physicians	May cause sensitization of susceptible persons. Treat symptomatically.
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4.4. Reference to Other Sections

Reference to Other Sections	Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION Section 11: TOXICOLOGY INFORMATION
-----------------------------	--

Section 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media
Use extinguishing agent suitable for type of surrounding fire.

Unsuitable Extinguishing Media
None known.

5.2. Special Hazards Arising from the Substance or Mixture

Specific Hazards Arising from the Chemical

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Thermal decomposition can lead to release of irritating and toxic gases and vapors.

Hazardous Combustion Products Carbon oxides.

Explosion Data
Sensitivity to Mechanical Impact None.
Sensitivity to Static Discharge None.

5.3. Advice for Firefighters

Protective Equipment and Precautions for Firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

Section 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Personal Precautions Avoid creating dust. Do not get in eyes, on skin, or on clothing. Wear protective gloves/protective clothing and eye/face protection.

For Emergency Responders Sweep up to prevent slipping hazard.

6.2. Environmental Precautions

Environmental Precautions Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. See Section 12 for additional Ecological Information.

6.3. Methods and Material for Containment and Cleaning up

Methods for Containment Prevent dust cloud. Take up mechanically, placing in appropriate containers for disposal.

Methods for Cleaning up Use personal protective equipment as required. Sweep up and shovel into suitable containers for disposal. Avoid creating dust.

6.4. Reference to other sections

Reference to Other Sections
Section 7: HANDLING AND STORAGE
Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION
Section 13: DISPOSAL CONSIDERATIONS

Section 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Advice on Safe Handling Wash contaminated clothing before reuse. Handle in accordance with good industrial hygiene and safety practice. Avoid generation of dust. Avoid contact with skin and eyes.

7.2. Conditions for Safe Storage, including any Incompatibilities

Storage Conditions Keep out of the reach of children. Protect from direct contact with water or excessive moisture. Keep the packing dry and well sealed to prevent contamination and absorption of humidity.

Incompatible Materials None known based on information supplied.

7.3. Specific End Use(s)

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Other Information No information available.

7.4. References to Other Sections

Reference to Other Sections Section 13: DISPOSAL CONSIDERATIONS
Section 10: STABILITY AND REACTIVITY

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	NIOSH IDLH	OSHA PEL	Mexico
Quartz 14808-60-7	TWA: 0.025 mg/m ³ respirable fraction	IDLH: 50 mg/m ³ respirable dust TWA: 0.05 mg/m ³ respirable dust	: (30)/(%SiO ₂ + 2) mg/m ³ TWA total dust : (250)/(%SiO ₂ + 5) mppcf TWA respirable fraction : (10)/(%SiO ₂ + 2) mg/m ³ TWA respirable fraction	TWA: 0.1 mg/m ³
Cement, portland, chemicals 65997-15-1	TWA: 1 mg/m ³ particulate matter containing no asbestos and <1% crystalline silica, respirable fraction	IDLH: 5000 mg/m ³ TWA: 10 mg/m ³ total dust TWA: 5 mg/m ³ respirable dust	TWA: 15 mg/m ³ total dust TWA: 5 mg/m ³ respirable fraction TWA: 50 mppcf <1% Crystalline silica	TWA: 10 mg/m ³ STEL: 20 mg/m ³
Limestone 1317-65-3	-	TWA: 10 mg/m ³ total dust TWA: 5 mg/m ³ respirable dust	TWA: 15 mg/m ³ total dust TWA: 5 mg/m ³ respirable fraction	TWA: 10 mg/m ³ STEL: 20 mg/m ³
Gypsum (Ca(SO ₄).2H ₂ O) 13397-24-5	TWA: 10 mg/m ³ inhalable fraction	TWA: 10 mg/m ³ total dust TWA: 5 mg/m ³ respirable dust	TWA: 15 mg/m ³ total dust TWA: 5 mg/m ³ respirable fraction	TWA: 10 mg/m ³
Aluminum oxide 1344-28-1	TWA: 1 mg/m ³ respirable fraction	-	TWA: 15 mg/m ³ total dust TWA: 5 mg/m ³ respirable fraction	TWA: 10 mg/m ³

Chemical Name	Argentina	Brazil	Chile	Venezuela
Quartz 14808-60-7	TWA: 0.05 mg/m ³	-	TWA: 0.08 mg/m ³	TWA: 0.025 mg/m ³
Cement, portland, chemicals 65997-15-1	TWA: 10 mg/m ³	-	TWA: 8 mg/m ³	TWA: 10 mg/m ³
Limestone 1317-65-3	TWA: 10 mg/m ³	-	TWA: 8 mg/m ³	-
Gypsum (Ca(SO ₄).2H ₂ O) 13397-24-5	-	-	TWA: 8 mg/m ³	-
Aluminum oxide 1344-28-1	TWA: 10 mg/m ³	-	-	TWA: 10 mg/m ³

8.2. Exposure Controls

Engineering Controls Showers
Eyewash stations
Ventilation systems.

Personal protective equipment [PPE]

Eye/Face Protection Tight sealing safety goggles. Face protection shield. Wear safety glasses with side shields (or goggles).

Skin and Body Protection Wear suitable chemical resistant gloves. The selection of suitable gloves does not only depend on the material, but also on further marks of quality and various manufacturers.

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Respiratory Protection

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

General Hygiene Considerations

When using do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with skin, eyes or clothing. Wash hands thoroughly after handling. Keep away from food, drink and animal feeding stuffs.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Physical State	Solid
Color	Multiple Colors
Odor	No information available
Odor Threshold	No information available

Property	Values	Remarks • Method
pH	No information available	
Melting Point/Freezing Point	No information available	
Boiling Point	No information available	
Flash Point	> 93.3 °C / > 200 °F	
Evaporation Rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper Flammability Limit	No information available	
Lower Flammability Limit	No information available	
Vapor Pressure	No information available	
Vapor Density	No information available	
Specific Gravity	No information available	
Water Solubility	No information available	
Solubility in Other Solvents		
Partition Coefficient	No information available	
Autoignition Temperature	No information available	
Decomposition Temperature	No information available	
Kinematic Viscosity	No information available	
Dynamic Viscosity	No information available	
Explosive Properties	No information available	
Oxidizing Properties	No information available	

9.2. Other Information

Softening Point	No information available
Molecular Weight	No information available
Solvent Content (%)	No information available
Solid Content (%)	100
Density	2.79 g/cm ³
VOC	No information available

Section 10: STABILITY AND REACTIVITY

10.1. Reactivity

None under normal use conditions.

10.2. Chemical Stability

Stable under recommended storage conditions.

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10.3. Possibility of Hazardous Reactions

None under normal processing.

10.4. Conditions to Avoid

Extremes of temperature and direct sunlight.

10.5. Incompatible Materials

None known based on information supplied.

10.6. Hazardous Decomposition Products

None known based on information supplied.

Section 11: TOXICOLOGY INFORMATION

11.1. Information on Toxicological Effects

Product Information	No Data Available
Inhalation	No Data Available.
Eye contact	No Data Available.
Skin Contact	No Data Available.
Ingestion	No Data Available.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Quartz 14808-60-7	>2000 mg/kg (Rat)	-	-
Limestone 1317-65-3	>5000 mg/kg (rat)	-	-
Aluminum oxide 1344-28-1	> 5000 mg/kg (Rat)	-	-

Delayed and Immediate Effects as well as Chronic Effects from Short and Long-term Exposure

Symptoms	No information available.
Skin Corrosion/Irritation	No information available.
Serious Eye Damage/Eye Irritation	No information available.
Irritation	No information available.
Corrosivity	No information available.
Sensitization	No information available.
Germ Cell Mutagenicity	No information available.
Reproductive Toxicity	No information available.
Developmental Toxicity	No information available.
Teratogenicity	No information available.
STOT - Single Exposure	No information available.
STOT - Repeated Exposure	No information available.
Chronic Toxicity	Repeated contact may cause allergic reactions in very susceptible persons. Avoid repeated exposure.
Target Organ Effects	Eyes, Lungs, Respiratory system, Skin.
Aspiration Hazard	No information available.
Carcinogenicity	The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
Quartz	A2	Group 1	Known	X

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14808-60-7				
Aluminum oxide 1344-28-1	-	-	Reasonably Anticipated	X

ACGIH (American Conference of Governmental Industrial Hygienists)

A2 - Suspected Human Carcinogen

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

NTP (National Toxicology Program)

Known - Known Carcinogen

Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Chemical Name	Algae/Aquatic Plants	Fish	Toxicity to Microorganisms	Crustacea
Limestone 1317-65-3	CE50 (72h) >200mg/L Algae (Desmodesmus subspicatus)	CL50 (96h) >10000mg/L Fish (Oncorhynchus mykiss)		CE50 (48h) >1000 mg/L Daphnia Magna

12.2. Persistence and Degradability

No information available.

12.3. Bioaccumulative Potential

No information available.

12.4. Mobility in Soil

No information available.

12.5 Other adverse effects

No information available

Section 13: DISPOSAL CONSIDERATIONS

13.1. Waste Treatment Methods

Disposal of Wastes

It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations

Contaminated Packaging

Dispose of in accordance with federal, state and local regulations

Section 14: TRANSPORTATION INFORMATION

DOT

Not regulated

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IATA Not regulated

IMDG Not regulated

Section 15: REGULATORY INFORMATION

Global Inventories

TSCA	Listed
DSL	Listed

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL - Canadian Domestic Substances List

Listed - The components of this product are either listed or exempt from listing on inventory.

Not Listed - One or more components of this product are not listed on inventory.

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR

WHMIS Hazard Class

D2A - Very toxic materials

E - Corrosive material



United States of America

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute Health Hazard	yes
Chronic Health Hazard	yes
Fire Hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

California Proposition 65

This product contains one or more of the substances listed on Proposition 65 at or above 0.01 wt. %

Chemical Name	CAS No
Quartz	14808-60-7
Titanium dioxide	13463-67-7

Europe

Restrictions of Use of Hazardous Substances (RoHS) Directive 2011/65/EU

This product does not contain Lead (7439-92-1), Cadmium (7440-43-9), Mercury (7439-97-6), Hexavalent chromium (7440-47-3), Polybrominated biphenyls (PBB), and Polybrominated diphenyl ethers (PBDE) above the regulated limit mentioned in this regulation.

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EU-REACH (1907/2006) - Candidate List of Substances of Very High Concern (SVHC) for Authorization in accordance with Article 59

This product does not contain candidate substances of very high concern at a concentration $\geq 0.1\%$ (Regulation (EC) No. 1907/2006 (REACH), Article 59)

Section 16: OTHER INFORMATION

Product(s) Covered

G00712-26A BOS MOR 50# TILE-MATE 712 WH
G00762-26A BOS MOR 50# TILE-MATE 762 GR

HMIS Health Hazards 2* Flammability 1 Physical Hazards 0 Personal Protection X

Key or Legend to Abbreviations and Acronyms Used in the Safety Data Sheet

No information available

Key Literature References and Sources for Data

No information available

Prepared By Product Safety & Regulatory Affairs

Revision Date 19-May-2016

Revision Note Not applicable.

Training Advice No information available

Additional information No information available

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

FLINN SCIENTIFIC, INC.

Safety Data Sheet (SDS)

SDS #: 822.00

Revision Date: March 25, 2014

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Tin

Flinn Scientific, Inc. P.O. Box 219, Batavia, IL 60510 (800) 452-1261

CHEMTREC Emergency Phone Number: (800) 424-9300

Signal Word N/A

Pictograms

SECTION 2 — HAZARDS IDENTIFICATION

This chemical is considered nonhazardous according to GHS classifications for the Hazard Communication Standard. Treat all laboratory chemicals with caution.

Although this material is considered to be nonhazardous, unpredictable reactions among chemicals are always possible. Prudent laboratory practices should be observed.

SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Tin	7440-31-5	Sn	118.69	

SECTION 4 — FIRST AID MEASURES

Call a POISON CENTER or physician if you feel unwell.

If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing.

If on skin: Rinse with water.

If swallowed: Rinse mouth. Call a POISON CENTER or physician if you feel unwell.

SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable solid. Finely divided metal may be combustible.

When heated to decomposition, may emit toxic fumes.

In case of fire: Use a tri-class dry chemical fire extinguisher.

NFPA CODE

None
established

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Sweep up, place in sealed bag or container and dispose. Wash spill site after material pickup is complete. See Sections 8 and 13 for further information.

SECTION 7 — HANDLING AND STORAGE

Flinn Suggested Chemical Storage Pattern: Inorganic #1. Store with metals and metal hydrides.

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Wear protective gloves, protective clothing, and eye protection. Wash hands thoroughly after handling.

Exposure guidelines: PEL/TLV 2 mg/m³ (OSHA/ACGIH)

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Silver-white, ductile solid. Forms: granular, mossy, shot, and foil.
Odorless.

Soluble: Acids and hot potassium hydroxide solution. Insoluble in water.

Boiling point: 2507 °C

Melting point: 232 °C

Specific gravity: 7.310

SECTION 10 — STABILITY AND REACTIVITY

Avoid contact with strong oxidizers, sulfur, strong bases, halogens.

Shelf life: Indefinite, if stored properly.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: N.A.

Chronic effects: N.A.

Target organs: N.A.

ORL-RAT LD₅₀: N.A.

IHL-RAT LC₅₀: N.A.

SKN-RBT LD₅₀: N.A.

N.A. = Not available, not all health aspects of this substance have been fully investigated.

SECTION 12 — ECOLOGICAL INFORMATION

Data not yet available.

SECTION 13 — DISPOSAL CONSIDERATIONS

Please review all federal, state and local regulations that may apply before proceeding.

Flinn Suggested Disposal Method #27a is one option.

SECTION 14 — TRANSPORT INFORMATION

Shipping name: Not regulated. Hazard class: N/A. UN number: N/A.

N/A = Not applicable

SECTION 15 — REGULATORY INFORMATION

TSCA-listed, EINECS-listed (231-141-8), RCRA code D001.

SECTION 16 — OTHER INFORMATION

This Safety Data Sheet (SDS) is for guidance and is based upon information and tests believed to be reliable. Flinn Scientific, Inc. makes no guarantee of the accuracy or completeness of the data and shall not be liable for any damages relating thereto. The data is offered solely for your consideration, investigation, and verification. The data should not be confused with local, state, federal or insurance mandates, regulations, or requirements and CONSTITUTE NO WARRANTY. Any use of this data and information must be determined by the science instructor to be in accordance with applicable local, state or federal laws and regulations. The conditions or methods of handling, storage, use and disposal of the product(s) described are beyond the control of Flinn Scientific, Inc. and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THIS PRODUCT(S).

Consult your copy of the *Flinn Science Catalog/Reference Manual* for additional information about laboratory chemicals.

Revision Date: March 25, 2014

Tinker Can Pipe Dope

MATERIAL SAFETY DATA SHEET
S O S PRODUCTS COMPANY INC
P. O. Box 47
East Greenville, Pa. 18041
Phone (215)-679-6262 (215)-679-6263

PAGE 1

SECTION I - GENERAL INFORMATION

Product Code: PD Revision Date: 03/06/11
Identification: PIPE DOPE

SECTION II - HAZARDOUS INGREDIENTS

This product is not classified as hazardous in accordance with OSHA 1910.1200

Carcinogenicity: This product is NOT considered to be a carcinogen by the National Toxicology Program, the International Agency for Research on Cancer, or the Occupational Safety and Health Administration.

SECTION III - PHYSICAL CHARACTERISTICS

Boiling Point: 300o F	Specific Gravity: 1.61
Vapor Pressure: N/A	Melting Point: N/A
Vapor Density: N/A	Evaporation Rate: N/A

Solubility in Water: NOT SOLUBLE

Odor and Appearance: GRAY ODORLESS PASTE

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash Point: 300o F.	LEL: N/A
Flammable Limits: N/A	UEL: N/A

Extinguishing Media: FOAM, CARBON DIOXIDE, DRY CHEMICAL

Special Fire Fighting Procedures: USE WATER TO COOL FIRE-EXPOSED CONTAINERS.

Unusual Fire and Explosion Hazards: NONE

SECTION V - REACTIVITY DATA

Tinker Can Pipe Dope

This product is STABLE.

Conditions to avoid: DIRECT CONTACT WITH OPEN FLAME.

Incompatibility: NONE KNOWN

Hazardous Decomposition: CARBON DIOXIDE AND CARBON MONOXIDE MAY FORM ON
BURNING.

Hazardous Polymerization WILL NOT OCCUR.

SECTION VI - HEALTH HAZARD DATA

Routes of Entry:	Inhalation?	NO
	Skin?	YES - PRIMARY
	Ingestion?	YES - SECONDARY

Health Hazards (Acute and Chronic): NONE

Carcinogenicity:	NTP?	NO
	IARC Monographs?	NO
	OSHA Regulated?	NO

Signs and Symptoms of Exposure:
PROLONGED CONTACT MAY BE MILDLY IRRITATING TO CERTAIN PEOPLE.

Medical Conditions Generally Aggravated by Exposure: NONE KNOWN

Emergency and First Aid Procedures:
SKIN: WASH WITH SOAP AND WATER. EYES: FLUSH 15 MINUTES. INGESTION: DO
NOT INDUCE VOMITING. CALL PHYSICIAN.

SECTION VII - HANDLING PRECAUTIONS

Steps to be Taken if Material is Released or Spilled:
USE ABSORBENT MATERIAL & SWEEP UP.

Waste Disposal Method: NON-HAZARDOUS LANDFILL

Precautions to be Taken in Handling and Storage: NONE

Other Precautions: AVOID DIRECT CONTACT WITH OPEN FLAME & SPARKS.

SECTION VIII - CONTROL MEASURES

Respiratory Protection: NONE REQUIRED FOR NORMAL USE.
Ventilation Required: USE NORMAL VENTILATION.

Tinker Can Pipe Dope

Protective Gloves: WEAR RUBBER GLOVES
Eye Protection: WEAR SAFETY GOGGLES OR GLASSES.
Other Protective Equipment: NONE REQUIRED FOR NORMAL USE.
Work/Hygienic Practices: WASH THOROUGHLY WITH SOAP & WATER AFTER USING.

The above information pertains to the product as it is currently formulated and is based upon the information available at this time. Additions of reducers or other additives to this product may substantially alter the composition and subsequent hazards of the product. Since conditions of use are outside of our control, we make no warranties, either expressed or implied, and assume no liability in connection with any use of this information.

DELTA FIRST CORPORATION

Material Safety Data Sheet Material Identity: WHEEL SAVER

SECTION I · PRODUCT IDENTIFICATION

Manufacturers Address:
105 Bucknell Court, Suite B
Atlanta, Georgia 30336
Product Type: Liquid Rim Conditioner

Emergency Phone: (800) 982-2325
Information Phone: 404-349-2560
Date Prepared: 02/12/08
Preparer: R Braun

HMIS Rating
0- Minimal 1- Slight 2- Moderate
3- Serious 4- Extreme
HEALTH: 0 FIRE: 0 REACTIVITY: 0

SECTION II · HAZARDOUS INGREDIENTS

CHEMICAL NAME	CAS Number	%WT	TLV	PEL
---------------	------------	-----	-----	-----

None Reportable

SECTION III · PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point: > 212 °F
pH: 8 ± 0.5
Solubility In Water: Complete
Appearance/Odor: Clear green or red liquid, slight NH4 odor.

Vapor Density (Air=1): 2.4
Vapor Pressure: 1 mmHg
VOC %: 5.5
Specific Gravity (H₂O=1): 1.01
Evaporation Rate (Water=1): >1

SECTION IV · FIRE FIGHTING MEASURES

Flash Point (method used): None to 212 °F.
Extinguishing Media: N/A
Flammable Limits: N/A.
Special Fire Fighting Procedures: N/A
Unusual Fire and Explosion Hazards: None known.

SECTION V · REACTIVITY AND STABILITY

Stability: Stable.
Conditions to Avoid: Temperatures in excess of boiling.
Incompatibility: Avoid contact with strong oxidizing agents.
Hazardous Decomposition Products: Oxides of Carbon and smoke particulates.
Hazardous Polymerization: Will not occur.

SECTION VI · STORAGE AND HANDLING

Precautions To Be Taken In Handling and Storage: For Industrial and Institutional use only. Store in a cool, dry area away from heat or open flame. Do not store at temperatures in excess of 120 °F for prolonged periods. Always store in original tightly sealed container.
Other Precautions: Follow Label Instructions and Precautions.

SECTION VII · FIRST AID MEASURES

Eyes: Flush with large amounts of cool running water for at least 15 minutes. If irritation develops seek medical attention.
Skin: Wash skin with soap and water. If irritation develops seek medical attention.
Inhalation: For excessive inhalation remove to fresh air. If breathing is difficult seek medical attention.
Ingestion: INDUCE vomiting. Drink large amounts of water. Seek medical attention immediately.

SECTION VIII · EXPOSURE CONTROLS / PERSONAL PROTECTION

Eye Protection: Eye Protection when pouring.
Respiratory Protection: None required under normal use conditions.
Ventilation: General Mechanical ventilation to prevent TLV from exceeding control limits.
Protective Gloves: Plastic or rubber gloves encouraged

DELTA FIRST CORPORATION

Material Safety Data Sheet Material Identity: WHEEL SAVER

SECTION IX · ACCIDENTAL RELEASE MEASURES

Small Spill: Stop source of spill. Absorb on inert media and collect into suitable container.

Large Spill: Stop leak at the source. Absorb on inert media and collect into suitable container.

SECTION X · HAZARD IDENTIFICATION

None Reportable

SECTION XI · TOXICOLOGY

Skin: Slight irritant upon prolonged contact.

Eyes: Slight Irritation, experienced as mild discomfort and accompanied by some redness.

Inhalation: May be slightly irritating to respiratory system, overexposure may result in dizziness, headache, nausea and drowsiness.

Ingestion: May cause gastric distress, diarrhea and vomiting. Excessive amounts will cause kidney damage. Severe poisoning may cause death.

SECTION XII · ECOLOGY INFORMATION

No information available on the compounded material.

SECTION XIII · DISPOSAL CONSIDERATIONS

Dispose of in a manner consistent with federal, state, and local regulations.

Refer to the latest EPA or state regulations regarding proper disposal.

SECTION XIV · TRANSPORTATION

Proper Shipping Name: Product is NOT regulated as a hazardous material under the regulations of either the United States Department of Transportation or the IMDG.

Hazard Class:

UN Number:

Packaging Group:

SECTION XV · OTHER INFORMATION

N/A= NOT APPLICABLE · N/E=NOT ESTABLISHED · N/D=NOT DETERMINED · <=LESS THAN · >=MORE THAN

NOTICE: The information contained on this Material Safety Data Sheet is considered accurate as of the date of publication. It is not necessarily all inclusive nor fully adequate in every circumstance. The suggestions should not be confused with, nor followed in violation of applicable laws, regulations, rules or insurance requirements. No warranty, express or implied, of merchantability, fitness, accuracy of data, or the results to be obtained from the use thereof is made. The vendor assumes no responsibility for injury or damages resulting from the inappropriate use of this product.

Franklin International

Material Safety Data Sheet

Product name : Titebond Professional Drywall Adhesive

1 . Product and company identification

CAS # : Mixture
Address : Franklin International
2020 Bruck Street
Columbus OH 43207
Contact person : Franklin Technical Services
Telephone : (800) 877-4583
Emergency phone: : Franklin Security
(614) 445-1300
Reference number : 3104
Product code : 5352
Date of revision : 4/23/2009.
Print date : 7/30/2009.
Chemtrec (24 Hour) : (800) 424 - 9300
Chemtrec International : (703) 527 - 3887
Chemical family : Adhesive.
Product use : Construction Adhesive
Product type : Solvent Based

2 . Hazards identification

Physical state : Liquid. [Paste.]
Odor : Solvent(s) [Strong]
OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Emergency overview : DANGER!
EXTREMELY FLAMMABLE LIQUID AND VAPOR. FLAMMABLE. VAPOR MAY CAUSE FLASH FIRE. HARMFUL IF INHALED. CAUSES EYE AND SKIN IRRITATION. MAY BE HARMFUL IF SWALLOWED. MAY CAUSE RESPIRATORY TRACT IRRITATION. PROLONGED OR REPEATED CONTACT MAY DRY SKIN AND CAUSE IRRITATION. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE. REPRODUCTIVE HAZARD - CONTAINS MATERIAL WHICH CAN CAUSE ADVERSE REPRODUCTIVE EFFECTS IN FEMALES.
Extremely flammable liquid. Harmful by inhalation. May be harmful if swallowed. Severely irritating to eyes. Irritating to skin. Moderately irritating to the respiratory system. Defatting to the skin. Keep away from heat, sparks and flame. Do not breathe vapor or mist. Do not ingest. Do not get in eyes. Avoid contact with skin and clothing. Contains material that may cause target organ damage. Contains material which can impair female fertility. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.
Routes of entry : Dermal contact. Eye contact. Inhalation. Ingestion.
Potential acute health effects
Inhalation : Toxic by inhalation. Moderately irritating to the respiratory system.
Ingestion : Harmful if swallowed.

2 . Hazards identification

- Skin** : Irritating to skin.
- Eyes** : Severely irritating to eyes. Risk of serious damage to eyes.

Potential chronic health effects

- Chronic effects** : Contains material that may cause target organ damage. Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.
- Carcinogenicity** : No known significant effects or critical hazards.
- Mutagenicity** : No known significant effects or critical hazards.
- Teratogenicity** : No known significant effects or critical hazards.
- Developmental effects** : No known significant effects or critical hazards.
- Fertility effects** : Contains material which can impair female fertility.
- Target organs** : Contains material which may cause damage to the following organs: kidneys, liver, peripheral nervous system, upper respiratory tract, skin, central nervous system (CNS), eye, lens or cornea.

Over-exposure signs/symptoms

- Inhalation** : High vapor concentrations can cause headaches, dizziness, drowsiness and nausea and may lead to unconsciousness. Adverse symptoms may include the following:
respiratory tract irritation
coughing
- Ingestion** : No specific data.
- Skin** : Adverse symptoms may include the following:
irritation
redness
dryness
cracking
- Eyes** : Adverse symptoms may include the following:
pain or irritation
watering
redness
- Medical conditions aggravated by over-exposure** : Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.

See toxicological information (section 11)

3 . Composition/information on ingredients

<u>Name</u>	<u>CAS number</u>	<u>%</u>
n-hexane	110-54-3	10 - 25
toluene	108-88-3	10 - 25

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

4 . First aid measures

- Eye contact** : Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.
- Skin contact** : In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.
- Inhalation** : Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

4 . First aid measures

- Ingestion** : Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.
- Notes to physician** : No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

5 . Fire-fighting measures

- Flammability of the product** : Extremely flammable liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.
- Extinguishing media**
- Suitable** : Use dry chemical, CO₂, water spray (fog) or foam.
- Not suitable** : Do not use water jet.
- Special exposure hazards** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6 . Accidental release measures

- Personal precautions** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
- Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. Absorb with an inert material.
- Large spill** : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

7 . Handling and storage

- Handling** : Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat,

7 . Handling and storage

sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

- Storage** :
- Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

8 . Exposure controls/personal protection

Ingredient	Exposure limits
n-hexane	<p>OSHA PEL 1989 (United States, 3/1989). TWA: 50 ppm 8 hour(s). TWA: 180 mg/m³ 8 hour(s). NIOSH REL (United States, 6/2008). TWA: 50 ppm 10 hour(s). TWA: 180 mg/m³ 10 hour(s). ACGIH TLV (United States, 1/2008). Absorbed through skin. TWA: 50 ppm 8 hour(s). OSHA PEL (United States, 11/2006). TWA: 500 ppm 8 hour(s). TWA: 1800 mg/m³ 8 hour(s).</p>
toluene	<p>OSHA PEL 1989 (United States, 3/1989). TWA: 100 ppm 8 hour(s). TWA: 375 mg/m³ 8 hour(s). STEL: 150 ppm 15 minute(s). STEL: 560 mg/m³ 15 minute(s). OSHA PEL Z2 (United States, 11/2006). TWA: 200 ppm 8 hour(s). CEIL: 300 ppm AMP: 500 ppm 10 minute(s). NIOSH REL (United States, 6/2008). TWA: 100 ppm 10 hour(s). TWA: 375 mg/m³ 10 hour(s). STEL: 150 ppm 15 minute(s). STEL: 560 mg/m³ 15 minute(s). ACGIH TLV (United States, 1/2008). TWA: 20 ppm 8 hour(s).</p>

- Recommended monitoring procedures** :
- If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.
- Engineering measures** :
- Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
- Hygiene measures** :
- Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

8 . Exposure controls/personal protection

Personal protection

- Respiratory** : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
- Hands** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
- Eyes** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts.
- Skin** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

9 . Physical and chemical properties

- Physical state** : Liquid. [Paste.]
- Flash point** : Closed cup: <-17.778°C (<-0.0004°F) [Setaflash.]
- Flammable limits** : Lower: 1.2%
Upper: 7.5%
- Color** : Beige.
- Odor** : Solvent(s) [Strong]
- Boiling/condensation point** : 65.556°C (150°F)
- Relative density** : 1.12
- Volatility** : 31.16% (w/w)
- VOC (less water, less exempt solvents)** : 365 g/l
- Dispersibility properties** : Not dispersible in the following materials: cold water and hot water.
- Solubility** : Insoluble in the following materials: cold water and hot water.

10 . Stability and reactivity

- Chemical stability** : The product is stable.
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- Hazardous polymerization** : Under normal conditions of storage and use, hazardous polymerization will not occur.
- Conditions to avoid** : Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
- Materials to avoid** : Highly reactive or incompatible with the following materials:
oxidizing materials
- Incompatibility** : Reactive or incompatible with the following materials: oxidizing materials, acids and alkalis.
- Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.
- Conditions of reactivity** : Highly flammable in the presence of the following materials or conditions: open flames, sparks and static discharge.

11 . Toxicological information

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
n-hexane	LD50 Oral	Rat	25 gm/kg	-
	LDLo	Rat	9100 mg/kg	-
toluene	Intraperitoneal			
	TDLo Oral	Rat	20000 mg/kg	-
	LC50 Inhalation	Rat	627000 mg/m3	3 minutes
	LC50 Inhalation	Rat	48000 ppm	4 hours
	LD50 Dermal	Rabbit	14100 uL/kg	-
	LD50	Rat	1332 mg/kg	-
	Intraperitoneal			
	LD50 Intravenous	Rat	1960 mg/kg	-
	LD50 Oral	Rat	636 mg/kg	-
	LD50 Unreported	Rat	6900 mg/kg	-
	LDLo	Rat	2.5 mL/kg	-
	Intraperitoneal			
	TDLo Oral	Rat	400 mg/kg	-
	TDLo Oral	Rat	800 mg/kg	-
	TDLo Oral	Rat	1200 mg/kg	-
	TDLo	Rat	900 mg/kg	-
	Intraperitoneal			
	TDLo	Rat	750 mg/kg	-
	Intraperitoneal			
	TDLo	Rat	1 gm/kg	-
	Intraperitoneal			
	TDLo	Rat	600 mg/kg	-
	Intraperitoneal			
	LC50 Inhalation	Rat	49 gm/m3	4 hours

Chronic toxicity

No known significant effects or critical hazards.

Irritation/Corrosion

Conclusion/Summary

- Skin** : Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.
- Eyes** : Severely irritating to eyes.
- Respiratory** : High vapor concentrations can cause headaches, dizziness, drowsiness and nausea and may lead to unconsciousness.

Sensitizer

No known significant effects or critical hazards.

Carcinogenicity

Classification

Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
toluene	A4	3	-	-	-	-

Mutagenicity

No known significant effects or critical hazards.

Teratogenicity

No known significant effects or critical hazards.

Reproductive toxicity

Product/ingredient name	Maternal toxicity	Fertility	Development toxin	Species	Dose	Exposure
toluene	-	-	-	Rat	Inhalation	-

Conclusion/Summary : Reproductive toxicant - female

12 . Ecological information

Environmental effects : No known significant effects or critical hazards.

Aquatic ecotoxicity

Product/ingredient name	Test	Result	Species	Exposure
n-hexane	-	Acute LC50 113000 ug/L Fresh water	Fish - Mozambique tilapia - Tilapia mossambica - 99 mm - 10 g	96 hours
	-	Acute LC50 2500 to 2980 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas - 31 days - 20.4 mm - 0.123 g	96 hours
toluene	-	Acute EC50 19600 ug/L Fresh water	Daphnia - Water flea - Daphnia magna - LARVAE	48 hours
	-	Acute EC50 6880 to 9830 ug/L Fresh water	Daphnia - Water flea - Daphnia magna - Neonate - <=24 hours	48 hours
	-	Acute EC50 6780 to 7810 ug/L Fresh water	Fish - Rainbow trout,donaldson trout - Oncorhynchus mykiss - Juvenile (Fledgling, Hatchling, Weanling) - 54 mm - 2.187 g	96 hours
	-	Acute EC50 6000 ug/L Fresh water	Daphnia - Water flea - Daphnia magna - Juvenile (Fledgling, Hatchling, Weanling)	48 hours
	-	Acute LC50 15.5 ppm Marine water	Crustaceans - Daggerblade grass shrimp - Palaemonetes pugio - Adult	48 hours
	-	Acute LC50 15500 ug/L Marine water	Crustaceans - Daggerblade grass shrimp - Palaemonetes pugio	48 hours
	-	Acute LC50 9360 ug/L Fresh water	Fish - Coho salmon,silver salmon - Oncorhynchus kisutch - FRY - >90 days	96 hours
	-	Acute LC50 8110 ug/L Fresh water	Fish - Coho salmon,silver salmon - Oncorhynchus kisutch - 0.3 g	96 hours
	-	Acute LC50 8090 to 8780 ug/L Marine water	Fish - Pink salmon - Oncorhynchus gorbuscha - FRY - 3.5 cm - 0.35 g	96 hours
	-	Acute LC50 7630 to 8480 ug/L Marine water	Fish - Pink salmon - Oncorhynchus gorbuscha - FRY - 3.5 cm - 0.35 g	96 hours
	-	Acute LC50 170000 ug/L Marine water	Crustaceans - Dungeness or edible crab - Cancer magister - Zoea	48 hours
	-	Acute LC50 97700 to 174700 ug/L Fresh water	Daphnia - Water flea - Daphnia magna - Neonate - <=24 hours	48 hours
	-	Acute LC50 6780 to 7810 ug/L Fresh water	Fish - Rainbow trout,donaldson trout - Oncorhynchus mykiss - Juvenile (Fledgling, Hatchling, Weanling) - 54 mm - 2.187 g	96 hours
	-	Acute LC50 6410 to 7180 ug/L Marine water	Fish - Pink salmon - Oncorhynchus gorbuscha - FRY - 3.5 cm - 0.35 g	96 hours
	-	Acute LC50 86300 to 174700 ug/L Fresh water	Daphnia - Water flea - Daphnia magna - Neonate	48 hours

12 . Ecological information

-	Acute LC50 5800 ug/L Fresh water	- <=24 hours Fish - Rainbow trout, donaldson trout - Oncorhynchus mykiss	96 hours
-	Acute LC50 5500 ug/L Fresh water	Fish - Coho salmon, silver salmon - Oncorhynchus kisutch - FRY - 1 g	96 hours
-	Acute LC50 310000 to 420000 ug/L Fresh water	Daphnia - Water flea - Daphnia magna - <24 hours	48 hours
-	Acute LC50 7.3 ul/L Marine water	Fish - Striped bass - Morone saxatilis - Juvenile (Fledgling, Hatchling, Weanling) - 6 g	96 hours

Biodegradability

No known significant effects or critical hazards.

Other adverse effects : No known significant effects or critical hazards.





13 . Disposal considerations

Waste disposal : The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.


Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

14 . Transport information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
DOT Classification	1133	Consumer commodity	ORM-D	III		-
TDG Classification	1133	ADHESIVES, containing flammable liquid	3	III		Remarks Limited quantity
Mexico Classification	1133	ADHESIVES, containing flammable liquid	3	III		-
ADR/RID Class	1133	ADHESIVES, containing flammable liquid	3	III		-
IMDG Class	1133	ADHESIVES, containing flammable liquid	3	III		Remarks Limited quantity

14 . Transport information

IATA-DGR Class	1133	ADHESIVES, containing flammable liquid	3	III		Remarks Limited quantity
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PG* : Packing group

15 . Regulatory information**United States**

HCS Classification : Flammable liquid
Toxic material
Irritating material
Target organ effects

U.S. Federal regulations : **United States inventory (TSCA 8b):** All components are listed or exempted.
SARA 302/304/311/312 extremely hazardous substances: No products were found.
SARA 302/304 emergency planning and notification: No products were found.
SARA 302/304/311/312 hazardous chemicals: toluene; n-hexane; Benzene, ethenyl-, polymer with 1,3-butadiene
SARA 311/312 MSDS distribution - chemical inventory - hazard identification:
Titebond Professional Drywall Adhesive: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Listed

SARA 313

	<u>Product name</u>	<u>CAS number</u>	<u>Concentration</u>
Form R - Reporting requirements	n-hexane	110-54-3	10 - 25
	toluene	108-88-3	10 - 25
Supplier notification	n-hexane	110-54-3	10 - 25
	toluene	108-88-3	10 - 25

SARA 313 notifications must not be detached from the MSDS and any copying and redistribution of the MSDS shall include copying and redistribution of the notice attached to copies of the MSDS subsequently redistributed.

State regulations : **Massachusetts Spill:** None of the components are listed.
Massachusetts Substances: The following components are listed: HEXANE; TOLUENE
New Jersey Hazardous Substances: The following components are listed: n-HEXANE; TOLUENE
New Jersey Spill: None of the components are listed.
New Jersey Toxic Catastrophe Prevention Act: None of the components are listed.
Pennsylvania RTK Hazardous Substances: The following components are listed: HEXANE; BENZENE, METHYL-

California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

<u>Ingredient name</u>	<u>Cancer</u>	<u>Reproductive</u>	<u>No significant risk level</u>	<u>Maximum acceptable dosage level</u>
toluene	No.	Yes.	No.	7000 µg/day (ingestion) 13000 µg/day (inhalation)

International regulations

15 . Regulatory information

International lists : Australia inventory (AICS): Not determined.
 China inventory (IECSC): Not determined.
 Japan inventory (ENCS): Not determined.
 Japan inventory (ISHL): Not determined.
 Korea inventory (KECI): Not determined.
 New Zealand Inventory of Chemicals (NZIoC): Not determined.
 Philippines inventory (PICCS): Not determined.

Chemical Weapons Convention List Schedule I Chemicals : Not listed

Chemical Weapons Convention List Schedule II Chemicals : Not listed

Chemical Weapons Convention List Schedule III Chemicals : Not listed

16 . Other information

Label requirements : EXTREMELY FLAMMABLE LIQUID AND VAPOR. FLAMMABLE. VAPOR MAY CAUSE FLASH FIRE. HARMFUL IF INHALED. CAUSES EYE AND SKIN IRRITATION. MAY BE HARMFUL IF SWALLOWED. MAY CAUSE RESPIRATORY TRACT IRRITATION. PROLONGED OR REPEATED CONTACT MAY DRY SKIN AND CAUSE IRRITATION. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE. REPRODUCTIVE HAZARD - CONTAINS MATERIAL WHICH CAN CAUSE ADVERSE REPRODUCTIVE EFFECTS IN FEMALES.

Hazardous Material Information System (U.S.A.) :

Health	*	2
Flammability		3
Physical hazards		0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

Date of printing : 7/30/2009.

Date of issue : 4/23/2009.

Date of previous issue : 1/19/2009.

Version : 1

Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Franklin International

Material Safety Data Sheet

Titebond Heavy Duty Construction Adhesive

1. Product and company identification

CAS #	: mixture
Synonym	: None known.
Address	: Franklin International 2020 Bruck Street Columbus OH 43207
Contact person	: Franklin Technical Services
Telephone	: (800) 877-4583
<u>In case of emergency</u>	: Franklin Security (614) 445-1300
Reference number	: 3195
Product code	: 5261
Date of revision	: 6/6/2014.
Print date	: 6/6/2014.
Chemtrec (24 Hour)	: (800) 424 - 9300
Chemtrec International	: (703) 527 - 3887
Product use	: Construction Adhesive
Product type	: Solvent based

2. Hazards identification

Emergency overview

Physical state	: Liquid. [Paste.]
Color	: Beige.
Odor	: Solvent. [Strong]
Signal word	: DANGER!
Hazard statements	: EXTREMELY FLAMMABLE LIQUID AND VAPOR. FLAMMABLE. VAPOR MAY CAUSE FLASH FIRE. HARMFUL IF INHALED. CAUSES RESPIRATORY TRACT, EYE AND SKIN IRRITATION. MAY BE HARMFUL IF SWALLOWED. REPRODUCTIVE HAZARD - CONTAINS MATERIAL WHICH CAN CAUSE ADVERSE REPRODUCTIVE EFFECTS IN FEMALES.
Precautionary measures	: Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Do not ingest. Avoid breathing vapor or mist. Use only with adequate ventilation. Avoid contact with eyes, skin and clothing. Keep away from heat, sparks and flame. Keep container tightly closed. Use personal protective equipment as required. Wash thoroughly after handling.
OSHA/HCS status	: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Routes of entry	: Dermal contact. Eye contact. Inhalation. Ingestion.
<u>Potential acute health effects</u>	
Inhalation	: Toxic by inhalation. Irritating to respiratory system.
Ingestion	: Harmful if swallowed.
Skin	: Irritating to skin.

2. Hazards identification

Eyes : Severely irritating to eyes. Risk of serious damage to eyes.

Potential chronic health effects

Chronic effects : Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : Contains material which can impair female fertility.

Target organs : Contains material which may cause damage to the following organs: blood, kidneys, the nervous system, the reproductive system, liver, peripheral nervous system, upper respiratory tract, skin, central nervous system (CNS), eye, lens or cornea.

Over-exposure signs/symptoms

Inhalation : High vapor concentrations can cause headaches, dizziness, drowsiness and nausea and may lead to unconsciousness. Adverse symptoms may include the following:
respiratory tract irritation
coughing
reduced fetal weight
increase in fetal deaths
skeletal malformations

Ingestion : Adverse symptoms may include the following:
reduced fetal weight
increase in fetal deaths
skeletal malformations

Skin : Adverse symptoms may include the following:
irritation
redness
dryness
cracking
reduced fetal weight
increase in fetal deaths
skeletal malformations

Eyes : Adverse symptoms may include the following:
pain or irritation
watering
redness
reduced fetal weight
increase in fetal deaths
skeletal malformations

Medical conditions aggravated by over-exposure : None known.

See toxicological information (Section 11)

3. Composition/information on ingredients

United States

Name	CAS number	%
n-hexane	110-54-3	10 - 25
acetone	67-64-1	10 - 25
toluene	108-88-3	5 - 10

Canada

3. Composition/information on ingredients

Name	CAS number	%
n-hexane	110-54-3	10 - 25
acetone	67-64-1	10 - 25
toluene	108-88-3	5 - 10

Mexico

Name	CAS number	UN number	%	IDLH	Classification			
					H	F	R	Special
n-hexane	110-54-3	UN1993	10 - 25	1100 ppm	1	3	0	-
acetone	67-64-1	UN1993	10 - 25	2500 ppm	2	3	0	-
toluene	108-88-3	UN1993	5 - 10	500 ppm	2	3	0	-

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

4. First aid measures

- Eye contact** : Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.
- Skin contact** : In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.
- Inhalation** : Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.
- Ingestion** : Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.
- Notes to physician** : No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

5. Fire-fighting measures

- Flammability of the product** : Extremely flammable liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.

Extinguishing media

- Suitable** : Use dry chemical, CO₂, water spray (fog) or foam.
- Not suitable** : Do not use water jet.
- Special exposure hazards** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide

5. Fire-fighting measures

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. Accidental release measures

Personal precautions : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods for cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. Absorb with an inert material.

Large spill : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

7. Handling and storage

Handling : Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

Storage : Store between the following temperatures: -17 to 40°C (1.4 to 104°F). Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

8. Exposure controls/personal protection

United States

8. Exposure controls/personal protection

Ingredient	Exposure limits
<div>n-hexane</div> <div>acetone</div> <div>toluene</div>	<p>OSHA PEL 1989 (United States, 3/1989). TWA: 50 ppm 8 hours. TWA: 180 mg/m³ 8 hours.</p> <p>NIOSH REL (United States, 10/2013). TWA: 50 ppm 10 hours. TWA: 180 mg/m³ 10 hours.</p> <p>ACGIH TLV (United States, 6/2013). Absorbed through skin. TWA: 50 ppm 8 hours.</p> <p>OSHA PEL (United States, 2/2013). TWA: 500 ppm 8 hours. TWA: 1800 mg/m³ 8 hours.</p> <p>ACGIH TLV (United States, 6/2013). TWA: 500 ppm 8 hours. TWA: 1188 mg/m³ 8 hours. STEL: 750 ppm 15 minutes. STEL: 1782 mg/m³ 15 minutes.</p> <p>OSHA PEL 1989 (United States, 3/1989). TWA: 750 ppm 8 hours. TWA: 1800 mg/m³ 8 hours. STEL: 1000 ppm 15 minutes. STEL: 2400 mg/m³ 15 minutes.</p> <p>NIOSH REL (United States, 10/2013). TWA: 250 ppm 10 hours. TWA: 590 mg/m³ 10 hours.</p> <p>OSHA PEL (United States, 2/2013). TWA: 1000 ppm 8 hours. TWA: 2400 mg/m³ 8 hours.</p> <p>OSHA PEL 1989 (United States, 3/1989). TWA: 100 ppm 8 hours. TWA: 375 mg/m³ 8 hours. STEL: 150 ppm 15 minutes. STEL: 560 mg/m³ 15 minutes.</p> <p>OSHA PEL Z2 (United States, 2/2013). TWA: 200 ppm 8 hours. CEIL: 300 ppm AMP: 500 ppm 10 minutes.</p> <p>NIOSH REL (United States, 10/2013). TWA: 100 ppm 10 hours. TWA: 375 mg/m³ 10 hours. STEL: 150 ppm 15 minutes. STEL: 560 mg/m³ 15 minutes.</p> <p>ACGIH TLV (United States, 6/2013). TWA: 20 ppm 8 hours.</p>

Canada

Occupational exposure limits		TWA (8 hours)			STEL (15 mins)			Ceiling			Notations
Ingredient	List name	ppm	mg/m ³	Other	ppm	mg/m ³	Other	ppm	mg/m ³	Other	
n-hexane	US ACGIH 6/2013	50	-	-	-	-	-	-	-	-	[1]
	AB 4/2009	50	176	-	-	-	-	-	-	-	[1]
	BC 7/2013	20	-	-	-	-	-	-	-	-	[1]
	ON 1/2013	50	-	-	-	-	-	-	-	-	[1]
	QC 12/2012	50	176	-	-	-	-	-	-	-	[1]
	US ACGIH 6/2013	500	1188	-	750	1782	-	-	-	-	
	AB 4/2009	500	1200	-	750	1800	-	-	-	-	
	BC 7/2013	250	-	-	500	-	-	-	-	-	
	ON 1/2013	500	1188	-	750	1782	-	-	-	-	
	QC 12/2012	500	1190	-	1000	2380	-	-	-	-	

8. Exposure controls/personal protection

toluene	US ACGIH 6/2013	20	-	-	-	-	-	-	-	-	-	[1]
	AB 4/2009	50	188	-	-	-	-	-	-	-	-	
	BC 7/2013	20	-	-	-	-	-	-	-	-	-	
	ON 1/2013	20	-	-	-	-	-	-	-	-	-	
	QC 12/2012	50	188	-	-	-	-	-	-	-	-	[1]

[1] Absorbed through skin.

Mexico

Occupational exposure limits

Ingredient	Exposure limits
n-hexane	NOM-010-STPS (Mexico, 9/2000). LMPE-PPT: 50 ppm 8 hours.
acetone	LMPE-PPT: 176 mg/m ³ 8 hours. NOM-010-STPS (Mexico, 9/2000). LMPE-PPT: 1000 ppm 8 hours.
	LMPE-PPT: 2400 mg/m ³ 8 hours.
	LMPE-CT: 3000 mg/m ³ 15 minutes.
	LMPE-CT: 1260 ppm 15 minutes.
toluene	NOM-010-STPS (Mexico, 9/2000). Absorbed through skin. LMPE-PPT: 50 ppm 8 hours.
	LMPE-PPT: 188 mg/m ³ 8 hours.

Consult local authorities for acceptable exposure limits.

- Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
- Engineering measures** : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protection

Respiratory

- : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Hands

- : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Eyes

- : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

8. Exposure controls/personal protection

- Skin** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

9. Physical and chemical properties

- Physical state** : Liquid. [Paste.]
- Flash point** : Closed cup: -18°C (-0.4°F) [Setaflash.]
- Auto-ignition temperature** : 252°C (485.6°F)
- Flammable limits** : Lower: 1.2%
Upper: 12.8%
- Color** : Beige.
- Odor** : Solvent. [Strong]
- Boiling/condensation point** : 56°C (132.8°F)
- Relative density** : 1.07365
- Volatility** : 35.17% (w/w)
- VOC (less water, less exempt solvents)** : 286 g/l
- Solubility** : Insoluble in the following materials: cold water.

10. Stability and reactivity

- Chemical stability** : The product is stable.
- Conditions to avoid** : Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
- Incompatible materials** : Highly reactive or incompatible with the following materials:
oxidizing materials
- Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- Hazardous polymerization** : Under normal conditions of storage and use, hazardous polymerization will not occur.

11. Toxicological information

United States

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
n-hexane	LC50 Inhalation Gas.	Rat	48000 ppm	4 hours
acetone	LD50 Oral	Rat	15840 mg/kg	-
toluene	LD50 Oral	Rat	5800 mg/kg	-
	LC50 Inhalation Vapor	Rat	49 g/m ³	4 hours
	LD50 Oral	Rat	636 mg/kg	-

Chronic toxicity

No known significant effects or critical hazards.

Irritation/Corrosion

11. Toxicological information

Product/ingredient name	Result	Species	Score	Exposure	Observation
n-hexane acetone toluene	Eyes - Mild irritant	Rabbit	-	10 milligrams	-
	Eyes - Mild irritant	Human	-	186300 parts per million	-
	Eyes - Mild irritant	Rabbit	-	10 microliters	-
	Eyes - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-
	Eyes - Severe irritant	Rabbit	-	20 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Mild irritant	Rabbit	-	395 milligrams	-
	Eyes - Mild irritant	Rabbit	-	0.5 minutes 100 milligrams	-
	Eyes - Mild irritant	Rabbit	-	870 Micrograms	-
	Eyes - Severe irritant	Rabbit	-	24 hours 2 milligrams	-
	Skin - Mild irritant	Pig	-	24 hours 250 microliters	-
	Skin - Mild irritant	Rabbit	-	435 milligrams	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-
	Skin - Moderate irritant	Rabbit	-	500 milligrams	-

Conclusion/Summary

Skin

: Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

Eyes

: Moderately irritating to eyes.

Respiratory

: High vapor concentrations can cause headaches, dizziness, drowsiness and nausea and may lead to unconsciousness.

Sensitizer

No known significant effects or critical hazards.

Carcinogenicity

Classification

Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
acetone	A4	-	-	-	-	-
toluene	A4	3	-	-	-	-

Mutagenicity

No known significant effects or critical hazards.

Teratogenicity

No known significant effects or critical hazards.

Reproductive toxicity

Product/ingredient name	Maternal toxicity	Fertility	Development toxin	Species	Dose	Exposure
toluene	-	-	-	Rat	Inhalation	-

Conclusion/Summary : Reproductive toxicant - female

Canada

Acute toxicity

11. Toxicological information

Product/ingredient name	Result	Species	Dose	Exposure
n-hexane	LC50 Inhalation Gas.	Rat	48000 ppm	4 hours
	LD50 Oral	Rat	15840 mg/kg	-
acetone	LD50 Oral	Rat	5800 mg/kg	-
toluene	LC50 Inhalation Vapor	Rat	49 g/m ³	4 hours
	LD50 Oral	Rat	636 mg/kg	-

Chronic toxicity

No known significant effects or critical hazards.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
n-hexane	Eyes - Mild irritant	Rabbit	-	10 milligrams	-
acetone	Eyes - Mild irritant	Human	-	186300 parts per million	-
	Eyes - Mild irritant	Rabbit	-	10 microliters	-
	Eyes - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-
	Eyes - Severe irritant	Rabbit	-	20 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Mild irritant	Rabbit	-	395 milligrams	-
toluene	Eyes - Mild irritant	Rabbit	-	0.5 minutes 100 milligrams	-
	Eyes - Mild irritant	Rabbit	-	870 Micrograms	-
	Eyes - Severe irritant	Rabbit	-	24 hours 2 milligrams	-
	Skin - Mild irritant	Pig	-	24 hours 250 microliters	-
	Skin - Mild irritant	Rabbit	-	435 milligrams	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-
	Skin - Moderate irritant	Rabbit	-	500 milligrams	-

Conclusion/Summary

Skin

: Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

Eyes

: Moderately irritating to eyes.

Respiratory

: High vapor concentrations can cause headaches, dizziness, drowsiness and nausea and may lead to unconsciousness.

Sensitizer

No known significant effects or critical hazards.

Carcinogenicity

Classification

Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
acetone	A4	-	-	-	-	-
toluene	A4	3	-	-	-	-

Mutagenicity

No known significant effects or critical hazards.

Teratogenicity

11. Toxicological information

No known significant effects or critical hazards.

Reproductive toxicity

Product/ingredient name	Maternal toxicity	Fertility	Development toxin	Species	Dose	Exposure
toluene	-	-	-	Rat	Inhalation	-

Conclusion/Summary : Reproductive toxicant - female

Mexico

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
n-hexane	LC50 Inhalation Gas. LD50 Oral	Rat Rat	48000 ppm 15840 mg/kg	4 hours -
acetone	LD50 Oral	Rat	5800 mg/kg	-
toluene	LC50 Inhalation Vapor LD50 Oral	Rat Rat	49 g/m ³ 636 mg/kg	4 hours -

Chronic toxicity

No known significant effects or critical hazards.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
n-hexane	Eyes - Mild irritant	Rabbit	-	10 milligrams	-
acetone	Eyes - Mild irritant	Human	-	186300 parts per million	-
	Eyes - Mild irritant	Rabbit	-	10 microliters	-
	Eyes - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-
	Eyes - Severe irritant	Rabbit	-	20 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Mild irritant	Rabbit	-	395 milligrams	-
toluene	Eyes - Mild irritant	Rabbit	-	0.5 minutes 100 milligrams	-
	Eyes - Mild irritant	Rabbit	-	870 Micrograms	-
	Eyes - Severe irritant	Rabbit	-	24 hours 2 milligrams	-
	Skin - Mild irritant	Pig	-	24 hours 250 microliters	-
	Skin - Mild irritant	Rabbit	-	435 milligrams	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-
	Skin - Moderate irritant	Rabbit	-	500 milligrams	-

Conclusion/Summary

Skin

: Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

Eyes

: Moderately irritating to eyes.

Respiratory

: High vapor concentrations can cause headaches, dizziness, drowsiness and nausea and may lead to unconsciousness.

Sensitizer

No known significant effects or critical hazards.

11. Toxicological information

Carcinogenicity

Classification

Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
acetone	A4	-	-	-	-	-
toluene	A4	3	-	-	-	-

Mutagenicity

No known significant effects or critical hazards.

Teratogenicity

No known significant effects or critical hazards.

Reproductive toxicity

Product/ingredient name	Maternal toxicity	Fertility	Development toxin	Species	Dose	Exposure
toluene	-	-	-	Rat	Inhalation	-

Conclusion/Summary : Reproductive toxicant - female

12. Ecological information

Ecotoxicity : No known significant effects or critical hazards.

United States

Aquatic ecotoxicity

Product/ingredient name	Result	Species	Exposure
n-hexane	Acute LC50 113000 µg/l Fresh water	Fish - Oreochromis mossambicus	96 hours
acetone	Acute EC50 20.565 mg/l Marine water	Algae - Ulva pertusa	96 hours
	Acute LC50 6000000 µg/l Fresh water	Crustaceans - Gammarus pulex	48 hours
	Acute LC50 10000 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 100 mg/l Fresh water	Fish - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling)	96 hours
	Chronic NOEC 4.95 mg/l Marine water	Algae - Ulva pertusa	96 hours
toluene	Chronic NOEC 0.016 ml/L Fresh water	Crustaceans - Daphniidae	21 days
	Chronic NOEC 0.1 ml/L Fresh water	Daphnia - Daphnia magna - Neonate	21 days
	Chronic NOEC 5 µg/l Marine water	Fish - Gasterosteus aculeatus - Larvae	42 days
	Acute EC50 433 ppm Marine water	Algae - Skeletonema costatum	96 hours
	Acute EC50 12500 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute EC50 11600 µg/l Fresh water	Crustaceans - Gammarus pseudolimnaeus - Adult	48 hours
	Acute EC50 6000 µg/l Fresh water	Daphnia - Daphnia magna - Juvenile (Fledgling, Hatchling, Weanling)	48 hours
	Acute LC50 5500 µg/l Fresh water	Fish - Oncorhynchus kisutch - Fry	96 hours
	Chronic NOEC 500000 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
	Chronic NOEC 1000 µg/l Fresh water	Daphnia - Daphnia magna	21 days

Persistence/degradability

No known significant effects or critical hazards.

Canada

Aquatic ecotoxicity

12. Ecological information

Product/ingredient name	Result	Species	Exposure
n-hexane	Acute LC50 113000 µg/l Fresh water	Fish - Oreochromis mossambicus	96 hours
acetone	Acute EC50 20.565 mg/l Marine water	Algae - Ulva pertusa	96 hours
	Acute LC50 6000000 µg/l Fresh water	Crustaceans - Gammarus pulex	48 hours
	Acute LC50 10000 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 100 mg/l Fresh water	Fish - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling)	96 hours
	Chronic NOEC 4.95 mg/l Marine water	Algae - Ulva pertusa	96 hours
	Chronic NOEC 0.016 ml/L Fresh water	Crustaceans - Daphniidae	21 days
	Chronic NOEC 0.1 ml/L Fresh water	Daphnia - Daphnia magna - Neonate	21 days
	Chronic NOEC 5 µg/l Marine water	Fish - Gasterosteus aculeatus - Larvae	42 days
toluene	Acute EC50 433 ppm Marine water	Algae - Skeletonema costatum	96 hours
	Acute EC50 12500 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute EC50 11600 µg/l Fresh water	Crustaceans - Gammarus pseudolimnaeus - Adult	48 hours
	Acute EC50 6000 µg/l Fresh water	Daphnia - Daphnia magna - Juvenile (Fledgling, Hatchling, Weanling)	48 hours
	Acute LC50 5500 µg/l Fresh water	Fish - Oncorhynchus kisutch - Fry	96 hours
	Chronic NOEC 500000 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
	Chronic NOEC 1000 µg/l Fresh water	Daphnia - Daphnia magna	21 days

Persistence/degradability

No known significant effects or critical hazards.

Mexico

Aquatic ecotoxicity

Product/ingredient name	Result	Species	Exposure
n-hexane	Acute LC50 113000 µg/l Fresh water	Fish - Oreochromis mossambicus	96 hours
acetone	Acute EC50 20.565 mg/l Marine water	Algae - Ulva pertusa	96 hours
	Acute LC50 6000000 µg/l Fresh water	Crustaceans - Gammarus pulex	48 hours
	Acute LC50 10000 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 100 mg/l Fresh water	Fish - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling)	96 hours
	Chronic NOEC 4.95 mg/l Marine water	Algae - Ulva pertusa	96 hours
	Chronic NOEC 0.016 ml/L Fresh water	Crustaceans - Daphniidae	21 days
	Chronic NOEC 0.1 ml/L Fresh water	Daphnia - Daphnia magna - Neonate	21 days
	Chronic NOEC 5 µg/l Marine water	Fish - Gasterosteus aculeatus - Larvae	42 days
toluene	Acute EC50 433 ppm Marine water	Algae - Skeletonema costatum	96 hours
	Acute EC50 12500 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute EC50 11600 µg/l Fresh water	Crustaceans - Gammarus pseudolimnaeus - Adult	48 hours
	Acute EC50 6000 µg/l Fresh water	Daphnia - Daphnia magna - Juvenile (Fledgling, Hatchling, Weanling)	48 hours
	Acute LC50 5500 µg/l Fresh water	Fish - Oncorhynchus kisutch - Fry	96 hours
	Chronic NOEC 500000 µg/l Fresh water	Algae - Pseudokirchneriella	96 hours

12. Ecological information

	Chronic NOEC 1000 µg/l Fresh water	subcapitata Daphnia - Daphnia magna	21 days
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Persistence/degradability

No known significant effects or critical hazards.

13. Disposal considerations




Waste disposal

: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.




Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

14. Transport information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
DOT Classification	1133	ADHESIVES, containing flammable liquid RQ (toluene, n-hexane)	3	III		Reportable quantity 12163.7 lbs / 5522.3 kg [1358.8 gal / 5143.5 L] Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements. Remarks Limited quantity
TDG Classification	1133	ADHESIVES, containing flammable liquid	3	III		Remarks Limited quantity
Mexico Classification	1133	ADHESIVES, containing flammable liquid	3	III		Remarks Limited quantity

14. Transport information

ADR/RID Class	1133	ADHESIVES, containing flammable liquid	3	III		Special provisions 640 (E) Tunnel code (D/E) Remarks Limited quantity
IMDG Class	1133	ADHESIVES, containing flammable liquid	3	III		Remarks Limited quantity
IATA-DGR Class	1133	ADHESIVES, containing flammable liquid	3	III		Remarks Limited quantity

PG* : Packing group

15. Regulatory information

United States

HCS Classification : Flammable liquid
Toxic material
Irritating material
Target organ effects

U.S. Federal regulations :

TSCA 8(a) CDR Exempt/Partial exemption: Not determined

United States inventory (TSCA 8b): All components are listed or exempted.

SARA 302/304: No products were found.

SARA 311/312 Hazards identification: Fire hazard, Immediate (acute) health hazard,
Delayed (chronic) health hazard

Clean Air Act Section 112 : Listed

**(b) Hazardous Air
Pollutants (HAPs)**

Clean Air Act Section 602 : Not listed
Class I Substances

Clean Air Act Section 602 : Not listed
Class II Substances

DEA List I Chemicals : Not listed
(Precursor Chemicals)

DEA List II Chemicals : Listed
(Essential Chemicals)

SARA 313

15. Regulatory information

	Product name	CAS number	Concentration
Form R - Reporting requirements	n-hexane acetone toluene	110-54-3 67-64-1 108-88-3	10 - 25 10 - 25 5 - 10
Supplier notification	n-hexane toluene	110-54-3 108-88-3	10 - 25 5 - 10

SARA 313 notifications must not be detached from the MSDS and any copying and redistribution of the MSDS shall include copying and redistribution of the notice attached to copies of the MSDS subsequently redistributed.

State regulations

- Massachusetts** : The following components are listed: HEXANE; ACETONE; TOLUENE
- New York** : The following components are listed: Hexane; Acetone; 2-Propanone; Toluene
- New Jersey** : The following components are listed: n-HEXANE; HEXANE; ACETONE; 2-PROPANONE; TOLUENE; BENZENE, METHYL-
- Pennsylvania** : The following components are listed: HEXANE; 2-PROPANONE; BENZENE, METHYL-
- California Prop. 65**

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

Ingredient name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
toluene	No.	Yes.	No.	7000 µg/day (ingestion)

Canada

- WHMIS (Canada)** : Class B-2: Flammable liquid
Class D-2A: Material causing other toxic effects (Very toxic).
Class D-2B: Material causing other toxic effects (Toxic).

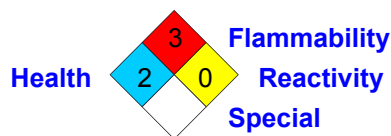
Canadian lists

- Canadian NPRI** : The following components are listed: n-Hexane; Volatile organic compounds; Toluene
- CEPA Toxic substances** : The following components are listed: Volatile organic compounds
- Canada inventory** : Not determined.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

Mexico

Classification :



International regulations

- International lists** :
- Australia inventory (AICS):** Not determined.
 - China inventory (IECSC):** Not determined.
 - Japan inventory:** Not determined.
 - Korea inventory:** Not determined.
 - Malaysia Inventory (EHS Register):** Not determined.
 - New Zealand Inventory of Chemicals (NZIoC):** Not determined.
 - Philippines inventory (PICCS):** Not determined.
 - Taiwan inventory (CSNN):** Not determined.

15. Regulatory information

**Chemical Weapons
Convention List Schedule
I Chemicals** : Not listed

**Chemical Weapons
Convention List Schedule
II Chemicals** : Not listed

**Chemical Weapons
Convention List Schedule
III Chemicals** : Not listed

16. Other information

Label requirements : EXTREMELY FLAMMABLE LIQUID AND VAPOR. FLAMMABLE. VAPOR MAY CAUSE FLASH FIRE. HARMFUL IF INHALED. CAUSES RESPIRATORY TRACT, EYE AND SKIN IRRITATION. MAY BE HARMFUL IF SWALLOWED. REPRODUCTIVE HAZARD - CONTAINS MATERIAL WHICH CAN CAUSE ADVERSE REPRODUCTIVE EFFECTS IN FEMALES.

**Hazardous Material
Information System (U.S.A.)** :

Health	2
Flammability	3
Physical hazards	0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

**National Fire Protection
Association (U.S.A.)** :



Reprinted with permission from NFPA 704-2001, Identification of the Hazards of Materials for Emergency Response Copyright ©1997, National Fire Protection Association, Quincy, MA 02269. This reprinted material is not the complete and official position of the National Fire Protection Association, on the referenced subject which is represented only by the standard in its entirety.

Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

Date of printing : 6/6/2014.
Date of issue : 6/6/2014.
Date of previous issue : 9/16/2013.
Version : 2

Indicates information that has changed from previously issued version.

[Notice to reader](#)

16. Other information

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Franklin International

MATERIAL SAFETY DATA SHEET

MSDS Name: Titebond II Premium Wood Glue

MSDS Number: 5006

Revision Date: 5/24/06

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Titebond II Premium Wood Glue

CAS Number: none

HMIS Hazard Rating: Health: 1 Fire: 1 Reactivity: 0

Company Identification: Franklin International
2020 Bruck Street
Columbus OH 43207

Contact: Franklin Technical Services
Telephone/Fax: (800) 877-4583 (614) 445-1493
Emergency Phone (24 Hour): Franklin Security
(614) 445-1300
Chemtrec (24 Hour): (800) 424-9300
Chemtrec International: (703) 527-3887

Product Class: CROSSLINK POLYVINYL ACETATE
Product Use: wood glue
Product Code: 5000

Division: Construction Adhesives & Sealants

SECTION 2 - COMPOSITION AND INFORMATION ON INGREDIENTS

Hazardous Ingredients	CAS Number	Percent
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Product contains no hazardous ingredients or they are below reportable levels.

OSHA PELs & ACGIH TLVs are listed in Section 8 where applicable.

SECTION 3 - HAZARD IDENTIFICATION

EMERGENCY OVERVIEW:

Cream colored water-based adhesive. Slippery in the wet state.

ROUTES OF ENTRY:

Ingestion:	Yes
Inhalation:	Yes
Skin:	Yes
Eye:	Yes

INHALATION:

Vapors and/or aerosols which may be formed at elevated temperature may be irritating to eyes and respiratory tract.

No reported incidents of adverse health affects resulting from inhalation of vapors at room temperature.

INGESTION:

No hazard expected in normal industrial use. Ingestion is not a likely route of exposure.

SKIN:

Prolonged or repeated skin contact can cause irritation.

EYE:

Substance may cause moderate eye irritation.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:

None identified.

CARCINOGENICITY:

IARC: No

NTP: No

OSHA: No

REPRODUCTIVE TOXICITY:

This product has not been evaluated for reproductive toxicity.

SECTION 4 - FIRST AID MEASURES

INHALATION:

Remove patient to fresh air, if discomfort persists seek medical attention.

INGESTION:

Call poison control center immediately. Follow their specific instructions. Do not induce vomiting.

SKIN:

Wash with soap and water. Contact a physician if irritation develops or persists.

EYE:

Hold eyelids apart and flush with plenty of water for at least 15 minutes. Seek medical attention.

SECTION 5 - FIRE-FIGHTING MEASURES

Flammability Class (OSHA) IIIB

Flash Point: Not Applicable

Explosive Range: Not Applicable

EXTINGUISHING MEDIA:

Use alcohol foam, carbon dioxide, water spray, or ABC dry chemical when fighting fires involving this product.

HAZARDOUS COMBUSTION PRODUCTS:

Oxides of carbon.

FIRE FIGHTING PROCEDURES:

Wear a NIOSH approved self-contained breathing apparatus.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

CONTAINMENT TECHNIQUES:

Use inert absorbent to dike the spill. Keep away from drains.

CLEAN-UP:

If possible pump liquid into an approved container or spread absorbent over spill and shovel product/absorbent mixture into an approved container. If product has dried scrape up and place in an approved container.

SECTION 7 - HANDLING AND STORAGE

HANDLING:

Empty drums should be completely drained, properly bunged and promptly returned to a reconditioner, or properly disposed of.

Use only in well ventilated area.

STORAGE:

Keep from freezing.

Store at temperatures between 50 F and 90 F.

PRECAUTIONARY STATEMENT:

Keep out of the reach of children.

SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTION

Occupational Exposure Limits

ACGIH TLV	ACGIH TLV-C	ACGIH STEL	OSHA STEL	OSHA PEL
-----------	-------------	------------	-----------	----------

ENGINEERING CONTROLS:

Use local exhaust as needed to maintain occupational exposure limits.

OTHER:

Facilities storing or utilizing any chemical should be equipped with an eyewash facility and a safety shower.

RESPIRATORY PROTECTION:

Where exposure limits may be exceeded select a NIOSH approved respirator with appropriate Protection Factor and cartridge for the specific contaminants. Follow requirements for respiratory protection in OSHA 1910.134.

EYE PROTECTION:

Chemical splash goggles (ANSI Z87.1 or approved equivalent).

SKIN PROTECTION:

Where skin contact can occur, wear impervious gloves.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Form:	Liquid
Appearance/Color:	cream
Odor:	Mild
Solubility (in water):	Dispersible in water
pH Value:	3.
Boiling Range/Point:	210.0°F
Evaporation Rate:	Slower than n-Butyl Acetate

% Volatile:	52.%
Specific Gravity:	1.09
VOC:	5.5 g/l

SECTION 10 - STABILITY AND REACTIVITY

Stability:	This product is stable
Hazardous Polymerization:	Hazardous polymerization will not occur

CONDITIONS TO AVOID:

None.

INCOMPATIBILITY:

Strong acids and bases.

HAZARDOUS DECOMPOSITION PRODUCTS:

Oxides of carbon may be released during combustion.

SECTION 11 - TOXICOLOGICAL INFORMATION

Acute and chronic health effects are not expected as long as good industrial hygiene and safety precautions are followed.

SECTION 12 - ECOLOGICAL INFORMATION

This formulation has not been tested for environmental effects.

SECTION 13 - DISPOSAL CONSIDERATIONS

WASTE DISPOSAL:

Disposal of this product must comply with all applicable federal, state and local regulations.

CONTAINER DISPOSAL:

Disposal of this container should comply with all applicable federal, state and local regulations.

SECTION 14 - TRANSPORT INFORMATION

UN Number	none
UN Pack Group	N/A
UN Class	Nonhaz
ICAO/IATA Class	Nonhazardous
IMDG Class	Nonhazardous
Shipping Name	Nonhazardous

Packaging may not be approved for shipping by air. Please contact Franklin International for further information.

SECTION 15 - REGULATORY INFORMATION

TSCA (Toxic Substances Control Act Inventory):

All components of this product are listed on the TSCA inventory except as exempted.

PENNSYLVANIA:

Special hazardous components required to be listed at .01% or more:
formaldehyde; formaldehyde; 50-00-0

Non-hazardous components required to be listed at 3% or more:

polyvinyl acetate emulsion 113408-93-8; polyvinyl alcohol 25213-24-5

NEW JERSEY:

polyvinyl acetate emulsion 113408-93-8; water 7732-18-5; aluminum chloride 7784-13-6; polyvinyl alcohol 25213-24-5; n-methylolacrylamide 924-42-5

SECTION 16 - OTHER INFORMATION

DISCLAIMER:

While the information and recommendations set forth herein are believed to be accurate as of the data hereof, Franklin International makes no warranty, express or implied, with respect thereto and disclaims all liability from reliance thereon.

Franklin International

Material Safety Data Sheet

Titebond Original Wood Glue

1. Product and company identification

Synonym	: None known.
Address	: Franklin International 2020 Bruck Street Columbus OH 43207
Contact person	: Franklin Technical Services
Telephone	: (800) 877-4583
In case of emergency	: Franklin Security (614) 445-1300
Reference number	: 2213
Product code	: 5062
Date of revision	: 5/22/2014.
Print date	: 5/22/2014.
Chemtrec (24 Hour)	: (800) 424 - 9300
Chemtrec International	: (703) 527 - 3887
Chemical family	: Adhesive.
Product use	: Wood glue
Product type	: Aliphatic resin

2. Hazards identification

Emergency overview

Physical state	: Liquid.
Color	: Yellow.
Odor	: Faint odor.
Signal word	: CAUTION!
Hazard statements	: MAY CAUSE EYE AND SKIN IRRITATION.
Precautionary measures	: Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.
OSHA/HCS status	: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Routes of entry	: Eye contact. Inhalation. Ingestion.

Potential acute health effects

Inhalation	: Inhalation of oil mist or vapors at elevated temperatures may cause respiratory irritation. No known significant effects or critical hazards.
Ingestion	: No known significant effects or critical hazards.
Skin	: Slightly irritating to the skin. Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.
Eyes	: Moderately irritating to eyes. This product may irritate eyes upon contact.

Potential chronic health effects

Chronic effects	: No known significant effects or critical hazards.
Carcinogenicity	: No known significant effects or critical hazards.

2. Hazards identification

- Mutagenicity** : No known significant effects or critical hazards.
- Teratogenicity** : No known significant effects or critical hazards.
- Developmental effects** : No known significant effects or critical hazards.
- Fertility effects** : No known significant effects or critical hazards.
- Target organs** : May cause damage to the following organs: skin, eyes.

Over-exposure signs/symptoms

- Inhalation** : No specific data.
- Ingestion** : No specific data.
- Skin** : Adverse symptoms may include the following:
 - irritation
 - redness
- Eyes** : Adverse symptoms may include the following:
 - irritation
 - watering
 - redness
- Medical conditions aggravated by over-exposure** : None known.

See toxicological information (Section 11)

3. Composition/information on ingredients

There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

4. First aid measures

- Eye contact** : Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.
- Skin contact** : In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.
- Inhalation** : Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.
- Ingestion** : Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
- Notes to physician** : No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

5. Fire-fighting measures

- Flammability of the product** : In a fire or if heated, a pressure increase will occur and the container may burst.
- Extinguishing media**
 - Suitable** : Use an extinguishing agent suitable for the surrounding fire.
 - Not suitable** : None known.

5. Fire-fighting measures

- Special exposure hazards** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. Accidental release measures

- Personal precautions** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
- Small spill** : Stop leak if without risk. Move containers from spill area. Dispose of via a licensed waste disposal contractor. Absorb with an inert material.
- Large spill** : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

7. Handling and storage

- Handling** : Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Storage** : Store between the following temperatures: 10 to 32.222°C (50 to 90°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

8. Exposure controls/personal protection

Canada

Occupational exposure limits

No exposure limit value known.

Mexico

Occupational exposure limits

No exposure limit value known.

Consult local authorities for acceptable exposure limits.

8. Exposure controls/personal protection

Recommended monitoring procedures	: If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
Engineering measures	: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
Hygiene measures	: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
<u>Personal protection</u>	
Respiratory	: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
Hands	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
Eyes	: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.
Skin	: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Environmental exposure controls	: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

9. Physical and chemical properties

Physical state	: Liquid.
Flash point	: Closed cup: Not applicable.
Color	: Yellow.
Odor	: Faint odor.
pH	: 3.8 to 4.7
Boiling/condensation point	: 98.889°C (210°F)
Relative density	: 1.1
Volatility	: 54.1% (w/w)
Evaporation rate	: <1 (butyl acetate = 1)
VOC (less water, less exempt solvents)	: 10.7 g/l
Dispersibility properties	: Dispersible in the following materials: cold water and hot water.
Physical/chemical properties comments	: VOC = 10.7 g/L

10. Stability and reactivity

Chemical stability	: The product is stable.
Conditions to avoid	: No specific data.
Incompatible materials	: No specific data.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Hazardous polymerization	: Under normal conditions of storage and use, hazardous polymerization will not occur.

11. Toxicological information

United States

Acute toxicity

No known significant effects or critical hazards.

Chronic toxicity

No known significant effects or critical hazards.

Irritation/Corrosion

Conclusion/Summary

- | | |
|--------------------|--|
| Skin | : Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis. |
| Eyes | : This product may irritate eyes upon contact. |
| Respiratory | : Inhalation of oil mist or vapors at elevated temperatures may cause respiratory irritation. |

Sensitizer

No known significant effects or critical hazards.

Carcinogenicity

No known significant effects or critical hazards.

Mutagenicity

No known significant effects or critical hazards.

Teratogenicity

No known significant effects or critical hazards.

Reproductive toxicity

No known significant effects or critical hazards.

Canada

Acute toxicity

No known significant effects or critical hazards.

Chronic toxicity

No known significant effects or critical hazards.

Irritation/Corrosion

Conclusion/Summary

- | | |
|--------------------|--|
| Skin | : Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis. |
| Eyes | : This product may irritate eyes upon contact. |
| Respiratory | : Inhalation of oil mist or vapors at elevated temperatures may cause respiratory irritation. |

Sensitizer

No known significant effects or critical hazards.

Carcinogenicity

No known significant effects or critical hazards.

11. Toxicological information

Mutagenicity

No known significant effects or critical hazards.

Teratogenicity

No known significant effects or critical hazards.

Reproductive toxicity

No known significant effects or critical hazards.

Mexico

Acute toxicity

No known significant effects or critical hazards.

Chronic toxicity

No known significant effects or critical hazards.

Irritation/Corrosion

Conclusion/Summary

Skin

: Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

Eyes

: This product may irritate eyes upon contact.

Respiratory

: Inhalation of oil mist or vapors at elevated temperatures may cause respiratory irritation.

Sensitizer

No known significant effects or critical hazards.

Carcinogenicity

No known significant effects or critical hazards.

Mutagenicity

No known significant effects or critical hazards.

Teratogenicity

No known significant effects or critical hazards.

Reproductive toxicity

No known significant effects or critical hazards.

12. Ecological information

Ecotoxicity

: No known significant effects or critical hazards.

United States

Aquatic ecotoxicity

No known significant effects or critical hazards.

Persistence/degradability

No known significant effects or critical hazards.

Canada

Aquatic ecotoxicity

No known significant effects or critical hazards.

Persistence/degradability

No known significant effects or critical hazards.

Mexico

Aquatic ecotoxicity

No known significant effects or critical hazards.

Persistence/degradability

No known significant effects or critical hazards.

12. Ecological information

Other adverse effects : No known significant effects or critical hazards.

13. Disposal considerations

Waste disposal : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

14. Transport information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
DOT Classification	Not regulated.	-	-	-		-
TDG Classification	Not regulated.	-	-	-		-
Mexico Classification	Not regulated.	-	-	-		-
ADR/RID Class	Not regulated.	-	-	-		-
IMDG Class	Not regulated.	-	-	-		-
IATA-DGR Class	Not regulated.	-	-	-		-

PG* : Packing group

15. Regulatory information

United States

HCS Classification : Irritating material

U.S. Federal regulations :

TSCA 8(a) PAIR: Not applicable

TSCA 8(a) CDR Exempt/Partial exemption: Not determined

United States inventory (TSCA 8b): All components are listed or exempted.

SARA 302/304: No products were found.

SARA 311/312 Hazards identification: Immediate (acute) health hazard

15. Regulatory information

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Not listed

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

State regulations

Massachusetts : None of the components are listed.

New York : None of the components are listed.

New Jersey : None of the components are listed.

Pennsylvania : None of the components are listed.

Canada

WHMIS (Canada) : Not controlled under WHMIS (Canada).

Canadian lists

Canadian NPRI : None of the components are listed.

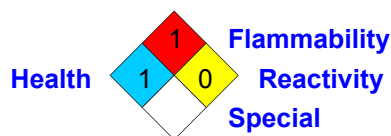
CEPA Toxic substances : None of the components are listed.

Canada inventory : Not determined.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

Mexico

Classification :



International regulations

International lists :

- Australia inventory (AICS)**: Not determined.
- China inventory (IECSC)**: Not determined.
- Japan inventory**: Not determined.
- Korea inventory**: Not determined.
- Malaysia Inventory (EHS Register)**: Not determined.
- New Zealand Inventory of Chemicals (NZIoC)**: Not determined.
- Philippines inventory (PICCS)**: Not determined.
- Taiwan inventory (CSNN)**: Not determined.

Chemical Weapons Convention List Schedule I Chemicals : Not listed

Chemical Weapons Convention List Schedule II Chemicals : Not listed

Chemical Weapons Convention List Schedule III Chemicals : Not listed

16. Other information

Label requirements : MAY CAUSE EYE AND SKIN IRRITATION.

Hazardous Material :

Information System (U.S.A.)

Health	1
Flammability	1
Physical hazards	0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.) :



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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

Date of printing : 5/22/2014.

Date of issue : 5/22/2014.

Date of previous issue : 5/20/2014.

Version : 2

Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Franklin International

MATERIAL SAFETY DATA SHEET

MSDS Name: Titebond Weathermaster Clear 000

MSDS Number: 44011

Revision Date: 4/6/07

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Titebond Weathermaster Clear 000
CAS Number: none
HMIS Hazard Rating: Health: 2 Fire: 1 Reactivity: 0

Company Identification: Franklin International
2020 Bruck Street
Columbus OH 43207

Contact: Franklin Technical Services
Telephone/Fax: (800) 877-4583 (614) 445-1493
Emergency Phone (24 Hour): Franklin Security
(614) 445-1300
Chemtrec (24 Hour): (800) 424-9300
Chemtrec International: (703) 527-3887

Product Class: elastomeric sealant
Product Use: caulk sealant
Product Code: Not applicable

Division: Construction Adhesives & Sealants

SECTION 2 - COMPOSITION AND INFORMATION ON INGREDIENTS

Hazardous Ingredients	CAS Number	Percent
METHYL OXIMINO SILANE	22984-54-9	5.00
Di Methoxymethyl Silane	83817-72-5	3.00

OSHA PELs & ACGIH TLVs are listed in Section 8 where applicable.

SECTION 3 - HAZARD IDENTIFICATION

EMERGENCY OVERVIEW:

CAUTION: IRRITANT. Direct contact with uncured caulk irritates eyes and skin. Overexposure to vapor may irritate eyes, nose and throat. Caulk may release methyl ethyl ketoxime (CAS# 96-29-7) during cure. Fully cured caulk is nonhazardous. KEEP OUT OF THE REACH OF CHILDREN. Material is a paste-like material.

ROUTES OF ENTRY:

Inhalation: yes
Ingestion: yes
Skin: yes
Eye: yes

INHALATION:

May be irritating to upper respiratory tract.

INGESTION:

Ingestion is not a probable route of exposure. Single dose oral toxicity is considered to be extremely low. No hazard expected from swallowing small amounts incidental to normal handling operations. Ingestion may cause gastrointestinal irritation.

SKIN:

Prolonged or repeated skin contact may cause moderate irritation.

EYE:

Substance may cause moderate eye irritation.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:

None identified.

CARCINOGENICITY:

IARC: No

NTP: No

OSHA: No

REPRODUCTIVE TOXICITY:

None currently known.

TARGET ORGANS:

Eyes, skin, and respiratory tract.

SECTION 4 - FIRST AID MEASURES

INHALATION:

Remove to fresh air. If difficulty persists, seek medical attention.

INGESTION:

Call poison control center immediately. Follow their specific instructions.

SKIN:

Wash with soap and water or waterless cleaner. Contact a physician if irritation develops or persist.

EYE:

Hold eyelids apart and flush with plenty of water for at least 15 minutes. Seek medical attention.

SECTION 5 - FIRE-FIGHTING MEASURES

Flammability Class (OSHA)	IIIB
Flash Point:	> 200.øF
	Not available
Explosive Range:	Not applicable

EXTINGUISHING MEDIA:

Use alcohol foam, carbon dioxide, water spray, or ABC dry chemical when fighting fires involving this product.

FIRE FIGHTING PROCEDURES:

Wear a NIOSH approved self contained breathing apparatus. Wear appropriate personal protective equipment.
Product will not burn but may spatter if temperature exceeds boiling point of water. After water evaporates, remaining material will burn.

SECTION 6 - ACCIDENTAL RELEASE MEASURES**CONTAINMENT TECHNIQUES:**

Use inert absorbent to dike the spill. Keep away from drains.

CLEAN-UP:

Spread absorbent over material and scrape up material/absorbent and place in an approved container. If product has dried scrape up and place in an approved container.

SECTION 7 - HANDLING AND STORAGE**HANDLING:**

Wash thoroughly after handling.
Do not get material in eyes.
Avoid breathing vapors.
Avoid prolonged or repeated contact with the skin.

STORAGE:

Store in a cool, dry place. Avoid contact with moist air.

PRECAUTIONARY STATEMENT:

Keep out of the reach of children.

SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTION**Occupational Exposure Limits**

	ACGIH TLV	ACGIH TLV-C	ACGIH STEL	OSHA STEL	OSHA PEL
METHYL OXIMINO SILANE	N/est	N/est	N/est	N/est	N/est
Di Methoxymethyl Silane	N/est	N/est	N/est	N/est	N/est

Note: Product evolves MEKO (CAS# 96-27-7) when exposed to moisture or humid air. The ACGIH TLV for MEKO is 10.00 ppm with a 15-minute STEL of 10 ppm.

ENGINEERING CONTROLS:

Use appropriate ventilation as needed to maintain occupational exposure limits.

OTHER:

Facilities storing or utilizing any chemical should be equipped with an eyewash facility and a safety shower.

RESPIRATORY PROTECTION:

Respiratory protection is not expected to be necessary under normal use. Follow requirements for respiratory protection in OSHA 1910.134.

EYE PROTECTION:

Chemical splash goggles (ANSI Z87.1 or approved equivalent).

SKIN PROTECTION:

Where skin contact can occur, wear impervious gloves.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Form:	Paste
Appearance/Color:	Translucent
Odor:	Mild
Solubility (in water):	Nil
pH Value:	5-7
Boiling Range/Point:	Not Available
Evaporation Rate:	Slower than n-Butyl Acetate

% Volatile:	< 4
Specific Gravity:	1.05
VOC:	46.0 g/l

SECTION 10 - STABILITY AND REACTIVITY

Stability:	This product is stable
Hazardous Polymerization:	Hazardous polymerization will not occur

CONDITIONS TO AVOID:

None known.

INCOMPATIBILITY:

Water or damp air; product cures in the presence of moisture. Avoid oxidizing materials.

HAZARDOUS DECOMPOSITION PRODUCTS:

Methyl ethyl ketoxime (CAS# 96-29-7) is released on hydrolysis.

SECTION 11 - TOXICOLOGICAL INFORMATION

Inhalation of MEKO vapor is irritating to the eyes and respiratory system. Direct and prolonged contact with the skin is irritating.

SECTION 12 - ECOLOGICAL INFORMATION

This formulation has not been tested for environmental effects.

SECTION 13 - DISPOSAL CONSIDERATIONS

WASTE DISPOSAL:

Disposal of this product must comply with all applicable federal, state and local regulations.

CONTAINER DISPOSAL:

Disposal of this container should comply with all applicable federal, state and local regulations.

SECTION 14 - TRANSPORT INFORMATION

UN Number	None
UN Pack Group	N/A
UN Class	Nonhaz
ICAO/IATA Class	Nonhazardous
IMDG Class	Nonhazardous
Shipping Name	Nonhazardous

Packaging may not be approved for shipping by air. Please contact Franklin International for further information.

SECTION 15 - REGULATORY INFORMATION

TSCA (Toxic Substances Control Act Inventory):

All components of this product are listed on the TSCA inventory except as exempted.

PENNSYLVANIA:

Nonhazardous components required to be listed at 3% or more:

methyl oximino silane 22984-54-9; dimethoxymethyl silane 83817-72-5

NEW JERSEY:

methyl oximino silane 22984-54-9; dimethoxymethyl silane 83817-72-5;

ethoxy tri(ethyl methyl ketoxime) silane 101371-00-0; methyl ethyl

ketoxime 96-29-7; diethoxy di(ethyl methyl ketoxime) silane 93917-75-0

SECTION 16 - OTHER INFORMATION

DISCLAIMER:

While the information and recommendations set forth herein are believed to be accurate as of the data hereof, Franklin International makes no warranty, express or implied, with respect thereto and disclaims all liability from reliance thereon.

FLINN SCIENTIFIC, INC.

Safety Data Sheet (SDS)

SDS #: 824.00

Revision Date: March 25, 2014

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Toluene

Flinn Scientific, Inc. P.O. Box 219, Batavia, IL 60510 (800) 452-1261

CHEMTREC Emergency Phone Number: (800) 424-9300

Signal Word **DANGER**

Pictograms



SECTION 2 — HAZARDS IDENTIFICATION

Hazard class: Flammable liquids (Category 2). Highly flammable liquid and vapor (H225). Keep away from heat, sparks, open flames, and hot surfaces. No smoking (P210).

Hazard class: Acute toxicity, oral (Category 4). Harmful if swallowed (H302).

Hazard class: Aspiration hazard (Category 1). May be fatal if swallowed and enters airways (H304).

Hazard class: Skin and serious eye damage, corrosion or irritation (Category 2, 2B). Causes skin and eye irritation (H315+H320).

Hazard class: Specific target organ toxicity, single exposure; Narcotic effects (Category 3). May cause drowsiness or dizziness (H336). Avoid breathing mist, vapors or spray (P261).

Hazard class: Reproductive toxicity (Category 2). Suspected of damaging fertility or the unborn child (H361). Obtain special instructions before use (P201). Do not handle until all safety precautions have been read and understood (P202). Use personal protective equipment as required (P281).

Hazard class: Specific target organ toxicity, repeated exposure (Category 2). May cause damage to organs through prolonged or repeated exposure (H373). Do not breathe mist, vapors or spray (P260). Do not eat, drink or smoke when using this product (P270).

SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Toluene	108-88-3	C ₆ H ₅ CH ₃	94.14	
Synonyms: Methyl benzene; Toluol				

SECTION 4 — FIRST AID MEASURES

Get medical advice or attention if you feel unwell (P314).

If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing (P305+P351+P338). **If eye irritation persists:** Get medical advice or attention (P337+P313).

If on skin (or hair): Immediately remove all contaminated clothing. Rinse skin with water (P303+P361+P353).

If swallowed: Immediately call a POISON CENTER or physician (P301+P310). Do NOT induce vomiting (P331).

SECTION 5 — FIRE FIGHTING MEASURES

Class IB flammable liquid.

Flash point: 4 °C Flammable limits: Lower: 1.1% Upper: 7.1% Autoignition Temperature: 480 °C

Dangerous fire risk.

In case of fire: Use a tri-class dry chemical fire extinguisher (P370+P378).

NFPA Code

H-2

F-3

R-0

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Remove all ignition sources and ventilate area. Contain spill with sand or other inert absorbent material; deposit in sealed bag or container. See Sections 8 and 13 for further information.

SECTION 7 — HANDLING AND STORAGE

Flinn Suggested Chemical Storage Pattern: Organic #3. Store with hydrocarbons, oils, esters and aldehydes. Store in a dedicated flammables cabinet. If a flammables cabinet is not available, store in Flinn Saf-Stor™ can. Keep container tightly closed (P233). Keep cool (P235). Use only in a hood or in a well-ventilated area. Use explosion-proof electrical and ventilating equipment (P241).

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Wear protective gloves, protective clothing, and eye protection (P280). Wash hands thoroughly after handling (P264). Use only in a hood or in a well-ventilated area.

Exposure guidelines: PEL 200 ppm, Ceiling 300 ppm (OSHA); TLV 20 ppm (ACGIH)

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Colorless liquid; benzene-like odor.

Soluble: Alcohol and ether. Insoluble in water.

Boiling point: 111 °C

Melting point: -93 °C

Specific gravity: 0.866

Vapor density: 3.2

Vapor pressure: 22 mmHg

SECTION 10 — STABILITY AND REACTIVITY

Avoid contact with strong oxidizers.

Shelf life: Good, if stored properly.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Toxic, severe irritant, lung irritation, chest pain and edema, which may be fatal.

Chronic effects: N.A.

Target organs: Brain, liver, kidneys, bladder.

ORL-RAT LD₅₀: 636 mg/kg

IHL-RAT LC₅₀: 26700 ppm/1H

SKN-RBT LD₅₀: 12124 mg/kg

N.A. = Not available, not all health aspects of this substance have been fully investigated.

SECTION 12 — ECOLOGICAL INFORMATION

Data not yet available.

SECTION 13 — DISPOSAL CONSIDERATIONS

Please review all federal, state and local regulations that may apply before proceeding.

Flinn Suggested Disposal Method #18b is one option.

SECTION 14 — TRANSPORT INFORMATION

Shipping name: Toluene. Hazard class: 3, Flammable liquid. UN number: UN1294.

N/A = Not applicable

SECTION 15 — REGULATORY INFORMATION

TSCA-listed, EINECS-listed (203-625-9), RCRA code U220.

SECTION 16 — OTHER INFORMATION

This Safety Data Sheet (SDS) is for guidance and is based upon information and tests believed to be reliable. Flinn Scientific, Inc. makes no guarantee of the accuracy or completeness of the data and shall not be liable for any damages relating thereto. The data is offered solely for your consideration, investigation, and verification. The data should not be confused with local, state, federal or insurance mandates, regulations, or requirements and CONSTITUTE NO WARRANTY. Any use of this data and information must be determined by the science instructor to be in accordance with applicable local, state or federal laws and regulations. The conditions or methods of handling, storage, use and disposal of the product(s) described are beyond the control of Flinn Scientific, Inc. and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THIS PRODUCT(S).

Consult your copy of the *Flinn Science Catalog/Reference Manual* for additional information about laboratory chemicals.

Revision Date: March 25, 2014

MATERIAL SAFETY DATA SHEET

FOR

TOUCH 'N SEAL®

U2-12, U2-22, U2-200, U2-600

A COMPONENT & B COMPONENT

Part # of this MSDS: 4004550096

MATERIAL SAFETY DATA SHEET

SECTION I - PRODUCT INFORMATION

Product: **Touch 'n Seal® U2-12, U2-22, U2-200, U2-600 A Component and B Component**

Manufacturer:

**Convenience Products
866 Horan Drive
Fenton, MO 63026-2416
U.S.A.**

Emergency Telephone
Number

Chemtrec:
1-800-424 9300

Information Telephone
Number (during regular
business hours):

1-636-349 5333

Revised on 9/1/05

Prepared by Jay ZHANG

Approved by Joe Lott

SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

A Component

CHEMICAL NAME	CAS NO.	OSHA PEL	ACGIH TLV	PERCENTAGE
Polymeric Diphenylmethane Diisocyanate (MDI)	9016-87-9	NE*	NE*	40-55
4,4-Diphenylmethane Diisocyanate	101-68-8	0.02ppm CEIL	0.005ppm TWA	40-55
Chlorodifluoromethane (HCFC-22)	75-45-6	1,000ppm TWA	1,000ppm TWA	6 - 18

B Component

CHEMICAL NAME	CAS NO.	OSHA PEL	ACGIH TLV	PERCENTAGE
Polyol Blend	Proprietary Mixture NE*	NE*	NE*	35-75
Flame Retardant	Proprietary Mixture NE*	NE*	NE*	3- 20
Catalyst	Proprietary Mixture NE*	NE*	NE*	< 1
Chlorodifluoromethane (HCFC-22)	75-45-6	1,000ppm TWA	1,000ppm TWA	14 - 33

*Not established

None of the ingredients in both A and B component is listed by IARC, NTP, OSHA, or ACGIH as a carcinogenic substance.

Hazard Rating: HMIS	A Component	Health 2	Flammability 1	Reactivity 1
	B Component	Health 1	Flammability 1	Reactivity 0

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

	A Component		B Component	
Boiling Point	HCFC-22 MDI	-41.4°F at 1 ATM 392°F at 5 mm Hg	HCFC-22 Polyol Blend	-41.4°F at 1 ATM NE*
Vapor Pressure	HCFC-22 MDI	136 psia at 70°F 0.00016mmHg@68°F	HCFC-22 Polyol Blend	136 psia at 70°F NE*
Vapor Density (AIR = 1)	HCFC-22	2.98 at 1 ATM	HCFC-22	2.98 at 1 ATM
Specific Gravity (H ₂ O = 1)	HCFC-22 MDI	1.17 at 86°F 1.2	HCFC-22 Polyol Blend	1.17 at 86°F 1.1
Flash Point	HCFC-22 MDI	None > 400°F closed cup	HCFC-22 Polyol Blend	None NE*
Solubility in Water	Insoluble		Soluble	
Appearance and Odor	Dark brown color with earthy, musty odor		Clear, off yellow viscous liquid with slight odor	

*Not established

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Extinguishing Media

U2 units in boxes: Water fog, foam, CO₂, or dry chemical

Cured foam: Water fog, foam, CO₂, or dry chemical

Fire Fighting Procedures

U2 units in boxes: Keep containers cool. Wear self-contained breathing apparatus and turnout gear.

Hazardous decomposition products include CO, CO₂, oxides of nitrogen, and traces of HCN, HF, HCl, Tin Oxide, Cl, PO & Silicon Dioxide.

Cured foam: Wear self-contained breathing apparatus. Hazardous decomposition products include CO, CO₂, oxides of nitrogen, and traces of HCN, HF, HCl, Tin Oxide, Cl, and PO.

Unusual Hazards

Units in boxes: High temperatures will increase the pressure in the tanks, which may lead to rupturing.

Cured foam: This product is combustible. Do not expose to high heat, sparks, or open flame.

SECTION V - REACTIVITY DATA

Stability

U2 units in boxes are considered stable under normal storage and handling conditions. Do not store above 120°F. The mixing of the "A" Component and "B" Component during use produces heat and expansion. Cured foam will slowly deteriorate when exposed to UV light.

Incompatibility

A Component:	Water, alcohols, strong bases, finely powdered metal such as aluminum, Magnesium or zinc, and strong oxidizers.
B Component:	Strong alkali or alkaline earth metals, finely powdered metals such as Aluminum, magnesium, or zinc, strong oxidizers, and strong acids.

/Hazards to Avoid:

Avoid high heat; i.e., flames, extremely hot metal surfaces, heating elements, combustion engines, etc. Contaminated A component with water may form CO₂. Do not dispense only one tank at a time. Both A & B components must be used together.

SECTION VI – TOXICOLOGICAL INFORMATION

Concentration of ingredients (section II) must be considered to determine effects of the "A" component mixture and "B" component mixture. Although these mixtures have not been tested, it is assumed that the mixture presents the same health hazards as do the ingredients present at 1% or higher level. Proper

personnel protection and adequate ventilation should be provided to avoid exceeding the exposure limits listed in section II.

Inhalation MDI vapors from A component or spray mist may cause irritation of the mucous membranes of the nose, throat or trachea, which may cause chest discomfort, coughing, and allergic asthma-like sensitivity. Air-borne overexposure well above the PEL may result additionally in eye irritation, headache, chemical bronchitis, asthma-like findings or pulmonary edema. Inhaling concentrated fluorocarbons from A component and/or B component can cause unconsciousness, drowsiness, respiratory depression, rapid heartbeat and other symptoms. Persons with preexisting heart disease may be at increased risk from exposure.

Skin Contact: with both A component and B component may result in localized irritation, reddening or swelling. Prolonged or repeated exposure may lead to sensitization and/or dermatitis. Uncured foam forms a quick bond with skin and hard to remove after it is cured.

Eyes Contact: with MDI of A component may result in eye irritation and mild corneal opacity due to adhesive character. B component may have irritating effect to eyes.

Ingestion: A component may cause irritation of mucous membranes in the mouth and digestive tract. B component may have slight effect of such.

Emergency and First Aid Procedures

A component or B component material

Skin - If frostbitten, warm skin slowly with water; otherwise, wash affected areas with soap and water at least 15 minutes. Remove contaminated clothing and launder before reuse. Get immediate medical attention.

Eyes - Immediately flush with large quantities of water for a minimum of 15 minutes. Use fingers to assure that eyelids are separated and that eye is being irrigated. Get immediate medical attention.

Ingestion - If swallowed, dilute with water. DO NOT INDUCE VOMITING. Never give fluids or induce vomiting if the victim is unconscious or having convulsions. Get immediate medical attention.

Inhalation - Remove to fresh air. Get immediate medical attention.

Foam

Skin - Remove wet foam immediately from skin with soft cloth, and then clean with acetone or nail polish remover. If irritation persists get medical attention. Dried foam is hard to remove from skin. If foam dries on skin, apply generous amounts of petroleum jelly or lanolin, leave on for one hour, wash thoroughly, and repeat process until foam is removed. Do not attempt to remove dried foam with solvents.

Eye - In case of eye contact, flush with water for 15 minutes. Get immediate medical attention.

Ingestion - In case of ingestion, get immediate medical attention.

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

"A" Side

Spills/Leaks - Evacuate and ventilate spill area, dike spill to prevent entry into water system, wear full protective equipment including respiratory equipment during clean up.

If transportation spill involved, call CHEMTREC @ 1-800-424-9300. If temporary control of isocyanate vapor is required, a blanket of protein foam (available at most fire departments) may be placed over the spill. Transfer as much liquid as possible via pump or vacuum device into closed but not sealed containers for disposal. Absorb the isocyanate with sawdust or other absorbent and shovel into open top containers. Do not make pressure tight. Transport to a well-ventilated area (outside) and treat with neutralizing solution consisting of a mixture of 90% water, 3-8% ammonia and 2-7% detergent. Add about 10 parts of neutralizer per part of isocyanate with mixing. Allow standing for 48 hours letting evolved carbon dioxide escape. Decontaminate spill area using neutralizing solution and letting stand over affected areas for at least 10 minutes.

Waste Disposal - Dispose according to federal, state, and local regulations. - Do not discharge into waterways or sewer systems.

Container Disposal - Dispose according to federal, state, and local regulations.

"B" Side

Spills/Leaks - Evacuate and ventilate spill area, dike spill to prevent entry into water system, wear full protective equipment including respiratory equipment during clean up. If transportation spill involved, call CHEMTREC @ 1-800-424-9300. Transfer as much liquid as possible via pump or vacuum device into closed but not sealed containers for disposal. Absorb the material with sawdust or other absorbent and shovel into containers and transport to a well-ventilated area.

Waste Disposal - Do not discharge into waterways or sewer systems. Dispose according to federal, state, and local regulations.

Container Disposal - Dispose according to federal, state, and local regulations

Storage: Store in a cool, dry place. Ideal storage temperature is 60°F - 80°F. Storage above 90°F will shorten the shelf life. Since the containers are pressurized, do not store above 120°F (49°C) in order to avoid excessive pressure build up and possible container rupture. Protect containers from physical abuse.

SECTION VIII - PERSONAL PROTECTION

Respiratory Protection Use only in well-ventilated areas. Wear NIOSH / MSHA approved, positive pressure, supplied air respirator when vapor level is exceed the guideline listed in section II in this MSDS.

Clothing Wear rubber butyl or nitrile rubber gloves, coveralls, long sleeve shirts, and head covering to avoid skin contact. Contaminated equipment / clothing should be cleaned after each use or disposed.

Eye Protection Wear face shield and goggles, or safety glasses.

Ventilation If ventilation is not enough to maintain P.E.L. exhaust area.

SECTION IX - OTHER REGULATORY INFORMATION

TSCA – Inventory Status: all chemicals contained in this product are listed on TSCA inventory.

SARA - This product contains a toxic chemical that may be subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (40CFR 372).

NAME	CAS NO.	AMOUNT
Diphenylmethane Diisocyanate	101-68-8	40-55% of "A" Side
Chlorodifluoromethane (HCFC-22)	75-45-6	6-18% of "A" Side
Chlorodifluoromethane (HCFC-22)	75-45-6	14-33% of "B" Side

CERCLA - Reportable Quantity - yes ...(40CFR 302.4).....(5000 lb. of Methylene bisphenyl isocyanate)

RCRA Hazardous Waste - No

DOT Proper Shipping Name

U2-12 & U2-22 Consumer Commodity ORM-D

U2-200 & U2-600 Compressed gas, NOS (Chlorodifluoromethane, Nitrogen)

Diphenylmethane Diisocyanate (cas# 101-68-8) is cited on certain state lists as follow:

NJ2=New Jersey environmental hazardous substance (present at greater than or equal to 1.0%)

NJ3=New Jersey workplace hazardous substance (present at greater than or equal to 1.0%)

PA1=Pennsylvania hazardous substance (present at greater than or equal to 1.0%)

PA3=New Jersey environmental hazardous substance (present at greater than or equal to 1.0%)

The above information is accurate to the best of our knowledge. However, since safety standards, data, and government regulations are subject to change and the conditions of handling and use or misuse are beyond our control, Convenience Products makes no warranty, either express or implied, with respect to the completeness or continuing accuracy of the information contained herein and disclaims all liability for reliance thereon. User should satisfy himself that he has all current data relevant to his particular use.

MATERIAL SAFETY DATA SHEET

NFPA RATING: Health = 3 Flammability = 0 Reactivity = 0
HMIS RATING: Health = / 3 Flammability = 0 Reactivity = 0

SECTION I – IDENTITY AND MANUFACTURER'S INFORMATION (1132A)**Distributor:** HILLYARD**Product Name:** PROFFESIONAL PRIDE TOUCHDOWN**Address:** 40 Ash Circle**Date Prepared:** April 28, 2008

Warminster, PA 18974

Prepared by: Regulatory Affairs Department

Emergency Telephone No.: (800) 424-9300 (Only in the event of chemical emergency involving a spill, leak, fire, exposure or accident involving chemicals.)

Other information calls: (816) 233-1321 (Ext. 8285)<http://www.hillyard.com>**SECTION II – INGREDIENTS/IDENTITY INFORMATION****Components****(Specific Chemical Identity:**

Common Name(s)	CAS#	OSHA PEL	ACGIH TLV	OTHER LIMITS RECOMMENDED	%
2-Butyl cellosolve (2-Butoxyethanol) (1)*	111-76-2	50 ppm	20 ppm	N.A.	18-23%
Ethanolamine (2)	141-43-5	3 ppm	3 ppm	N.A.	3-7%
Potassium Hydroxide (3)*	1310-58-3	2 mg/ m ³	2 mg/ m ³	NIOSH = 2mg/m ³	1-5%
Sodium Metasilicate	6834-92-0	not est.	not est.	2 mg/M ³	1-5%
Water	7732-18-5	none	none	N.A.	---
Sodium Xylene Sulfonate	1300-58-3	none	none	N.A.	---

(1) Regulated by OSHA, FL, IL, LA, MA, NJ, PA, RI.

(2) Regulated by OSHA, CT, FL, IL, LA, MA, NJ, PA, RI.

(3) Regulated by OSHA, CT, FL, IL, LA, MA, NJ, PA, RI

*This product contains the following chemicals subject to the reporting requirements of SARA Title III, Sec. 313, and 40 CFR Part 372: 2-Butoxyethanol and Potassium Hydroxide.

VOC (Concentrate) = 26%; VOC (min. dilution) = 4.33%

SECTION III – PHYSICAL / CHEMICAL CHARACTERISTICS

Boiling Point: 204°F **Specific Gravity (H₂O = 1):** 25°C = 1.05 & 39°C = 1.06
Vapor Pressure (mm Hg.): 16.3 **Percent Volatile by Volume (%):** 84.2%
Vapor Density (AIR = 1): 1.5 **Evaporation Rate (ethyl ether = 1):** slower than 1
Solubility in Water : Complete **Appearance and Odor:** Clear, colorless to amber liquid; mild solvent odor
pH (concentrate) = 13.8

SECTION IV – FIRE AND EXPLOSION HAZARD DATA**Flash point:** None (Tag Closed Cup) **Flammable Limits:** LEL = Not established UEL = Not established**Extinguishing Media:** Carbon dioxide, dry chemical or foam (water spray to cool closed containers)**Special Fire Fighting Procedures:** Self-contained breathing apparatus and protective clothing should be worn in fighting fires involving chemicals.**Unusual Fire and Explosion Hazards:** None known to Hillyard.**SECTION V – PHYSICAL HAZARDS****Stability:** Stable **Conditions to Avoid:** Heat, sparks and open flame**Incompatibility (Materials to Avoid):** Keep away from strong oxidizers such as permanganate or strong oxides. Avoid contact with all acids, leather, wool, aluminum, copper, tin, lead, zinc and their alloys.**Hazardous Decomposition Products or Byproducts:** Potassium hydroxide reacts with zinc, aluminum, tin, and other active metals liberating flammable hydrogen gas.**Hazardous Polymerization:** Will not occur **Conditions to Avoid:** N/A**SECTION VI – HEALTH HAZARD DATA****Routes of entry:** Inhalation? Yes Skin? Yes Ingestion? Yes**HEALTH HAZARDS (1. Acute and 2. Chronic)**

1. Corrosive to all body tissue with which it comes in contact. Chronic local effects may consist of multiple areas of superficial destruction of the skin or dermatitis. Harmful or fatal if swallowed. 2. None known to Hillyard

Chemical listed as Carcinogen or Potential Carcinogen:

National Toxicology Program = No **I.A.R.C. Monographs =** No **OSHA =** No

SECTION VI – HEALTH HAZARD DATA continued.

Signs and Symptoms of Exposure: Butyl cellosolve is readily absorbed through the skin in toxic amounts. Inhalation of high concentrations of vapors results in respiratory and eye irritation, narcosis, headache, nausea, dizziness, hematuria, and damage to liver and kidneys.

Medical Conditions Generally Aggravated by Exposure: Repeated overexposure may result in damage to the blood.

Emergency and First Aid Procedures: Inhalation - Remove person to fresh air. If breathing difficulty persists or occurs later, call a physician. In case of contact, immediately flush eyes or skin with plenty of water for 15 minutes. Get prompt medical attention. Remove and wash all contaminated clothing before reuse. If swallowed, immediately give large amounts of water and CALL A PHYSICIAN, hospital emergency room or poison control center.

SECTION VII – PRECAUTIONS FOR SAFE HANDLING AND USE

Steps To Be Taken In Case Material Is Released Or Spilled: Absorb large spills with floor dry material (see disposal below).

Small spills: Flush with water and pick up with mop or wet vacuum.

Waste Disposal Method: Dispose of in accordance with state or local regulations. Do not dispose of in storm drains or streams; monoethanolamine is toxic to fish.

Precautions To Be Taken In Handling And Storing: Keep container closed when not in use. Since empty packages retain product residue, follow label warning even after package is empty. Do not store above 120°F. Spray mist may produce respiratory irritation or damage and increase susceptibility to respiratory illness. USE WITH ADEQUATE VENTILATION. Avoid breathing vapors or spray mist. Open windows and doors, use exhaust fans or other means to insure fresh air entry during application and drying. Refer to OSHA Standard 29 CFR 1910.94 for technical guidelines on keeping air contamination below acceptable exposure limits. Do not get on skin, in eyes, or on clothing.

SECTION VIII – CONTROL MEASURES

Respiratory Protection (Specify Type): Wear appropriate, properly fitted respirator (NIOSH or MSHA approved) unless air monitoring demonstrates vapor or mist levels are below applicable limits.

Ventilation: at least 10 air changes per hour recommended

Local Exhaust = recommended **Mechanical (General) =** recommended **Special =** N/A **Other =** N/A

Protective Gloves: impervious rubber gloves **Eye Protection:** chemical safety goggles

Other Protective Clothing or Equipment: Protective clothing such as uniforms, coveralls. Wear impervious/slip-resistant boots such as Hillyard Stripping Boots while standing in the stripping solution.

Work / Hygienic Practices: Wash contaminated clothing before reuse (including shoes).

SECTION IX – TRANSPORTATION INFORMATION

DOT SHIPPING DESCRIPTION ON BILL OF LADING:

(Quart boxes) = Consumer Commodity ORM-D

Package Marking = Consumer Commodity ORM-D Label = None Hazard Class = not applicable

DOT SHIPPING DESCRIPTION ON BILL OF LADING:

(2.5 and 55 Gallon packages) = Compound, cleaning, liquid, (Potassium Hydroxide, Monoethanolamine), 8, NA 1760, PG II

Package Marking = Compound, cleaning liquid (Potassium Hydroxide, Monoethanolamine), NA 1760

Package Label = Corrosive Hazard Class = 8 Package Group = II

EPA Hazardous waste number/code: not listed

Hazardous waste characteristics: Ignitability = not applicable; Corrosivity = applicable; Reactivity = not applicable

DISCLAIMER OF WARRANTIES

NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR OF ANY NATURE ARE MADE WITH RESPECT TO THE PRODUCT(S) OR INFORMATION CONTAINED IN THIS MATERIAL SAFETY DATA SHEET.

The information and recommendations contained in this Material Safety Data Sheet are supplied pursuant to 29 CFR 1910.1200 of the Occupational Safety and Health Standards Hazard Communication Rule. All information contained herein is presented in good faith and is believed to be appropriate and accurate.

THE BUYER OR USER ASSUMES ALL RISKS ASSOCIATED WITH THE USE, MISUSE OR DISPOSAL OF THIS PRODUCT. THE BUYER OR USER IS RESPONSIBLE TO COMPLY WITH ALL FEDERAL, STATE OR LOCAL REGULATIONS CONCERNING THE USE, MISUSE OR DISPOSAL OF THESE PRODUCTS.

Tough Guy Carpet Shampoo 5FVZ3

Common Name:

CARPET SHAMPOO

Manufacturer:

W.W. GRAINGER

MSDS Revision Date:

1/18/2010

Grainger Item Number(s):

5FVZ3

Manufacturer Model Number(s):

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MATERIAL SAFETY DATA SHEET

TOUGH GUY(TM)

CARPET SHAMPOO

VERSION NUMBER: 0

PREPARATION DATE: 2010-01-18

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: CARPET SHAMPOO

MSDS #: MS0600590

PRODUCT CODE: 5FVZ3

Tough Guy Carpet Shampoo 5FVZ3

RECOMMENDED USE:

CARPET CARE. THIS PRODUCT IS INTENDED TO BE DILUTED PRIOR TO USE.

MANUFACTURER, IMPORTER, SUPPLIER:

MANUFACTURED FOR:

W.W. GRAINGER, INC.
100 GRAINGER PARKWAY
LAKE FOREST, IL 60045-5201

PHONE: 1-847-535-1000

TECHNICAL SERVICE: 1-847-535-5400

EMERGENCY TELEPHONE NUMBER: 1-800-983-4582

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

CAUTION

CAUSES EYE AND SKIN IRRITATION

PRINCIPLE ROUTES OF EXPOSURE:

EYE CONTACT:

SKIN CONTACT:

INHALATION:

EYE CONTACT: MODERATELY IRRITATING TO THE EYES

SKIN CONTACT: MODERATELY IRRITATING TO THE SKIN

INHALATION: NONE KNOWN

INGESTION: MAY CAUSE IRRITATION TO MOUTH, THROAT AND STOMACH

3. COMPOSITION/INFORMATION ON INGREDIENTS

Tough Guy Carpet Shampoo 5FVZ3

INGREDIENT(S)	CAS #	WEIGHT %
SODIUM LAURYL SULFATE	151-21-3	5 - 10%
AMINE SALT OF MODIFIED ACRYLIC COPOLYMER	TS*	5 - 10%
INGREDIENT(S)	LD50 ORAL - RAT (MG/KG)	LD50 DERMAL - RABBIT LC50 INHALATION - RAT
SODIUM LAURYL SULFATE	1288	=580 MG/KG >3900 MG/M3 (1 H)

4. FIRST AID MEASURES

EYE CONTACT:

FLUSH IMMEDIATELY WITH PLENTY OF WATER
IF IRRITATION PERSISTS, GET MEDICAL ATTENTION

SKIN CONTACT:

FLUSH IMMEDIATELY WITH PLENTY OF WATER
IF IRRITATION PERSISTS, GET MEDICAL ATTENTION

INHALATION: NO SPECIFIC FIRST AID MEASURES ARE REQUIRED

INGESTION: IF SWALLOWED, GIVE A CUPFUL OF WATER OR MILK

AGGRAVATED MEDICAL CONDITIONS:

PERSONS WITH PRE-EXISTING SKIN DISORDERS MAY BE MORE SUSCEPTABLE TO
IRRITATING EFFECTS

5. FIRE-FIGHTING MEASURES

Tough Guy Carpet Shampoo 5FVZ3

SUITABLE EXTINGUISHING MEDIA:

THE PRODUCT IS NOT FLAMMABLE

EXTINGUISH FIRE USING AGENT SUITABLE FOR SURROUNDING FIRE

SPECIFIC HAZARDS: NOT APPLICABLE

UNUSUAL HAZARDS: NONE KNOWN

SPECIFIC METHODS: NO SPECIAL METHODS REQUIRED

SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS:

AS IN ANY FIRE, WEAR SELF-CONTAINED BREATHING APPARATUS PRESSURE-DEMAND,
MSHA/NIOSH (APPROVED OR EQUIVALENT) AND FULL PROTECTIVE GEAR

EXTINGUISHING MEDIA WHICH MUST NOT BE USED FOR SAFETY REASONS:

NO INFORMATION AVAILABLE

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: USE PERSONAL PROTECTIVE EQUIPMENT

ENVIRONMENTAL PRECAUTIONS AND CLEAN-UP METHODS: NO INFORMATION AVAILABLE

7. HANDLING AND STORAGE

HANDLING:

AVOID CONTACT WITH SKIN, EYES AND CLOTHING

Tough Guy Carpet Shampoo 5FVZ3

WASH THOROUGHLY AFTER HANDLING

FOR COMMERCIAL AND INDUSTRIAL USE ONLY.

STORAGE:

PROTECT FROM FREEZING

KEEP TIGHTLY CLOSED IN A DRY, COOL AND WELL-VENTILATED PLACE

KEEP OUT OF REACH OF CHILDREN

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING MEASURES TO REDUCE EXPOSURE:

NO SPECIAL VENTILATION REQUIREMENTS

GENERAL ROOM VENTILATION IS ADEQUATE

PERSONAL PROTECTIVE EQUIPMENT:

EYE PROTECTION: NO SPECIAL REQUIREMENTS UNDER NORMAL USE CONDITIONS

HAND PROTECTION: NO SPECIAL REQUIREMENTS UNDER NORMAL USE CONDITIONS

SKIN AND BODY PROTECTION:

NO SPECIAL REQUIREMENTS UNDER NORMAL USE CONDITIONS

RESPIRATORY PROTECTION:

NO SPECIAL REQUIREMENTS UNDER NORMAL USE CONDITIONS

HYGIENE MEASURES:

HANDLE IN ACCORDANCE WITH GOOD INDUSTRIAL HYGIENE AND SAFETY PRACTICE

PERSONAL PROTECTIVE EQUIPMENT: NONE

9. PHYSICAL AND CHEMICAL PROPERTIES

Tough Guy Carpet Shampoo 5FVZ3

PHYSICAL STATE: LIQUID

BULK DENSITY: NO INFORMATION AVAILABLE

ELEMENTAL PHOSPHORUS: 0 % BY WT.

EVAPORATION RATE: NO INFORMATION AVAILABLE

VOC: 0.2 % *

pH: 8.2

DILUTION pH: 7.6 @ 1:16

APPEARANCE: AQUEOUS SOLUTION

SPECIFIC GRAVITY: 1.025

VAPOR DENSITY: NO INFORMATION AVAILABLE

SOLUBILITY: COMPLETELY SOLUBLE

VISCOSITY: NO INFORMATION AVAILABLE

DENSITY: 8.59 LBS/GAL 1.03 KG/L

PARTITION COEFFICIENT (n-OCTANOL/WATER): NO INFORMATION AVAILABLE

SOLUBILITY IN OTHER SOLVENTS: NO INFORMATION AVAILABLE

COLOR: CLEAR STRAW

ODOR: FRUITY

BOILING POINT/RANGE: NOT DETERMINED

MELTING POINT/RANGE: NOT DETERMINED

FLASH POINT: >200 DEG. F >93.4 DEG. C

DECOMPOSITION TEMPERATURE: NOT DETERMINED

AUTOIGNITION TEMPERATURE: NO INFORMATION AVAILABLE

* - TITLE 17, CALIFORNIA CODE OF REGULATIONS, DIVISION 3, CHAPTER 1,
SUBCHAPTER 8.5, ARTICLE 2, CONSUMER PRODUCTS, SECTIONS 94508

Tough Guy Carpet Shampoo 5FVZ3

10. STABILITY AND REACTIVITY

STABILITY: THE PRODUCT IS STABLE

POLYMERIZATION: HAZARDOUS POLYMERIZATION DOES NOT OCCUR

HAZARDOUS DECOMPOSITION PRODUCTS: NONE REASONABLY FORESEEABLE.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY:

ORAL LD50 ESTIMATED TO BE GREATER THAN 5000 MG/KG

DERMAL LD50 ESTIMATED TO BE >2000 MG/KG

COMPONENT INFORMATION: SEE SECTION 3

CHRONIC TOXICITY: NONE KNOWN

SPECIFIC EFFECTS:

CARCINOGENIC EFFECTS: NONE KNOWN

MUTAGENIC EFFECTS: NONE KNOWN

REPRODUCTIVE TOXICITY: NONE KNOWN

TARGET ORGAN EFFECTS: NONE KNOWN

12. ECOLOGICAL INFORMATION

Tough Guy Carpet Shampoo 5FVZ3

ENVIRONMENTAL INFORMATION: NO DATA AVAILABLE

13. DISPOSAL CONSIDERATIONS

WASTE FROM RESIDUES / UNUSED PRODUCTS:
DISPOSE OF ACCORDING TO ALL FEDERAL, STATE AND LOCAL APPLICABLE REGULATIONS

14. TRANSPORT INFORMATION

DOT/TDG:
PLEASE REFER TO THE BILL OF LADING/RECEIVING DOCUMENTS FOR UP TO DATE
SHIPPING INFORMATION

15. REGULATORY INFORMATION

INTERNATIONAL INVENTORIES:

ALL COMPONENTS OF THIS PRODUCT ARE LISTED ON THE FOLLOWING INVENTORIES:
U.S.A. (TSCA)

U.S. REGULATIONS:

Tough Guy Carpet Shampoo 5FVZ3

CALIFORNIA PROPOSITION 65:

THIS PRODUCT IS NOT SUBJECT TO THE REPORTING REQUIREMENTS UNDER CALIFORNIA'S PROPOSITION 65.

SARA 311/312 HAZARD CATEGORIES:

IMMEDIATE (X)
DELAYED ()
FIRE ()
REACTIVITY ()
SUDDEN RELEASE OF PRESSURE ()

CANADA:

WHMIS HAZARD CLASS: NOT FOR SALE IN CANADA

RIGHT TO KNOW (RTK):

INGREDIENT(S)	CAS #	NJRTK	MARTK	PARTK	RIRTK
WATER	7732-18-5				
SODIUM LAURYL SULFATE	151-21-3				
AMINE SALT OF MODIFIED ACRYLIC COPOLYMER	TS*				

CERCLA/SARA:

16. OTHER INFORMATION

HMIS:

HEALTH 2
FIRE HAZARD 0
REACTIVITY 0

NFPA:

HEALTH 2
FLAMMABILITY 0
INSTABILITY 0

Tough Guy Carpet Shampoo 5FVZ3

REASON FOR REVISION: NOT APPLICABLE

PREPARED BY: NAPRAC

ADDITIONAL ADVICE:

CONTAINS AN ADDED FRAGRANCE, SEE "ODOR" HEADING IN SECTION 9 FOR SPECIFIC DESCRIPTION

NOTICE TO READER:

THIS DOCUMENT HAS BEEN PREPARED USING DATA FROM SOURCES CONSIDERED TECHNICALLY RELIABLE. IT DOES NOT CONSTITUTE A WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY OF THE INFORMATION CONTAINED WITHIN. ACTUAL CONDITIONS OF USE AND HANDLING ARE BEYOND SELLER'S CONTROL. USER IS RESPONSIBLE TO EVALUATE ALL AVAILABLE INFORMATION WHEN USING PRODUCT FOR ANY PARTICULAR USE AND TO COMPLY WITH ALL FEDERAL, STATE, PROVINCIAL AND LOCAL LAWS AND REGULATIONS.

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MSDS

Common Name: COMMERCIAL CRAWLING INSECT KILLER (DR-G-098)**Manufacturer:** ECOSMART TECHNOLOGIES**MSDS Revision Date:** 11/1/2007**Grainger Item Number(s):** 1NNX2, 9PMW0**Manufacturer Model Number(s):**

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MATERIAL SAFETY DATA SHEET

ECOSMART (R*) COMMERCIAL

CRAWLING INSECT KILLER

THIS DOCUMENT HAS BEEN PREPARED TO MEET THE REQUIREMENTS OF THE U.S. OSHA HAZARD COMMUNICATION STANDARD 29 CFR 1910.1200, THE EU DIRECTIVE, 91/155/EEC AND OTHER REGULATORY REQUIREMENTS.

1. COMPANY & PRODUCT IDENTIFICATION



PRODUCT: ECOSMART COMMERCIAL CRAWLING INSECT KILLER (DR-G-098)

MANUFACTURER:
ECOSMART TECHNOLOGIES, INC.
3600 MANSELL ROAD
SUITE 150
ALPHARETTA, GA 30022

FOR GENERAL INFORMATION: (888) 326-SAFE (9AM TO 5PM EST)

EMERGENCY TELEPHONE NUMBER:
INFOTRAC CHEMICAL RESPONSE SYSTEM: (800) 535-5053 (24 HOURS)

2. INGREDIENTS



ESSENTIAL OILS BLEND (ACTIVE INGREDIENT):

% BY WEIGHT: 8%

CAS: N.A.

EXPOSURE LIMITS: NONE ESTABLISHED

CARBON DIOXIDE PROPELLANT (INERT INGREDIENT):

% BY WEIGHT: 3.5%

CAS: 124-38-9

EXPOSURE LIMITS:

TWA: 5000 PPM

EMULSIFIER (INERT INGREDIENT):

% BY WEIGHT: 0.2%

CAS: 8002-43-5

EXPOSURE LIMITS: NONE ESTABLISHED

PROPRIETARY SOLVENT BLEND (INERT INGREDIENT):

% BY WEIGHT: 40%

CAS: N.A.

EXPOSURE LIMITS: NONE ESTABLISHED

WATER (INERT INGREDIENT):

% BY WEIGHT: TO 100%

CAS: 7732-18-5

EXPOSURE LIMITS: NONE ESTABLISHED

3. HAZARDS IDENTIFICATION



POTENTIAL HEALTH EFFECTS:

MAY BE HARMFUL IF SWALLOWED OR INHALED. MAY CAUSE EYE IRRITATION. AVOID BREATHING SPRAY MIST. AVOID CONTACT WITH SKIN, EYES OR CLOTHING.

FLAMMABLE:

CONTENTS UNDER PRESSURE. DO NOT USE OR STORE NEAR HEAT OR OPEN FLAME. DO NOT PUNCTURE OR INCINERATE CONTAINER. EXPOSURE TO TEMPERATURE ABOVE 130 DEG. F MAY CAUSE BURSTING.

4. FIRST AID MEASURES



CAUTION: AVOID CONTACT WITH EYES.

IF IN EYES: FLUSH WITH PLENTY OF WATER.

IF ON SKIN: WASH WITH SOAP AND WATER.

IF INHALED: MOVE EXPOSED PERSON(S) TO FRESH AIR.

IF INGESTED:

RINSE MOUTH OUT WITH WATER. DO NOT INDUCE VOMITING. SEEK MEDICAL ATTENTION IF NECESSARY.

5. FIRE FIGHTING MEASURES



FLASHPOINT: NOT TESTED

FLAMMABLE LIMITS: NOT TESTED

EXTINGUISHING MEDIA:

USE FOAM, CARBON DIOXIDE, OR DRY CHEMICAL EXTINGUISHERS.

FIRE AND EXPLOSION HAZARDS:

CONTAINER CONTENTS ARE UNDER PRESSURE. EXPOSURE TO TEMPERATURES ABOVE 130 DEG. F COULD CAUSE BURSTING.

SPECIAL FIRE FIGHTING PROCEDURES:

KEEP CONTAINERS COOL TO PREVENT BURSTING. FIREFIGHTERS SHOULD HAVE EYE PROTECTION AND WEAR SELF-CONTAINED BREATHING APPARATUS.

HAZARDOUS DECOMPOSITION PRODUCTS:

CARBON DIOXIDE, CARBON MONOXIDE, SMOKE, FUMES AND UNBURNED HYDROCARBONS AND TERPINES.

6. SPILL/LEAK PROCEDURES

SHOULD THE CONTAINER BEGIN TO LEAK (IF ACCIDENTALLY PUNCTURED FOR EXAMPLE) ALLOW THE CONTENTS TO DISCHARGE COMPLETELY IN A WELL-VENTILATED AREA. WHEN THE CONTENTS HAVE BEEN COMPLETELY DISCHARGED, ABSORB ANY LIQUID RESIDUE WITH AN INERT ABSORBENT MATERIAL AND DISPOSE OF THE EMPTY CONTAINER AND ABSORBENT MATERIAL IN ACCORDANCE WITH LOCAL ORDINANCES. COMPONENTS OF THIS PRODUCT ARE NOT CONSIDERED EPA HAZARDOUS WASTES.

7. HANDLING & STORAGE

STORE IN A COOL, DRY PLACE. DO NOT USE OR STORE NEAR HEAT, FLAMES OR HOT SURFACES. DO NOT SMOKE WHILE USING PRODUCT. DO NOT USE PRODUCT ON OR IN ELECTRICAL EQUIPMENT. FOODS AND EATING UTENSILS SHOULD BE REMOVED OR COVERED WHEN THIS PRODUCT IS USED. FOOD PROCESSING EQUIPMENT SHOULD BE COVERED AND/OR WIPED DOWN AFTER USE. NO SMOKING OR EATING IN THE PRODUCT HANDLING AREA.

DISPOSAL:

WHEN CONTAINER IS EMPTY, RECYCLE IF AVAILABLE. IF RECYCLING IS NOT AVAILABLE, WRAP AND PLACE THE EMPTY CONTAINER IN A TRASH COLLECTOR. KEEP OUT OF THE REACH OF CHILDREN AND ANIMALS.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

VENTILATION: LOCAL EXHAUST VENTILATION IS NOT REQUIRED.

RESPIRATORY PROTECTION: NOT REQUIRED WITH ADEQUATE VENTILATION.

EYE PROTECTION:

NOT REQUIRED. SAFETY GLASSES ARE RECOMMENDED DURING VOLUMETRIC TREATMENTS.

GLOVES: NOT REQUIRED.

OTHER PROTECTIVE EQUIPMENT: NOT REQUIRED.

9. PHYSICAL PROPERTIES

APPEARANCE: WHITE LIQUID

SPECIFIC GRAVITY (WATER = 1): 0.98 G/ML

ODOR: SWEET FLORAL / MINTY SCENT

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY: STABLE

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

11. TOXICOLOGICAL INFORMATION



RAT ACUTE ORAL: NOT DETERMINED

ACUTE EFFECTS FROM OVEREXPOSURE:

THE INDIVIDUAL COMPONENTS OF THIS PRODUCT ARE KNOWN TO HAVE LOW ORAL AND DERMAL TOXICITY. THIS MIXTURE IS EXPECTED TO HAVE A SIMILAR TOXICOLOGICAL PROFILE. PROLONGED CONTACT WITH THE SKIN MAY CAUSE IRRITATION, AND CONTACT WITH THE EYES MAY CAUSE EYE IRRITATION. INHALATION OF THE VAPOR MAY CAUSE IRRITATION OF NASAL PASSAGES AND/OR DIZZINESS. INGESTION OF THIS PRODUCT COULD RESULT IN IRRITATION OF THE GASTROINTESTINAL TRACT, HEADACHE OR NAUSEA.

CHRONIC EFFECTS FROM OVEREXPOSURE: NO DATA IS AVAILABLE.

CARCINOGENICITY:

NTP: NO

OSHA: NO

12. ENVIRONMENTAL INFORMATION



WHILE SPECIFIC DATA REGARDING TOXICITY TO FISH OR OTHER AQUATIC ORGANISMS IS NOT AVAILABLE FOR THIS PRODUCT, CARE SHOULD ALWAYS BE TAKEN TO PREVENT PESTICIDES FROM ENTERING AQUIFERS.

13. DISPOSAL



THE AEROSOL CONTAINER IS NOT REFILLABLE. WHEN CONTAINER IS EMPTY, RECYCLE IF AVAILABLE. IF RECYCLING IS NOT POSSIBLE, WRAP THE CONTAINER AND DISPOSE OF WITH ORDINARY TRASH.

14. TRANSPORTATION INFORMATION



PROPER SHIPPING NAME: CONSUMER COMMODITY

DOT HAZARD CLASS: ORM-D

15. REGULATORY INFORMATION



NFPA RATINGS:

HEALTH 1

FIRE 1

REACTIVITY 0

SPECIAL NONE

SARA TITLE III:

THIS PRODUCT DOES NOT CONTAIN ANY INGREDIENTS SUBJECT TO SECTION 313 (40 CFR 372) REPORTING REQUIREMENTS.

ECOSMART TECHNOLOGIES

ECOSMART TECHNOLOGIES, INC.
3600 MANSELL ROAD
SUITE 150
ALPHARETTA, GA 30022

PHONE: (888) 326-7233

REVISED: NOVEMBER 2007

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MSDS

Common Name: TOUGH GUY CRAWLING INSECT KILLER**Manufacturer:** W.W. GRAINGER**MSDS Revision Date:** 8/30/2007**Grainger Item Number(s):** 2DCB3**Manufacturer Model Number(s):**

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MATERIAL SAFETY DATA SHEET

HMIS (R*) :

HEALTH	1
FLAMMABILITY	1
REACTIVITY	0
PERSONAL PROTECTION	A

IDENTITY: TOUGH GUY CRAWLING INSECT KILLER**PART NUMBER:** 2DCB3

NOTE:

BLANK SPACES ARE NOT PERMITTED. IF ANY ITEM IS NOT APPLICABLE, OR NO INFORMATION IS AVAILABLE, THE SPACE MUST BE MARKED TO INDICATE THAT.

SECTION 1: COMPANY IDENTIFICATION

**MANUFACTURED FOR:** W.W. GRAINGER, INC.

ADDRESS (NUMBER, STREET, CITY, STATE, AND ZIP CODE) :
100 GRAINGER PARKWAY
LAKE FOREST, IL 60045

EMERGENCY TELEPHONE NUMBER: 1-800-228-5635

TELEPHONE NUMBER FOR INFORMATION: 1-847-535-5400

SIGNATURE OF PREPARER (OPTIONAL):

SECTION 2: INGREDIENTS/IDENTITY INFORMATION



COMPONENTS (CHEMICAL IDENTITY, COMMON NAME(S))	CAS NO.	OSHA PEL	ACGIH- TLV	OTHER LIMITS RECOMMENDED	% (OPT.)
ISOPARAFFIN	64742-47-8	5 MG/M3	5 MG/M3		7 - 13%
ISOBUTANE	75-28-5	800 PPM	800 PPM		7 - 13%
PROPANE	74-98-6	1000 PPM	2500 PPM		1 - 5%
PIPERONYL BUTOXIDE	51-03-6	NONE	NONE		<1%
PERMETHRIN	52645-53-1	NONE	NONE		<1%

ANY SUBSTANCE LISTED AS HAZARDOUS BY THE STATES OF CALIFORNIA, FLORIDA, ILLINOIS, MICHIGAN, NEW JERSEY, OHIO, PENNSYLVANIA OR TEXAS IS DESCRIBED ABOVE IF KNOWN PRESENT IN REGULATED CONCENTRATIONS.

SECTION 3: HAZARDS IDENTIFICATION



ROUTE(S) OF ENTRY:

EYES?: YES

INHALATION?: YES

SKIN?: NO

INGESTION?: YES

ACUTE HEALTH HAZARDS:

CAUTION. HARMFUL IF INHALED. MAY BE HARMFUL IF INHALED OR SWALLOWED. MAY CAUSE SKIN IRRITATION. EXCESSIVE EXPOSURE TO VAPORS IN INADEQUATELY VENTILATED AREAS MAY INDUCE ANESTHETIC PROPERTIES. FOLLOW GOOD CHEMICAL HYGIENE PRACTICES WHEN USING THIS AND OTHER INSECTICIDAL PRODUCTS.

CHRONIC HEALTH HAZARDS: NONE KNOWN

CARCINOGENICITY:

CHEMICAL: NONE

OSHA: NO

NTP: NO

IARC: NO

SIGNS AND SYMPTOMS OF EXPOSURE:

IRRITATION OF NOSE, THROAT OR RESPIRATORY TRACT. REDNESS OR IRRITATION OF SKIN OR EYES. OVEREXPOSURE TO VAPORS MAY CAUSE DROWSINESS, DIZZINESS, NAUSEA, LOSS OF COORDINATION OR CONSCIOUSNESS (EXTREME CONDITIONS) OR FATIGUE.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:

SLIGHT SKIN IRRITATION TO THOSE WITH SENSITIVE SKIN. FOLLOW GOOD CHEMICAL HYGIENE PRACTICES TO AVOID THESE HAZARDS.

SECTION 4: EMERGENCY AND FIRST AID PROCEDURES



EYES:

FLUSH WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES LIFTING EYELIDS TO

INSURE COMPLETE REMOVAL. GET IMMEDIATE MEDICAL ATTENTION.

INGESTION:

(UNLIKELY, AEROSOL) IF SWALLOWED, CALL A PHYSICIAN OR POISON CONTROL CENTER IMMEDIATELY. DO NOT INDUCE VOMITING UNLESS INSTRUCTED BY A PHYSICIAN. GET IMMEDIATE MEDICAL ATTENTION.

INHALATION:

REMOVE VICTIM TO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION, PREFERABLY MOUTH TO MOUTH. GET MEDICAL ATTENTION.

SKIN:

WASH WITH SOAP AND WATER, RINSE THOROUGHLY. IF IRRITATION ARISES AND PERSISTS, CALL A PHYSICIAN.

NOTE: CONTAINS PETROLEUM DISTILLATES.

SECTION 5: FIRE FIGHTING MEASURES



USA FLAME PROJECTION TEST (ASTM D-3065): 0", NO FLASHBACK, NON-FLAMMABLE

FLAMMABLE LIMITS: NO DATA

LEL: NO DATA

UEL: NO DATA

EXTINGUISHING MEDIA:

TREAT AS AN OIL FIRE. FLOATING FIRE MAY SPREAD. USE CARBON DIOXIDE, FOAM, OR DRY CHEMICAL.

SPECIAL FIRE FIGHTING PROCEDURES:

USE WATER SPRAY TO KEEP CONTAINERS COOL AND VAPORS DOWN. DO NOT ALLOW RUNOFF TO ENTER SEWERS OR PUBLIC WATERCOURSES. THIS PRODUCT IS TOXIC TO FISH. WEAR SELF-CONTAINED BREATHING APPARATUS IN CHEMICAL FIRES.

HAZARDOUS PRODUCTS OF COMBUSTION:

CARBON DIOXIDE, CARBON MONOXIDE, SMOKE, SOOT AND VARIOUS ORGANIC OXIDATION BY-PRODUCTS.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

AEROSOL CONTAINER (PRESSURIZED) MAY BURST IF HEATED OVER 130 DEG. F. CONTAINS COMBUSTIBLE LIQUIDS.

SECTION 6: ACCIDENTAL RELEASE MEASURES



SMALL SPILL:

WIPE UP SMALL RELEASES WITH A DRY ABSORBENT CLOTH OR OTHER ABSORBENT MATERIAL.

LARGE SPILL:

ABSORB LIQUID WITH VERMICULITE, ABSORBENT CLOTH, OR OTHER ABSORBENT MATERIAL. PREVENT MATERIAL FROM ENTERING SEWERS OR DRAINS. VENTILATE AREA AND BLOCK TRAFFIC. TRANSFER CONTAMINATED MATERIAL INTO SUITABLE CONTAINER FOR PROPER DISPOSAL. THIS PRODUCT IS TOXIC TO FISH.

SECTION 7: HANDLING AND STORAGE



HANDLING:

DO NOT BREATHE VAPOR OR SPRAY MIST. DO NOT DELIBERATELY CONCENTRATE AND INHALE VAPORS. DIRECT SPRAY AWAY FROM FACE. REMOVE CONTAMINATED CLOTHING AND WASH BEFORE REUSE. DO NOT USE AROUND IGNITION SOURCES SUCH AS HEAT, SPARKS, OPEN FLAME, STATIC ELECTRICITY, ELECTRIC MOTORS, WELDING ARCS, ETC. DO NOT SMOKE WHILE USING. DO NOT USE THIS PRODUCT IN OR ON ELECTRICAL

EQUIPMENT DUE TO THE POSSIBILITY OF SHOCK HAZARD. DO NOT USE AROUND THE ELDERLY, INFIRM OR PATIENTS. AVOID CONTAMINATION OF FEED AND FOODSTUFFS. VACATE ROOM AFTER TREATMENT AND VENTILATE BEFORE REOCCUPYING.

STORAGE:

FOLLOW LABEL DIRECTIONS CAREFULLY. KEEP OUT OF REACH OF CHILDREN. STORE IN A COOL (UNDER 130 DEG. F) DRY LOCATION AWAY FROM HEAT, SPARKS, OPEN FLAME, AND DIRECT SUNLIGHT. PROTECT FROM FREEZING. STORE AT TEMPERATURES ABOVE 32 DEG. F AND BELOW 130 DEG. F. REPLACE CAP WHEN NOT IN USE. DO NOT PUNCTURE OR INCINERATE CONTAINER.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION



EYE PROTECTION: YES, SAFETY GLASSES OR GOGGLES (ANSI Z87).

SKIN PROTECTION: NOT USUALLY NEEDED. IF DIRECT CONTACT POSSIBLE, IMPERVIOUS

RESPIRATORY PROTECTIONS:

NOT USUALLY NECESSARY. USE WITH ADEQUATE VENTILATION. USE NIOSH/MSHA APPROVED RESPIRATOR IF PELS OR TLVS ARE EXCEEDED.

ENGINEERING CONTROLS:

VENTILATION NOT USUALLY NECESSARY BUT SHOULD BE PROVIDED IN THE EVENT OF OVEREXPOSURE.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES



APPEARANCE AND ODOR:

A THICK WHITE OPAQUE LIQUID THAT HAS A CHARACTERISTIC INSECTICIDE ODOR IN AN AEROSOL CAN.

pH: 7.0 +/- 0.5

SPECIFIC GRAVITY (70 DEG. F): 0.968

BOILING POINT: 212 DEG. F

MELTING POINT: NO DATA

EVAPORATION RATE (BUTYL ACETATE = 1): NO DATA

PRESSURE (PSIG. @ 70 DEG. F): 65 +/- 5

VAPOR DENSITY (AIR = 1): GREATER THAN ONE (1)

SOLUBILITY IN WATER: DISPERSIBLE

VOLATILE ORGANIC COMPOUNDS (VOCs):

129.79 GRAMS PER LITER OR 14.98% BY WEIGHT VOCs

SECTION 10: STABILITY AND REACTIVITY



HAZARDOUS POLYMERIZATION:

THIS PRODUCT WILL NOT UNDERGO HAZARDOUS POLYMERIZATION.

HAZARDOUS DECOMPOSITION OR BYPRODUCTS:

CARBON DIOXIDE, CARBON MONOXIDE, SMOKE, SOOT AND VARIOUS ORGANIC OXIDATION BY-PRODUCTS.

CHEMICAL STABILITY: STABLE

INCOMPATIBILITY (MATERIALS TO AVOID):

STRONG OXIDIZING AND STRONG REDUCING AGENTS, STRONG MINERAL ACIDS, OXYGEN, CHLORINE, PERMANGANATES, AND DICHROMATES.

SECTION 11: TOXICOLOGICAL INFORMATION



NO DATA

SECTION 12: ECOLOGICAL INFORMATION



NO DATA

SECTION 13: DISPOSAL CONSIDERATION



DISPOSAL METHOD:

DISPOSE OF IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL REGULATIONS.

RCRA WASTE INFORMATION:

IF THIS PRODUCT BECOMES A WASTE, IT WOULD NOT BE A HAZARDOUS WASTE AS DEFINED BY RCRA (40 CFR 261). HOWEVER THE WASTE SHOULD BE PROPERLY CHARACTERIZED TO EVALUATE WHETHER ITS COMPOSITION HAS BEEN MODIFIED PRIOR TO DISPOSAL.

SECTION 14: TRANSPORT INFORMATION



DOT INFORMATION - 49 CFR 172.101:

PROPER SHIPPING DESCRIPTION: CONSUMER COMMODITY

HAZARD CLASS: ORM-D

IDENTIFICATION NUMBER: NONE

PACKING GROUP: NONE

WATER TRANSPORTATION:

PROPER SHIPPING DESCRIPTION: AEROSOLS

HAZARD CLASS: 2

IDENTIFICATION NUMBER: UN 1950

PACKING GROUP: NONE

AIR TRANSPORTATION:

PROPER SHIPPING DESCRIPTION: AEROSOLS, NON-FLAMMABLE

HAZARD CLASS: 2.2

IDENTIFICATION NUMBER: UN 1950

PACKING GROUP: NONE

MARINE POLLUTANTS: NONE

SECTION 15: REGULATORY INFORMATION



US FEDERAL REGULATIONS:

EPA PRODUCT REGISTRATION NUMBER: 11694-110-10637

TSCA (TOXIC SUBSTANCES CONTROL ACT) STATUS:

ALL INGREDIENTS ARE ON THE TSCA INVENTORY OR ARE NOT REQUIRED TO BE LISTED ON THE TSCA INVENTORY.

CERCLA RQ - 40 CFR 302.4 (A): NONE LISTED

SARA 313 COMPONENTS - 40 CFR 372.65:
PIPERONYL BUTOXIDE (CAS: 51-03-6) - 0.59%
PERMETHRIN (CAS: 52645-53-1) - 0.24%

STATE AND LOCAL REGULATIONS:

CALIFORNIA PROPOSITION 65: NONE

SECTION 16: ADDITIONAL INFORMATION



DATE PREPARED: 08/30/07

WARNING!

THE USE OF THIS PRODUCT IS BEYOND THE CONTROL OF THE MANUFACTURER; THEREFORE, NO GUARANTEE, EXPRESSED OR IMPLIED, IS MADE AS TO THE EFFECTS OF SUCH OR THE RESULTS TO BE OBTAINED IF NOT USED IN ACCORDANCE WITH DIRECTIONS OR ESTABLISHED SAFE PRACTICE. THE USER MUST ASSUME ALL RESPONSIBILITY, INCLUDING INJURY OR DAMAGE, RESULTING FROM ITS MISUSE AS SUCH, OR IN COMBINATION WITH OTHER MATERIALS. THE MANUFACTURER WARRANTS ONLY THAT THIS PRODUCT MEETS THE MANUFACTURER'S SPECIFICATIONS FOR SUCH PRODUCT. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, AS TO DESCRIPTION, QUALITY, MERCHANTABILITY. FITNESS FOR ANY PARTICULAR PURPOSE, PRODUCTIVENESS, OR ANY OTHER MATTER, OF THIS PRODUCT. THE MANUFACTURER SHALL BE IN NO WAY RESPONSIBLE FOR THE IMPROPER USE OF THIS PRODUCT. THE SOLE AND EXCLUSIVE REMEDY AGAINST THE MANUFACTURER FOR BREACH OF WARRANTY SHALL BE REIMBURSEMENT OF THE PURCHASE PRICE OF THE PRODUCT IN THE EVENT THAT A DEFECTIVE CONDITION OF THE PRODUCT SHALL BE FOUND TO EXIST. NO OTHER REMEDY (INCLUDING BUT NOT LIMITED TO INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR INJURY TO PERSON OR PROPERTY OR ANY OTHER INCIDENTAL OR CONSEQUENTIAL LOSS) SHALL BE AVAILABLE.

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MSDS

Common Name: DR-G-012 COMMERCIAL FLYING INSECT KILLER**Manufacturer:** ECOSMART TECHNOLOGIES**MSDS Revision Date:** 2/19/2007**Grainger Item Number(s):** 1NNX3, 9AGE5**Manufacturer Model Number(s):**

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DRG012 ECOSMART COMMERCIAL FLYING INSECT KILLER

MATERIAL SAFETY DATA SHEET

THIS DOCUMENT HAS BEEN PREPARED TO MEET THE REQUIREMENTS OF THE U.S. OSHA HAZARD COMMUNICATION STANDARD 29 CFR 1910.1200, THE EU DIRECTIVE, 91/155/EEC AND OTHER REGULATORY REQUIREMENTS.

1. COMPANY AND PRODUCT IDENTIFICATION



PRODUCT: DR-G-012 ECOSMART COMMERCIAL FLYING INSECT KILLER

MANUFACTURER:
ECOSMART TECHNOLOGIES, INC.
318 SEABOARD LANE
SUITE 208
FRANKLIN, TN 37067

EMERGENCY TELEPHONE NUMBER:
INFO TRAC CHEMICAL RESPONSE SYSTEM: (800) 535-5053 (24 HOURS)

FOR GENERAL INFORMATION: (888) 326-SAFE (9AM TO 5PM EST)

2. INGREDIENTS



INGREDIENT NAME	% BY WEIGHT	CAS #	EXPOSURE LIMITS
ACTIVE INGREDIENTS:			
BLEND OF ESSENTIAL OILS	3.6%		NONE ESTABLISHED
INERT INGREDIENTS:			
CARBON DIOXIDE (PROPELLANT)	3.0%	124-38-9	TWA: 5000 PPM
EMULSIFIER	0.2%	8002-43-5	NONE ESTABLISHED
PROPRIETARY SOLVENT BLEND	13.0%	NOT APPLICABLE	NONE ESTABLISHED
WATER	TO 100%	7732-18-5	NONE ESTABLISHED

3. HAZARDS IDENTIFICATION



POTENTIAL HEALTH EFFECTS:

MAY BE HARMFUL IF SWALLOWED OR INHALED. MAY CAUSE EYE IRRITATION.
AVOID BREATHING SPRAY MIST. AVOID CONTACT WITH SKIN, EYES OR CLOTHING.

FLAMMABLE:

CONTENTS UNDER PRESSURE. DO NOT USE OR STORE NEAR HEAT OR OPEN FLAME.

DO NOT PUNCTURE OR INCINERATE CONTAINER. EXPOSURE TO TEMPERATURE ABOVE
130 DEG. F MAY CAUSE BURSTING.

4. FIRST AID MEASURES



CAUTION: AVOID CONTACT WITH EYES.

IF IN EYES: FLUSH WITH PLENTY OF WATER.

IF ON SKIN: WASH WITH SOAP AND WATER.

IF INHALED: MOVE EXPOSED PERSON(S) TO FRESH AIR.

IF INGESTED:

RINSE MOUTH OUT WITH WATER. DO NOT INDUCE VOMITING. SEEK MEDICAL ATTENTION
IF NECESSARY.

5. FIRE FIGHTING MEASURES



FLASH POINT: GREATER THAN 212 DEG. F (100 DEG. C)

FLAMMABLE LIMITS: NOT TESTED

EXTINGUISHING MEDIA:

USE FOAM, CARBON DIOXIDE, OR DRY CHEMICAL EXTINGUISHERS.

FIRE AND EXPLOSION HAZARDS:

CONTAINER CONTENTS ARE UNDER PRESSURE. EXPOSURE TO TEMPERATURES ABOVE
130 DEG. F COULD CAUSE BURSTING.

SPECIAL FIRE FIGHTING PROCEDURES:

KEEP CONTAINERS COOL TO PREVENT BURSTING. FIREFIGHTERS SHOULD HAVE EYE
PROTECTION AND WEAR SELF-CONTAINED BREATHING APPARATUS.

HAZARDOUS DECOMPOSITION PRODUCTS:

CARBON DIOXIDE, CARBON MONOXIDE, SMOKE, FUMES, AND UNBURNED HYDROCARBONS AND TERPENES.

6. SPILL/LEAK PROCEDURES

SHOULD THE CONTAINER BEGIN TO LEAK (IF ACCIDENTALLY PUNCTURED FOR EXAMPLE) ALLOW THE CONTENTS TO DISCHARGE COMPLETELY IN A WELL-VENTILATED AREA. WHEN THE CONTENTS HAVE BEEN COMPLETELY DISCHARGED, ABSORB ANY LIQUID RESIDUE WITH AN INERT ABSORBENT MATERIAL AND DISPOSE OF THE EMPTY CONTAINER AND ABSORBENT MATERIAL IN ACCORDANCE WITH LOCAL ORDINANCES. COMPONENTS OF THIS PRODUCT ARE NOT CONSIDERED EPA HAZARDOUS WASTES.

7. HANDLING AND STORAGE

STORE IN A COOL, DRY PLACE. DO NOT USE OR STORE NEAR HEAT, FLAMES OR HOT SURFACES. DO NOT SMOKE WHILE USING PRODUCT. DO NOT USE PRODUCT ON OR IN ELECTRICAL EQUIPMENT. FOODS AND EATING UTENSILS SHOULD BE REMOVED OR COVERED WHEN THIS PRODUCT IS USED. FOOD PROCESSING EQUIPMENT SHOULD BE COVERED AND/OR WIPED DOWN AFTER USE. NO SMOKING OR EATING IN THE PRODUCT HANDLING AREA.

DISPOSAL:

WHEN CONTAINER IS EMPTY, RECYCLE IF AVAILABLE. IF RECYCLING IS NOT AVAILABLE, WRAP AND PLACE THE EMPTY CONTAINER IN A TRASH COLLECTOR. KEEP OUT OF THE REACH OF CHILDREN AND ANIMALS.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

VENTILATION: LOCAL EXHAUST VENTILATION IS NOT REQUIRED.

RESPIRATORY PROTECTION: NOT REQUIRED WITH ADEQUATE VENTILATION.

EYE PROTECTION:

NOT REQUIRED. SAFETY GLASSES ARE RECOMMENDED DURING VOLUMETRIC TREATMENTS.

GLOVES: NOT REQUIRED.

OTHER PROTECTIVE EQUIPMENT: NOT REQUIRED.

9. PHYSICAL PROPERTIES

APPEARANCE: WHITE LIQUID

SPECIFIC GRAVITY (WATER = 1): 1.0 G/ML

ODOR: SWEET FLORAL / MINTY SCENT

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY: STABLE

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

11. TOXICOLOGICAL INFORMATION

RAT ACUTE ORAL:
LD50: >5,000 MG/KG

ACUTE EFFECTS FROM OVEREXPOSURE:
THE INDIVIDUAL COMPONENTS OF THIS PRODUCT ARE KNOWN TO HAVE LOW ORAL AND DERMAL TOXICITY. THIS MIXTURE IS EXPECTED TO HAVE A SIMILAR TOXICOLOGICAL PROFILE. PROLONGED CONTACT WITH THE SKIN MAY CAUSE IRRITATION, AND CONTACT WITH THE EYES MAY CAUSE EYE IRRITATION. INHALATION OF THE VAPOR MAY CAUSE IRRITATION OF NASAL PASSAGES AND/OR DIZZINESS. INGESTION OF THIS PRODUCT COULD RESULT IN IRRITATION OF THE GASTROINTESTINAL TRACT, HEADACHE OR NAUSEA.

CHRONIC EFFECTS FROM OVEREXPOSURE: NO DATA ARE AVAILABLE.

CARCINOGENICITY:
NTP: NO
OSHA: NO

12. ENVIRONMENTAL INFORMATION



WHILE SPECIFIC DATA REGARDING TOXICITY TO FISH OR OTHER AQUATIC ORGANISMS IS NOT AVAILABLE FOR THIS PRODUCT, CARE SHOULD ALWAYS BE TAKEN TO PREVENT INSECTICIDES FROM ENTERING AQUIFERS.

13. DISPOSAL



THE AEROSOL CONTAINER IS NOT REFILLABLE. WHEN CONTAINER IS EMPTY, RECYCLE IF AVAILABLE. IF RECYCLING IS NOT POSSIBLE, WRAP THE CONTAINER AND DISPOSE OF WITH ORDINARY TRASH.

14. TRANSPORTATION INFORMATION



PROPER SHIPPING NAME: CONSUMER COMMODITY

DOT HAZARD CLASS: ORM-D

15. REGULATORY INFORMATION



NFPA RATINGS:
HEALTH 1
FIRE 1
REACTIVITY 0
SPECIAL NONE

TSCA: NO INGREDIENTS IN THIS PRODUCT ARE LISTED ON THE TSCA INVENTORY.

SARA TITLE III:
THIS PRODUCT DOES NOT CONTAIN ANY INGREDIENTS SUBJECT TO SECTION 313 (40 CFR 372) REPORTING REQUIREMENTS.

FEBRUARY 19, 2007

DRG012 ECOSMART COMMERCIAL FLYING INSECT KILLER MSDS.DOC

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MSDS

Common Name: TOUGH GUY CARPET & TEXTILE SPOT CLEANER**Manufacturer:** W.W. GRAINGER**MSDS Revision Date:** 8/30/2007**Grainger Item Number(s):** 2DCB7**Manufacturer Model Number(s):****MSDS Table of Contents**

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MATERIAL SAFETY DATA SHEET**HMIS (R*) :**

HEALTH 1
FLAMMABILITY 3
REACTIVITY 0
PERSONAL PROTECTION B

IDENTITY: TOUGH GUY CARPET & TEXTILE SPOT CLEANER**PART NUMBER:** 2DCB7**NOTE:**

BLANK SPACES ARE NOT PERMITTED. IF ANY ITEM IS NOT APPLICABLE, OR NO INFORMATION IS AVAILABLE, THE SPACE MUST BE MARKED TO INDICATE THAT.

SECTION 1: COMPANY IDENTIFICATION**MANUFACTURED FOR:** W.W. GRAINGER, INC.

ADDRESS (NUMBER, STREET, CITY, STATE, AND ZIP CODE):
100 GRAINGER PARKWAY
LAKE FOREST, IL 60045

EMERGENCY TELEPHONE NUMBER: 1-800-228-5635

TELEPHONE NUMBER FOR INFORMATION: 1-847-535-5400

SIGNATURE OF PREPARER (OPTIONAL):

SECTION 2: INGREDIENTS/IDENTITY INFORMATION



COMPONENTS (CHEMICAL IDENTITY, COMMON NAME(S))	CAS NO.	OSHA PEL	ACGIH TLV	OTHER LIMITS RECOMMENDED	% (OPT.)
WATER	7732-18-5	NONE	NONE		60 - 100%
ISOBUTANE	75-28-5	800 PPM	800 PPM		5 - 10%
VM & P NAPHTHA (MIST)	64742-89-8	5 MG/M3	5 MG/M3		3 - 7%
METHANOL (SKIN DESIGNATION)	67-56-1	200 PPM	200 PPM	250 PPM (STEL)	1 - 5%
PROPANE	74-98-6	1000 PPM	ASPHYXIAN		1 - 5%

ANY SUBSTANCE LISTED AS HAZARDOUS BY THE STATES OF CALIFORNIA, FLORIDA, ILLINOIS, MICHIGAN, NEW JERSEY, OHIO, PENNSYLVANIA OR TEXAS IS DESCRIBED ABOVE IF KNOWN PRESENT IN REGULATED CONCENTRATIONS.

SECTION 3: HAZARDS IDENTIFICATION



ROUTE(S) OF ENTRY:

EYES?: YES

INHALATION?: YES

SKIN?: YES

INGESTION?: YES

ACUTE HEALTH HAZARDS:

WARNING.

ASPIRATION HAZARD. HARMFUL OR FATAL IF SWALLOWED. MAY CAUSE EYE AND SKIN IRRITATION. MAY CAUSE RESPIRATORY TRACT IRRITATION. CONTENTS UNDER PRESSURE. TOXIC BY INGESTION.

CHRONIC HEALTH HAZARDS: NONE KNOWN

CARCINOGENICITY:

CHEMICAL: NONE

OSHA: NO

NTP: NO

IARC: NO

SIGNS AND SYMPTOMS OF EXPOSURE:

REDNESS, TEARING, BURNING IN EYES. DEFATTING OR DRYING OF SKIN, CRACKING. NARCOTIC EFFECTS POSSIBLE WITH INADEQUATE VENTILATION. IRRITATION OF NOSE AND THROAT. ASPIRATION HAZARD. CONTAINS METHANOL (LESS THAN 2.5%).

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:

PRE-EXISTING SKIN AND LUNG DISORDERS. FOLLOW GOOD CHEMICAL HYGIENE PROCEDURES TO AVOID THIS HAZARD.

SECTION 4: EMERGENCY AND FIRST AID PROCEDURES



EYES:

FLUSH WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES LIFTING EYELIDS TO INSURE COMPLETE REMOVAL. GET IMMEDIATE MEDICAL ATTENTION.

INGESTION: DO NOT INDUCE VOMITING. GET IMMEDIATE MEDICAL ATTENTION.

INHALATION:

GET TO FRESH AIR. IF BREATHING HAS STOPPED, QUALIFIED PERSONNEL SHOULD ADMINISTER ARTIFICIAL RESPIRATION.

SKIN:

FLUSH WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. IF IRRITATION OCCURS OR PERSISTS, SEE PHYSICIAN.

SECTION 5: FIRE FIGHTING MEASURES

USA FLAME PROJECTION TEST: 6" - 8", NO FLASHBACK (FLAMMABLE)

FLAMMABLE LIMITS: NO DATA

LEL: NO DATA

UEL: NO DATA

EXTINGUISHING MEDIA:

CARBON DIOXIDE, DRY CHEMICAL, FOAM OR WATER FOG ACCEPTABLE.

SPECIAL FIRE FIGHTING PROCEDURES:

KEEP CONTAINERS COOL AND VAPORS DOWN WITH WATER SPRAY. PREVENT RUNOFF FROM ENTERING SEWERS AND PUBLIC WATERWAYS. WEAR SELF-CONTAINED BREATHING APPARATUS (SCBA) IN CHEMICAL FIRES.

HAZARDOUS PRODUCTS OF COMBUSTION: CARBON DIOXIDE AND CARBON MONOXIDE.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

AEROSOL CONTAINER (PRESSURIZED) MAY BURST IF HEATED OVER 120 DEG. F. FOAM MAY RETAIN PROPELLANT.

SECTION 6: ACCIDENTAL RELEASE MEASURES**SMALL SPILL:**

WIPE UP SMALL RELEASES WITH A DRY ABSORBENT CLOTH OR OTHER ABSORBENT MATERIAL.

LARGE SPILL:

ABSORB LIQUID WITH VERMICULITE, ABSORBENT CLOTH, OR OTHER ABSORBENT MATERIAL. PREVENT MATERIAL FROM ENTERING SEWERS OR DRAINS. VENTILATE AREA AND BLOCK TRAFFIC. TRANSFER CONTAMINATED MATERIAL INTO SUITABLE CONTAINER FOR PROPER DISPOSAL.

SECTION 7: HANDLING AND STORAGE**HANDLING:**

DO NOT GET IN EYES. AVOID CONTACT WITH SKIN AND CLOTHING. DO NOT SWALLOW. DO NOT DELIBERATELY CONCENTRATE AND INHALE VAPORS. DO NOT USE AROUND IGNITION SOURCES SUCH AS HEAT, SPARKS, OPEN FLAME, ETC. WASH THOROUGHLY AFTER HANDLING. CONTAINS PETROLEUM DISTILLATES. ASPIRATION HAZARD. DIRECT SPRAY AWAY FROM FACE. USE WITH ADEQUATE VENTILATION. AVOID INHALING MIST OR VAPORS.

STORAGE:

FOLLOW LABEL DIRECTIONS CAREFULLY. STORE IN A COOL (UNDER 120 DEG. F) DRY LOCATION AWAY FROM HEAT, SPARKS, OPEN FLAME, DIRECT SUNLIGHT, ETC. KEEP OUT

OF REACH OF CHILDREN. DO NOT PUNCTURE OR INCINERATE CONTAINER. DO NOT CONTAMINATE FOOD, WATER OR FEED BY USE OR STORAGE. REPLACE CAP WHEN NOT IN USE.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION



EYE PROTECTION: YES, SAFETY GLASSES W/SIDE SHIELDS, OR GOGGLES (ANSI Z87).

SKIN PROTECTION: YES (IMPERMEABLE, I.E. RUBBER, NEOPRENE, ETC.)

RESPIRATORY PROTECTIONS:

NOT USUALLY NECESSARY. USE WITH ADEQUATE VENTILATION. USE NIOSH/MSHA APPROVED RESPIRATOR IF PELS OR TLVS ARE EXCEEDED.

ENGINEERING CONTROLS:

VENTILATION NOT USUALLY NECESSARY BUT SHOULD BE PROVIDED IN THE EVENT OF OVEREXPOSURE.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES



APPEARANCE AND ODOR:

THIN WHITE OPAQUE LIQUID WITH A PLEASANT SCENT IN AN AEROSOL CAN.

pH 9.5 +/- 0.5

SPECIFIC GRAVITY (70 DEG. F): 0.988

BOILING POINT: 212 DEG. F

MELTING POINT: NO DATA

EVAPORATION RATE (BUTYL ACETATE = 1): >1

PRESSURE (PSIG. @ 70 DEG. F): 60 +/- 10

VAPOR DENSITY (AIR = 1): >1

SOLUBILITY IN WATER: COMPLETE

VOLATILE ORGANIC COMPOUNDS (VOCs):

176.5 GRAMS PER LITER OR 19% BY WEIGHT VOCs

SECTION 10: STABILITY AND REACTIVITY



HAZARDOUS POLYMERIZATION:

THIS PRODUCT WILL NOT UNDERGO HAZARDOUS POLYMERIZATION.

HAZARDOUS DECOMPOSITION OR BYPRODUCTS: CARBON DIOXIDE AND CARBON MONOXIDE.

CHEMICAL STABILITY: STABLE

INCOMPATIBILITY (MATERIALS TO AVOID):

STRONG ACIDS AND OXIDIZERS, SELECTED AMINES.

SECTION 11: TOXICOLOGICAL INFORMATION



NO DATA

SECTION 12: ECOLOGICAL INFORMATION

NO DATA

SECTION 13: DISPOSAL CONSIDERATION**DISPOSAL METHOD:**

DISPOSE OF IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL REGULATIONS.

RCRA WASTE INFORMATION:

IF THIS PRODUCT BECOMES A WASTE, IT WOULD BE A HAZARDOUS WASTE (D001) AS DEFINED BY RCRA (40 CFR 261). HOWEVER THE WASTE SHOULD BE PROPERLY CHARACTERIZED TO EVALUATE WHETHER ITS COMPOSITION HAS BEEN MODIFIED PRIOR TO DISPOSAL.

SECTION 14: TRANSPORT INFORMATION**DOT INFORMATION - 49 CFR 172.101:**

PROPER SHIPPING DESCRIPTION: CONSUMER COMMODITY

HAZARD CLASS: ORM-D

IDENTIFICATION NUMBER: NONE

PACKING GROUP: NONE

WATER TRANSPORTATION:

PROPER SHIPPING DESCRIPTION: AEROSOLS

HAZARD CLASS: 2

IDENTIFICATION NUMBER: UN 1950

PACKING GROUP: NONE

AIR TRANSPORTATION:

PROPER SHIPPING DESCRIPTION: AEROSOLS, FLAMMABLE

HAZARD CLASS: 2.1

IDENTIFICATION NUMBER: UN 1950

PACKING GROUP: NONE

MARINE POLLUTANTS: NONE

SECTION 15: REGULATORY INFORMATION**US FEDERAL REGULATIONS:****TSCA (TOXIC SUBSTANCES CONTROL ACT) STATUS:**

ALL INGREDIENTS ARE ON THE TSCA INVENTORY OR ARE NOT REQUIRED TO BE LISTED ON THE TSCA INVENTORY.

CERCLA RQ - 40 CFR 302.4 (A):

METHANOL: 5000 LBS.

SARA 313 COMPONENTS - 40 CFR 372.65:

METHANOL	(CAS: 67-56-1)	2.25%
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STATE AND LOCAL REGULATIONS:

CALIFORNIA PROPOSITION 65

WARNING:

THIS PRODUCT CONTAINS TRACE CHEMICALS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER, AND/OR BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

SECTION 16: ADDITIONAL INFORMATION

DATE PREPARED: 08/30/07

WARNING!

THE USE OF THIS PRODUCT IS BEYOND THE CONTROL OF THE MANUFACTURER; THEREFORE, NO GUARANTEE, EXPRESSED OR IMPLIED, IS MADE AS TO THE EFFECTS OF SUCH OR THE RESULTS TO BE OBTAINED IF NOT USED IN ACCORDANCE WITH DIRECTIONS OR ESTABLISHED SAFE PRACTICE. THE USER MUST ASSUME ALL RESPONSIBILITY, INCLUDING INJURY OR DAMAGE, RESULTING FROM ITS MISUSE AS SUCH, OR IN COMBINATION WITH OTHER MATERIALS. THE MANUFACTURER WARRANTS ONLY THAT THIS PRODUCT MEETS THE MANUFACTURER'S SPECIFICATIONS FOR SUCH PRODUCT. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, AS TO DESCRIPTION, QUALITY, MERCHANTABILITY. FITNESS FOR ANY PARTICULAR PURPOSE, PRODUCTIVENESS, OR ANY OTHER MATTER, OF THIS PRODUCT. THE MANUFACTURER SHALL BE IN NO WAY RESPONSIBLE FOR THE IMPROPER USE OF THIS PRODUCT. THE SOLE AND EXCLUSIVE REMEDY AGAINST THE MANUFACTURER FOR BREACH OF WARRANTY SHALL BE REIMBURSEMENT OF THE PURCHASE PRICE OF THE PRODUCT IN THE EVENT THAT A DEFECTIVE CONDITION OF THE PRODUCT SHALL BE FOUND TO EXIST. NO OTHER REMEDY (INCLUDING BUT NOT LIMITED TO INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR INJURY TO PERSON OR PROPERTY OR ANY OTHER INCIDENTAL OR CONSEQUENTIAL LOSS) SHALL BE AVAILABLE.

[Close this window](#)

SDS

Common Name: TOUGH GUY GENERAL PURPOSE DISINFECTANT WIPE**Manufacturer:** W.W. GRAINGER**SDS Revision Date:** 8/1/2013**SDS Format:** No Format Specified**Grainger Item Number(s):** 4AZR9, 4AZT1**Manufacturer Model Number(s):**

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TOUGH GUY (R*)

SAFETY

MATERIAL SAFETY DATA SHEET

DISTRIBUTED BY:
W.W. GRAINGER
100 GRAINGER PARKWAY
LAKE FOREST, IL 60045-5201

TELEPHONE: 847-535-1000

EMERGENCY: 800-983-4582

TECHNICAL SERVICE: 847-535-5400

MSDS DATE: 08-01-2013

REPLACES: 08-01-2011

MSDS NO.: GWP220110

SKU:
4AZT1
4AZR9

IDENTIFICATION (I)



PRODUCT NAME: TOUGH GUY GENERAL PURPOSE DISINFECTANT WIPE

CHEMICAL FORMULATION: PREMOISTEN TOWELETTE

NFPA HAZARD IDENTIFICATION SYSTEM:

HEALTH 2

FLAMMABILITY 1

REACTIVITY 0

HAZARD RATING:

4 - EXTREME

3 - HIGH

2 - MODERATE

1 - SLIGHT

0 - INSIGNIFICANT

HAZARDOUS INGREDIENTS (II)



SUBSTANCE	APPROX %	OSHA PEL	ACGIH TLV	EPA 40 CFT	CAS#
				302 355 372	

CONTAINS NO HAZARDOUS COMPONENTS AS DEFINED IN 29 CFR 1910.1200 (D)

KEY:

PEL: PERMISSIBLE EXPOSURE LIMIT

TLV: THRESHOLD LIMIT VALUE

C: CEILING LEVEL

STEL: SHORT TERM EXPOSURE LIMIT

N/A: NOT APPLICABLE

N/D: NOT DETERMINED

N/E: NOT ESTABLISHED

Y: YES

N: NO

302:

CERCLA LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES (40 CFR 302.4).

355:

SARA TITLE III / LIST OF EXTREMELY HAZARDOUS SUBSTANCES FOR EMERGENCY PLANNING AND NOTIFICATION (40 CFR 355).

372:

SARA TITLE III / LIST OF TOXIC CHEMICALS SUBJECT TO RELEASE REPORTING (COMMUNITY RIGHT TO KNOW) (40 CFR 372).

PHYSICAL DATA (III)



BOILING POINT (DEG. F): N/D

SPECIFIC GRAVITY (WATER = 1): 1.00*

VAPOR PRESSURE (MMHG): N/D

VOC CONTENT (% BY WEIGHT): <1.0*

VAPOR DENSITY (AIR = 1): N/D

EVAPORATION RATE (WATER = 1): N/D

SOLUBILITY IN WATER: UNKNOWN

PH: N/D

APPEARANCE AND ODOR:

WHITE TOWEL IMPREGNATED WITH A CLEAR LIQUID; LEMON FRAGRANCE.

*TESTED USING THE LIQUID COMPONENT OF THE TOWELETTE.

FIRE AND EXPLOSION HAZARD DATA (IV)



FLASH POINT (DEG. F): N/D
(TEST METHOD): CLOSED CUP

FLAMMABLE LIMITS IN AIR (VOLUME %):
UPPER: N/A
LOWER: N/A

EXTINGUISHING MEDIA: WATER FOG, FOAM, CARBON DIOXIDE, DRY CHEMICAL.

SPECIAL FIRE FIGHTING PROCEDURES:
COOL FIRE EXPOSED CONTAINERS WITH WATER FOG. FIREFIGHTERS SHOULD BE
EQUIPPED WITH FULL PROTECTIVE GEAR INCLUDING SELF-CONTAINED BREATHING
APPARATUS.

UNUSUAL FIRE AND EXPLOSION HAZARD: NONE

REACTIVITY DATA (V)



STABILITY: STABLE

INCOMPATIBILITY: STRONG OXIDIZERS.

CONDITIONS TO AVOID: EXCESS HEAT AND OPEN FLAME.

HAZARDOUS DECOMPOSITION PRODUCTS:
THERMAL DECOMPOSITION MAY PRODUCE OXIDES OF NITROGEN, AMMONIA, CARBON AND
OTHER LOW MOLECULAR WEIGHT HYDROCARBONS.

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR.

CONDITIONS TO AVOID: NONE

HEALTH HAZARD DATA (VI)



ROUTES OF ENTRY:
INHALATION (X)
EYE CONTACT (X)
SKIN CONTACT (X)
INGESTION ()

INGREDIENTS THAT ARE CONSIDERED BY OSHA, NTP, IARC TO BE SUSPECTED HUMAN
CARCINOGENS: NONE

EFFECTS OF OVEREXPOSURE:

IF IN EYES: MILD IRRITATION.

IF ON SKIN:
MILD IRRITATION AND REDNESS, WITH PROLONGED OR REPEATED EXPOSURE.

IF SWALLOWED: MAY BE HARMFUL OR FATAL IF SWALLOWED.

IF INHALED: EXPOSURE NOT LIKELY.

EMERGENCY AND FIRST AID PROCEDURES:

IF IN EYES:
FLUSH EYES AND UNDER EYELIDS WITH PLENTY OF COOL WATER FOR AT LEAST 15

MINUTES. IF IRRITATION PERSISTS, OBTAIN MEDICAL ATTENTION.

IF ON SKIN:

REMOVE CONTAMINATED CLOTHING. FLUSH SKIN WITH LARGE AMOUNTS OF WATER.

IF IRRITATION PERSISTS, OBTAIN MEDICAL ATTENTION.

IF SWALLOWED:

CONTACT PHYSICIAN OR POISON CONTROL CENTER IMMEDIATELY DO NOT INDUCE

VOMITING.

IF INHALED:

REMOVE PERSON TO FRESH AIR. IF NOT BREATHING, ADMINISTER ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, ADMINISTER OXYGEN. OBTAIN MEDICAL ATTENTION IF IRRITATION PERSISTS.

SPILL OR LEAK PROTECTION (VII)



STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

VENTILATE AREA AND REMOVE ALL SOURCES OF IGNITION. SCOOP UP MATERIAL AND PLACE IN A PROPERLY MARKED CLOSED CONTAINER FOR PROPER DISPOSAL.

WASTE DISPOSAL METHOD: CONSULT LOCAL ENVIRONMENTAL AUTHORITIES.

SPECIAL PROTECTION INFORMATION (VIII)



RESPIRATORY PROTECTION: USE WITH ADEQUATE VENTILATION.

VENTILATION:

LOCAL: RECOMMENDED

MECHANICAL: NOT REQUIRED

PROTECTIVE GLOVES: CHEMICAL RESISTANT.

EYE PROTECTION: SAFETY GLASSES.

OTHER PROTECTIVE EQUIPMENT: NONE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

STORE IN A COOL, DRY PLACE AWAY FROM HEAT OR OPEN FLAME. KEEP CONTAINER TIGHTLY CLOSED WHEN NOT IN USE.

OTHER PRECAUTIONS: KEEP OUT OF REACH OF CHILDREN..

TRANSPORTATION INFORMATION (GROUND TRANSPORTATION ONLY) (IX)



DOT ID NUMBER: NONE

DOT PROPER SHIPPING NAME: NONE

DOT CLASS: NONE

DOT PACKING GROUP: NONE

THE SHIPPING INFORMATION LISTED ABOVE APPLIES ONLY TO NON-BULK (<119 GALLONS) CONTAINERS OF THIS PRODUCT. THIS PRODUCT MAY HAVE MORE THAN ONE PROPER SHIPPING NAME DEPENDING ON PACKAGING, PRODUCT PROPERTIES, & MODE OF SHIPMENT. IF ANY ALTERATION OF PACKAGING, PRODUCT, OR MODE OF TRANSPORTATION IS FURTHER INTENDED, DIFFERENT SHIPPING NAMES AND LABELING MAY APPLY.

THIS INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED ACCURATE. HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THIS DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF. TOUGH CUY(TM) ASSUMES NO RESPONSIBILITY FOR PERSONAL INJURY OR PROPERTY DAMAGE TO THE VENDEE, USERS OR THIRD PARTIES CAUSED BY THE MATERIAL SUCH VENDEES OR USERS

ASSUME ALL RISKS ASSOCIATED WITH THE USE OF THIS MATERIAL.

[Close this window](#)

MSDS

Common Name: TOUGH GUY GRAFFITI & SPRAY PAINT REMOVER**Manufacturer:** W.W. GRAINGER**MSDS Revision Date:** 8/30/2007**Grainger Item Number(s):** 2DBX9**Manufacturer Model Number(s):**

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MATERIAL SAFETY DATA SHEET

HMIS (R*) :

HEALTH	2
FLAMMABILITY	4
REACTIVITY	0
PERSONAL PROTECTION	B

IDENTITY: TOUGH GUY GRAFFITI & SPRAY PAINT REMOVER**PART NUMBER:** 2DBX9

NOTE:

BLANK SPACES ARE NOT PERMITTED. IF ANY ITEM IS NOT APPLICABLE, OR NO INFORMATION IS AVAILABLE, THE SPACE MUST BE MARKED TO INDICATE THAT.

SECTION 1: COMPANY IDENTIFICATION

**MANUFACTURED FOR:** W.W. GRAINGER, INC.

ADDRESS (NUMBER, STREET, CITY, STATE, AND ZIP CODE) :
100 GRAINGER PARKWAY
LAKE FOREST, IL 60045

EMERGENCY TELEPHONE NUMBER: 1-800-228-5635

TELEPHONE NUMBER FOR INFORMATION: 1-847-535-5400

SIGNATURE OF PREPARER (OPTIONAL):

SECTION 2: INGREDIENTS/IDENTITY INFORMATION



COMPONENTS (CHEMICAL IDENTITY, COMMON NAME(S))	CAS NO.	OSHA PEL	ACGIH- TLV	OTHER LIMITS RECOMMENDED	% (OPT.)
ACETONE	67-64-1	1000 PPM	500 PPM		15 - 40%
TOLUENE	108-88-3	200 PPM	50 PPM	STEL: 150 PPM	10 - 30%
METHOXY ISOPROPANOL	107-98-2	NONE	100 PPM	STEL: 150 PPM	7 - 13%
ISOBUTANE	75-28-5	800 PPM	800 PPM		7 - 13%
DIMETHYL ADIPATE	627-93-0	NONE	NONE		7 - 13%
DIMETHYL GLUTARATE	1119-40-0	NONE	NONE		7 - 13%
PPG-2 METHYL ETHER (SKIN DESIGNATION)	34590-94-8	100 PPM	100 PPM	STEL: 150 PPM	3 - 7%
D-LIMONENE (R-p-MENTHA-1, 8-DIENE)	5989-27-5	NONE	NONE	30 PPM (MANU.)	3 - 7%
PROPANE	74-98-6	1000 PPM	ASPHYXIAN		3 - 7%

ANY SUBSTANCE LISTED AS HAZARDOUS BY THE STATES OF CALIFORNIA, FLORIDA, ILLINOIS, MICHIGAN, NEW JERSEY, OHIO, PENNSYLVANIA OR TEXAS IS DESCRIBED ABOVE IF KNOWN PRESENT IN REGULATED CONCENTRATIONS.

SECTION 3: HAZARDS IDENTIFICATION



ROUTE(S) OF ENTRY:

EYES?: YES

INHALATION?: YES

SKIN?: YES

INGESTION?: YES

ACUTE HEALTH HAZARDS:

DANGER. EXTREMELY FLAMMABLE LIQUID AND VAPOR. MAY BE HARMFUL OR FATAL IF SWALLOWED. ASPIRATION HAZARD. CAUSES EYE IRRITATION. MAY BE HARMFUL IF INHALED. MAY CAUSE SKIN IRRITATION. MAY BE HARMFUL IF ABSORBED THROUGH SKIN. CONTENTS UNDER PRESSURE.

CHRONIC HEALTH HAZARDS:

REPEATED OR PROLONGED OCCUPATIONAL OVEREXPOSURE CAN CAUSE DERMATITIS AND PAINTER'S SYNDROME.

CARCINOGENICITY:

CHEMICAL: NONE

OSHA: NO

NTP: NO

IARC: NO

SIGNS AND SYMPTOMS OF EXPOSURE:

REDNESS, TEARING, STINGING OR BURNING IN EYES. REDNESS, DRYNESS OR IRRITATION OF SKIN. DROWSINESS, DIZZINESS, LOSS OF COORDINATION, NAUSEA, VOMITING OR FATIGUE. IRRITATION OF NOSE, THROAT OR DIGESTIVE TRACT.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:
PRE-EXISTING SKIN, HEART, LIVER AND KIDNEY DISORDERS MAY BE ADVERSELY AFFECTED IF EXPOSURES OCCUR. FOLLOW GOOD CHEMICAL HYGIENE PRACTICES TO AVOID THIS HAZARD.

SECTION 4: EMERGENCY AND FIRST AID PROCEDURES



EYES:

IMMEDIATELY FLUSH WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES LIFTING EYELIDS TO INSURE COMPLETE REMOVAL. SEE A PHYSICIAN IMMEDIATELY.

INGESTION:

DO NOT INDUCE VOMITING UNLESS DIRECTED BY A PHYSICIAN. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. CALL A PHYSICIAN OR POISON CONTROL CENTER IMMEDIATELY.

INHALATION:

GET TO FRESH AIR. IF BREATHING HAS STOPPED, QUALIFIED PERSONNEL SHOULD ADMINISTER ARTIFICIAL RESPIRATION.

SKIN:

IMMEDIATELY FLUSH WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES WHILE REMOVING CONTAMINATED CLOTHING. IF IRRITATION ARISES AND PERSISTS, CALL A PHYSICIAN. LAUNDRY CONTAMINATED CLOTHING AND SHOES BEFORE REUSE.

SECTION 5: FIRE FIGHTING MEASURES



USA FLAME PROJECTION TEST (ASTM D-3065):
>18", FLASHBACK: EXTREMELY FLAMMABLE

FLAMMABLE LIMITS: NO DATA

LEL: NO DATA

UEL: NO DATA

EXTINGUISHING MEDIA:

USE CARBON DIOXIDE, DRY CHEMICAL, OR FOAM. TREAT AS AN OIL FIRE. BURNING LIQUID MAY FLOAT ON WATER.

SPECIAL FIRE FIGHTING PROCEDURES:

KEEP CONTAINERS COOL AND VAPORS DOWN WITH WATER SPRAY. PREVENT RUNOFF FROM ENTERING SEWERS AND PUBLIC WATERWAYS. WEAR SELF-CONTAINED BREATHING APPARATUS (SCBA) IN CHEMICAL FIRES.

HAZARDOUS PRODUCTS OF COMBUSTION:

OXIDES OF CARBON AND VARIOUS HYDROCARBONS.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

AEROSOL CONTAINER (PRESSURIZED) MAY BURST IF HEATED OVER 120 DEG. F. FLAMMABLE CONTENTS.

SECTION 6: ACCIDENTAL RELEASE MEASURES



SMALL SPILL:

WIPE UP SMALL RELEASES WITH A DRY ABSORBENT CLOTH OR OTHER ABSORBENT MATERIAL.

LARGE SPILL:

ABSORB LIQUID WITH VERMICULITE, ABSORBENT CLOTH, OR OTHER ABSORBENT MATERIAL. PREVENT MATERIAL FROM ENTERING SEWERS OR DRAINS. VENTILATE AREA AND BLOCK TRAFFIC. TRANSFER CONTAMINATED MATERIAL INTO SUITABLE CONTAINER FOR PROPER DISPOSAL.

SECTION 7: HANDLING AND STORAGE



HANDLING:

DO NOT USE AROUND IGNITION SOURCES SUCH AS HEAT, SPARKS, OPEN FLAME, WELDING ARCS, ETC. AVOID CONTACT WITH EYES, SKIN AND CLOTHING. LAUNDER CONTAMINATED CLOTHING BEFORE REUSE. DO NOT SWALLOW. WASH THOROUGHLY AFTER HANDLING. AVOID INHALING MIST OR VAPORS. DO NOT DELIBERATELY CONCENTRATE AND INHALE VAPORS. USE WITH ADEQUATE VENTILATION. DIRECT SPRAY AWAY FROM FACE.

STORAGE:

FOLLOW LABEL DIRECTIONS CAREFULLY. KEEP OUT OF REACH OF CHILDREN. STORE IN A COOL (UNDER 120 DEG. F) DRY LOCATION AWAY FROM HEAT, SPARKS, OPEN FLAME, AND DIRECT SUNLIGHT. REPLACE CAP WHEN NOT IN USE. DO NOT PUNCTURE OR INCINERATE CONTAINER.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION



EYE PROTECTION: YES, USE GOGGLES OR APPROVED SAFETY GLASSES (ANSI Z87).

SKIN PROTECTION: YES, IMPERVIOUS.

RESPIRATORY PROTECTIONS:

NOT USUALLY NECESSARY. USE WITH ADEQUATE VENTILATION. USE NIOSH/MSHA APPROVED RESPIRATOR IF PELS OR TLVS ARE EXCEEDED.

ENGINEERING CONTROLS:

VENTILATION NOT USUALLY NECESSARY BUT SHOULD BE PROVIDED IN THE EVENT OF OVEREXPOSURE.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES



APPEARANCE AND ODOR:

CLEAR COLORLESS LIQUID/GEL WITH AN AROMATIC SOLVENT AND CITRUS ODOR IN AN AEROSOL CAN.

pH: N/A

SPECIFIC GRAVITY (70 DEG. F): 0.888

BOILING POINT: 205 DEG. F

MELTING POINT: NO DATA

EVAPORATION RATE (BUTYL ACETATE = 1) NO DATA

PRESSURE (PSIG. @ 70 DEG. F): 50 +/- 10

VAPOR DENSITY (AIR = 1): >1

SOLUBILITY IN WATER: INSOLUBLE

VOLATILE ORGANIC COMPOUNDS (VOCs):

405.76 GRAMS PER LITER OR 49.98% BY WEIGHT VOC'S

SECTION 10: STABILITY AND REACTIVITY



HAZARDOUS POLYMERIZATION:
THIS PRODUCT WILL NOT UNDERGO HAZARDOUS POLYMERIZATION.

HAZARDOUS DECOMPOSITION OR BYPRODUCTS:
OXIDES OF CARBON AND VARIOUS HYDROCARBONS.

CHEMICAL STABILITY: STABLE

INCOMPATIBILITY (MATERIALS TO AVOID): STRONG OXIDIZING AND REDUCING AGENTS.

SECTION 11: TOXICOLOGICAL INFORMATION



NO DATA

SECTION 12: ECOLOGICAL INFORMATION



NO DATA

SECTION 13: DISPOSAL CONSIDERATION



DISPOSAL METHOD:
DISPOSE OF IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL REGULATIONS.

RCRA WASTE INFORMATION:
IF THIS PRODUCT BECOMES A WASTE, IT WOULD BE A HAZARDOUS WASTE (D001) AS DEFINED BY RCRA (40 CFR 261). HOWEVER THE WASTE SHOULD BE PROPERLY CHARACTERIZED TO EVALUATE WHETHER ITS COMPOSITION HAS BEEN MODIFIED PRIOR TO DISPOSAL.

SECTION 14: TRANSPORT INFORMATION



DOT INFORMATION - 49 CFR 172.101:
PROPER SHIPPING DESCRIPTION: CONSUMER COMMODITY
HAZARD CLASS: ORM-D
IDENTIFICATION NUMBER: NONE
PACKING GROUP: NONE

WATER TRANSPORTATION:
PROPER SHIPPING DESCRIPTION: AEROSOLS
HAZARD CLASS: 2
IDENTIFICATION NUMBER: UN 1950
PACKING GROUP: NONE

AIR TRANSPORTATION:
PROPER SHIPPING DESCRIPTION: AEROSOLS, FLAMMABLE
HAZARD CLASS: 2.1
IDENTIFICATION NUMBER: UN 1950
PACKING GROUP: NONE

MARINE POLLUTANTS: NONE

SECTION 15: REGULATORY INFORMATION



US FEDERAL REGULATIONS:

TSCA (TOXIC SUBSTANCES CONTROL ACT) STATUS:
ALL INGREDIENTS ARE ON THE TSCA INVENTORY OR ARE NOT REQUIRED TO BE LISTED
ON THE TSCA INVENTORY.

CERCLA RQ - 40 CFR 302.4 (A):

TOLUENE	(CAS: 108-88-3)	1000 LBS
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ACETONE	(CAS: 67-64-1)	5000 LBS
---------	----------------	----------

SARA 313 COMPONENTS - 40 CFR 372.65:

TOLUENE	(CAS: 108-88-3)	17%
---------	-----------------	-----

STATE AND LOCAL REGULATIONS:

CALIFORNIA PROPOSITION 65:

WARNING:

THIS PRODUCT CONTAINS A CHEMICAL (TOLUENE) KNOWN TO THE STATE OF CALIFORNIA
TO CAUSE BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

SECTION 16: ADDITIONAL INFORMATION



DATE PREPARED: 08/30/07

WARNING!

THE USE OF THIS PRODUCT IS BEYOND THE CONTROL OF THE MANUFACTURER;
THEREFORE, NO GUARANTEE, EXPRESSED OR IMPLIED, IS MADE AS TO THE EFFECTS OF
SUCH OR THE RESULTS TO BE OBTAINED IF NOT USED IN ACCORDANCE WITH
DIRECTIONS OR ESTABLISHED SAFE PRACTICE. THE USER MUST ASSUME ALL
RESPONSIBILITY, INCLUDING INJURY OR DAMAGE, RESULTING FROM ITS MISUSE AS
SUCH, OR IN COMBINATION WITH OTHER MATERIALS. THE MANUFACTURER WARRANTS
ONLY THAT THIS PRODUCT MEETS THE MANUFACTURER'S SPECIFICATIONS FOR SUCH
PRODUCT. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR
IMPLIED, AS TO DESCRIPTION, QUALITY, MERCHANTABILITY, FITNESS FOR ANY
PARTICULAR PURPOSE, PRODUCTIVENESS, OR ANY OTHER MATTER, OF THIS PRODUCT.
THE MANUFACTURER SHALL BE IN NO WAY RESPONSIBLE FOR THE IMPROPER USE OF
THIS PRODUCT. THE SOLE AND EXCLUSIVE REMEDY AGAINST THE MANUFACTURER FOR
BREACH OF WARRANTY SHALL BE REIMBURSEMENT OF THE PURCHASE PRICE OF THE
PRODUCT IN THE EVENT THAT A DEFECTIVE CONDITION OF THE PRODUCT SHALL BE
FOUND TO EXIST. NO OTHER REMEDY (INCLUDING BUT NOT LIMITED TO INCIDENTAL OR
CONSEQUENTIAL DAMAGES FOR INJURY TO PERSON OR PROPERTY OR ANY OTHER
INCIDENTAL OR CONSEQUENTIAL LOSS) SHALL BE AVAILABLE.

[Close this window](#)

MSDS

Common Name: TOUGH GUY HEAVY DUTY PRE-SPRAY - GALLON**Manufacturer:** W.W. GRAINGER**MSDS Revision Date:** 1/18/2010**Grainger Item Number(s):** 5RVT5**Manufacturer Model Number(s):**

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MATERIAL SAFETY DATA SHEET

MSDS: 152_022310

SECTION I - PRODUCT IDENTIFICATION



PRODUCT NAME: TOUGH GUY HEAVY DUTY PRE-SPRAY - GALLON

PRODUCT CODE NUMBER: 152

PRODUCT USE: CLEANER

WHMIS CLASS: CLASS D - DIVISION 2B

DOT CLASSIFICATION: NOT REGULATED AS DANGEROUS GOODS.

TDG CLASSIFICATION: NOT REGULATED AS DANGEROUS GOODS.

MANUFACTURER/SUPPLIER:
W.W. GRAINGER, INC.
100 GRAINGER PARKWAY
LAKE FOREST, IL 60045

GENERAL ASSISTANCE: 800-323-0620

EMERGENCY TELEPHONE: (800) 535-5053

HMIS/NFPA:
HEALTH 1
FLAMMABILITY 0
PHYSICAL HAZARD 0
PERSONAL PROTECTION B

LEGEND:

SEVERE 4
SERIOUS 3
MODERATE 2
SLIGHT 1
MINIMAL 0

SECTION II - HAZARDOUS INGREDIENTS / IDENTITY INFORMATION

INGREDIENT(S)	CAS#	WT%	OSHA PELS
1-OCTANESULFONIC ACID, SODIUM SALT	5324-84-5	1-5	NOT ESTABLISHED
ALCOHOLS, C12-15, ETHOXYLATED	68131-39-5	1-5	NOT ESTABLISHED
CARBONIC ACID, SODIUM SALT (2:3)	533-96-0	1-5	NOT ESTABLISHED
SODIUM CITRATE	24851-98-7	1-5	NOT ESTABLISHED
INGREDIENT(S)	ACGIH-TLV	LC50	ORAL LD50
1-OCTANESULFONIC ACID, SODIUM SALT	NOT ESTABLISHED	NOT AVAILABLE	5000 MG/KG RAT
ALCOHOLS, C12-15, ETHOXYLATED	NOT ESTABLISHED	5 MG/L RAT	2000 MG/KG RAT
CARBONIC ACID, SODIUM SALT (2:3)	NOT ESTABLISHED	NOT AVAILABLE	5600 MG/KG RAT
SODIUM CITRATE	NOT ESTABLISHED	NOT AVAILABLE	NOT AVAILABLE

SECTION III - PHYSICAL CHARACTERISTICS

BOILING POINT: 100 DEG. C

FREEZING POINT: 0 DEG. C

VAPOR PRESSURE: SAME AS WATER

VAPOR DENSITY: SAME AS WATER

SOLUBILITY IN WATER: COMPLETE

PHYSICAL STATE: LIQUID

APPEARANCE: COLORLESS LIQUID

ODOR: CHARACTERISTIC

pH (USE SOLUTION): 8.0 - 9.8

SPECIFIC GRAVITY: 1.05 - 1.07 @ 25 DEG. C (77 DEG. F) (H2O = 1)

COEFFICIENT OF WATER/OIL DISTRIBUTION: NOT AVAILABLE

% VOLATILE: 85-90%

EVAPORATION RATE: 1 (H2O = 1)

pH: 9.3 - 9.8

VISCOSITY: SAME AS WATER

ODOR THRESHOLD: LOW ODOR

ADDED FRAGRANCE: NONE

SECTION IV - FIRE AND EXPLOSION HAZARD DATA



FLAMMABILITY: NOT FLAMMABLE BY WHMIS/OSHA CRITERIA

FLASH POINT: >100.00 DEG. C (>212 DEG. F)

LEL: NOT AVAILABLE

UEL: NOT AVAILABLE

HAZARDOUS COMBUSTION PRODUCTS:

MAY INCLUDE AND ARE NOT LIMITED TO: OXIDES OF SODIUM. OXIDES OF CARBON

AUTOIGNITION TEMPERATURE: NOT AVAILABLE

EXPLOSION DATA:

SENSITIVITY TO MECHANICAL IMPACT: NOT AVAILABLE

SENSITIVITY TO STATIC DISCHARGE: NOT AVAILABLE

MEANS OF EXTINCTION:

DRY CHEMICAL. WATER SPRAY. ALCOHOL FOAM. CARBON DIOXIDE.

SPECIAL FIRE HAZARDS:

FIREFIGHTERS SHOULD WEAR A SELF-CONTAINED BREATHING APPARATUS.

SECTION V - REACTIVITY DATA



CONDITIONS FOR CHEMICAL INSTABILITY:

STABLE UNDER RECOMMENDED STORAGE CONDITIONS.

INCOMPATIBLE MATERIALS: STRONG OXIDIZING AGENTS. ACIDS.

REACTIVITY, AND UNDER WHAT CONDITIONS: DO NOT MIX WITH OTHER CHEMICALS.

HAZARDOUS DECOMPOSITION PRODUCTS:

MAY INCLUDE AND ARE NOT LIMITED TO:

OXIDES OF SODIUM. OXIDES OF CARBON WHEN HEATED TO DECOMPOSITION.

SECTION VI - TOXICOLOGICAL PROPERTIES



ROUTE OF ENTRY: EYE, SKIN CONTACT, INHALATION, INGESTION.

EFFECTS OF ACTIVE EXPOSURE:

EYE: MAY CAUSE IRRITATION.

SKIN: MAY CAUSE IRRITATION.

INHALATION: MAY CAUSE RESPIRATORY TRACT IRRITATION.

INGESTION: MAY CAUSE STOMACH DISTRESS, NAUSEA OR VOMITING.

EFFECTS OF CHRONIC EXPOSURE:

SKIN:

PROLONGED OR REPEATED EXPOSURE CAN CAUSE DRYING, DEFATTING AND DERMATITIS.

IRRITANCY: HAZARDOUS BY WHMIS/OSHA CRITERIA.

RESPIRATORY TRACT: NON-HAZARDOUS BY WHMIS/OSHA CRITERIA.

SENSITIZATION: NON-HAZARDOUS BY WHMIS/OSHA CRITERIA.

CARCINOGENICITY: NON-HAZARDOUS BY WHMIS/OSHA CRITERIA.

TERATOGENICITY: NON-HAZARDOUS BY WHMIS/OSHA CRITERIA.

MUTAGENICITY: NON-HAZARDOUS BY WHMIS/OSHA CRITERIA.

REPRODUCTIVE EFFECTS: NON-HAZARDOUS BY WHMIS/OSHA CRITERIA.

SYNERGISTIC MATERIALS: NOT AVAILABLE

SECTION VII - PREVENTATIVE MEASURES



GLOVES: RUBBER GLOVES. CONFIRM WITH A REPUTABLE SUPPLIER FIRST.

EYE PROTECTION: SAFETY GLASSES

RESPIRATORY PROTECTION:
NOT NORMALLY REQUIRED IF GOOD VENTILATION IS MAINTAINED.

OTHER PROTECTIVE EQUIPMENT: AS REQUIRED BY EMPLOYER CODE.

ENGINEERING CONTROLS: GENERAL VENTILATION NORMALLY ADEQUATE.

LEAK AND SPILL PROCEDURE:
BEFORE ATTEMPTING TO CLEAN UP, REFER TO HAZARD DATA GIVEN ABOVE. SMALL SPILLS MAY BE ABSORBED WITH NON-REACTIVE ABSORBENT AND PLACED IN SUITABLE, COVERED, LABELED CONTAINERS. PREVENT LARGE SPILLS FROM ENTERING SEWERS OR WATERWAYS. CONTACT EMERGENCY SERVICES AND SUPPLIER FOR ADVICE.

WASTE DISPOSAL:
REVIEW FEDERAL, STATE/PROVINCIAL, AND LOCAL GOVERNMENT REQUIREMENTS PRIOR TO DISPOSAL.

HANDLING REQUIREMENTS:
USE GOOD INDUSTRIAL HYGIENE PRACTICES IN HANDLING THIS MATERIAL. WASH HAND BEFORE BREAKS AND IMMEDIATELY AFTER HANDLING THE PRODUCT.

STORAGE REQUIREMENTS:
KEEP OUT OF REACH OF CHILDREN. STORE IN A CLOSED CONTAINER AWAY FROM INCOMPATIBLE MATERIALS, KEEP IN A DRY, COOL PLACE. AVOID STORAGE UNDER DIRECT SUNLIGHT.

SECTION VIII - FIRST AID



EYE:
FLUSH WITH COOL WATER. REMOVE CONTACT LENSES, IF APPLICABLE, AND CONTINUE FLUSHING. OBTAIN MEDICAL ATTENTION IF IRRITATION PERSISTS.

SKIN:
FLUSH WITH COOL WATER. WASH WITH SOAP AND WATER. OBTAIN MEDICAL ATTENTION OF IRRITATION PERSISTS.

INHALATION:
IF SYMPTOMS DEVELOP MOVE VICTIM TO FRESH AIR. IF SYMPTOMS PERSIST, OBTAIN MEDICAL ATTENTION.

INGESTION:
DO NOT INDUCE VOMITING. RINSE MOUTH WITH WATER AND THEN DRINK ONE OR TWO

GLASSES OF WATER. OBTAIN MEDICAL ATTENTION. NEVER GIVE ANYTHING BY MOUTH IF VICTIM IS UNCONSCIOUS, OR IS CONVULSING.

SECTION IX - PREPARATION INFORMATION



EFFECTIVE DATE: 18-JAN-2010

EXPIRY DATE: 18-JAN-2013

ISSUE DATE: 18-JAN-2010

PREPARED BY: CLAIRE MANUFACTURING

INFORMATION CONTAINED HEREIN WAS OBTAINED FROM SOURCES CONSIDERED TECHNICALLY ACCURATE AND RELIABLE. WHILE EVERY EFFORT HAS BEEN MADE TO ENSURE FULL DISCLOSURE OF PRODUCT HAZARDS, IN SOME CASES DATA IS NOT AVAILABLE AND IS SO STATED. SINCE CONDITIONS OF ACTUAL PRODUCT USE ARE BEYOND CONTROL OF THE SUPPLIER, IT IS ASSUMED THAT THE USERS OF THIS MATERIAL HAVE BEEN FULLY TRAINED ACCORDING TO THE REQUIREMENTS OF ALL APPLICABLE LEGISLATION AND REGULATORY INSTRUMENTS. NO WARRANTY EXPRESSED OR IMPLIED, IS MADE AND SUPPLIER WILL NOT BE LIABLE FOR ANY LOSSES, INJURIES OR CONSEQUENTIAL DAMAGES WHICH MAY RESULT FROM THE USE OF OR RELIANCE ON ANY INFORMATION CONTAINED IN THIS DOCUMENT.

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MSDS

Common Name: TOUGH GUY WASP & HORNET KILLER**Manufacturer:** W.W. GRAINGER**MSDS Revision Date:** 8/30/2007**Grainger Item Number(s):** 2DCB5**Manufacturer Model Number(s):**

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MATERIAL SAFETY DATA SHEET

HMIS (R*) :

HEALTH	1
FLAMMABILITY	1
REACTIVITY	1
PERSONAL PROTECTION	A

IDENTITY: TOUGH GUY WASP & HORNET KILLER**PART NUMBER:** 2DCB5

NOTE:

BLANK SPACES ARE NOT PERMITTED. IF ANY ITEM IS NOT APPLICABLE, OR NO INFORMATION IS AVAILABLE, THE SPACE MUST BE MARKED TO INDICATE THAT.

SECTION 1: COMPANY IDENTIFICATION

**MANUFACTURED FOR:** W.W. GRAINGER, INC.**ADDRESS (NUMBER, STREET, CITY, STATE, AND ZIP CODE):**
100 GRAINGER PARKWAY
LAKE FOREST, IL 60045**EMERGENCY TELEPHONE NUMBER:** 1-800-228-5635

TELEPHONE NUMBER FOR INFORMATION: 1-847-535-5400

SIGNATURE OF PREPARER (OPTIONAL):

SECTION 2: INGREDIENTS/IDENTITY INFORMATION



COMPONENTS (CHEMICAL IDENTITY, COMMON NAME(S))	CAS NO.	OSHA PEL	ACGIH- TLV	OTHER LIMITS RECOMMENDED	% (OPT.)
ALIPHATIC HYDROCARBON	64742-47-8	NOT ESTAB.	NOT ESTAB.	100 PPM MANU.	60 - 100%
CARBON DIOXIDE	124-38-9	5000 PPM	5000 PPM	30000 PPM STEL	3 - 7%

ANY SUBSTANCE LISTED AS HAZARDOUS BY THE STATES OF CALIFORNIA, FLORIDA, ILLINOIS, MICHIGAN, NEW JERSEY, OHIO, PENNSYLVANIA OR TEXAS IS DESCRIBED ABOVE IF KNOWN PRESENT IN REGULATED CONCENTRATIONS.

SECTION 3: HAZARDS IDENTIFICATION



ROUTE(S) OF ENTRY:

EYES?: YES

INHALATION?: YES

SKIN?: YES

INGESTION?: YES

ACUTE HEALTH HAZARDS:

CAUTION. CAUSES MODERATE EYE IRRITATION. MAY CAUSE SKIN IRRITATION. UNLIKELY TO BE SWALLOWED, BUT CONTAINS PETROLEUM DISTILLATES WHICH MAY PRESENT AN ASPIRATION HAZARD IF SWALLOWED. MAY BE HARMFUL IF INHALED.

CHRONIC HEALTH HAZARDS:

PROLONGED OR FREQUENTLY REPEATED SKIN CONTACT MAY CAUSE ALLERGIC REACTIONS IN SOME INDIVIDUALS. FOLLOW LABEL INSTRUCTIONS AND GOOD CHEMICAL HYGIENE PRACTICES TO AVOID THESE HAZARDS.

CARCINOGENICITY:

CHEMICAL: NONE

OSHA: NO

NTP: NO

IARC: NO

SIGNS AND SYMPTOMS OF EXPOSURE:

REDNESS, DRYNESS, SCALING OR ITCHING SKIN. EXCESSIVE INHALATION OF VAPORS MAY CAUSE HEADACHES, STUPOR, OR IRRITATION OF THROAT AND EYES. SWALLOWING MAY CAUSE IRRITATION OF STOMACH AND INTESTINES RESULTING IN NAUSEA AND VOMITING.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:

PRE-EXISTING SKIN AND KIDNEY CONDITIONS MAY BE ADVERSELY AFFECTED. FOLLOW GOOD CHEMICAL HYGIENE PRACTICES TO AVOID THIS HAZARD.

SECTION 4: EMERGENCY AND FIRST AID PROCEDURES



EYES:

FLUSH WITH PLENTY OF WATER (FOR AT LEAST 15 MINUTES LIFTING EYELIDS TO INSURE COMPLETE REMOVAL.) CALL A PHYSICIAN IF IRRITATION PERSISTS.

INGESTION:

UNLIKELY FROM AEROSOL CAN. IF LARGE QUANTITIES ARE SWALLOWED, CALL A

PHYSICIAN OR POISON CONTROL CENTER IMMEDIATELY. GET IMMEDIATE MEDICAL ATTENTION.

INHALATION:

GET TO FRESH AIR. IF BREATHING HAS STOPPED, QUALIFIED PERSONNEL SHOULD ADMINISTER ARTIFICIAL RESPIRATION.

SKIN:

WASH THOROUGHLY WITH SOAP AND WATER. REMOVE CONTAMINATED CLOTHING AND SHOES. LAUNDRY CONTAMINATED CLOTHING BEFORE REUSE. CALL A PHYSICIAN IF IRRITATION ARISES AND PERSISTS.

NOTE TO PHYSICIAN: CONTAINS PETROLEUM DISTILLATES (>80%).

SECTION 5: FIRE FIGHTING MEASURES



USA FLAME PROJECTION TEST (ASTM D-3065): 0", NO FLASHBACK

FLAMMABLE LIMITS: NO DATA

LEL: NO DATA

UEL: NO DATA

EXTINGUISHING MEDIA:

TREAT AS AN OIL FIRE. WATER MAY CAUSE FIRE TO FLOAT AND SPREAD. USE CARBON DIOXIDE, DRY CHEMICAL OR FOAM.

SPECIAL FIRE FIGHTING PROCEDURES:

USE WATER SPRAY TO KEEP CONTAINERS COOL AND VAPORS DOWN. DO NOT ALLOW RUNOFF TO ENTER SEWERS OR PUBLIC WATERCOURSES. WEAR SELF-CONTAINED BREATHING APPARATUS IN CHEMICAL FIRES.

HAZARDOUS PRODUCTS OF COMBUSTION:

CARBON DIOXIDE, CARBON MONOXIDE, OXYGEN, SMOKE, SOOT AND VARIOUS ORGANIC OXIDATION BY-PRODUCTS.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

AEROSOL CONTAINER (PRESSURIZED) MAY BURST IF HEATED OVER 130 DEG. F. COMBUSTIBLE CONTENTS.

SECTION 6: ACCIDENTAL RELEASE MEASURES



SMALL SPILL:

CAUTION, SLIP HAZARD. WIPE UP SMALL SPILLS PROMPTLY. THOROUGHLY CLEAN ANY RESIDUES WITH AN EFFECTIVE CLEANING COMPOUND.

LARGE SPILL:

ISOLATE TRAFFIC AND VENTILATE AREA. ELIMINATE ALL IGNITION SOURCES. WEAR PROTECTIVE GEAR AS NECESSARY. DIKE TO PREVENT SPREAD. PREVENT FROM ENTERING DRAINS, SEWERS OR ANY WATERCOURSE OR WATERWAY. PICK UP WITH AN ABSORBENT MATERIAL. PUT IN A SUITABLE CONTAINER FOR PROPER DISPOSAL. THIS PRODUCT IS TOXIC TO FISH AND AQUATIC INVERTEBRATES.

SECTION 7: HANDLING AND STORAGE



HANDLING:

AVOID CONTACT WITH EYES OR CLOTHING. WASH THOROUGHLY WITH SOAP AND WATER AFTER HANDLING. DO NOT SWALLOW. AVOID INHALING MIST OR VAPORS. DO NOT DELIBERATELY CONCENTRATE AND INHALE VAPORS. USE WITH ADEQUATE VENTILATION. KEEP AWAY FROM HEAT, SPARKS AND OPEN FLAME. DO NOT USE AROUND IGNITION SOURCES SUCH AS HEAT, SPARKS, OPEN FLAME, STATIC ELECTRICITY, ELECTRIC MOTORS, WELDING ARCS, ETC. DO NOT SMOKE WHILE USING. EXPOSURE TO TEMPERATURES ABOVE 130 DEG. F MAY CAUSE BURSTING. DIRECT SPRAY AWAY FROM

FACE. REPLACE CAP WHEN NOT IN USE. DO NOT PUNCTURE OR INCINERATE CONTAINER. DO NOT APPLY DIRECTLY TO WATER.

STORAGE:

FOLLOW LABEL DIRECTIONS CAREFULLY. KEEP OUT OF REACH OF CHILDREN. STORE IN A COOL (UNDER 130 DEG. F) DRY LOCATION AWAY FROM HEAT, SPARKS, OPEN FLAME, AND DIRECT SUNLIGHT.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION



EYE PROTECTION: YES, GOGGLES OR APPROVED SAFETY GLASSES (ANSI Z87)

SKIN PROTECTION:

NOT USUALLY NEEDED. IF DIRECT CONTACT IS POSSIBLE, WEAR CHEMICAL RESISTANT GLOVES OR PPE.

RESPIRATORY PROTECTIONS:

NOT USUALLY NECESSARY. USE WITH ADEQUATE VENTILATION. IF PELS OR TLVS ARE EXCEEDED (SEE SECTION II), FOLLOW NIOSH\MSHA RECOMMENDATIONS.

ENGINEERING CONTROLS:

VENTILATION NOT USUALLY NECESSARY BUT SHOULD BE PROVIDED IN THE EVENT OF OVEREXPOSURE.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES



APPEARANCE AND ODOR:

CLEAR COLORLESS LIQUID WITH A SLIGHT PETROLEUM ODOR IN AN AEROSOL CAN.

pH: NOT APPLICABLE

SPECIFIC GRAVITY (70 DEG. F): 0.811

BOILING POINT (CONCENTRATE): 430 DEG. F

MELTING POINT: NO DATA

EVAPORATION RATE (BUTYL ACETATE = 1): NO DATA

PRESSURE (PSIG. @ 70 DEG. F): 90 +/- 5

VAPOR DENSITY (AIR = 1): GREATER THAN ONE (1)

SOLUBILITY IN WATER: NEGLIGIBLE

VOLATILE ORGANIC COMPOUNDS (VOCs): 0 GRAMS PER LITER OR 0% BY WEIGHT VOCs

SECTION 10: STABILITY AND REACTIVITY



HAZARDOUS POLYMERIZATION:

THIS PRODUCT WILL NOT UNDERGO HAZARDOUS POLYMERIZATION.

HAZARDOUS DECOMPOSITION OR BYPRODUCTS:

CARBON DIOXIDE, CARBON MONOXIDE, OXYGEN, SMOKE, SOOT AND VARIOUS ORGANIC OXIDATION BY-PRODUCTS.

CHEMICAL STABILITY: STABLE

INCOMPATIBILITY (MATERIALS TO AVOID):

STRONG OXIDIZING AGENTS, ALKALI METALS, ALKALINE EARTH METALS, METAL ACETYLHALIDES AND CHROMIUM.

SECTION 11: TOXICOLOGICAL INFORMATION

NO DATA

SECTION 12: ECOLOGICAL INFORMATION

NO DATA

SECTION 13: DISPOSAL CONSIDERATION

DISPOSAL METHOD:

DISPOSE OF IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL REGULATIONS.

RCRA WASTE INFORMATION:

IF THIS PRODUCT BECOMES A WASTE, IT WOULD NOT BE A HAZARDOUS WASTE AS DEFINED BY RCRA (40 CFR 261). HOWEVER THE WASTE SHOULD BE PROPERLY CHARACTERIZED TO EVALUATE WHETHER ITS COMPOSITION HAS BEEN MODIFIED PRIOR TO DISPOSAL.

SECTION 14: TRANSPORT INFORMATION

DOT INFORMATION - 49 CFR 172.101:

PROPER SHIPPING DESCRIPTION: CONSUMER COMMODITY

HAZARD CLASS: ORM-D

IDENTIFICATION NUMBER: NONE

PACKING GROUP: NONE

AIR TRANSPORTATION:

PROPER SHIPPING DESCRIPTION: AEROSOLS, NON-FLAMMABLE

HAZARD CLASS: 2.2

IDENTIFICATION NUMBER: UN 1950

PACKING GROUP: NONE

MARINE POLLUTANTS: NONE

SECTION 15: REGULATORY INFORMATION

US FEDERAL REGULATIONS:

EPA PRODUCT REGISTRATION NUMBER: 11694-109-10637

TSCA (TOXIC SUBSTANCES CONTROL ACT) STATUS:

ALL INGREDIENTS ARE ON THE TSCA INVENTORY OR ARE NOT REQUIRED TO BE LISTED ON THE TSCA INVENTORY.

CERCLA RQ - 40 CFR 302.4 (A): NONE LISTED

SARA 313 COMPONENTS - 40 CFR 372.65:

NAME	CAS	PERCENTAGE
TETRAMETHRIN	7696-12-0	0.1%
PERMETHRIN	52645-53-1	0.26%
PIPERONYL BUTOXIDE	51-03-6	0.52%

STATE AND LOCAL REGULATIONS:

CALIFORNIA PROPOSITION 65: NONE

SECTION 16: ADDITIONAL INFORMATION



DATE PREPARED: 08/30/07

WARNING!

THE USE OF THIS PRODUCT IS BEYOND THE CONTROL OF THE MANUFACTURER; THEREFORE, NO GUARANTEE, EXPRESSED OR IMPLIED, IS MADE AS TO THE EFFECTS OF SUCH OR THE RESULTS TO BE OBTAINED IF NOT USED IN ACCORDANCE WITH DIRECTIONS OR ESTABLISHED SAFE PRACTICE. THE USER MUST ASSUME ALL RESPONSIBILITY, INCLUDING INJURY OR DAMAGE, RESULTING FROM ITS MISUSE AS SUCH, OR IN COMBINATION WITH OTHER MATERIALS. THE MANUFACTURER WARRANTS ONLY THAT THIS PRODUCT MEETS THE MANUFACTURER'S SPECIFICATIONS FOR SUCH PRODUCT. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, AS TO DESCRIPTION, QUALITY, MERCHANTABILITY. FITNESS FOR ANY PARTICULAR PURPOSE, PRODUCTIVENESS, OR ANY OTHER MATTER, OF THIS PRODUCT. THE MANUFACTURER SHALL BE IN NO WAY RESPONSIBLE FOR THE IMPROPER USE OF THIS PRODUCT. THE SOLE AND EXCLUSIVE REMEDY AGAINST THE MANUFACTURER FOR BREACH OF WARRANTY SHALL BE REIMBURSEMENT OF THE PURCHASE PRICE OF THE PRODUCT IN THE EVENT THAT A DEFECTIVE CONDITION OF THE PRODUCT SHALL BE FOUND TO EXIST. NO OTHER REMEDY (INCLUDING BUT NOT LIMITED TO INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR INJURY TO PERSON OR PROPERTY OR ANY OTHER INCIDENTAL OR CONSEQUENTIAL LOSS) SHALL BE AVAILABLE.

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MSDS

Common Name: DR-G-004 COMMERCIAL WASP & HORNET KILLER**Manufacturer:** ECOSMART TECHNOLOGIES**MSDS Revision Date:** 2/19/2007**Grainger Item Number(s):** 1NNX4, 8RF73**Manufacturer Model Number(s):**

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DRG004 ECOSMART COMMERCIAL WASP & HORNET KILLER

MATERIAL SAFETY DATA SHEET

THIS DOCUMENT HAS BEEN PREPARED TO MEET THE REQUIREMENTS OF THE U.S. OSHA HAZARD COMMUNICATION STANDARD 29 CFR 1910.1200, THE EU DIRECTIVE, 91/155/EEC AND OTHER REGULATORY REQUIREMENTS.

1. COMPANY AND PRODUCT IDENTIFICATION



PRODUCT: DR-G-004 ECOSMART COMMERCIAL WASP & HORNET KILLER

MANUFACTURER:
ECOSMART TECHNOLOGIES, INC.
318 SEABOARD LANE
SUITE 208
FRANKLIN, TN 37067

EMERGENCY TELEPHONE NUMBER:
INFO TRAC CHEMICAL RESPONSE SYSTEM: (800) 535-5053 (24 HOURS)

FOR GENERAL INFORMATION: (888) 326-SAFE (9AM TO 5PM EST)

2. INGREDIENTS



INGREDIENT NAME	% BY WEIGHT	CAS #	EXPOSURE LIMITS
ACTIVE INGREDIENTS:			
BLEND OF ESSENTIAL OILS	4.0%		NONE ESTABLISHED
INERT INGREDIENTS:			
CARBON DIOXIDE (PROPELLANT)	3.5%		TWA: 5000 PPM
PROPRIETARY SOLVENT BLEND	TO 100%	NOT APPLICABLE	NONE ESTABLISHED

3. HAZARDS IDENTIFICATION



POTENTIAL HEALTH EFFECTS:

MAY BE HARMFUL IF SWALLOWED OR INHALED. MAY CAUSE EYE IRRITATION. AVOID BREATHING SPRAY MIST. AVOID CONTACT WITH SKIN, EYES OR CLOTHING.

FLAMMABLE:

CONTENTS UNDER PRESSURE. DO NOT USE OR STORE NEAR HEAT OR OPEN FLAME. DO NOT PUNCTURE OR INCINERATE CONTAINER. EXPOSURE TO TEMPERATURE ABOVE 130 DEG. F MAY CAUSE BURSTING.

4. FIRST AID MEASURES



CAUTION: AVOID CONTACT WITH EYES.

IF IN EYES: FLUSH WITH PLENTY OF WATER.

IF ON SKIN: WASH WITH SOAP AND WATER.

IF INHALED: MOVE EXPOSED PERSON(S) TO FRESH AIR.

IF INGESTED:

RINSE MOUTH OUT WITH WATER. DO NOT INDUCE VOMITING. SEEK MEDICAL ATTENTION IF NECESSARY.

5. FIRE FIGHTING MEASURES



FLASH POINT: 148.9 DEG. C (300 DEG. F)

FLAMMABLE LIMITS: NOT TESTED

EXTINGUISHING MEDIA:

USE FOAM, CARBON DIOXIDE, OR DRY CHEMICAL EXTINGUISHERS.

FIRE AND EXPLOSION HAZARDS:

FLAMMABLE LIQUID. CONTAINER CONTENTS ARE UNDER PRESSURE.

EXPOSURE TO TEMPERATURES ABOVE 130 DEG. F COULD CAUSE BURSTING.

SPECIAL FIRE FIGHTING PROCEDURES:

KEEP CONTAINERS COOL TO PREVENT BURSTING. FIREFIGHTERS SHOULD HAVE EYE PROTECTION AND WEAR SELF-CONTAINED BREATHING APPARATUS.

HAZARDOUS DECOMPOSITION PRODUCTS:

CARBON DIOXIDE, CARBON MONOXIDE, SMOKE, FUMES, AND UNBURNED HYDROCARBONS AND TERPENES.

6. SPILL/LEAK PROCEDURES



IF SPILLED, ELIMINATE SOURCES OF IGNITION, ABSORB LIQUID WITH AN INERT ABSORBENT MATERIAL AND DISPOSE OF THE EMPTY CONTAINER AND ABSORBENT MATERIAL IN ACCORDANCE WITH LOCAL ORDINANCES. COMPONENTS OF THIS PRODUCT ARE NOT CONSIDERED EPA HAZARDOUS WASTES.

7. HANDLING AND STORAGE



STORE IN A COOL, DRY AREA AWAY FROM HEAT, SPARKS OR OPEN FLAME. DO NOT SMOKE WHILE USING PRODUCT.

DISPOSAL:

WHEN CONTAINER IS EMPTY, RECYCLE IF AVAILABLE. IF RECYCLING IS NOT AVAILABLE, WRAP AND PLACE THE EMPTY CONTAINER IN A TRASH COLLECTOR. KEEP OUT OF THE REACH OF CHILDREN AND ANIMALS.

8. EXPOSURE CONTROL/PERSONAL PROTECTION



VENTILATION: LOCAL EXHAUST VENTILATION IS NOT REQUIRED.

RESPIRATORY PROTECTION: NOT REQUIRED WITH ADEQUATE VENTILATION.

EYE PROTECTION:

NOT REQUIRED. SAFETY GLASSES ARE RECOMMENDED DURING VOLUMETRIC TREATMENTS.

GLOVES: NOT REQUIRED.

OTHER PROTECTIVE EQUIPMENT: NOT REQUIRED.

9. PHYSICAL PROPERTIES



APPEARANCE: COLORLESS LIQUID

SPECIFIC GRAVITY (WATER = 1): 0.86 G/ML

ODOR: SWEET CITRUS / MINTY SCENT

10. STABILITY AND REACTIVITY



CHEMICAL STABILITY: STABLE

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

11. TOXICOLOGICAL INFORMATION



RAT ACUTE ORAL: NOT DETERMINED

ACUTE EFFECTS FROM OVEREXPOSURE:

THE INDIVIDUAL COMPONENTS OF THIS PRODUCT ARE KNOWN TO HAVE LOW ORAL AND DERMAL TOXICITY. THIS MIXTURE IS EXPECTED TO HAVE A SIMILAR TOXICOLOGICAL PROFILE. PROLONGED CONTACT WITH THE SKIN MAY CAUSE IRRITATION, AND CONTACT WITH THE EYES MAY CAUSE EYE IRRITATION. INHALATION OF THE VAPOR MAY CAUSE IRRITATION OF NASAL PASSAGES AND/OR DIZZINESS. INGESTION OF THIS PRODUCT COULD RESULT IN IRRITATION OF THE GASTROINTESTINAL TRACT, HEADACHE OR NAUSEA.

CHRONIC EFFECTS FROM OVEREXPOSURE: NO DATA ARE AVAILABLE.

CARCINOGENICITY:

NTP: NO

OSHA: NO

12. ENVIRONMENTAL INFORMATION



WHILE SPECIFIC DATA REGARDING TOXICITY TO FISH OR OTHER AQUATIC ORGANISMS IS NOT AVAILABLE FOR THIS PRODUCT, CARE SHOULD ALWAYS BE TAKEN TO PREVENT INSECTICIDES FROM ENTERING AQUIFERS.

13. DISPOSAL



THE AEROSOL CONTAINER IS NOT REFILLABLE. WHEN CONTAINER IS EMPTY, RECYCLE IF AVAILABLE. IF RECYCLING IS NOT POSSIBLE, WRAP THE CONTAINER AND DISPOSE OF WITH ORDINARY TRASH.

14. TRANSPORTATION INFORMATION



PROPER SHIPPING NAME: CONSUMER COMMODITY

DOT HAZARD CLASS: ORM-D

15. REGULATORY INFORMATION



NFPA RATINGS:

HEALTH 1
FIRE 2
REACTIVITY 0
SPECIAL NONE

TSCA: NO INGREDIENTS IN THIS PRODUCT ARE LISTED ON THE TSCA INVENTORY.

SARA TITLE III:

THIS PRODUCT DOES NOT CONTAIN ANY INGREDIENTS SUBJECT TO SECTION 313 (40 CFR 372) REPORTING REQUIREMENTS.

FEBRUARY 19, 2007

DRG004 ECOSMART COMMERCIAL WASP & HORNET KILLER MSDS.DOC

SPECTREM 2 WHITE

Version 1.2

Print Date 02/09/2010

REVISION DATE: 09/01/2006

SECTION 1 - PRODUCT IDENTIFICATION

Trade name : SPECTREM 2 WHITE
Product code : 947806 502

COMPANY : Tremco Incorporated
3735 Green Road
Cleveland, OH 44122

Telephone : (216) 292-5000 8:30 - 5:00 EST
Emergency Phone: : (216) 765-6727 8:30 - 5:00 EST
After Hours: Chemtrec 1-800-424-9300

Product use : Sealant

SECTION 2 - HAZARDS IDENTIFICATION**Emergency Overview**

White. Non-sag gunnable paste. May cause slight irritation to the respiratory system. Leave area to breathe fresh air. Avoid further overexposure. If symptoms persist, get medical attention.

Acute Potential Health Effects/ Routes of Entry

Inhalation : May cause slight irritation to the respiratory system.
Eyes : Direct contact may cause moderate irritation.
Ingestion : May cause irritation to the mouth, throat and stomach.
Skin : May cause mild irritation.

Aggravated Medical Conditions

Pre-existing eye, skin, liver, kidney, and respiratory disorders may be aggravated by exposure.

Chronic Health Effects

Possible skin sensitization. As a by-product of curing up to 4% Methyl Ethyl Ketoxime (MEKO) may be released within product. Repeated and prolonged exposure to MEKO can cause allergic skin reaction and is a potential carcinogen (Group 2B) by IARC. It may adversely affect the blood, (methemoglobinemia and anemia). Inhalation of crystalline silica (quartz) can cause cancer based on animal data, and IARC concludes sufficient evidence in humans (Group 1). Prolonged and repeated overexposure to free crystalline silica dust above the TLV level may cause scarring of the lungs with cough and shortness of breath. A delayed lung injury, silicosis may result from breathing free silica. Organosilane may cause liver injury with fibrosis after repeated and prolonged overexposure. Fillers are encapsulated and not expected to be released from product under normal conditions of use.

Target Organs: Skin, Blood, Lung, Liver, Kidney

SECTION 3 - PRODUCT COMPOSITION

Chemical Name	CAS-No.	Weight %
Calcium Carbonate (Limestone)	1317-65-3	40.0 - 70.0
Silicone polymer	NJ TSRN# 51721300-5110P	30.0 - 60.0
Polydimethylsiloxane, trimethyl endcap	63148-62-9	7.0 - 13.0
Amorphous silica	7631-86-9	3.0 - 7.0
Organosilane	NJ TSRN# 51721300-5368P	1.0 - 5.0

SPECTREM 2 WHITE

Version 1.2

Print Date 02/09/2010

REVISION DATE: 09/01/2006

Titanium dioxide	13463-67-7	1.0 - 5.0
Crystalline Silica (Quartz)/ Silica Sand	14808-60-7	- <1.0

SECTION 4 - FIRST AID MEASURES

Get immediate medical attention for any significant overexposure.

Inhalation	:	Leave area to breathe fresh air. Avoid further overexposure. If symptoms persist, get medical attention.
Eye contact	:	Flush with water for at least 15 minutes while holding eye lids apart. Get medical attention immediately.
Skin contact	:	Clean area of contact thoroughly using soap and water. If irritation, rash or other disorders develop, get medical attention immediately.
Ingestion	:	Do not induce vomiting unless advised by a physician. Call nearest Poison Control Center or Physician immediately.

SECTION 5 - FIRE FIGHTING MEASURES

Flash point	:	Not available.
Method	:	Not available.
Burning rate	:	Non-flammable solid
Lower explosion limit	:	Not available.
Upper explosion limit	:	Not available.
Autoignition temperature	:	Not available.
Extinguishing media	:	If water fog is ineffective, use carbon dioxide, dry chemical or foam.
Hazardous combustion products	:	Smoke, fumes. Carbon monoxide and carbon dioxide can form. Silicon oxides and trace amounts of MEKO.
Protective equipment for firefighters	:	Use accepted fire fighting techniques. Wear full firefighting protective clothing, including self-contained breathing apparatus (SCBA).
Fire and explosion conditions	:	This product not expected to ignite under normal conditions of use.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Use appropriate protective equipment. Avoid contact with material. Keep out of water courses. Scrape up and transfer to appropriate container for disposal.

SECTION 7 - HANDLING AND STORAGE

Personal protective equipment must be worn during maintenance or repair of contaminated mixer, reactor, or other equipment. Do not use in confined or poorly ventilated areas. Prevent inhalation of vapor, ingestion, and contact with skin eyes and clothing. Keep container closed when not in use. Precautions also apply to emptied containers. Change soiled work clothes frequently. Clean hands thoroughly after handling. Store in sealed containers in a cool, dry, ventilated warehouse location.

SPECTREM 2 WHITE

Version 1.2

Print Date 02/09/2010

REVISION DATE: 09/01/2006

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION**Personal protection equipment**

- Respiratory protection : Wear appropriate, properly fitted NIOSH/MSHA approved respirator, as directed by the manufacturer, when the airborne contaminant level(s) exceed the exposure limits indicated on the MSDS.
- Hand protection : Use suitable impervious rubber or vinyl gloves and protective apparel to reduce exposure.
- Eye protection : Wear appropriate eye protection. Use safety glasses if eye contact is likely.
- Skin and body protection : Prevent contact with shoes and clothing.
- Protective measures : Use professional judgment in the selection, care, and use.
- Engineering measures : General ventilation is sufficient.

Exposure Limits

Chemical Name	CAS Number	Regulation	Limit	Form
Calcium Carbonate (Limestone)	1317-65-3	OSHA PEL: OSHA PEL: ACGIH TWA: ACGIH TWA: OSHA TWA: OSHA TWA:	5 mg/m3 15 mg/m3 3 mg/m3 10 mg/m3 15 mg/m3 5 mg/m3	Respirable fraction. Total dust. Respirable particles. Inhalable particles. Total dust. Respirable fraction.
Amorphous silica	7631-86-9	ACGIH TWA: ACGIH TWA: OSHA PEL: OSHA PEL: OSHA TWA:	3 mg/m3 10 mg/m3 15 mg/m3 5 mg/m3 0.8 mg/m3	Respirable particles. Inhalable particles. Total dust. Respirable fraction.
Titanium dioxide	13463-67-7	ACGIH TWA: OSHA PEL: OSHA TWA: OSHA TWA:	10 mg/m3 15 mg/m3 15 mg/m3 5 mg/m3	Total dust. Total dust. Respirable fraction.
Crystalline Silica (Quartz)/ Silica Sand	14808-60-7	ACGIH TWA: OSHA TWA: OSHA TWA: OSHA PEL: OSHA PEL:	0.05 mg/m3 0.1 mg/m3 0.3 mg/m3 15 mg/m3 5 mg/m3	Respirable fraction. Respirable. Total dust. Total dust. Respirable fraction.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

- Form : Non-sag gunnable paste
- Color : White
- Odor : Oxime
- pH : Not available.
- Vapour pressure : Not available.

SPECTREM 2 WHITE

Version 1.2

Print Date 02/09/2010

REVISION DATE: 09/01/2006

Vapor density	: Heavier than air
Melting point/range	: Not available.
Freezing point	: Not available.
Boiling point/range	: Not available.
Water solubility	: Negligible
Specific Gravity	: 1.34
% Volatile Weight	: 3 %

SECTION 10 - REACTIVITY / STABILITY

Substances to avoid	: Strong acids.Strong bases.Alcohols.Water or moisture and oxidizing agents.
Stability	: Material is stable under normal storage, handling, and use.
Hazardous polymerization	: Will not occur.

SECTION 11 - TOXICOLOGICAL INFORMATION

Amorphous silica, CAS-No.: 7631-86-9
Acute oral toxicity (LD-50 oral) 22,500 mg/kg (Rat)

SECTION 12 - ECOLOGICAL INFORMATION

No Data Available

SECTION 13 - DISPOSAL CONSIDERATIONS

Disposal Method : Waste not regulated under RCRA. Incinerate at EPA approved facility or dispose of waste in compliance with state and local regulations.

SECTION 14 - TRANSPORTATION / SHIPPING DATA

TDG / DOT Shipping Description:
NOT REGULATED

SECTION 15 - REGULATORY INFORMATION**North American Inventories:**

All components are listed or exempt from the TSCA inventory.
This product or its components are listed on, or exempt from the Canadian Domestic Substances List.

U.S. Federal Regulations:

SARA 313 Components	: None present or none present in regulated quantities.
SARA 311/312 Hazards	: Acute Health Hazard

SPECTREM 2 WHITE

Version 1.2

Print Date 02/09/2010

REVISION DATE: 09/01/2006

Chronic Health Hazard

OSHA Hazardous Components :

Calcium Carbonate (Limestone)	1317-65-3
Amorphous silica	7631-86-9
Titanium dioxide	13463-67-7
Crystalline Silica (Quartz)/ Silica Sand	14808-60-7

OSHA Status: Considered : Irritant
hazardous based on the Carcinogen
following criteria:

OSHA Flammability : Not Regulated

Regulatory VOC (less water and : 42 g/l
exempt solvent)

VOC Method 310 : 3 %

Chemical is listed as an IARC, NTP, OSHA, or ACGIH Carcinogen:

Crystalline Silica (Quartz)/ Silica Sand 14808-60-7

U.S. State Regulations:

MASS RTK Components	: Calcium Carbonate (Limestone)	1317-65-3
	Amorphous silica	7631-86-9
	Titanium dioxide	13463-67-7
Penn RTK Components	: Calcium Carbonate (Limestone)	1317-65-3
	Silicone polymer	NJ TSRN# 51721300-5110P
	Polydimethylsiloxane, trimethyl endcap	63148-62-9
	Amorphous silica	7631-86-9
	Titanium dioxide	13463-67-7
NJ RTK Components	: Calcium Carbonate (Limestone)	1317-65-3
	Silicone polymer	NJ TSRN# 51721300-5110P
	Polydimethylsiloxane, trimethyl endcap	63148-62-9
	Amorphous silica	7631-86-9
	Organosilane	NJ TSRN# 51721300-5368P
	Crystalline Silica (Quartz)/ Silica Sand	14808-60-7

Chemicals known to the State of California to cause cancer birth defects and/or other reproductive harm:

14808-60-7 Crystalline Silica (Quartz)/ Silica Sand
64-17-5 Ethyl alcohol

SECTION 16 - OTHER INFORMATION**HMIS Rating :**

Health	2
Flammability	1
Reactivity	0
PPE	

0 = Minimum
1 = Slight
2 = Moderate
3 = Serious
4 = Severe

SPECTREM 2 WHITE

Version 1.2

Print Date 02/09/2010

REVISION DATE: 09/01/2006

Further information:

For Industrial Use Only. Keep out of Reach of Children. The hazard information herein is offered solely for the consideration of the user, subject to their own investigation of compliance with applicable regulations, including the safe use of the product under every foreseeable condition.

Prepared by: Rich Mikol

Legend

ACGIH - American Conference of Governmental Hygienists

CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act

DOT - Department of Transportation

DSL - Domestic Substance List

EPA - Environmental Protection Agency

HMIS - Hazardous Materials Information System

IARC - International Agency for Research on Cancer

MSHA - Mine Safety Health Administration

NDSL - Non-Domestic Substance List

NIOSH - National Institute for Occupational Safety and Health

NTP - National Toxicology Program

OSHA - Occupational Safety and Health Administration

PEL - Permissible Exposure Limit

RCRA - Resource Conservation and Recovery Act

RTK - Right To Know

SARA - Superfund Amendments and Reauthorization Act

STEL - Short Term Exposure Limit

TLV - Threshold Limit Value

TSCA - Toxic Substances Control Act

TWA - Time Weighted Average

V - Volume

VOC - Volatile Organic Compound

WHMIS - Workplace Hazardous Materials Information System

TREMSTOP ACRYLIC RUST RED 17L PAIL

Version 2.0

Print Date 05/16/2013

REVISION DATE: 07/08/2012

SECTION 1 - PRODUCT IDENTIFICATION

Trade name : TREMSTOP ACRYLIC RUST RED 17L PAIL
Product code : 901874 805

COMPANY : Tremco Incorporated
3735 Green Road
Cleveland, OH 44122

Telephone : (216) 292-5000 8:30 - 5:00 EST
Emergency Phone: : (216) 765-6727 8:30 - 5:00 EST
After Hours: Chemtrec 1-800-424-9300

Product use : Sealant

SECTION 2 - HAZARDS IDENTIFICATION**Emergency Overview**

Rust Red. Non-sag gunnable paste. May cause slight irritation to the respiratory system. Leave area to breathe fresh air. Avoid further overexposure. If symptoms persist, get medical attention.

Acute Potential Health Effects/ Routes of Entry

Inhalation : May cause slight irritation to the respiratory system.
Eyes : Slightly irritating.
Ingestion : May cause irritation to the mouth, throat and stomach.
Skin : Irritant effect may be delayed.

Aggravated Medical Conditions

Pre-existing eye, skin and respiratory disorders may be aggravated by exposure.

Chronic Health Effects

Long term overexposure to propylene glycol caused liver abnormalities, kidney damage in laboratory animals. Repeated excessive ingestion may cause central nervous system effects. Fillers are encapsulated and not expected to be released from product under normal conditions of use.

SECTION 3 - PRODUCT COMPOSITION

Chemical Name	CAS-No.	Weight %
Acrylic polymer	NJ TSRN# 51721300-5277P	40.0 - 70.0
Water	7732-18-5	30.0 - 60.0
White mineral oil	8042-47-5	7.0 - 13.0
Amorphous silica	7631-86-9	1.0 - 5.0
Propylene glycol	57-55-6	1.0 - 5.0
Ammonium hydroxide	1336-21-6	- <1.0
Zinc oxide	1314-13-2	- <1.0
Chlorothalonil	1897-45-6	- <1.0
Formaldehyde	50-00-0	- <0.1

TREMSTOP ACRYLIC RUST RED 17L PAIL

Version 2.0

Print Date 05/16/2013

REVISION DATE: 07/08/2012

SECTION 4 - FIRST AID MEASURES

Get immediate medical attention for any significant overexposure.

- Inhalation : Leave area to breathe fresh air. Avoid further overexposure. If symptoms persist, get medical attention.
- Eye contact : Flush with water for 15 minutes. If irritation persists, get medical attention.
- Skin contact : Wash with water. If irritation, rash or other disorders develop, get medical attention immediately.
- Ingestion : Do not induce vomiting unless advised by a physician. Call nearest Poison Control Center or Physician immediately.

SECTION 5 - FIRE FIGHTING MEASURES

- Flash point : Not available.
- Method : Not available.
- Burning rate : Non-flammable solid
- Lower explosion limit : Not available.
- Upper explosion limit : Not available.
- Autoignition temperature : Not available.
- Extinguishing media : This product is not expected to burn under normal conditions of use. Use that which is appropriate to the surroundings.
- Hazardous combustion products : Smoke, fumes.
- Protective equipment for firefighters : Not applicable. Product is not expected to burn.
- Fire and explosion conditions : This product not expected to ignite under normal conditions of use.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Use appropriate protective equipment. Avoid contact with material. Scrape up and transfer to appropriate container for disposal. Keep out of water courses.

SECTION 7 - HANDLING AND STORAGE

Prevent inhalation of vapor, ingestion, and contact with skin eyes and clothing. Keep container closed when not in use. Precautions also apply to emptied containers. Do not use in confined or poorly ventilated areas. Store in sealed containers in a dry, ventilated warehouse location above freezing.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION**Personal protection equipment**

TREMSTOP ACRYLIC RUST RED 17L PAIL

Version 2.0

Print Date 05/16/2013

REVISION DATE: 07/08/2012

- Respiratory protection : Not required under normal conditions of use.
- Hand protection : Protect hands with impervious gloves.
- Eye protection : Use safety glasses if eye contact is likely.
- Protective measures : Use professional judgment in the selection, care, and use. Other equipment not normally required.
- Engineering measures : General ventilation is sufficient. Use local exhaust when the general ventilation is inadequate.

Exposure Limits

Chemical Name	CAS Number	Regulation	Limit	Form
Amorphous silica	7631-86-9	ACGIH TWA: ACGIH TWA: OSHA PEL: OSHA PEL: OSHA TWA:	3 mg/m3 10 mg/m3 15 mg/m3 5 mg/m3 0.8 mg/m3	Respirable particles. Inhalable particles. Total dust. Respirable fraction.
Ammonium hydroxide	1336-21-6	ACGIH TWA: ACGIH STEL: OSHA PEL:	25 ppm 35 ppm 35 mg/m3	
Zinc oxide	1314-13-2	ACGIH TWA: ACGIH STEL: OSHA PEL: OSHA PEL: OSHA PEL: OSHA TWA: OSHA TWA:	2 mg/m3 10 mg/m3 5 mg/m3 5 mg/m3 15 mg/m3 15 mg/m3 5 mg/m3	Respirable fraction. Respirable fraction. Fume. Respirable fraction. Total dust. Total dust. Respirable fraction.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

- Form : Non-sag gunnable paste
- Color : Rust Red
- Odor : Mild Glycol Acrylate
- pH : Not available.
- Vapour pressure : Not available.
- Vapor density : Heavier than air
- Melting point/range : < 32 °C, < 90 °F
- Freezing point : Not available.
- Boiling point/range : Not available.
- Water solubility : Miscible
- Specific Gravity : 1.04
- % Volatile Weight : 35 %

TREMSTOP ACRYLIC RUST RED 17L PAIL

Version 2.0

Print Date 05/16/2013

REVISION DATE: 07/08/2012

SECTION 10 - REACTIVITY / STABILITY

Substances to avoid : Oxidizing agents.Strong acids.Strong bases.

SECTION 11 - TOXICOLOGICAL INFORMATION

Amorphous silica, CAS-No.: 7631-86-9

Acute oral toxicity (LD-50 oral)

22,500 mg/kg (Rat) 15,000 mg/kg (Mouse)

Propylene glycol, CAS-No.: 57-55-6

Acute oral toxicity (LD-50 oral)

30,000 mg/kg (Rat) 18,000 mg/kg (Rabbit) 19,000 mg/kg
(Dog) 23,900 - 31,800 mg/kg (Mouse) 18,400 - 196,000
mg/kg (Guinea pig)

Ammonium hydroxide, CAS-No.: 1336-21-6

Acute oral toxicity (LD-50 oral)

350 mg/kg (Rat)

Zinc oxide, CAS-No.: 1314-13-2

Acute oral toxicity (LD-50 oral)

7,950 mg/kg (Mouse) 7,950 mg/kg (Mouse)

Chlorothalonil, CAS-No.: 1897-45-6

Acute oral toxicity (LD-50 oral)

10,000 mg/kg (Rat)

Acute dermal toxicity (LD-50 dermal)

10,000 mg/kg (Albino rat)

Formaldehyde, CAS-No.: 50-00-0

Acute oral toxicity (LD-50 oral)

800 mg/kg (Rat) 260 mg/kg (Guinea pig) 100 mg/kg (Rat)
42 mg/kg (Mouse)

Acute inhalation toxicity (LC-50)

0.82 mg/l for 30 min (Rat) 0.48 mg/l for 4 h (Rat) 0.414
mg/l for 4 h (Mouse) 0.4 mg/l for 2 h (Mouse)**SECTION 12 - ECOLOGICAL INFORMATION**

No Data Available

SECTION 13 - DISPOSAL CONSIDERATIONSDisposal Method : Waste not regulated under RCRA. Incinerate at EPA approved facility or dispose of
waste in compliance with state and local regulations.**SECTION 14 - TRANSPORTATION / SHIPPING DATA****CFR / DOT:**

Not Regulated

TDG:

Not Regulated

TREMSTOP ACRYLIC RUST RED 17L PAIL

Version 2.0

Print Date 05/16/2013

REVISION DATE: 07/08/2012

IMDG:

Not Regulated

SECTION 15 - REGULATORY INFORMATION**North American Inventories:**

All components are listed or exempt from the TSCA inventory.

This product or its components are listed on, or exempt from the Canadian Domestic Substances List.

U.S. Federal Regulations:

SARA 313 Components : Chlorothalonil 1897-45-6

SARA 311/312 Hazards : Acute Health Hazard

OSHA Hazardous Components :

Amorphous silica 7631-86-9

Ammonium hydroxide 1336-21-6

Zinc oxide 1314-13-2

Chlorothalonil 1897-45-6

Formaldehyde 50-00-0

OSHA Status: Considered : Irritant
hazardous based on the
following criteria:

OSHA Flammability : Not Regulated

Regulatory VOC (less water and : 35 g/l
exempt solvent)

VOC Method 310 : 1 %

U.S. State Regulations:MASS RTK Components : Amorphous silica 7631-86-9
Formaldehyde 50-00-0Penn RTK Components : Acrylic polymer NJ TSRN# 51721300-5277P
Water 7732-18-5
White mineral oil 8042-47-5
Amorphous silica 7631-86-9
Propylene glycol 57-55-6NJ RTK Components : Acrylic polymer NJ TSRN# 51721300-5277P
Water 7732-18-5
White mineral oil 8042-47-5
Amorphous silica 7631-86-9
Propylene glycol 57-55-6

Components under California Proposition 65:

TREMSTOP ACRYLIC RUST RED 17L PAIL

Version 2.0

Print Date 05/16/2013

REVISION DATE: 07/08/2012

WARNING! Contains chemicals known to the State of California to cause cancer, birth defects and/or other reproductive harm

SECTION 16 - OTHER INFORMATION**HMIS Rating :**

Health	1
Flammability	0
Reactivity	0
PPE	

0 = Minimum
1 = Slight
2 = Moderate
3 = Serious
4 = Severe

Further information:

For Industrial Use Only. Keep out of Reach of Children. The hazard information herein is offered solely for the consideration of the user, subject to their own investigation of compliance with applicable regulations, including the safe use of the product under every foreseeable condition.

Prepared by: Rich Mikol**Legend**

ACGIH - American Conference of Governmental Hygienists
CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act
DOT - Department of Transportation
DSL - Domestic Substance List
EPA - Environmental Protection Agency
HMIS - Hazardous Materials Information System
IARC - International Agency for Research on Cancer
MSHA - Mine Safety Health Administration
NDSL - Non-Domestic Substance List
NIOSH - National Institute for Occupational Safety and Health
NTP - National Toxicology Program
OSHA - Occupational Safety and Health Administration

PEL - Permissible Exposure Limit
RCRA - Resource Conservation and Recovery Act
RTK - Right To Know
SARA - Superfund Amendments and Reauthorization Act
STEL - Short Term Exposure Limit
TLV - Threshold Limit Value
TSCA - Toxic Substances Control Act
TWA - Time Weighted Average
V - Volume
VOC - Volatile Organic Compound
WHMIS - Workplace Hazardous Materials Information System

MATERIAL SAFETY DATA SHEET**SECTION 1 - IDENTIFICATION**

Product identifier : **Trim-Tex 847 Adhesive**

Product Code(s) : None reported.

Product Use : Adhesive

Chemical Family : Mixture

Supplier's name and address:
TRIM-TEX, Inc.
3700 W. Pratt Avenue
Lincolnwood, IL, USA
60712

Manufacturer's name and address:
Refer to Supplier

Information Telephone # : 847-679-3000 (8 AM - 4:30 PM, CST, Monday-Friday)

24 Hr. Emergency Tel # : Chemtrec 1-800-424-9300 (Within Continental U.S.); Chemtrec 703-527-3887 (Outside U.S.).

SECTION 2 - HAZARDS IDENTIFICATION

Classification : This material is classified as hazardous under OSHA regulations (29CFR 1910.1200). Hazardous classification:
Compressed gas
Flammable aerosol
Acute Health Hazard
Chronic Health Hazard

This product is a WHMIS Controlled Product. It meets one or more of the criteria for a controlled product provided in Part IV of the Canadian Controlled Products Regulations (CPR). WHMIS Classification:
Class A (Pressurized containers)
Class B5 (Flammable Aerosols)
Class D2B (Materials Causing Other Toxic Effects, Toxic Material)

Emergency Overview : Pink liquid aerosol. Odour of mint and acetone.
DANGER! Extremely flammable aerosol. Contents under pressure. Contents may catch fire. Container may explode if heated. Causes severe eye irritation. May be harmful if inhaled or swallowed. Inhalation may cause respiratory irritation and central nervous system depression. Prolonged or repeated skin contact may cause drying and irritation. Contains material which may be a teratogen. May cause liver and kidney damage.

POTENTIAL HEALTH EFFECTS:**Signs and symptoms of short-term (acute) exposure**

Inhalation : May be fatal if inhaled. May cause irritation to the nose, throat and upper respiratory tract. Symptoms may include pain, headache, nausea, vomiting, dizziness, drowsiness and other central nervous system effects. In extremely high concentrations, product may act as an asphyxiant and cause increased breathing and pulse rates, fatigue and unconsciousness.

Skin : May cause mild skin irritation. Symptoms may include redness, itching and swelling. If product is sprayed directly on skin, symptoms of frostbite may be experienced including numbness, prickling and itching.

Eyes : Direct contact causes severe irritation and possibly eye injury Symptoms may include redness, itching and swelling. If product is sprayed directly into the eyes, could cause freezing of the eye.

Ingestion : Not an expected route of entry under normal conditions of use. However, if the product is sprayed directly into mouth and large amounts of the liquid concentrate are swallowed, it may cause irritation to the mouth, throat and stomach. Symptoms may include abdominal pain, nausea, vomiting, diarrhea and collapse. Aspiration into the lungs during swallowing or subsequent vomiting may cause chemical pneumonitis, which can be fatal.

Effects of long-term (chronic) exposure

: Prolonged or repeated contact may cause drying, cracking and defatting of the skin. Prolonged overexposure may cause liver and kidney effects. Prolonged overexposure may cause peripheral neuropathy, damage to the nerves of the hands and feet.

Carcinogenic status : See TOXICOLOGICAL INFORMATION, Section 11.

Additional health hazards : Potential teratogen. See TOXICOLOGICAL INFORMATION, Section 11.

Potential environmental effects

: See ECOLOGICAL INFORMATION, Section 12.

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

<u>Ingredients</u>	<u>CAS #</u>	<u>Wt.%</u>
Acetone	67-64-1	15.00 - 40.00
Propane	74-98-6	10.00 - 30.00
Hexane	110-54-3	10.00 - 30.00
Dimethyl ether	115-10-6	7.00 - 13.00
Toluene	108-88-3	3.00 - 7.00
Alkanes, C12-14, iso-	68551-19-9	1.00 - 5.00

SECTION 4 - FIRST AID MEASURES

- Inhalation** : Immediately remove person to fresh air. If breathing is difficult, give oxygen by qualified medical personnel only. If breathing has stopped, give artificial respiration. Seek immediate medical attention/advice.
- Skin contact** : Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If irritation persists, seek prompt medical attention.
- Eye contact** : Immediately flush eyes with running water for at least 15 minutes. Seek immediate medical attention/advice.
- Ingestion** : Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Seek immediate medical attention/advice. If vomiting occurs spontaneously, keep victim's head lowered (forward) to reduce the risk of aspiration.
- Notes For Physician** : Treat symptomatically.

SECTION 5 - FIRE FIGHTING MEASURES**Fire hazards/conditions of flammability**

- : Extremely flammable aerosol. Will ignite when exposed to heat, flame and other sources of ignition. Vapours are heavier than air and collect in confined and low-lying areas. Vapour can travel considerable distance and flashback to a source of ignition. Closed containers may rupture if exposed to excess heat or flame due to a build-up of internal pressure. Product may float, and be re-ignited at the water's surface.

Flammability classification (OSHA 29 CFR 1910.1200)

- : Flammable aerosol.

Oxidizing properties

- : None known.

Explosion data: Sensitivity to mechanical impact / static discharge

- : Aerosols are sensitive to mechanical impact. May be sensitive to static discharge.

Suitable extinguishing media

- : Dry chemical, foam, carbon dioxide and water fog. Do not use water jet, as this may spread burning material.

Special fire-fighting procedures/equipment

- : Firefighters should wear proper protective equipment and self-contained breathing apparatus with full face piece operated in positive pressure mode. Move containers from fire area if safe to do so. Shield personnel to protect from venting or rupturing containers. Water spray may be useful in cooling equipment exposed to heat and flame. Avoid spreading burning liquid with water spray used for cooling purposes.

Hazardous combustion products

- : Carbon oxides; Hydrocarbons; Aldehydes; acetic acid; Sulphur oxides; Nitrogen oxides (NOx); irritating fumes and smoke.

NFPA Rating

- 0 - Minimal 1 - Slight 2 - Moderate 3 - Serious 4 - Severe
- : *Health:* 2 *Flammability:* 4 *Instability:* 0 *Special Hazards:* None

SECTION 6 - ACCIDENTAL RELEASE MEASURES

- Personal precautions** : Restrict access to area until completion of clean-up. Ensure clean-up is conducted by trained personnel only. All persons dealing with clean-up should wear the appropriate protective equipment including self-contained breathing apparatus. Refer to Section 8, EXPOSURE CONTROLS AND PERSONAL PROTECTION, for additional information on acceptable personal protective equipment.

- Environmental precautions** : Ensure spilled product does not enter drains, sewers, waterways, or confined spaces. If necessary, dike well ahead of the spill to prevent runoff into drains, sewers, or any natural waterway or drinking supply.
- Spill response/cleanup** : Remove all sources of ignition. Ventilate area of release. Stop the spill at source if it is safe to do so. Contain and absorb spilled liquid with non-combustible, inert absorbent material (e.g. sand), then place absorbent material into a container for later disposal (see Section 13). Do not flush into surface water or sanitary sewer system. Contaminated absorbent material may pose the same hazards as the spilled product. Notify the appropriate authorities as required.
- Prohibited materials** : None known.
- Special spill response procedures** : In case of a transportation accident, in the United States contact CHEMTREC at 1-800-424-9300 or International at 1-703-527-3887. If a spill/release in excess of the EPA reportable quantity is made into the environment, immediately notify the national response center in the United States (phone: 1-800-424-8002).
US CERCLA Reportable quantity (RQ): Acetone (5000 lbs / 2270 kg); Hexane(5000 lbs / 2270 kg); toluene (1000 lbs / 454 kg).

SECTION 7 - HANDLING AND STORAGE

- Safe Handling procedures** : Extremely flammable aerosol. Wear protective equipment during handling. Use in a well-ventilated area. Avoid breathing vapours or mists. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Keep away from heat and sources of ignition. Ground all equipment during handling. Use caution when opening cap. Do not puncture or incinerate containers. Keep containers tightly closed when not in use. Empty containers retain residue (liquid and/or vapour) and can be dangerous.
- Storage requirements** : Store in a cool, dry, well ventilated area. Keep away from incompatibles. Storage area should be clearly identified, clear of obstruction and accessible only to trained and authorized personnel. Inspect periodically for damage or leaks. No smoking in the area.
- Incompatible materials** : Strong oxidizing agents; Acids; Reducing agents.
- Special packaging materials** : Always keep in containers made of the same materials as the supply container.

SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Limits

<u>Ingredients</u>	<u>ACGIH TLV</u>		<u>OSHA PEL</u>	
	<u>TWA</u>	<u>STEL</u>	<u>PEL</u>	<u>STEL</u>
Acetone	500 ppm	750 ppm	1000 ppm	N/Av
Propane	1000 ppm	N/Av	1000 ppm	N/Av
Hexane	50 ppm	N/Av	500 ppm	N/Av
Dimethyl ether	1000ppm	N/Av	N/Av	N/Av
Toluene	50 ppm	N/Av	200 ppm	N/Av
Alkanes, C12-14, iso-	N/Av	N/Av	N/Av	N/Av

* Note: The ACGIH TLV listed above for the following ingredient(s) is an AIHA WEEL: Dimethyl ether.
The ACGIH TLV listed above for Propane is for 'Aliphatic hydrocarbon gases'.

Ventilation and engineering measures

- : Provide sufficient ventilation to keep vapour concentration below the given TLV and/or PEL.

Respiratory protection

- : Respiratory protection is required if the concentrations exceed the TLV. NIOSH-approved respirators are recommended. Seek advice from respiratory protection specialists.

Skin protection

- : Impervious gloves must be worn when using this product. Advice should be sought from glove suppliers.

Eye / face protection

- : Chemical splash goggles must be worn when handling this material.

Other protective equipment

- : Wear resistant clothing and boots. An eyewash station and safety shower should be made available in the immediate working area.

General hygiene considerations

- : Avoid breathing vapour or mist. Avoid contact with skin, eyes and clothing. Do not eat, drink, smoke or use cosmetics while working with this product. Upon completion of work, wash hands before eating, drinking, smoking or use of toilet facilities. Remove soiled clothing and wash it thoroughly before reuse.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical state	: Liquid aerosol.	Appearance	: Pink liquid aerosol.
Odour	: acetone-like	Odour threshold	: N/Av
pH	: N/Av		
Boiling point	: -41°C / -44°F (acetone) : - 244°C / 472°F (C12-C14 Isoalkanes)	Specific gravity	: 0.71
Melting/Freezing point	: N/Av	Coefficient of water/oil distribution	: N/Av
Vapour pressure (mmHg @ 20° C / 68° F)	: (approximately) 57 psig	Solubility in water	: negligible
Vapour density (Air = 1)	: Heavier than air.	Evaporation rate (n-Butyl acetate = 1)	: faster than butyl acetate
Volatile organic Compounds (VOC's)	: 52.4%	Volatiles (% by weight)	: 76.9
Flash point	: (propellant) -104°C / -156°F		
Flash point Method	: Pensky Martens Closed Cup	Auto-ignition temperature	: N/Av
Lower flammable limit (% by vol.)	: 1%	Upper flammable limit (% by vol.)	: 18%
Flame Projection Length	: 76 cm (30")	Flashback observed	: YES

Section 10: Stability And Reactivity

Stability and reactivity	: Stable under the recommended storage and handling conditions prescribed.
Hazardous polymerization	: Will not occur.
Conditions to avoid	: Keep this product away from heat, sparks, flame, and other sources of ignition (e.g. pilot lights, electric motors, static electricity). Exposure to sunlight.
Materials To Avoid And Incompatibility	: Incompatible materials (see Section 7).
Hazardous decomposition products	: None known, refer to hazardous combustion products in Section 5.

SECTION 11 - TOXICOLOGICAL INFORMATION

Target organs	: Eyes, skin, respiratory system, central nervous system, liver and kidneys.
Routes of exposure	: <i>Inhalation</i> : YES <i>Skin Absorption</i> : YES <i>Skin & Eyes</i> : YES <i>Ingestion</i> : YES
Toxicological data	: There is no available data for the product itself, only for the ingredients. See below for individual ingredient acute toxicity data.

<u>Ingredients</u>	<u>LC₅₀(4hr)</u>	<u>LD₅₀</u>	
	<u>inh, rat</u>	<u>(Oral, rat)</u>	<u>(Rabbit, dermal)</u>
Acetone	30000 ppm	5800mg/kg	>16000mg/kg
Propane	N/Av	N/Av	N/Av
Hexane	38500ppm	28700 mg/kg	N/Av
Dimethyl ether	164000ppm	N/Av	N/Av
Toluene	7350ppm	2600-7500mg/kg	12225mg/kg
Alkanes, C12-14, iso-	>5300mg/m ³	>5000mg/kg	>2000mg/kg

Carcinogenic status	: No components are listed as carcinogens by ACGIH, IARC, OSHA or NTP.
Reproductive effects	: Not expected to have other reproductive effects.
Teratogenicity	: Contains Toluene. Toluene may cause fetotoxic effects at doses which are not maternally toxic, based on animal data.
Mutagenicity	: Not expected to be mutagenic in humans.

Epidemiology	: Not available.
Sensitization to material	: Not expected to be a skin or respiratory sensitizer.
Synergistic materials	: Not available.
Irritancy	: May cause eye, skin and respiratory tract irritation.
other important hazards	: None known.
Conditions aggravated by overexposure	: Pre-existing skin, eye, respiratory and central nervous system disorders.




SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity	: No data is available on the product itself. The product should not be allowed to enter drains or water courses, or be deposited where it can affect ground or surface waters.
Mobility	: No data is available on the product itself.
Persistence	: No data is available on the product itself.
Bioaccumulation potential	: No data is available on the product itself.
Other Adverse Environmental effects	: No data is available on the product itself.

SECTION 13 - DISPOSAL CONSIDERATIONS

Handling for Disposal	: Handle waste according to recommendations in Section 7.
Methods of Disposal	: Dispose in accordance with all applicable federal, state, provincial and local regulations. Contact your local, state, provincial or federal environmental agency for specific rules.
RCRA	: If this product, as supplied, becomes a waste in the United States, it may meet the criteria of a hazardous waste as defined under RCRA, Title 40 CFR 261. It is the responsibility of the waste generator to determine the proper waste identification and disposal method. For disposal of unused or waste material, check with local, state and federal environmental agencies.

SECTION 14: TRANSPORT INFORMATION

Regulatory Information	UN Number	Shipping Name	Class	Packing Group	Label
49CFR/DOT	UN1950	Aerosols	2.1	none	
49CFR/DOT Additional information	For shipments by ground within the United States, the Limited Quantity exception may apply. For limited quantity shipping information, refer to 49 CFR Section 173.306. Domestic US ground shipments may be shipped as Consumer Commodity, ORM-D. Outer cartons must have the ORM-D designation. Refer to 49CFR section 173.306(h) for additional ORM-D information.				
ICAO/IATA	UN1950	Aerosols	2.1	none	
ICAO/IATA Additional information	N/Av				
TDG	UN1950	AEROSOLS	2.1	none	
TDG Additional information	This product may be shipped by ground within Canada as a Limited Quantity or Consumer Commodity. Under the TDGR, refer to Section 1.17 for additional exemption information, if shipping under this exemption. Note that in order to ship within Canada as a Consumer Commodity, product containers must be labelled according to the Consumer Chemical and Container Regulations (CCCR 2001).				

SECTION 15 - REGULATORY INFORMATION

US Federal Information:

OSHA: This material is classified as hazardous under OSHA regulations (29CFR 1910.1200).

TSCA: All listed ingredients appear on the Toxic Substances Control Act (TSCA) inventory.

CERCLA Reportable Quantity (RQ) (40 CFR 117.302): Acetone (5000 lbs / 2270 kg); Hexane (5000 lbs / 2270 kg); toluene (1000 lbs / 454 kg).

SARA TITLE III: Sec. 302, Extremely Hazardous Substances, 40 CFR 355: No Extremely Hazardous Substances are present in this material.

SARA TITLE III: Sec. 311 and 312, MSDS Requirements, 40 CFR 370 Hazard Classes: Fire Hazard; Immediate (Acute) health hazard; Chronic Health Hazard. Under SARA Sections 311 and 312, the EPA has established threshold quantities for the reporting of hazardous chemicals. The current thresholds are 500 pounds for the threshold planning quantity (TPQ), whichever is lower, for extremely hazardous substances and 10,000 pounds for all other hazardous chemicals.

SARA TITLE III: Sec. 313, Toxic Chemicals Notification, 40 CFR 372: This product may be subject to SARA notification requirements, since it contains Toxic Chemical constituents above their de minimus concentrations. This product contains: Hexane; toluene.

US State Right to Know Laws:

New Jersey Labeling Requirements: This product contains the following substances required to be disclosed on product labeling: acetone (CAS 67-64-1; 15-40%); Propane (CAS 74-98-6; 10-30%); Hexane (CAS 110-54-3; 10-30%); Dimethyl ether (CAS 115-10-6; 7-13%); toluene (CAS 108-88-3; 3-7%); C12-C14 Isoalkanes (CAS 68551-19-9; 1-5%)

California Proposition 65: This product contains a chemical known to the State of California to cause cancer and/or reproductive harm. This product contains: toluene.

International Information:

Canadian Environmental Protection Act (CEPA) information: All ingredients listed appear on the Domestic Substances List (DSL).

WHMIS information: This product is a WHMIS Controlled Product. It meets one or more of the criteria for a controlled product provided in Part IV of the Canadian Controlled Products Regulations (CPR). Refer to Section 2 for a WHMIS Classification for this product.


This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

SECTION 16 - OTHER INFORMATION

HMIS Rating : * - Chronic hazard 0 - Minimal 1 - Slight 2 - Moderate 3 - Serious 4 - Severe
*Health: *2 Flammability: 4 Reactivity: 1*

Legend : ACGIH: American Conference of Governmental Industrial Hygienists
 CA: California
 CAS: Chemical Abstract Services
 CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act of 1980
 CFR: Code of Federal Regulations
 DOT: Department of Transportation
 EPA: Environmental Protection Agency
 HMIS: Hazardous Materials Identification System
 HSDB: Hazardous Substances Data Bank
 IARC: International Agency for Research on Cancer
 Inh: Inhalation
 N/Ap: Not Applicable
 N/Av: Not Available
 NFPA: National Fire Protection Association
 NIOSH: National Institute of Occupational Safety and Health
 NTP: National Toxicology Program
 OSHA: Occupational Safety and Health Administration
 PEL: Permissible exposure limit
 RCRA: Resource Conservation and Recovery Act
 RTECS: Registry of Toxic Effects of Chemical Substances
 SARA: Superfund Amendments and Reauthorization Act
 STEL: Short Term Exposure Limit
 TDG: Canadian Transportation of Dangerous Goods Act & Regulations
 TLV: Threshold Limit Values
 TPQ: Threshold Planning Quantity
 TSCA: Toxic Substance Control Act
 TWA: Time Weighted Average
 WHMIS: Workplace Hazardous Materials Identification System

- References** :
1. ACGIH, Threshold Limit Values and Biological Exposure Indices
 2. International Agency for Research on Cancer Monographs
 3. Canadian Centre for Occupational Health and Safety, CCIInfoWeb databases (Chempendium, HSDB and RTECs).
 4. Material Safety Data Sheets from manufacturer.
 5. US EPA Title III List of Lists
 6. California Proposition 65 List

<u>Prepared for:</u> TRIM-TEX, Inc. 3700 W. Pratt Avenue Lincolnwood, IL, USA 60712 Telephone: 847-679-3000 Direct all enquiries to:TRIM-TEX.	
<u>Prepared by:</u> ICC The Compliance Center Inc. http://www.thecompliancecenter.com	 HAZARDOUS MATERIALS REGULATIONS SPECIALISTS

DISCLAIMER OF LIABILITY

This Material Safety Data Sheet was prepared by ICC The Compliance Center Inc using information provided by / obtained from Trim-Tex Inc and CCOHS' Web Information Service. The information in the Material Safety Data Sheet is offered for your consideration and guidance when exposed to this product. ICC The Compliance Center Inc and Trim-Tex Inc expressly disclaim all expressed or implied warranties and assume no responsibilities for the accuracy or completeness of the data contained herein. The data in this MSDS does not apply to use with any other product or in any other process.

This Material Safety Data Sheet may not be changed, or altered in any way without the expressed knowledge and permission of ICC The Compliance Center Inc and Trim-Tex Inc.

Preparation Date (mm/dd/yyyy)

: 10/04/2010

MSDS Revision Date (mm/dd/yyyy)

: 08/28/2013

Revision No.

: 3

Revision Information

: Scheduled update

END OF DOCUMENT



SAFETY DATA SHEET

1. Identification

Product identifier LATICRETE 1600 Unsanded Grout
Other means of identification Not available.
Recommended use Grout.
Recommended restrictions None known.
Manufacturer / Importer / Supplier / Distributor information
Company Name LATICRETE International
Address 1 Laticrete Park, N
Bethany, CT 06524
Telephone (203)-393-0010
Contact person Steve Fine
Website www.laticrete.com
Emergency phone number Call CHEMTREC day or night
USA/Canada - 1.800.424.9300
Mexico - 1.800.681.9531
Outside USA/Canada
1.703.527.3887

2. Hazard(s) identification

Physical hazards Not classified.
Health hazards Skin corrosion/irritation Category 2
Serious eye damage/eye irritation Category 1
Sensitization, skin Category 1
Specific target organ toxicity, single exposure Category 3 respiratory tract irritation
OSHA defined hazards Not classified.

Label elements



Signal word Danger

Hazard statement Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. May cause respiratory irritation.

Precautionary statement

Prevention

Do not breathe dust/fume. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection. Contaminated work clothing must not be allowed out of the workplace.

Response

If inhaled: Remove person to fresh air and keep comfortable for breathing. If on skin: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor.

Storage

Store in a well-ventilated place. Keep container tightly closed. Store locked up.

Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC) Not classified.

3. Composition/information on ingredients

Mixtures

Chemical name	CAS number	%
Portland Cement	65997-15-1	28 - 38
Calcium hydroxide	1305-62-0	2 - 3
Magnesium hydroxide	1309-42-8	2 - 2.25

Composition comments

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures**Inhalation**

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a physician if symptoms develop or persist.

Skin contact

Wash off with soap and plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.

Eye contact

Do not rub eyes. Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.

Ingestion

Rinse mouth. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed

Rash. Coughing. Irritant effects. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Prolonged exposure may cause chronic effects.

Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Symptoms may be delayed.

General information

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

5. Fire-fighting measures**Suitable extinguishing media**

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO₂).

Unsuitable extinguishing media

None known.

Specific hazards arising from the chemical

During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire-fighting equipment/instructions

In case of fire and/or explosion do not breathe fumes.

6. Accidental release measures**Personal precautions, protective equipment and emergency procedures**

Keep unnecessary personnel away. Keep upwind. Avoid formation of dust. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation.

Methods and materials for containment and cleaning up

Stop the flow of material, if this is without risk. Sweep or shovel up material and place in a clearly labeled container for waste. Collect dust using a vacuum cleaner. Following product recovery, flush area with water.

Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage**Precautions for safe handling**

Minimize dust generation and accumulation. Wear appropriate personal protective equipment. Do not breathe dust. Avoid contact with eyes, skin, and clothing. Provide adequate ventilation. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Keep container tightly closed. Store in a cool, dry place out of direct sunlight.

8. Exposure controls/personal protection**Occupational exposure limits****US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

Components	Type	Value	Form
Calcium hydroxide (CAS 1305-62-0)	PEL	5 mg/m ³	Respirable fraction.
Portland Cement (CAS 65997-15-1)	PEL	15 mg/m ³ 5 mg/m ³	Total dust. Respirable fraction.
		15 mg/m ³	Total dust.

US. OSHA Table Z-3 (29 CFR 1910.1000)

Components	Type	Value
Portland Cement (CAS 65997-15-1)	TWA	50 millions of particle

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Calcium hydroxide (CAS 1305-62-0)	TWA	5 mg/m3	
Portland Cement (CAS 65997-15-1)	TWA	1 mg/m3	Respirable fraction.

US NIOSH Pocket Guide to Chemical Hazards: Recommended exposure limit (REL)

Components	Type	Value	Form
Calcium hydroxide (CAS 1305-62-0)	TWA	5 mg/m3	
Portland Cement (CAS 65997-15-1)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection

Wear chemical-resistant, impervious gloves.

Other

Wear appropriate chemical resistant clothing.

Respiratory protection

Wear a dust mask if dust is generated above exposure limits.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.

9. Physical and chemical properties

Appearance

Physical state

Solid.

Form

Powder.

Color

Colored.

Odor

Not available.

Odor threshold

Not available.

pH

Not available.

Melting point/freezing point

Not available.

Initial boiling point and boiling range

Not available.

Flash point

Not flammable or combustible.

Evaporation rate

Not available.

Flammability (solid, gas)

Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower (%)

Not available.

Flammability limit - upper (%)

Not available.

Explosive limit - lower (%)

Not available.

Explosive limit - upper (%)

Not available.

Vapor pressure

Not available.

Vapor density

Not available.

Relative density

Not available.

Solubility(ies)

Insoluble

Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Ingestion	Swallowing may cause gastrointestinal irritation.
Inhalation	Dust irritates the respiratory system, and may cause coughing and difficulties in breathing.
Skin contact	Causes skin irritation. May cause an allergic skin reaction. Prolonged contact with wet cement/mixture may cause burns.
Eye contact	Causes serious eye damage. Prolonged contact with wet cement/mixture may cause burns.
Symptoms related to the physical, chemical and toxicological characteristics	Rash. Coughing. Irritant effects. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Prolonged exposure may cause chronic effects.

Information on toxicological effects

Acute toxicity	May cause respiratory irritation.
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Components	Species	Test Results
Calcium hydroxide (CAS 1305-62-0)		
Acute		
Oral		
LD50	Rat	7340 mg/kg
Skin corrosion/irritation	Causes skin irritation.	
Serious eye damage/eye irritation	Causes serious eye damage.	
Respiratory sensitization	No data available.	
Skin sensitization	May cause an allergic skin reaction.	
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.	
Carcinogenicity	Not classified.	
Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.	
Specific target organ toxicity - single exposure	May cause respiratory irritation.	
Specific target organ toxicity - repeated exposure	Not classified.	
Aspiration hazard	Due to the physical form of the product it is not an aspiration hazard.	
Chronic effects	Frequent inhalation of dust over a long period of time increases the risk of developing lung diseases.	
Further information	No other specific acute or chronic health impact noted.	

12. Ecological information

Ecotoxicity	Not expected to be harmful to aquatic organisms.
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Components	Species	Test Results
Calcium hydroxide (CAS 1305-62-0)		
Aquatic		
Fish	LC50 Zambezi barbel (Clarias gariepinus)	33.8844 mg/l, 96 hours

Persistence and degradability	No data is available on the degradability of this product.
Bioaccumulative potential	No data available for this product.
Mobility in soil	The product is not mobile in soil.
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions	Dispose of contents/container in accordance with local/regional/national/international regulations. Do not contaminate ponds, waterways or ditches with chemical or used container.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT

Not regulated as a hazardous material by DOT.

IATA

Not regulated as a dangerous good.

IMDG

Not regulated as a dangerous good.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	This substance/mixture is not intended to be transported in bulk.
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15. Regulatory information

US federal regulations	This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
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TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories	Immediate Hazard - Yes Delayed Hazard - Yes Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No
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SARA 302 Extremely hazardous substance	No
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SARA 311/312 Hazardous chemical	Yes
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SARA 313 (TRI reporting)	Not regulated.
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Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA)	Not regulated.
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Food and Drug Administration (FDA)	Not regulated.
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US state regulations	California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.
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US. Massachusetts RTK - Substance List

Calcium hydroxide (CAS 1305-62-0)
Portland Cement (CAS 65997-15-1)

US. New Jersey Worker and Community Right-to-Know Act

Not regulated.

US. Pennsylvania RTK - Hazardous Substances

Calcium hydroxide (CAS 1305-62-0)
Portland Cement (CAS 65997-15-1)

US. Rhode Island RTK

Not regulated.

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Not listed.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

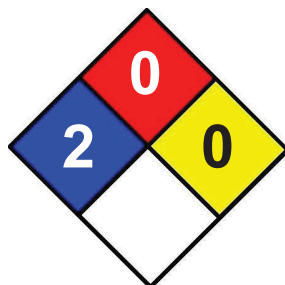
16. Other information, including date of preparation or last revision

Issue date 05-December-2013

Revision date -

Version # 01

NFPA Ratings

**References**

HSDB® - Hazardous Substances Data Bank
Registry of Toxic Effects of Chemical Substances (RTECS)

Disclaimer

The information in this (M)SDS was obtained from sources which we believe are reliable but cannot guarantee. Additionally, your use of this information is beyond our control and may be beyond our knowledge. Therefore, the information is provided without any representation or warranty express or implied.

Material Safety Data Sheet

Revised MAY 2002

191-100

Section 1 – Product Identification and Uses

PRODUCT IDENTIFIER <i>Studio and Brush cleaner</i>		PRODUCT IDENTIFICATION NUMBER (PIN)	
PRODUCT USE <i>Turpentine substitute for cleaning artist brushes.</i>			
MANUFACTURER'S NAME <i>Demco Manufacturing Inc.</i>		SUPPLIER'S NAME <i>Sax Arts & Crafts</i>	
STREET ADDRESS <i>2 Waterman Street</i>		STREET ADDRESS <i>2405 S. Calhoun Rd.</i>	
CITY <i>St.Lambert</i>	PROVINCE <i>Québec</i>	CITY <i>New Berlin</i>	STATE <i>Wisconsin</i>
POSTAL CODE <i>J4P 1R8</i>	EMERGENCY TELEPHONE NO <i>(450) 672-9931</i>	ZIP CODE <i>53151</i>	EMERGENCY TELEPHONE NO <i>(262) 784-6880</i>

Section 2 – Ingredient Information

HAZARDOUS INGREDIENTS	% by wt.	CAS NUMBER	LD ₅₀ OF INGREDIENT (SPECIFY SPECIES AND ROUTE)	LC ₅₀ OF INGREDIENT (SPECIFY SPECIES)
<i>Nonlyphenoxy Poly(ethyleneoxy)ethanol</i>	<i>25</i>	<i>68412-54-4</i>	<i>3000 gm/kg RAT/ORAL</i>	<i>Not available</i>

No toxic chemical(s) subject to the reporting requirements of section 313 of Title III and of 40 CFR 372 are present.

CEPA STATUS: All of the ingredients of this product are listed on the Domestic Substance List (DSL).

U.S.A. TSCA STATUS: All functional components of this product are listed on the TSCA inventory.

Section 3 – Physical Data

PHYSICAL STATE <i>Liquid</i>	ODOUR AND APPEARANCE <i>Mild odour, water-white</i>		ODOUR THRESHOLD (PPM) <i>N/A</i>	
VAPOUR PRESSURE (mm Hg) <i>No data</i>	VAPOUR DENSITY (AIR=1) <i>N/A</i>	EVAPORATION RATE (<i>n</i> -butyl acetate = 1) <i>N/A</i>	BOILING POINT [C] <i>93.3 °C (200 °F)</i>	FREEZING POINT [C] <i>-4 °C (24.8 °F)</i>
PH <i>N/A</i>	SPECIFIC GRAVITY <i>1.05</i>	COEFF WATER/OIL DIST <i>N/A</i>		

Section 4 – Fire and Explosion Data

FLAMMABILITY YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> IF YES UNDER WHICH CONDITIONS?		
MEANS OF EXTINCTION N/A		
FLASHPOINT [C] AND METHOD	UPPER FLAMMABLE LIMIT (% BY VOLUME) N/A	LOWER FLAMMABLE LIMIT (% BY VOLUME) N/A
AUTOIGNITION TEMPERATURE [C] N/A	HAZARDOUS COMBUSTION PRODUCTS N/A	
UNUSUAL FIRE AND EXPLOSION HAZARDS No special requirements. Container may burn and leak in heat of fire.		

Section 5 – Reactivity Data

CHEMICAL STABILITY YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> IF NO UNDER WHICH CONDITIONS?				
INCOMPATIBILITY WITH OTHER SUBSTANCES YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> IF SO, WHICH ONES?				
REACTIVITY, AND UNDER WHAT CONDITIONS <i>None reasonably foreseen</i>				
HAZARDOUS POLYMERIZATION <i>will not occur</i>				
HAZARDOUS DECOMPOSITION PRODUCTS <i>Oxides of carbon (CO, CO₂)</i>				

Section 6 – Toxicological Properties

ROUTE OF ENTRY SKIN CONTACT <input checked="" type="checkbox"/> SKIN ABSORPTION <input type="checkbox"/> EYE CONTACT <input checked="" type="checkbox"/> INHALATION <input type="checkbox"/> INGESTION <input checked="" type="checkbox"/>				
EFFECTS OF ACUTE EXPOSURE TO PRODUCT <i>May cause mild eye irritation. Prolonged or repeated skin contact may cause mild skin irritation. Ingestion may cause nausea and abdominal discomfort.</i>				
EFFECTS OF CHRONIC EXPOSURE TO PRODUCT <i>Prolonged or repeated skin contact may cause skin irritation.</i>				
MEDICAL CONDITIONS GENERALLY RECOGNIZED AS BEING AGGRAVATED BY EXPOSURE <i>Persons with pre-existing skin disorders may be more susceptible to irritating effects.</i>				
EXPOSURE LIMITS <i>N/A</i>	IRRITANCY OF PRODUCT <i>N/A</i>	SENSITIZATION TO PRODUCT <i>N/A</i>	CARCINOGENICITY <i>N/A</i>	
TERATOGENICITY <i>N/A</i>	REPRODUCTIVE TOXICITY <i>N/A</i>	MUTAGENICITY <i>N/A</i>	SYNERGISTIC PRODUCTS <i>N/A</i>	

Material Safety Data Sheet

Section 7 – Preventive Measures

PERSONAL PROTECTIVE EQUIPMENT

PROTECTIVE GLOVES (SPECIFY)

Recommended for prolonged exposure to skin, otherwise not needed.

RESPIRATORY PROTECTION (SPECIFY)

No special requirements under normal conditions.

EYE PROTECTION(SPECIFY)

Recommended to protect against splashes.

SPECIAL FOOTWEAR(SPECIFY)

Not needed

OTHER PROTECTIVECLOTHING (SPECIFY)

None needed

ENGINEERING CONTROLS (SPECIFY, EG VENTILATION, ENCLOSED PROCESS)

General room ventilation adequate.

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Floors may be slippery. Care should be exercised to avoid falls. May be toxic to aquatic life. Do not let spilled or leaking material enter watercourse. Contains ammonia. Absorb with oil-dry or similar inert material. Sweep or scrape up and containerize. Rinse affected area thoroughly with water.

WASTE DISPOSAL METHOD

No special method. Observe all applicable federal, provincial and state regulations and local or municipal ordinances regarding disposal of non-hazardous materials.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE

Avoid contact with eyes. Avoid prolonged contact with skin. Wash thoroughly after handling. Do not store, use and/or consume foods, beverages, tobacco products or cosmetics in areas where this material is stored. Wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics or using the toilet. Avoid breathing vapours or mists. In cold weather, this product may stratify and freeze. This does not damage the product.

STORAGE REQUIREMENTS

Store in a cool, dry place with adequate ventilation. Avoid extremes of heat and cold.

SPECIAL SHIPPING INFORMATION

None needed

REGULATORY INFORMATION

WHIS CLASSIFICATION - Non-regulated

All ingredients of this product are listed or are excluded from listing on the U.S. Toxic Substance Control Act (TSCA) Chemical Substance Inventory.

All ingredients in this product comply with the New Substances Notification requirements under the Canadian Environmental Act (CEPA).

This product is not subject to the reporting requirements under California's Proposition 65. These ingredients from Section 2 are subject to the following reporting requirements:

PA - The Pennsylvania Hazardous Substance List

NJ - The New Jersey Right to Know Hazardous Substance List

MA - The Massachusetts Hazardous Substance List

Section 8 – First Aid Measures

SPECIFIC MEASURES:

Inhalation: *Remove to fresh air. If breathing is affected, get medical attention.*

Eye Contact: *Flush immediately with large amounts of water for at least 15 minutes. If irritation develops, get medical attention.*

Skin Contact: *Wash contaminated area with soap and water. If irritation develops, get medical attention..*

Ingestion: *Immediately drink 1 or 2 glasses of water or milk to dilute. If discomfort persists, seek medical attention. Treat symptomatically. Do not administer anything by mouth to an unconscious person.*

Section 9 – Preparation Date of MSDS

PREPARED BY (GROUP DEPARTMENT, ETC)

Alex Dear, laboratory

PHONE NUMBER

(450) 672-9931

DATE

May 06, 2002

Demco Manufacturing Inc. makes no express or implied warranties, guarantees or representations regarding the product or the information herein, including but not limited to any implied warranty of merchantability or fitness for use. Demco Manufacturing Inc. shall not be liable for any personal injury, property or other damages of any nature, whether compensatory, consequential, exemplary, or otherwise, resulting from any publication, use or reliance upon the information herein.

Sargent Art^{inc.}

100 East Diamond Ave.
Hazleton, Pennsylvania 18201-5241
800-424-3596
570-454-3596 • Fax: 570-459-1752



Material Safety Data Sheet

May be used to comply with

OSHA's Hazard Communication Standard,
29 CFR 1910.1200. Standard must be
consulted for specific requirements.

Rcvd Feb 2004

U.S. Department of Labor

Occupational Safety and Health
Administration

(Non-Mandatory Form)
Form Approved
OMB No. 1218-0072

404581

404583

404584

404585

404586

404587

404588

404589

404591

404592

IDENTITY (As Used on Label and List)
SARGENT (WATER COLOR MAGIC)
LIQUID WATERCOLOR

Note: Blank spaces are not permitted. If any
item is not applicable, or no information is
available, the space must be marked to
indicate that.

Section I

Manufacturer's Name Sargent Art, Inc.	Emergency Telephone Number 570-454-3596
Address (Number, Street, City, State, and ZIP Code) 100 E Diamond Avenue Hazleton PA 18201	Telephone Number for Information 570-454-3596
	Date Prepared 7-26-2002
	Signature of Preparer (optional)

Section II - Hazard Ingredients/Identity Information

**Hazardous Components (Specific
Chemical Identity; Common Name(s))**

ALL CP/AP PRODUCTS ARE CERTIFIED BY A NATIONAL RECOGNIZED AUTHOR-
ITY ON TOXICOLOGY ASSOCIATED WITH A LEADING UNIVERSITY TO CONTAIN
NO KNOWN TOXIC MATERIALS IN SUFFICIENT QUANTITIES TO BE
INJURIOUS TO THE HUMAN BODY EVEN IF INGESTED.

CONFORMS TO ASTM-D 4236.

Section III - Physical/Chemical Characteristics

Boiling Point NOT APPLICABLE	Specific Gravity (H₂O = 1) N/A
Vapor Pressure (mm Hg.) N/A	Melting Point N/A
Vapor Density (AIR = 1) N/A	Evaporation Rate N/A (Butyl Acetate = 1)
Solubility In Water	Water Soluble - Water Dispersible
Appearance and Odor	Various Colors - Essentially Odorless

Section IV - Fire and Explosion Hazard Data

Flash Point (Method Used) N/A	Flammable Limits LEL UEL NONE NONE NONE
Extinguishing Media Special Fire Fighting Procedures	CARBON DIOXIDE, WATER, FOAM SELF-CONTAINED BREATHING APPARATUS
Unusual Fire and Explosion Hazards	NONE



100 East Diamond Ave.
Hazleton, Pennsylvania 18201-5241
800-424-3596
570-454-3596 • Fax: 570-459-1752

Section V - Reactivity Data

Stability	Unstable	Conditions to Avoid
	Stable X	None Known
Incompatibility (Materials to Avoid)	Strong oxidizers and acids	

Hazardous Decomposition or Byproducts

Hazardous Polymerization	May Occur	Conditions to Avoid
	Will Not Occur X	None Known

Section VI - Health Hazard Data

Route(s) of Entry: Inhalation?	Possible	Skin?	N/A	Ingestion?	Possible
Health Hazards (Acute and Chronic)					
This product is certified to contain no toxic or injurious to humans or to cause		materials in sufficient quantities to be acute or chronic health problems.			
Carcinogenicity:	NTP?	None	IARC Monographs?	N/A	OSHA
			Regulated?	No	
Signs and Symptoms of Exposure		None Known			
Medical Conditions					
Generally Aggravated by Exposure		None Known			
Emergency and First Aid Procedures		If ingested, do not induce vomiting, call physician.			

Section VII - Precautions for Safe Handling and Use

Steps to Be Taken in Case Material is Released or Spilled	Sweep into container and dispose of according to local regulations.
Waste Disposal Method	In accordance with local regulations.
Precautions to Be taken in Handling and Storing	Keep in cool, dry area.
Other Precautions	None Known

Section VIII - Control Measures

Respiratory Protection (Specify Type)	Not Required.		
Ventilation	Local Exhaust	Not Required	Special None
Mechanical (General)		Not Required	Other None
Protective Gloves		Not Required	Eye Protection Not Required
Other Protective Clothing or Equipment	Not Required		
Work/Hygienic Practices	Clean, safe work practices		

Recd Jan 2006

Material Safety Data Sheet

442139

SAX MATTE MEDIUM

Identity (Trade Name As Used On Label)

CHROMA INC

Manufacturer

205 BUCKY DRIVE

Address

LITITZ PA 17543

(717)626-8866

Phone Number (For Information)

(717)626-8866

Emergency Phone Number

Telex*

MSDS Number*

CAS Number*

08/05

Date Prepared

Prepared By*

Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.

SECTION 1 - MATERIAL IDENTIFICATION AND INFORMATION

COMPONENTS — Chemical Name & Common Names (Hazardous Components 1% or greater; Carcinogens 0.1% or greater)	%*	OSHA PEL	ACGIH TLV	OTHER LIMITS RECOMMENDED
PRODUCT IS A WATER-BASED, NON-TOXIC, NON-HAZARDOUS				
ACRYLIC MEDIUM IN LIQUID FORM. CERTIFIED NON-TOXIC BY				
(ART & CREATIVE MATERIALS INSTITUTE).				
1. ACRYLIC EMULSION				
2. WATER				
3. PROPYLENE GLYCOL				
4. COALESCENT (TEXANOL)				
5. PRESERVATIVE - NON HAZARDOUS AT LEVEL USED				
Non-Hazardous Ingredients				
TOTAL	100			

SECTION 2 - PHYSICAL / CHEMICAL CHARACTERISTICS

Boiling Point	215-275°F	Specific Gravity (H ₂ O = 1)	NOT KNOWN
Vapor Pressure (mm Hg and Temperature)	NOT KNOWN	Melting Point	NOT KNOWN
Vapor Density (Air = 1)	LIGHTER THAN AIR	Evaporation Rate (_____ = 1)	SLOWER THAN ETHER
Solubility in Water	TOTALLY SOLUBLE	Water Reactive	NOT KNOWN

Appearance and Odor MEDIUM VISCOSITY, TRANSLUCENT LIQUID, NO ODOR

SECTION 3 - FIRE AND EXPLOSION HAZARD DATA

Flash Point and Method Used	N/A	Auto-Ignition Temperature	N/A	Flammability Limits in Air % by Volume	N/A	LEL	UNKNOWN	UEL	UNKNOWN
Extinguisher Media	N/A								
Special Fire Fighting Procedures	N/A								

Unusual Fire and Explosion Hazards N/A

*Optional

SECTION 4 - REACTIVITY HAZARD DATA PAGE 2 - SAX MATTE MEDIUM**STABILITY**☒ Stable
☐ Unstable

Conditions

To Avoid N/A

Incompatibility
(Materials to Avoid) NONEHazardous
Decomposition Products NONE**HAZARDOUS POLYMERIZATION**☐ May Occur
☒ Will Not OccurConditions
To Avoid

N/A

SECTION 5 - HEALTH HAZARD DATA**PRIMARY ROUTES
OF ENTRY**☐ Inhalation☐ Skin Absorption☐ Ingestion☒ Not Hazardous**CARCINOGEN
LISTED IN**☐ NTP☐ IARC Monograph☐ OSHA☒ Not Listed**HEALTH HAZARDS**

Acute NONE

Chronic NONE

Signs and Symptoms
of Exposure NONEMedical Conditions
Generally Aggravated by Exposure NONE**EMERGENCY FIRST AID PROCEDURES** - Seek medical assistance for further treatment, observation and support if necessary.

Eye Contact

NONE

Skin Contact

NONE

Inhalation

NONE

Ingestion

NONE

SECTION 6 - CONTROL AND PROTECTIVE MEASURESRespiratory Protection
(Specify Type)

NONE NEEDED UNDER NORMAL CONDITIONS OF USE

Protective Gloves

NOT REQUIRED

Eye Protection

NOT REQUIRED

**VENTILATION
TO BE USED**☐ Local Exhaust

N/A

☐ Mechanical (general)

N/A

☐ Special

N/A

☐ Other (specify)

N/A

Other Protective
Clothing and Equipment

NOT REQUIRED

Hygienic Work
Practices

AS WITH ANY WATER-BASED PRODUCT

SECTION 7 - PRECAUTIONS FOR SAFE HANDLING AND USE / LEAK PROCEDURESSteps to be Taken If Material
Is Spilled Or ReleasedDIKE AND CONTAIN SPILL WITH INERT MATERIALS (SAND, SAWDUST, ETC.) AND
TRANSFER CONTENTS TO CONTAINERS FOR DISPOSAL.Waste Disposal
Methods

NORMAL DISPOSAL

Precautions to be Taken
in Handling and Storage

NO PARTICULAR PRECAUTIONS

Other Precautions and/or Special Hazards

NONE

NFPA

Rating* Health___ Flammability___ Reactivity___ Special___

HMIS

Rating* Health___ Flammability___ Reactivity___ Personal Protection___

*Optional

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Reorder No. 2217-2

Revd Oct 2005
SAFETY DATA SHEET

439232, 235, 238, 241, 244
439247, 250, 253, 256, 259
439262, 265, 268, 271, 274
439277, 280, 283, 286, 289
439292, 295, 298, 301

1 - IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Identification of the substance or preparation:

Name: Sax True Flow Acrylics M-vis : all colours.
Product code: STFALM.

Company/undertaking identification:

Registered company name: School Specialty Inc..
Address: W6316 Design Drive.WI 54942.Greenville..
Telephone: 888-388-3224. Fax:. Telex:.

Emergency telephone: 800-222-1222.

Association/Organisation: .

Use of the substance/preparation:

Paint & Varnish

2 - COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous substances present on their own:

(present in the preparation at a sufficient concentration to give it the toxicological characteristics it would have in a 100% pure state)

This preparation contains no hazardous substance in this category.

Other substances representing a hazard:

No known substance in this category present.

Substances present at a concentration below the minimum danger threshold:

No known substance in this category present.

Other substances with occupational exposure limits:

No known substance in this category present.

Other components:

Conforms to ASTM D-4236

3 - IDENTIFICATION OF HAZARDS

This product is not classed as flammable. Refer to the recommendations regarding the other products present on the site
This preparation is not classed as hazardous to health by directive 1999/45/EC.

Other data:

Packaging < 125 ml.

4 - FIRST AID MEASURES

As a general rule, in case of doubt or if symptoms persist, always call a doctor.
NEVER induce swallowing in an unconscious person.

5 - FIRE-FIGHTING MEASURES

Not relevant.

6 - ACCIDENTAL RELEASE MEASURES

Personal precautions:

Consult the safety measures listed under headings 7 and 8.

SAFETY DATA SHEET (91/155/EEC - 2001/58/EC - ISO 11014-1)
Version: N°2 (12/10/2005)
Name: Sax True Flow Acrylics M-vis : all colours - STFALM

Date: 14/10/2005 Page 2/3
Revision: N°1 (27/09/2005)
Company: School Specialty Inc.

Environmental precautions:

Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, diatomaceous earth in drums for waste disposal.

Prevent any material from entering drains or waterways.

Methods for cleaning up:

Clean preferably with a detergent, do not use solvents.

7 - HANDLING AND STORAGE

The regulations relating to storage premises apply to workshops where the product is handled.

Fire prevention:

Prevent access by unauthorised personnel.

8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

Use personal protection equipment as per Directive 89/686/EEC.

Technical measures:

Personnel shall wear regularly laundered overalls.

9 - PHYSICAL AND CHEMICAL PROPERTIES

General information:

Physical state: viscous liquid

Important health, safety and environmental information:

pH of the substance or preparation: slightly basic.

When a pH measure is possible, it has a value of: 8.50

Boiling point/boiling range: not relevant.

Flash point interval: not relevant.

vapour pressure: not specified.

Density: > 1

water solubility: Dilutable.

Other information:

melting point/melting range: not relevant.

Self-ignition temperature: not relevant.

Decomposition point/decomposition range : not relevant.

10 - STABILITY AND REACTIVITY

The preparation is stable at the handling and storage conditions recommended per § 7 of the safety data sheet,

11 - TOXICOLOGICAL INFORMATION

The preparation contains no substance classed as hazardous per directive 67/548/EEC.

12 - ECOLOGICAL INFORMATION

No ecological data on the product itself is available.

Other adverse effects:

Germany: WGK 2 (VwVwS vom 17/05/99, KBws)

13 - DISPOSAL CONSIDERATIONS

Do not pour into drains or waterways.

Waste:

Recycle or dispose of waste in compliance with current legislation, preferably via a certified collector or company.

Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

Soiled packaging:

Empty container completely. Keep label(s) on container.

Give to a certified disposal contractor.

Codes of wastes (Decision 2001/573/EC, Directive 75/442/EEC, Directive 91/689/EEC on hazardous waste) :

08 01 11 * waste paint and varnish containing organic solvents or other dangerous substances

14 - TRANSPORT INFORMATION

Exempt from transport classification and labelling.

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport (ADR 2005 - IMDG 2004 - ICAO/IATA 2005).

15 - STATUTORY INFORMATION

This preparation was classified in compliance with the directive known as <All preparations> 1999/45/EC and its adaptations
In addition directive 2004/73/EC with the 29° adaptation of directive 67/548/EEC (Hazardous substances) have been taken into account.

This preparation is not classed as hazardous to health by directive 1999/45/EC.

This product is not classed as flammable.

Packaging < 125 ml.

Particular provisions:

Germany: WGK 2 (VwVwS vom 17/05/99, KBws)

16 - OTHER INFORMATION

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.

The product must not be used for any purposes other than those specified under heading 1 without first obtaining written handling instructions.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

The information given on this safety data sheet must be regarded as a description of the safety requirements relating to our product and not a guarantee of its properties

Full text of risk phrases appearing in section 2:

Revd Dec 2004

MAYCO MSDS SHEET #3
Active Products

406312

SECTION 1: CHEMICAL PRODUCT AND COMPANY INFORMATION

Prepared: September 22, 2003
 Supersedes: All previous
 Manufacturer: MAYCO COLORS division of Coloramics, LLC
 4077 Weaver Court South
 Hilliard, Ohio 43026
 United States of America
 Distributor: USA _____ Local Phone _____
 EC _____ Local Phone _____
 Australia _____ Local Phone _____

IN CASE OF EMERGENCY PLEASE CONTACT YOUR LOCAL POISON
CONTROL CENTER

Prepared by: MSDS department
 Information Telephone Number: 614-876-1171

CERAMIC GLAZE(S) AND UNDERGLAZES AND MISCELLANEOUS.

Astro Gem Glazes AS-510, 512, 513, 515, 516, 518, 519, 520, 521, 523, 524, 527,
 531, 532, 534, 535, 539, 541, 545, 547, 548, 551
 One Stroke Colors OS-1, 2, 3, 4, 6, 8, 9, 17, 18, 21, 26, 29, 32, 34, 36, 38, 41, 43, 44,
 45, 46, 47, 48, 52, 54, 58, 59, 60, 61, 62, 63, 65, 66, 104, 105,
 132, 136, 137, 138, 140
 142, 143, 144, 147, 153
 Underglazes UG-1, 2, 3, 7, 8, 10, 11, 12, 15, 17, 18, 19, 21, 22, 24, 25, 26, 27,
 30, 31, 32, 33, 34, 35, 37, 38, 39, 41, 42, 43, 45, 46, 50, 51, 52,
 53, 56, 57, 58, 67, 68, 69, 70, 71, 72, 73, 75, 78, 80, 81, 82, 83,
 84, 85, 86, 87, 89, 90, 91, 92, 93, 94, 95, 97, 98, 100, 103, 104,
 105, 108, 109, 110, 111, 116, 119, 125, 127, 128, 130, 131,
 136, 141, 142, 144, 145, 146, 150, 178, 180, 181, 189, 191, 192,
 194, 195, 196, 198, 201, 202
 Pottery Coats PC-501 through PC-505
 Pottery Coat Stuccos PS-551 through PS-555
 Pottery Cascades PC-601 through PC-604
 Miscellaneous AC-306, AC-308
 Series 2000 Glazes *S-2101-2168 and S2170
 S-2560, 2561, 2562, 2564, 2565, 2566, 2574, 2577, 2578, 2579,
 2580, 2581, 2585
 S-2587, 2588, 2589, 2590, 2591, 2592, 2593
 *Excluding: S-2104, 2105, 2122, 2130, 2168, and 2586
 Series 2000 Mattes *S-2200, 2201, 2208, 2209, 2218, 2223, 2226, 2227, 2228, 2229,
 2230, 2231, 208, S-2232, 2233, 2234, 2235, 2236, 2237, 2239,
 *Excluding S-2224, S-2225,
 Stroke & Coat Series - All Stroke and Coat (SC's) except SC-23, 58, 59, 62, 24, 20, 4,
 67, 68, 50, SP-204, SD-304, SD-323 all SP series except SP-204
 Specstone Glazes S-2167, 2169, 2401, 2402, 2408, 2421, 2422, 2423, 2424, 2425,
 2427
 Crystalites S-2701 through S-2718 & S-2719, S-2722, S-2723
 Roll a Coat SC-210
 Elements EL-101 through EL-118

Chunky Elements EL-201 through EL-209
 Classic Crackles CC-500 through CC-507
 Clear Glaze S-2000, S-2101, SC-209
 Stoneware Like Glaze - SLG-02, 06, 17

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENTS	CAS	ACGIH	OSHA	TLV	PEL
Alumina Silicate	1332-58-7			NA	NA
Bentonite / Clay	1302-78-9			NA	NA
Water	7732-18-5			NA	NA

SECTION 3: HAZARDS IDENTIFICATION

Crystalline Silica may be present.

(OSHA PEL .1mg/m³)

Route(s) of Entry: Ingestion, absorption through the skin is negligible.

Inhalation only if sprayed.

Health Hazards (acute and chronic): Prolonged inhalation of silica, in excess of TLV, over an extended period of time may result in injury to the lungs.

SECTION 4: FIRST AID MEASURES

If Inhaled: Remove from exposure

If on skin: Wash skin with soap and water

If in eyes: Flush eyes with large quantities of water for at least 15 minutes. If irritation persists after washing, contact a physician.

If swallowed: Dilute by drinking water

SECTION 5: FIRE FIGHTING MEASURES

FIRE AND EXPLOSION HAZARD DATA

Flash Point (method used): N/A

LEL: N/A

UEL: N/A Flammable Limits: N/A

Extinguishing Media: None required, not combustible.

Special Fire Fighting Procedures: None

Unusual Fire and Explosion Hazards: None

SECTION 6: ACCIDENTAL RELEASE MEASURES

Steps to be taken in case material is released or spilled: Uncontaminated material may be recovered and re-used. If contaminated, scoop, vacuum, or wash into a receptacle for disposal.

Waste Disposal Method: Follow Federal or State and Local regulations for disposal.

Testing of the waste may be required to determine status under the hazardous waste regulations.

SECTION 7: HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING AND USE

Engineer Control - None

Work practices- Store away from feed and food. Do not smoke, eat or drink while handling.

Procedure / equipment- None

Procedure for leaks or spills: Uncontaminated material may be recovered and re-used. If contaminated, scoop, vacuum, or wash into a receptacle for disposal.

Waste Disposal Method: Follow Federal or State and Local regulations for disposal.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Use of the following protective measures are strongly recommended if the glazes are to be applied by spraying.

The Work/Hygienic Practices apply regardless of the method of application.

Respiratory Protection (Specify Type): Use a NIOSH approved dust and/or fume respirator as necessary.

Ventilation: Local Exhaust - for spraying

Protective Gloves: N/A

Eye Protection: for spraying

Other Protective Clothing or Equipment: Wear appropriate clean, protective clothing such as, but not limited to, overalls, smocks, and aprons. Work/Hygienic Practices: Food, beverages, and smoking materials should not be in the work area. Hygiene is very important. Wash thoroughly before eating, drinking, smoking, or applying cosmetics.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Various colors

Odor and odor threshold: Negligible

PH: Not available

Boiling Point: None

Vapor Pressure: NA

Vapor Density: NA

Melting Point: above 1000oF

Specific Gravity (H2O=1): 1.4 to 1.6

Flammable Limits: None

Explosive limits: None

Partition Coefficient: None

Oxidizing Properties: None

Solubility in Water: Negligible

Percent Volatile by Volume: None

Evaporation Rate: None

Freezing point: NA

Flash Point: None

Auto ignition temperature: None

SECTION 10: STABILITY AND REACTIVITY DATA

Incompatibility (material to avoid): Avoid fumes from firing by venting kiln area.

Stability: Stable (conditions to avoid: N/A)

Hazardous Decomposition or Byproducts: Not available

Hazardous Polymerization: Will not occur

Conditions to avoid: Fumes from firing in kiln. Inhalation of spray.

SECTION 11: TOXICOLOGICAL INFORMATION

Hazard to Human: None during normal use. Harmful if inhaled or swallowed.

DO NOT SPRAY APPLY

If glaze is spray applied the following warnings apply: Warning: Contains Quartz.

1. Possible cancer agent based on tests with laboratory animals.
2. Exposure may cause lung damage.
3. Keep out of reach of children; avoid inhalation.

This product contains chemicals known to the State of California to cause cancer.

Health Hazards (acute and chronic): Prolonged inhalation of silica, in excess of TLV, over an extended period of time may result in injury to the lungs.

Additional information: Frits are fused silica glass like substances. The bioavailability may be limited because of the physical nature of the frit.

SECTION 12: ECOLOGICAL INFORMATION

Mobility: Not Available

Persistence/degradability: Not Available

Bioaccumulation: Not Available

Ecotoxicity: Not Available

For more information in AUSTRALIA see web site www.nohsc.gov.au

SECTION 13 DISPOSAL CONSIDERATIONS

Waste Disposal Method: Follow your Federal or State and Local regulations for disposal. Lead is listed in US-EPA Code of Federal Regulations 40, Part 261.24. Testing of the waste may be required to determine status under the hazardous waste regulations.

Waste from residue/unused product: Can be landfilled according to local regulations.

Contaminated packing: Can be landfilled according to local regulations.

SECTION 14 TRANSPORTATION INFORMATION

UN Number: None for this product.

SECTION 15 REGULATORY INFORMATION

Silica is listed by California, Proposition 65

Silica is listed on the IARC, OSHA or NTP carcinogen list.

All ingredients are on U.S. TSCA / EC / AICS / DSL Inventory.
See local requirements.

EU Status:

Symbol- None

WHMIS Status: Not Controlled

SECTION 16 ADDITIONAL INFORMATION

This information is furnished with out warranty, representation, inducement or license of any

Kind, except that it is accurate to the best of knowledge of COLORAMICS, LLC or obtained

from sources believed to be accurate. COLORAMICS, LLC does not assume any legal responsibility for use or reliance on same. Customers are encouraged to conduct their own

tests before using any product. Read the product label.

For more information in AUSTRALIA see web site www.nohsc.gov.au

30455-1100	-1200	-1300	-1400
-4770	-5140	-5210	-6090
-6170	-7010	-7510	-8340

MSDS SHEET #3 Non-Toxic Fired Ceramic Products

30454-1001
-1002

SECTION 1: CHEMICAL PRODUCT AND COMPANY INFORMATION

Prepared: September 21, 2006
 Supersedes: All previous
 Manufacturer: Mayco Colors
 Division of Coloramics, LLC
 4077 Weaver Court South
 Hilliard, Ohio 43026
 United States of America

Distributor Contacts:

USA _____ Local Phone _____
 EC _____ Local Phone _____
 Australia _____ Local Phone _____

IN CASE OF EMERGENCY PLEASE CONTACT YOUR LOCAL POISON CONTROL CENTER

Prepared by: MSDS department
 Information Telephone Number: 614-876-1171

Ceramic Glaze and Underglaze and Miscellaneous.

Astro Gems	AS-510, AS-512, AS-513, AS-515, AS-516, AS-518, AS-519, AS-523, AS-524, AS-527, AS-531, AS-532, AS-534, AS-535, AS-539, AS-545, AS-547, AS-548
Chalkboard Glazes	SG-101, SG-102
Classic Crackle	CC-101, CC-102, CC-103, CC-104, CC-105, CC-106, CC-107, CC-108
Cobblestone Glazes	SG-201, SG-202
Coloramics Fired	AC-306, AC-308
Access.-Miscs	
Crystalites	S-2701, S-2702, S-2703, S-2704, S-2705, S-2706, S-2707, S-2708, S-2709, S-2710, S-2711, S-2712, S-2713, S-2714, S-2715, S-2716, S-2717, S-2718, S-2719, S-2722, S-2723, S-2724, S-2725, S-2726, S-2727, S-2731, S-2732
Element Chunkies	EL-201, EL-203, EL-204, EL-206, EL-209, EL-211, EL-212
Elements	EL-101, EL-102, EL-104, EL-107, EL-109, EL-110, EL-111, EL-112, EL-116, EL-118, EL-121, EL-124
One Stroke Translucent Underglazes	OS-1, OS-105, OS-136, OS-142, OS-147, OS-17, OS-18, OS-2, OS-21, OS-26, OS-29, OS-3, OS-32, OS-34, OS-36, OS-38, OS-4, OS-41, OS-47, OS-48, OS-58, OS-59, OS-6, OS-60, OS-61, OS-62, OS-63, OS-8, OS-9
Pottery Coat	PC-501, PC-502, PC-503, PC-504, PC-505
Pottery Coat Cascades	PC-601, PC-602, PC-603, PC-604

Series 2000 Glazes	S-2000, S-2101, S-2102, S-2103, S-2107, S-2109, S-2110, S-2111, S-2112, S-2113, S-2114, S-2115, S-2116, S-2117, S-2118, S-2119, S-2120, S-2121, S-2123, S-2126, S-2127, S-2128, S-2132, S-2133, S-2134, S-2136, S-2137, S-2138, S-2139, S-2140, S-2141, S-2142, S-2143, S-2144, S-2145, S-2146, S-2147, S-2148, S-2149, S-2150, S-2151, S-2152, S-2153, S-2154, S-2155, S-2159, S-2160, S-2161, S-2162, S-2163, S-2164, S-2165, S-2166, S-2167, S-2169, S-2171, S-2200, S-2201, S-2208, S-2209, S-2218, S-2220, S-2221, S-2223, S-2226, S-2227, S-2228, S-2229, S-2230, S-2231, S-2232, S-2233, S-2234, S-2235, S-2236, S-2237, S-2238, S-2239, S-2240, S-2242, S-2401, S-2402, S-2408, S-2421, S-2422, S-2423, S-2424, S-2425, S-2427, S-2560, S-2561, S-2562, S-2564, S-2565, S-2566, S-2574, S-2577, S-2578, S-2579, S-2580, S-2581, S-2582, S-2585, S-2587, S-2588, S-2589, S-2590, S-2591, S-2592, S-2593
Specialty Glazes	SG-301, SG-302
Speckled Stroke & Coat®	SP-201, SP-202, SP-203, SP-205, SP-206, SP-210, SP-211, SP-212, SP-213, SP-215, SP-216, SP-223, SP-226, SP-227, SP-231, SP-241, SP-245, SP-253, SP-254, SP-260, SP-270
Stoneware Glazes	SLG-17, SLG-2, SLG-6
Stroke & Coat®	SC-1, SC-10, SC-11, SC-12, SC-13, SC-14, SC-15, SC-16, SC-17, SC-18, SC-2, SC-22, SC-25, SC-26, SC-27, SC-28, SC-29, SC-3, SC-30, SC-31, SC-32, SC-33, SC-34, SC-35, SC-36, SC-37, SC-39, SC-40, SC-41, SC-42, SC-43, SC-45, SC-46, SC-48, SC-5, SC-51, SC-52, SC-53, SC-54, SC-55, SC-58, SC-6, SC-60, SC-63, SC-65, SC-7, SC-70, SC-71, SC-72, SC-76, SC-77, SC-78, SC-79, SC-8, SC-9
Underglazes	UG-1, UG-10, UG-100, UG-104, UG-11, UG-12, UG-125, UG-130, UG-131, UG-145, UG-146, UG-15, UG-18, UG-181, UG-189, UG-19, UG-194, UG-198, UG-2, UG-201, UG-21, UG-22, UG-24, UG-25, UG-26, UG-27, UG-3, UG-30, UG-31, UG-32, UG-33, UG-34, UG-35, UG-37, UG-38, UG-39, UG-41, UG-42, UG-43, UG-45, UG-46, UG-50, UG-51, UG-52, UG-53, UG-57, UG-58, UG-67, UG-68, UG-69, UG-70, UG-71, UG-72, UG-73, UG-80, UG-81, UG-82, UG-83, UG-87, UG-89, UG-90, UG-91, UG-92, UG-93, UG-94, UG-95, UG-97

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS	ACGIH TLV	OSHA PEL
Silica	14808-60-7	0.10mg/M3	0.10mg/M3
Alumina Silicate	1332-58-7	N/A	N/A
Bentonite/Clay	1302-78-9	N/A	N/A
Water	7732-18-5	N/A	N/A

SECTION 3: HAZARDS IDENTIFICATION

Crystalline Silica may be present .
(OSHA PEL .1mg/m3)

Route(s) of Entry: Igestion, absorption through the skin is negligible.

Inhalation only if sprayed.

Health Hazards (acute and chronic): Prolonged inhalation of silica, in excess of TLV, over an extended period of time may result in injury to the lungs.

SECTION 4: FIRST AID MEASURES

If Inhaled: Remove from exposure

If on skin: Wash skin with soap and water
If in eyes: Flush eyes with large quantities of water for at least 15 minutes. If irritation persists after washing, contact a physician.
If swallowed: Dilute by drinking water

SECTION 5: FIRE FIGHTING MEASURES

FIRE AND EXPLOSION HAZARD DATA

Flash Point (method used): N/A

LEL: N/A

UEL: N/A

Flammable Limits: N/A

Extinguishing Media: None required - not combustible

Special Fire Fighting Procedures: None

Unusual Fire and Explosion Hazards: None

SECTION 6: ACCIDENTAL RELEASE MEASURES

Steps to be taken in case material is released or spilled:

Uncontaminated material may be recovered and re-used. If contaminated, scoop, vacuum, or wash into a receptacle for disposal.

Waste Disposal Method: Follow Federal or State and Local regulations for disposal. Testing of the waste may be required to determine status under the hazardous waste regulations.

SECTION 7: HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING AND USE:

- Engineer Control - None
- Work practices- Store away from feed and food. Do not smoke, eat or drink while handling.
- Procedure/equipment: None
- Procedure for leaks or spills: Uncontaminated material may be recovered and reused. If contaminated, scoop, vacuum, or wash into a receptacle for disposal.
- Waste Disposal Method: Follow Federal or State and Local regulations for disposal.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Use of the following protective measures are strongly recommended if the glazes are to be applied by spraying.

The Work/Hygienic Practices apply regardless of the method of application. Respiratory Protection (Specify Type): Use a NIOSH approved dust and/or fume respirator as necessary.

Ventilation: Local Exhaust - for spraying

Protective Gloves: N/A

Eye Protection: for spraying

Other Protective Clothing or Equipment: Wear appropriate clean, protective clothing such as, but not limited to, overalls, smocks, and aprons. Work/Hygienic Practices: Food, beverages, and smoking materials should not be in the work area. Hygiene is very important. Wash thoroughly before eating, drinking, smoking, or applying cosmetics.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Various colors

Odor and odor threshold: Negligible

Ph: Not available

Boiling Point: None

Vapor Pressure: NA

Vapor Density: NA

Melting Point: above 1000oF
Specific Gravity (H2O=1): 1.4 to 1.6
Flammable Limits: None
Explosive limits: None
Partition Coefficient: None
Oxidizing Properties: None
Solubility in Water: Negligible
Percent Volatile by Volume: None
Evaporation Rate: None
Freezing point: NA
Flash Point: None
Auto ignition temperature: None

SECTION 10: STABILITY AND REACTIVITY DATA

- Incompatibility (material to avoid): Avoid fumes from firing by venting kiln area.
- Stability: Stable (conditions to avoid): N/A
- Hazardous Decomposition or Byproducts: Not available.
- Hazardous Polymerization: Will not occur
- Conditions to avoid: Fumes from firing in kiln. Inhalation of spray.

SECTION 11: TOXICOLOGY INFORMATION

Hazard to Human: None during normal use. Harmful if inhaled or swallowed.
DO NOT SPRAY APPLY

If glaze is spray applied the following warnings apply: Warning: Contains Quartz.

1. Possible cancer agent based on tests with laboratory animals.
2. Exposure may cause lung damage.
3. Keep out of reach of children; avoid inhalation.

This product contains chemicals known to the State of California to cause cancer.

Health Hazards (acute and chronic): Prolonged inhalation of silica, in excess of TLV, over an extended period of time may result in injury to the lungs.

Additional information: Frits are fused silica glass like substances. The bioavailability may be limited because of the physical nature of the frit.

SECTION 12: ECOLOGICAL INFORMATION

- Mobility: Not available.
- Persistence/degradability: Not available.
- Bioaccumulation: Not available.
- Ecotoxicity: Not available.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Method: Follow your Federal or State and Local regulations for disposal. Lead is listed in US-EPA Code of Federal Regulations 40, Part 261.24. Testing of the waste may be required to determine status under the hazardous waste regulations.

Waste from residue/unused product: Can be landfilled according to local regulations. Contaminated packing: Can be landfilled according to local regulations.

SECTION 14: TRANSPORTATION INFORMATION

UN Number: None for this product.

SECTION 15: REGULATORY INFORMATION

Silica is listed by California , Proposition 65
Silica is listed on the IARC, OSHA or NTP carcinogen list.
All ingredients are on U.S. TSCA / EC / AICS / DSL Inventory.
See local requirements.

EU Status:
Symbol- None
WHMIS Status : Not Controlled

SECTION 16: ADDITIONAL INFORMATION

This information is furnished with out warranty, representation, inducement or license of any kind, except that it is accurate to the best of knowledge of COLORAMICS, LLC or obtained from sources believed to be accurate.

COLORAMICS, LLC does not assume any legal responsibility for use or reliance on same. Customers are encouraged to conduct their own tests before using any product. Read the product label.

For more information in AUSTRALIA see web site www.nohsc.gov.au

Rcvd Feb 2006

409123

Material Safety Data Sheet

SAX TEMPERA EXTENDER

CHROMA INC

Manufacturer

205 BUCKY DRIVE

Address

LITITZ PA 17543

(717)626-8866

Phone Number (For Information)

(717)626-8866

Emergency Phone Number

Telex*

Identity (Trade Name As Used On Label)

MSDS Number*

CAS Number*

10/05

Date Prepared

Prepared By*

Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.

SECTION 1 - MATERIAL IDENTIFICATION AND INFORMATION

COMPONENTS — Chemical Name & Common Names (Hazardous Components 1% or greater; Carcinogens 0.1% or greater)	%*	OSHA PEL	ACGIH TLV	OTHER LIMITS RECOMMENDED
PRODUCT IS WATER BASED, NON-TOXIC, NON-HAZARDOUS				
ACRYLIC MEDIUM. IT CARRIES THE AP SEAL AND IS CERTIFIED				
BY THE ART & CREATIVE MATERIALS INSTITUTE.				
1. WATER				
2. ACRYLIC THICKENER - ACCOGUM MIXTURE				
3. PRESERVATIVE - .4%				
*PRESERVATIVE RATED NON-TOXIC WHEN USED IN THE				
AMOUNT OF .4%				
** INGREDIENTS ARE THE SAME FOR ALL SIZES OF THIS				
PRODUCT				
Non-Hazardous Ingredients				
TOTAL	100			

SECTION 2 - PHYSICAL / CHEMICAL CHARACTERISTICS

Boiling Point	215-275°F	Specific Gravity (H ₂ O = 1)	NOT KNOWN
Vapor Pressure (mm Hg and Temperature)	NOT KNOWN	Melting Point	NOT KNOWN
Vapor Density (Air = 1)	LIGHTER THAN AIR	Evaporation Rate (_____ = 1)	SLOWER THAN ETHER
Solubility in Water	TOTALLY SOLUBLE	Water Reactive	NOT KNOWN

Appearance and Odor

CLEAR GEL. MAY BE SLIGHT AMMONIA SMELL.

SECTION 3 - FIRE AND EXPLOSION HAZARD DATA

Flash Point and Method Used	N/A	Auto-Ignition Temperature	N/A	Flammability Limits in Air % by Volume	N/A	LEL	UNKNOWN	UEL	UNKNOWN
Extinguisher Media	N/A								
Special Fire Fighting Procedures	N/A								

Unusual Fire and Explosion Hazards N/A

*Optional

SECTION 4 - REACTIVITY HAZARD DATA

PAGE 2 -SAX TEMPERA EXTENDER

STABILITY☒ Stable
☐ UnstableConditions
To Avoid N/AIncompatibility
(Materials to Avoid) NONEHazardous
Decomposition Products NONE**HAZARDOUS POLYMERIZATION**☐ May Occur
☒ Will Not OccurConditions
To Avoid N/A**SECTION 5 - HEALTH HAZARD DATA****PRIMARY ROUTES
OF ENTRY**☐ Inhalation
☐ Skin Absorption
☒ Not Hazardous**CARCINOGEN
LISTED IN**☐ NTP
☐ IARC Monograph
☒ OSHA
☒ Not Listed**HEALTH HAZARDS**

Acute NONE

Chronic NONE

Signs and Symptoms
of Exposure NONEMedical Conditions
Generally Aggravated by Exposure NONE**EMERGENCY FIRST AID PROCEDURES** - Seek medical assistance for further treatment, observation and support if necessary.

Eye Contact NONE

Skin Contact NONE

Inhalation NONE

Ingestion NONE

SECTION 6 - CONTROL AND PROTECTIVE MEASURESRespiratory Protection
(Specify Type) NONE NEEDED UNDER NORMAL CONDITIONS OF USE

Protective Gloves NOT REQUIRED

Eye Protection NOT REQUIRED

**VENTILATION
TO BE USED**☐ Local Exhaust N/A☐ Mechanical (general) N/A☐ Special N/A☐ Other (specify) N/AOther Protective
Clothing and Equipment NOT REQUIREDHygienic Work
Practices AS WITH ANY WATER BASED ACRYLIC**SECTION 7 - PRECAUTIONS FOR SAFE HANDLING AND USE / LEAK PROCEDURES**Steps to be Taken If Material
Is Spilled Or Released DIKE AND CONTAIN SPILL.Waste Disposal
Methods NORMAL DISPOSALPrecautions to be Taken
in Handling and Storage NO PARTICULAR PRECAUTIONS

Other Precautions and/or Special Hazards NONE

NFPA
Rating* Health____ Flammability____ Reactivity____ Special____ HMIS
Rating* Health____ Flammability____ Reactivity____ Personal Protection____

*Optional

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Reorder No. 2217-2

Material Safety Data Sheet

Rev'd April 02

402270

Section 1 – Product Identification and Uses

PRODUCT IDENTIFIER <i>Tempera Varnish</i>		PRODUCT IDENTIFICATION NUMBER (PIN)	
PRODUCT USE <i>Protective Varnish for Tempera Paintings</i>			
MANUFACTURER'S NAME <i>Demco Manufacturing Inc.</i>		SUPPLIER'S NAME <i>Sax Arts & Crafts</i>	
STREET ADDRESS <i>2 Waterman Street</i>		STREET ADDRESS <i>2405 S. Calhoun Rd.</i>	
CITY <i>St. Lambert</i>	PROVINCE <i>Québec</i>	CITY <i>New Berlin</i>	STATE <i>Wisconsin</i>
POSTAL CODE <i>J4P 1H8</i>	EMERGENCY TELEPHONE NO <i>(450) 672-9931</i>	ZIP CODE <i>53151</i>	EMERGENCY TELEPHONE NO <i>(262) 784-6880</i>

Section 2 – Ingredient Information

HAZARDOUS INGREDIENTS	% by wt.	CAS NUMBER	LD ₅₀ OF INGREDIENT (SPECIFY SPECIES AND ROUTE)	LC ₅₀ OF INGREDIENT (SPECIFY SPECIES)
<i>Styrene Acrylic Polymers (Non-Hazardous)</i>	<i>45 - 50</i>	<i>Not available</i>	<i>Not established</i>	<i>Not established</i>
<i>Water</i>	<i>45 - 55</i>	<i>7732-18-5</i>	<i>Not established</i>	<i>Not established</i>
<i>Ammonium Hydroxide</i>	<i>1 - 4</i>	<i>1336-21-6</i>	<i>350 mg/kg (oral - rat)</i>	<i>25 ppm ACGIH/OSHA TWA, 35 ppm ACGIH/OSHA STEL</i>
<i>Ethoxylated Octyl Phenol</i>	<i>1 - 3</i>	<i>9036-19-5</i>	<i>Not established</i>	<i>Not established</i>
<i>Polypropylene Glycol</i>	<i>1 - 3</i>	<i>25322-69-4</i>	<i>Not established</i>	<i>Not established</i>

Section 3 – Physical Data

PHYSICAL STATE <i>Liquid</i>	ODOUR AND APPEARANCE <i>Ammonia-like, translucent</i>		ODOUR THRESHOLD (PPM) <i>N/A</i>	
VAPOUR PRESSURE (mm Hg) <i>same as water</i>	VAPOUR DENSITY (AIR=1) <i>N/A</i>	EVAPORATION RATE (n-butyl acetate = 1) <i>N/A</i>	BOILING POINT [C] <i>>93 °C (> 200 °F)</i>	FREEZING POINT [C] <i>N/A</i>
PH <i>8.0 - 9.0</i>	SPECIFIC GRAVITY <i>1.05 - 1.07</i>	COEFF WATER/OIL DIST <i>N/A</i>		

Section 4 – Fire and Explosion Data

FLAMMABILITY YES • NO x IF YES UNDER WHICH CONDITIONS?		
MEANS OF EXTINCTION N/A		
FLASHPOINT [C] AND METHOD N/A	UPPER FLAMMABLE LIMIT (% BY VOLUME) N/A	LOWER FLAMMABLE LIMIT (% BY VOLUME) N/A
AUTOIGNITION TEMPERATURE [C] N/A	HAZARDOUS COMBUSTION PRODUCTS N/A	
UNUSUAL FIRE AND EXPLOSION HAZARDS No special requirements. Container may burn and leak in heat of fire.		

Section 5 – Reactivity Data

CHEMICAL STABILITY YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> IF NO UNDER WHICH CONDITIONS?	
INCOMPATIBILITY WITH OTHER SUBSTANCES YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> IF SO, WHICH ONES?	
REACTIVITY, AND UNDER WHAT CONDITIONS <i>None reasonably foreseen</i>	
HAZARDOUS POLYMERIZATION <i>will not occur</i>	
HAZARDOUS DECOMPOSITION PRODUCTS <i>Produces normal products of combustion.</i>	

Section 6 – Toxicological Properties

ROUTE OF ENTRY SKIN CONTACT <input checked="" type="checkbox"/> SKIN ABSORPTION <input type="checkbox"/> EYE CONTACT <input checked="" type="checkbox"/> INHALATION <input type="checkbox"/> INGESTION <input checked="" type="checkbox"/>			
EFFECTS OF ACUTE EXPOSURE TO PRODUCT <i>May cause mild eye irritation. Prolonged or repeated skin contact may cause mild skin irritation. Ingestion may cause nausea and abdominal discomfort.</i>			
EFFECTS OF CHRONIC EXPOSURE TO PRODUCT <i>Prolonged or repeated skin contact may cause skin irritation.</i>			
MEDICAL CONDITIONS GENERALLY RECOGNIZED AS BEING AGGRAVATED BY EXPOSURE <i>Persons with pre-existing skin disorders may be more susceptible to irritating effects.</i>			
EXPOSURE LIMITS <i>N/A</i>	IRRITANCY OF PRODUCT <i>N/A</i>	SENSITIZATION TO PRODUCT <i>N/A</i>	CARCINOGENICITY <i>N/A</i>
TERATOGENICITY <i>N/A</i>	REPRODUCTIVE TOXICITY <i>N/A</i>	MUTAGENICITY <i>N/A</i>	SYNERGISTIC PRODUCTS <i>N/A</i>

Material Safety Data Sheet

Section 7 – Preventive Measures

PERSONAL PROTECTIVE EQUIPMENT		
PROTECTIVE GLOVES (SPECIFY) <i>Recommended for prolonged exposure to skin. otherwise not needed.</i>	RESPIRATORY PROTECTION (SPECIFY) <i>No special requirements under normal conditions.</i>	EYE PROTECTION(SPECIFY) <i>Recommended to protect against splashes.</i>
SPECIAL FOOTWEAR(SPECIFY) <i>Not needed</i>	OTHER PROTECTIVE CLOTHING (SPECIFY) <i>None needed</i>	
ENGINEERING CONTROLS (SPECIFY, EG VENTILATION, ENCLOSED PROCESS) <i>General room ventilation adequate.</i>		
STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED <i>Floors may be slippery. Care should be exercised to avoid falls. May be toxic to aquatic life. Do not let spilled or leaking material enter watercourse. Contains ammonia. Absorb with oil-dry or similar inert material. Sweep or scrape up and containerize. Rinse affected area thoroughly with water.</i>		
WASTE DISPOSAL METHOD <i>No special method. Observe all applicable federal, provincial and state regulations and local or municipal ordinances regarding disposal of non-hazardous materials.</i>		
PRECAUTIONS TO BE TAKEN IN HANDLING <i>Avoid contact with eyes. Avoid prolonged contact with skin. Wash thoroughly after handling.</i>		
STORAGE REQUIREMENTS <i>Store in a cool, dry place with adequate ventilation. Avoid extremes of heat and cold.</i>		
SPECIAL SHIPPING INFORMATION <i>Do not allow to freeze. Ship in heated containers during winter months.</i>		
REGULATORY INFORMATION <i>WHIS CLASSIFICATION - Non-regulated</i>		
<i>All ingredients of this product are listed or are excluded from listing on the U.S. Toxic Substance Control Act (TSCA) Chemical Substance Inventory.</i>		
<i>All ingredients in this product comply with the New Substances Notification requirements under the Canadian Environmental Act (CEPA).</i>		
<i>This product is not subject to the reporting requirements under California's Proposition 65. These ingredients from Section 2 are subject to the following reporting requirements:</i>		
<i>PA - The Pennsylvania Hazardous Substance List</i>		
<i>NJ - The New Jersey Right to Know Hazardous Substance List</i>		
<i>MA - The Massachusetts Hazardous Substance List</i>		

Section 8 – First Aid Measures

SPECIFIC MEASURES:
Inhalation: <i>Remove to fresh air. If breathing is affected, get medical attention.</i>
Eye Contact: <i>Flush immediately with large amounts of water for at least 15 minutes. If irritation develops, get medical attention.</i>
Skin Contact: <i>Wash contaminated area with soap and water. If irritation develops, get medical attention..</i>
Ingestion: <i>Immediately drink 1 or 2 glasses of water or milk to dilute. If discomfort persists, seek medical attention. Treat symptomatically. Do not administer anything by mouth to an unconscious person.</i>

Section 9 – Preparation Date of MSDS

PREPARED BY (GROUP DEPARTMENT, ETC) <i>Alex Dear, laboratory</i>	PHONE NUMBER <i>(450) 672-9931</i>	DATE <i>March 07, 2002</i>
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Material Safety Data Sheet

Rcvd Feb 2005

406667 + 668

Section 1 – Product Identification and Uses

PRODUCT IDENTIFIER <i>Tempera Varnish Matte</i>		PRODUCT IDENTIFICATION NUMBER (PIN)	
PRODUCT USE <i>Protective Varnish for Tempera Paintings</i>			
MANUFACTURER'S NAME <i>Demco Manufacturing Inc.</i>		SUPPLIER'S NAME <i>Demco Manufacturing Inc.</i>	
STREET ADDRESS <i>5485 Ramsay</i>		STREET ADDRESS <i>5485 Ramsay</i>	
CITY <i>St. Hubert</i>	PROVINCE <i>Québec</i>	CITY <i>St. Hubert</i>	STATE <i>Quebec</i>
POSTAL CODE <i>J3Y 2S3</i>	EMERGENCY TELEPHONE NO <i>(450) 672-9931</i>	ZIP CODE <i>J3Y 2S3</i>	EMERGENCY TELEPHONE NO <i>(450) 672-9931</i>

Section 2 – Ingredient Information

HAZARDOUS INGREDIENTS	% by wt.	CAS NUMBER	LD ₅₀ OF INGREDIENT (SPECIFY SPECIES AND ROUTE)	LC ₅₀ OF INGREDIENT (SPECIFY SPECIES)
<i>Styrene Acrylic Polymers (Non-Hazardous)</i>	<i>45 - 50</i>	<i>Not available</i>	<i>Not established</i>	<i>Not established</i>
<i>Water</i>	<i>40 - 50</i>	<i>7732-18-5</i>	<i>Not established</i>	<i>Not established</i>
<i>Ammonium Hydroxide</i>	<i>1 - 4</i>	<i>1336-21-6</i>	<i>350 mg/kg (oral - rat)</i>	<i>25 ppm ACGIH/OSHA TWA, 35 ppm ACGIH/OSHA STEL</i>
<i>Ethoxylated Octyl Phenol</i>	<i>1 - 3</i>	<i>9036-19-5</i>	<i>Not established</i>	<i>Not established</i>
<i>Polypropylene Glycol</i>	<i>1 - 3</i>	<i>25322-69-4</i>	<i>Not established</i>	<i>Not established</i>
<i>Fumed silica</i>	<i>>1.7</i>	<i>67762-90-7</i>	<i>Not established</i>	<i>Not established</i>

Section 3 – Physical Data

PHYSICAL STATE <i>Liquid</i>	ODOUR AND APPEARANCE <i>Ammonia-like, translucent</i>		ODOUR THRESHOLD (PPM) <i>N/A</i>	
VAPOUR PRESSURE	VAPOUR DENSITY	EVAPORATION RATE	BOILING POINT [C]	FREEZING POINT [C]
<i>(mm Hg) same as water</i>	<i>(AIR=1) N/A</i>	<i>(n-butyl acetate = 1) N/A</i>	<i>>93 °C (> 200 °F)</i>	<i>N/A</i>
PH <i>8.0 - 9.0</i>	SPECIFIC GRAVITY	COEFF WATER/OIL DIST		
	<i>1.05 - 1.07</i>	<i>N/A</i>		

Section 4 – Fire and Explosion Data

FLAMMABILITY YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> IF YES UNDER WHICH CONDITIONS?		
MEANS OF EXTINCTION N/A		
FLASHPOINT [C] AND METHOD N/A	UPPER FLAMMABLE LIMIT (% BY VOLUME) N/A	LOWER FLAMMABLE LIMIT (% BY VOLUME) N/A
AUTOIGNITION TEMPERATURE [C] N/A	HAZARDOUS COMBUSTION PRODUCTS N/A	
UNUSUAL FIRE AND EXPLOSION HAZARDS No special requirements. Container may burn and leak in heat of fire.		

Section 5 – Reactivity Data

CHEMICAL STABILITY YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> IF NO UNDER WHICH CONDITIONS?
INCOMPATIBILITY WITH OTHER SUBSTANCES YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> IF SO, WHICH ONES?
REACTIVITY, AND UNDER WHAT CONDITIONS <i>None reasonably foreseen</i>
HAZARDOUS POLYMERIZATION <i>will not occur</i>
HAZARDOUS DECOMPOSITION PRODUCTS <i>Produces normal products of combustion.</i>

Section 6 – Toxicological Properties

ROUTE OF ENTRY SKIN CONTACT <input checked="" type="checkbox"/> SKIN ABSORPTION <input type="checkbox"/> EYE CONTACT <input checked="" type="checkbox"/> INHALATION <input type="checkbox"/> INGESTION <input checked="" type="checkbox"/>			
EFFECTS OF ACUTE EXPOSURE TO PRODUCT <i>May cause mild eye irritation. Prolonged or repeated skin contact may cause mild skin irritation. Ingestion may cause nausea and abdominal discomfort.</i>			
EFFECTS OF CHRONIC EXPOSURE TO PRODUCT <i>Prolonged or repeated skin contact may cause skin irritation.</i>			
MEDICAL CONDITIONS GENERALLY RECOGNIZED AS BEING AGGRAVATED BY EXPOSURE <i>Persons with pre-existing skin disorders may be more susceptible to irritating effects.</i>			
EXPOSURE LIMITS <i>N/A</i>	IRRITANCY OF PRODUCT <i>N/A</i>	SENSITIZATION TO PRODUCT <i>N/A</i>	CARCINOGENICITY <i>N/A</i>

TERATOGENICITY N/A	REPRODUCTIVE TOXICITY N/A	MUTAGENICITY N/A	SYNERGISTIC PRODUCTS N/A
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Material Safety Data Sheet

Section 7 – Preventive Measures

PERSONAL PROTECTIVE EQUIPMENT		
PROTECTIVE GLOVES (SPECIFY) <i>Recommended for prolonged exposure to skin, otherwise not needed.</i>	RESPIRATORY PROTECTION (SPECIFY) <i>No special requirements under normal conditions.</i>	EYE PROTECTION(SPECIFY) <i>Recommended to protect against splashes.</i>
SPECIAL FOOTWEAR(SPECIFY) <i>Not needed</i>	OTHER PROTECTIVECLOTHING (SPECIFY) <i>None needed</i>	
ENGINEERING CONTROLS (SPECIFY, EG VENTILATION, ENCLOSED PROCESS) <i>General room ventilation adequate.</i>		
STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED <i>Floors may be slippery. Care should be exercised to avoid falls. May be toxic to aquatic life. Do not let spilled or leaking material enter watercourse. Contains ammonia. Absorb with oil-dry or similar inert material. Sweep or scrape up and containerize. Rinse affected area thoroughly with water.</i>		
WASTE DISPOSAL METHOD <i>No special method. Observe all applicable federal, provincial and state regulations and local or municipal ordinances regarding disposal of non-hazardous materials.</i>		
PRECAUTIONS TO BE TAKEN IN HANDLING <i>Avoid contact with eyes. Avoid prolonged contact with skin. Wash thoroughly after handling.</i>		
STORAGE REQUIREMENTS <i>Store in a cool, dry place with adequate ventilation. Avoid extremes of heat and cold.</i>		
SPECIAL SHIPPING INFORMATION <i>Do not allow to freeze. Ship in heated containers during winter months.</i>		
REGULATORY INFORMATION <i>WHIS CLASSIFICATION - Non-regulated</i>		
<i>All ingredients of this product are listed or are excluded from listing on the U.S. Toxic Substance Control Act (TSCA) Chemical Substance Inventory.</i>		
<i>All ingredients in this product comply with the New Substances Notification requirements under the Canadian Environmental Act (CEPA).</i>		
<i>This product is not subject to the reporting requirements under California's Proposition 65. These ingredients from Section 2 are subject to the following reporting requirements:</i>		
<i>PA - The Pennsylvania Hazardous Substance List</i>		
<i>NJ - The New Jersey Right to Know Hazardous Substance List</i>		
<i>MA - The Massachusetts Hazardous Substance List</i>		

Section 8 – First Aid Measures

SPECIFIC MEASURES:
Inhalation: <i>Remove to fresh air. If breathing is affected, get medical attention.</i>
Eye Contact: <i>Flush immediately with large amounts of water for at least 15 minutes. If irritation develops, get medical attention.</i>
Skin Contact: <i>Wash contaminated area with soap and water. If irritation develops, get medical attention..</i>
Ingestion: <i>Immediately drink 1 or 2 glasses of water or milk to dilute. If discomfort persists, seek medical attention. Treat symptomatically. Do not administer anything by mouth to an unconscious person.</i>

Section 9 – Preparation Date of MSDS

PREPARED BY (GROUP DEPARTMENT, ETC) <i>Alex Dear, laboratory</i>	PHONE NUMBER <i>(450) 672-9931</i>	DATE <i>January 31, 2005</i>
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Sax True Flow Block Printing Ink

Material Safety Data Sheet

May be used to comply with
OSHA's Hazard Communication Standard,
29 CFR 1910.1200. Standard must be
consulted for specific requirements.

U.S. Department of Labor

Occupational Safety and Health Administration
(Non-Mandatory Form)

Form Approved
OMB No. 1218-0072

461966

175-818

IDENTITY (As Used on Label and List) Revised March 2002 SPEEDBALL Water-Soluble Blockprinting Ink (3400 to 3417, 3448, 3449;
3500 to 3517, 3548, 3549; 3600 to 3617, 3648, 3649; 3700 to 3717, 3748, 3749)

Section I

Manufacturer's Name

SPEEDBALL ART PRODUCTS
2226 SPEEDBALL ROAD
STATESVILLE, NC 28677

Emergency Telephone Number

704-838-1475

Telephone Number for Information

704-838-1475

Date Prepared

4/12/00 (CF)

Signature of Preparer (optional)

Section II — Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	% (optional)
Approved for the AP Seal (Non-toxic) by the Art & Creative Materials Institute, Inc. (ACMI)				
Product labeling conforms to ASTM D4236.				

Note: This product has been evaluated by a Toxicologist only as per intended usage.
Do not deviate from intended usage!

Section III — Physical/Chemical Characteristics

Boiling Point	212-369°F	Specific Gravity (H ₂ O = 1)	1.2 to 1.7
Vapor Pressure (mm Hg.)	Unknown	Melting Point	<32°F.
Vapor Density (AIR = 1)	Unknown	Evaporation Rate (Butyl Acetate = 1)	less than 1
Solubility in Water	Dilutable		
Appearance and Odor	Thick paste with slight odor		

Section IV — Fire and Explosion Hazard Data

Flash Point (Method Used)	Flammable Limits	LEL	UEL
Not applicable (N/A)	N/A	N/A	N/A
Extinguishing Media	N/A		
Special Fire Fighting Procedures	wear self-contained breathing apparatus (pressure-demand, MSHA/NIOSH approved or equivalent) and full protective gear.		
Unusual Fire and Explosion Hazards	Material can spatter above 212°F. Film can burn.		

(Reproduce locally)

OSHA 174, Sept. 1985

Section V — Reactivity Data

Stability	Unstable	X	Conditions to Avoid	Onset of decomposition is 350°F.
	Stable			

Incompatibility (Materials to Avoid) N/A

Hazardous Decomposition or Byproducts

Oxides of carbon and nitrogen.

Hazardous Polymerization	May Occur	X	Conditions to Avoid	N/A
	Will Not Occur			

Section VI — Health Hazard Data

Routes of Entry:	N/A	Inhalation?	Skin?	Ingestion?
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Health Hazards (Acute and Chronic) N/A

Carcinogenicity:	N/A	NTP?	IARC Monographs?	OSHA Regulated?
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Signs and Symptoms of Exposure N/A

Medical Conditions Generally Aggravated by Exposure N/A

Emergency and First Aid Procedures Contact with eyes may cause mild irritation: Flush with water.

Section VII — Precautions for Safe Handling and Use

Steps to Be Taken in Case Material Is Released or Spilled
Floor may be slippery; use care to avoid falling. Transfer to containers for recovery or disposal. Keep out of municipal sewers and open bodies of water.

Waste Disposal Method

Incinerate at a permitted facility according to current local, state and federal regulations.

Precautions to Be Taken in Handling and Storing

Keep from freezing - product may coagulate.

Other Precautions N/A

Section VIII — Control Measures

Respiratory Protection (Specify Type)

None required with adequate ventilation & normal operating conditions.

Ventilation	Local Exhaust	Adequate	Special
	Mechanical (General)		

Protective Gloves	Impermeous	Eye Protection	Safety glasses
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Other Protective Clothing or Equipment N/A

Work/Hygiene Practices

Use protective cream where excessive skin contact is likely.

Workable Fixative - 466337

Issued to : School Specialty
Sax Arts and Craft
P.O.Box 1017

Appleton WI 54912-1017

Attention: : Material Safety Data Sheet Coordinator

The attached Material Safety Data Sheet relates potential hazards and recommended practices for safe handling of the product that you purchased from Raabe Company.

We urge you and your employees to review the entire MSDS prior to handling, use or disposal of the product.

You are required to keep this MSDS on file for reference by company employees or government regulatory officials.

If you resell or distribute this product, you must furnish a copy of the MSDS to your customer.

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

CHEMICAL PRODUCT IDENTIFICATION:

PRODUCT CODE. . . . : 01050 000470 604
PRODUCT NAME . . . : WORKABLE FIXATIVE
PRODUCT CLASS . . . : Aerosol Product

MSDS PREPARATION DATE : 02/27/2007

MANUFACTURER IDENTIFICATION:

RAABE COMPANY
PO BOX 1090

MENOMONEE FALLS WI 53052-1090

CUSTOMER IDENTIFICATION:

School Specialty
Sax Arts and Craft
P.O.Box 1017

Appleton

WI 54912-1017

EMERGENCY TELEPHONE NUMBERS:

24 HOURS A DAY - CALL CHEMTREC : 800-424-9300
INTERNATIONAL CALLS TO CHEMTREC : 703-527-3887
8 AM TO 4:30 PM CENTRAL TIME : 262-255-9500

SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS

1 N-BUTANE

CAS# 106-97-8

N-BUTANE

PCT BY WT: 11.0000 VAPOR PRESSURE: 879.100 MMHG @ 68F LEL 1.80

EXPOSURE LIMIT:

ACGIH TLV-TWA 800 ppm
ACGIH TLV-STEL NO INFO
OSHA PEL-TWA 800 ppm
COMPANY N.E.

LD50(ORAL) N.A.
LD50(DERMAL) N.A.
LC50 658000 mg/m3 (rat)

2 PROPANE
CAS# 74-98-6
PROPANE
PCT BY WT: 14.0000 VAPOR PRESSURE: 5585.200 MMHG @ 68F LEL 2.20
EXPOSURE LIMIT:
ACGIH TLV-TWA 1000 ppm
ACGIH TLV-STEL NO INFORMATION
LD50(ORAL) NOT APPLICABLE
LD50(DERMAL) NOT APPLICABLE
LC50 NO INFORMATION

3 BUTYL BENZYL PHTHALATE
CAS# 85-68-7
BUTYL BENZYL PHTHALATE
PCT BY WT: 1.0000 LEL .30
EXPOSURE LIMIT:
ACGIH TLV-TWA 5 mg/m3
ACGIH TLV-STEL N.E.
OSHA PEL-TWA 5 mg/m3
OTHER CALIFORNIA PROP 65-Developmental(listed 12/2/05)

4 ACETONE
CAS# 67-64-1
ACETONE
PCT BY WT: 54.0000 VAPOR PRESSURE: 231.000 MMHG @ 68F LEL 2.60
EXPOSURE LIMIT:
ACGIH TLV-TWA 750 ppm
ACGIH TLV-STEL 1000 ppm
OSHA PEL-TWA 750 ppm
OSHA PEL-STEL 1000 ppm
COMPANY N.E.
LD50(ORAL) 5340 mg/kg (rabbit)
LD50(DERMAL) 20000 mg/kg (rabbit)
LC50 70852 mg/m3 (rat)

5 GLYCOL ETHER PM ACETATE
CAS# 108-65-6
PROPYLENE GLYCOL METHYL ETHER ACETATE
PCT BY WT: 18.0000 VAPOR PRESSURE: 3.700 MMHG @ 68F LEL 1.30
EXPOSURE LIMIT:
ACGIH TLV-TWA NOT ESTABLISHED
ACGIH TLV-STEL NOT ESTABLISHED
LD50(ORAL) 8500 mg/kg (rat)
LD50(DERMAL) 5000 mg/kg (rat)
LC50 5321 mg/m3 (rat)

This product contains no reported carcinogens or suspected
carcinogens.

SECTION 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:
Harmful if swallowed.
Harmful if inhaled.
Causes eye irritation.
Causes skin irritation.

Workable Fixative - 466337

Vapors irritating to eyes and respiratory tract.

Extremely flammable liquid and vapor.

Vapors may cause flash fire or explosion.

Extremely flammable aerosol.

Contents under pressure.

EYE:

May cause eye irritation.

SKIN:

May cause skin irritation.

INHALATION:

Exposure to high concentrations of vapors may cause dizziness, breathing difficulty, headaches or respiratory irritation.

Extremely high concentrations may cause drowsiness, staggering, confusion, unconsciousness, coma or death.

Intentional misuse by deliberately concentrating and inhaling the contents of this product can be harmful or fatal.

INGESTION:

CHRONIC EFFECTS:

Chronic overexposure to a component or components in this material has been found to cause the following effects in laboratory animals:

Kidney damage

Eye damage

Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

Contains butyl benzyl phthalate which has been shown to cause cancer in at least one study in laboratory animals. Butyl benzyl phthalate is listed by the National Toxicology Program (NTP) as producing significant maternal and developmental toxicity.

SECTION 4 - FIRST AID MEASURES

EYE CONTACT:

Immediately flush eyes with plenty of water. Get medical attention, if irritation persists.

SKIN CONTACT:

Wash thoroughly with soap and water and seek medical attention if irritation persists. Remove contaminated clothing. Launder contaminated clothing before reuse.

INHALATION:

For inhalation overexposure move person to fresh air. If breathing stops, apply artificial respiration and seek medical attention.

INGESTION:

Since this product may contain materials which can cause lung damage if aspirated into the lungs, the decision whether to induce vomiting or not must be made by a physician after careful consideration of all materials ingested.

SECTION 5 - FIRE FIGHTING MEASURES

FIRE AND EXPLOSIVE PROPERTIES OF THE PRODUCT:

Flashpoint : Less Than -25 °F

Explosion Level : Low (LEL) - .3

High (UEL)- 100.0

EXTINGUISHING MEDIA:

Use Dry Chemical, Carbon Dioxide or Chemical Foam.

FIRE-FIGHTING PROCEDURES AND EQUIPMENT:

Contents under pressure. Do not use or store near sources of heat, sparks or open flame. Keep away from any source of heat such as sunlight, heaters or stoves that could cause the container to burst. Do not puncture or incinerate. Do not crush or place in a garbage compactor. Do not store above 120 degrees F. Aerosol containers may explode when exposed to extreme heat.

Workable Fixative - 466337

Product vapors are heavier than air and may travel a long distance to a source of ignition and flash back.

Full protective equipment including self-contained breathing apparatus to avoid inhalation of vapors should be used.

Water spray should not be used except to keep down vapors or cool closed containers to prevent build-up of pressure. If water is used, fog nozzles are preferred.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

CLEAN-UP AND CONTAINMENT:

Remove all sources of ignition. Avoid heat, sparks, flames and anything which could cause fire.

Ventilate area of spill and adjacent low lying areas. Avoid breathing solvent vapors. Remove with inert absorbent materials and non-sparking tools.

SECTION 7 - HANDLING AND STORAGE

HANDLING:

Wash hands thoroughly after handling.

STORAGE:

Store in a cool dry area with ventilation suitable for storing materials shown in section 2.

Keep away from heat, sparks and flame.

Store in a cool place away from direct sunlight or any source of ignition. Do not store at temperatures above 120 degrees F.

SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

ENGINEERING CONTROLS:

Sufficient ventilation, in volume and pattern, should be provided to keep air contamination below current applicable OSHA permissible exposure limit or ACGIH's TLV limit.

RESPIRATORY PROTECTION:

If workplace exposure limits are exceeded for any component(see section 2 for hazardous components and exposure limits), a NIOSH/OSHA approved respirator suitable for components listed is recommended.

SKIN PROTECTION:

Chemical resistant plastic or rubber gloves recommended for prolonged or repeated contact.

EYE PROTECTION:

Chemical goggles with side shields or face shield recommended if contact with the eyes is likely.

OTHER PROTECTIVE EQUIPMENT:

Appropriate impervious clothing is recommended if prolonged or repeated contact is likely.

HYGIENIC PRACTICES:

Wash hands before eating or smoking. Smoke in designated areas only.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Vapor Pressure	. . . . .	: 5585.20	mm Hg @ 20 C
Vapor Density	. . . . .	: -N/A	
Boiling Range	. . . . .	: Lower - 1.0	øF
		: Higher - 464.0	øF
Specific Gravity	. . . . .	: .733	
Formula Weight per Volume	. . . . .	: 6.1025	LB/GL
VOC (Calculated, LB/GAL)	. . . . .	: 4.862	
VOC (Calculated, GM/L)	. . . . .	: 582.61	
Percent Volatile by Weight	. . . . .	: 97.2428	
Percent Volatile by Volume	. . . . .	: 98.3392	
Evaporation Rate	. . . . .	: 7.700	(n-Butyl Acetate = 1)

Workable Fixative - 466337

Viscosity : -N/A

SECTION 10 - STABILITY AND REACTIVITY

CONDITIONS TO AVOID:

Avoid contact with heat, sparks, and open flame.
Product may explode if heated. Keep cool, avoid exposure to heat.

INCOMPATIBILITIES:

Strong oxidizing agents.

DECOMPOSITION:

Thermal decomposition may produce carbon dioxide, carbon monoxide, and unidentifiable organic materials.

POLYMERIZATION:

No hazardous polymerization will occur under normal conditions.

STABILITY:

The product is stable under normal storage conditions.

SECTION 11 - TOXICOLOGICAL INFORMATION

No specific information is available. Please refer to Section 2 and 3 for available information on exposure limits and hazards identification.

SECTION 12 - ECOLOGICAL INFORMATION

No specific ecological information is available for this product.

SECTION 13 - DISPOSAL CONSIDERATIONS

WASTE DISPOSAL:

Place in closed containers. Dispose of product in accordance with local, county, state, and federal regulations.

SECTION 14 - TRANSPORT INFORMATION

Ground shipment of limited or excepted quantities of aerosols or liquid paint in containers of 1 quart or less:

CONSUMER COMMODITY, ORM-D

Ground shipment of liquid paint in containers more than 1 quart:

PAINT, FLAMMABLE LIQUID, UN1263, CLASS 3, GROUP II

(Regulatory sources: DOT 49CFR 172.101)

Air shipment of limited or excepted quantities of aerosols or liquid paint in containers of 1 quart or less:

CONSUMER COMMODITY, ID 8000, CLASS 9 MISCELLANEOUS LABEL

(Regulatory sources: IATA Quantity Exemptions - Table 2.8.4, 2.7.A, 2.7.5, Packaging Instruction: 910)

OR

AEROSOLS, FLAMMABLE, UN1950, CLASS 2.1 LABEL

(Regulatory sources: IATA Quantity Exemptions - Table 2.8.1, 2.8.4, Packaging Instruction: Y203)

SECTION 15 - REGULATORY INFORMATION

SARA 313 INFORMATION:

This product contains NONE of the substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

FEDERAL REGULATIONS:

TOXIC SUBSTANCES CONTROL ACT: The chemical substances in this product are listed on the TSCA Section 8 inventory.

STATE REGULATIONS:

Workable Fixative - 466337

This product contains chemical(s) which are listed on California's proposition 65 list. If the product is to be sold or used in California a clear and reasonable warning must be provided such as:

Warning! This product contains a chemical or chemicals known to the State of California to cause birth defects or other reproductive harm.

NEW JERSEY RIGHT-TO-KNOW

The following non-hazardous ingredients are among the top five components in this product

CHEMICAL NAME	CAS NUMBER
Cellulose Acetate Butyrate	9004-36-8

PENNSYLVANIA RIGHT-TO-KNOW

No non-hazardous ingredients are present greater than 3%

INTERNATIONAL REGULATIONS:

CANADA: The chemical substances in this product are listed on the Canadian Domestic Substances List.

SECTION 16 - OTHER INFORMATION

The information contained on this MSDS is believed to be reliable and accurate. Due to the changing nature of government information, it is impossible to guarantee the accuracy of the information contained herein. Since the conditions of handling and use are beyond our control, we make no guarantee of results and assume no liability for damages incurred by the use of this material. This information should not be regarded as legal advice or regulation. It is the responsibility of the user to comply with all Federal, State, and Local laws and regulations. For questions relating to specific aspects of the requirements and regulations consult the proper regulatory agency.

HMIS RATINGS:

HEALTH: 2* FLAMMABILITY: 4 REACTIVITY: 0 PERSONAL PROTECTION: G

SUPERIOR GRAPHITE -- TUBE-O-LUBE
MATERIAL SAFETY DATA SHEET
NSN: 915000N033413
Manufacturer's CAGE: 1BG41
Part No. Indicator: A
Part Number/Trade Name: TUBE-O-LUBE

General Information

Company's Name: SUPERIOR GRAPHITE CO
Company's Street: 120 SOUTH RIVERSIDE PLAZA
Company's City: CHICAGO
Company's State: IL
Company's Country: US
Company's Zip Code: 60606
Company's Emerg Ph #: 312-559-2999; 708-499-1883
Company's Info Ph #: 312-559-2999
Record No. For Safety Entry: 001
Tot Safety Entries This Stk#: 001
Status: SMJ
Date MSDS Prepared: 14MAY90
Safety Data Review Date: 30JUL92
MSDS Preparer's Name: RONAEL B. VAGHN
Preparer's Company: SAME
MSDS Serial Number: BPBFZ
Hazard Characteristic Code: NK

Ingredients/Identity Information

Proprietary: NO
Ingredient: GRAPHITE; (NATURAL GRAPHITE)
Ingredient Sequence Number: 01
Percent: 70-99
NIOSH (RTECS) Number: MD9659600
CAS Number: 7782-42-5
OSHA PEL: 15 MPPCF RDUST
ACGIH TLV: 2 MG/M3 RDUST; 9293

Proprietary: NO
Ingredient: SILICON DIOXIDE, AMORPHOUS; (SILICA)
Ingredient Sequence Number: 02
NIOSH (RTECS) Number: 1005470SD
CAS Number: 7631-86-9
OSHA PEL: 6 MG/M3
ACGIH TLV: 10 MG/M3 TDUST

Physical/Chemical Characteristics

Appearance And Odor: DARK BLACK-GREY GRANULAR POWDER; NO ODOR.
Boiling Point: NONE
Melting Point: NONE
Vapor Pressure (MM Hg/70 F): NONE
Specific Gravity: 2.2 (H*20=1)
Solubility In Water: NEGLIGIBLE

Fire and Explosion Hazard Data

Flash Point: NONE
Lower Explosive Limit: NONE

Upper Explosive Limit: NONE
Extinguishing Media: CO*2, DRY CHEMICAL, FOAM.
Special Fire Fighting Proc: WEAR NIOSH/MSHA APPROVED SCBA AND FULL
PROTECTIVE EQUIPMENT (FP N).
Unusual Fire And Expl Hazrds: UNKNOWN.

=====
Reactivity Data
=====

Stability: YES
Cond To Avoid (Stability): NONE
Materials To Avoid: NONE
Hazardous Decomp Products: UNKNOWN
Hazardous Poly Occur: NO
Conditions To Avoid (Poly): NOT RELEVANT
=====

Health Hazard Data
=====

LD50-LC50 Mixture: NONE SPECIFIED BY MANUFACTURER.
Route Of Entry - Inhalation: YES
Route Of Entry - Skin: NO
Route Of Entry - Ingestion: YES
Health Haz Acute And Chronic: CASES OF PULMONARY FIBROSIS AND EMPHYSEMA
HAVE RESULTED FROM PROLONGED INHALATION OF GRAPHITE DUST.
Carcinogenicity - NTP: NO
Carcinogenicity - IARC: NO
Carcinogenicity - OSHA: NO
Explanation Carcinogenicity: NOT RELEVANT
Signs/Symptoms Of Overexp: POSSIBLY ALLERGENIC. MINOR IRRITATION TO EYES
OR NASAL PASSAGES.
Med Cond Aggravated By Exp: NONE SPECIFIED BY MANUFACTURER.
Emergency/First Aid Proc: INHAL: REMOVE FROM AREA. SKIN: WASH HANDS/ SKIN
WITH SOAP AND WATER. INGEST: DRINK WARM MILK OR WATER. EYES: FLUSH WITH
RUNNING WATER FOR AT LEAST 15 MINUTES.
=====

Precautions for Safe Handling and Use
=====

Steps If Matl Released/Spill: SWEEP UP/VACUUM.
Neutralizing Agent: NONE SPECIFIED BY MANUFACTURER.
Waste Disposal Method: DISPOSE OF I/A/W LOCAL, STATE AND FEDERAL
REGULATIONS.
Precautions-Handling/Storing: NONE
Other Precautions: NONE
=====

Control Measures
=====

Respiratory Protection: USE NIOSH/MSHA APPROVED DUST MASKS.
Ventilation: LOCAL EXHAUST: USE AMBIENT AMOUNT TO KEEP DUST BELOW TLV.
MECHANICAL (GENERAL): SAME AS FOR LOCAL EXHAUST.
Protective Gloves: RUBBER GLOVES.
Eye Protection: CHEMICAL WORKERS GOGGLES (FP N).
Other Protective Equipment: WEAR OLD CLOTHING AND VENTILATE WORK AREA WITH
DUST COLLECTING EQUIPMENT.
Work Hygienic Practices: NONE SPECIFIED BY MANUFACTURER.
Suppl. Safety & Health Data: NONE SPECIFIED BY MANUFACTURER.
=====

Transportation Data
=====

Trans Data Review Date: 92288
DOT PSN Code: ZZZ
DOT Proper Shipping Name: NOT REGULATED BY THIS MODE OF TRANSPORTATION

IMO PSN Code: ZZZ
IMO Proper Shipping Name: NOT REGULATED FOR THIS MODE OF TRANSPORTATION
IATA PSN Code: ZZZ
IATA Proper Shipping Name: NOT REGULATED BY THIS MODE OF TRANSPORTATION
AFI PSN Code: ZZZ
AFI Prop. Shipping Name: NOT REGULATED BY THIS MODE OF TRANSPORTATION
Additional Trans Data: NOT REGULATED FOR TRANSPORTATION

=====

Disposal Data

=====

=====

Label Data

=====

Label Required: YES
Technical Review Date: 30JUL92
Label Status: G
Common Name: TUBE-O-LUBE
Chronic Hazard: YES
Signal Word: CAUTION!
Acute Health Hazard-Slight: X
Contact Hazard-Slight: X
Fire Hazard-None: X
Reactivity Hazard-None: X
Special Hazard Precautions: ACUTE: MAY CAUSE MINOR IRRITATION TO EYES OR
NASAL PASSAGES. CHRONIC: PROLONGED INHALATION OF GRAPHITE DUST MAY CAUSE
PULMONARY FIBROSIS AND EMPHYSEMA.
Protect Eye: Y
Protect Skin: Y
Protect Respiratory: Y
Label Name: SUPERIOR GRAPHITE CO
Label Street: 120 SOUTH RIVERSIDE PLAZA
Label City: CHICAGO
Label State: IL
Label Zip Code: 60606
Label Country: US
Label Emergency Number: 312-559-2999; 708-499-1883

Material Safety Data Sheet

Revision Date 27-Jan-2012

1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product code DL2990
Product name TUNDRA
Recommended Use Cleaner

Supplier Drummond American
A Lawson Products Company
600 Corporate Woods Parkway
Vernon Hills, IL 60061
(847) 913-9313

Emergency telephone number (888) 426-4851

2. HAZARDS IDENTIFICATION

Emergency Overview
Harmful or fatal if swallowed. Irritant.

Aggravated Medical Conditions
Dermatitis.

Principal Routes of Exposure
Eyes. Skin. Ingestion.

Potential health effects

Eyes	Irritation.
Skin	Skin Irritation.
Inhalation	Nausea. Vomiting. Central nervous system effects. Irregular eye movement. Convulsions. Extreme overexposure may cause. Cardiac abnormalities. Pulmonary edema. Death.
Ingestion	Nausea. Pain. Vomiting. Central nervous system effects. Irregular eye movement. convulsions. Extreme overexposure may cause. Irregular cardiac activity. Death. Pulmonary edema.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %
Ethylene glycol	107-21-1	30-60
EDTA	64-02-8	1-5
Ethanolamine	141-43-5	1-5
Nonylphenol Ethoxylate	9016-45-9	1-5
Water	7732-18-5	40-60

4. FIRST AID MEASURES

Eye contact Flush with plenty of water for at least 15 minutes. Seek medical attention.

Skin contact Wash area thoroughly with soap and water. Seek medical attention if irritation persists.

Ingestion Contact physician or poison control center immediately. Drink 1 or 2 glasses of water.

Inhalation Remove to fresh air. Provide oxygen or artificial respiration if necessary. Call a physician.

5. FIRE FIGHTING MEASURES

Flash point °C Not Applicable
Flash point °F Not Applicable
Method No information available

Autoignition temperature °C No data available
Autoignition temperature °F No data available

Flammability Limits (% in Air)
Upper No data available
Lower No data available

Suitable extinguishing media
Water spray. Water fog. Dry chemical powder. Carbon dioxide (CO2). Foam.

Special protective equipment for firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

Special Fire-Fighting Procedures
Do not enter any enclosed or confined fire space without proper protective equipment .

Sensitivity to shock
No information available.

Sensitivity to static discharge
No information available.

6. ACCIDENTAL RELEASE MEASURES

Methods for cleaning up
Evacuate area of unprotected and unnecessary personnel. Shut off source of leak if safe to do so. Dike or dam large spills. Remove with vacuum trucks or pump to storage vessel. Soak up excess with absorbent material. Reclaim into containers for reuse, recycle, or proper disposal.

7. HANDLING AND STORAGE

Handling
Avoid contact with skin, eyes and clothing. Avoid breathing spray mist. Thoroughly wash hands and exposed skin after handling. Do not ingest.

Storage
Keep out of the reach of children.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Chemical Name	OSHA PEL (TWA)	OSHA PEL (Ceiling)	ACGIH OEL (TWA)	ACGIH OEL (STEL)
Ethylene glycol	-	-	-	-
Water	-	-	-	-
Nonylphenol Ethoxylate	-	-	-	-
Ethanolamine	3 ppm 6 mg/m ³	-	3 ppm	6 ppm
EDTA	-	-	-	-

Ventilation and Environmental Controls

Use enough ventilation, local exhaust at the work area, general, or both, to keep below the TLV's in the worker's breathing zone and the general area.

Hygiene measures

General industrial hygiene practice.

Respiratory protection

Use NIOSH approved respirator if TLV limit is exceeded. Wear a NIOSH approved organic vapor/mist respirator.

Hand Protection

Rubber gloves. PVC gloves.

Eye protection

Safety glasses. Goggles.

Skin and body protection

Impervious clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form	Liquid
Color	Blue
Odor	None
Odor Threshold	No information available
pH	11.9
Specific Gravity	1.1
Vapor pressure	No data available
Vapor density	No data available
Evaporation Rate	1 (H ₂ O=1)
Water solubility	Soluble in water
VOC Content	1.5
Partition Coefficient (n-octanol/water)	No data available
Boiling point/range °C	100
Boiling point/range °F	212
Melting point/range °C	-42.8
Melting point/range °F	-45
Flash point °C	Not Applicable
Flash point °F	Not Applicable

10. STABILITY AND REACTIVITY

Stability

Stable.

Conditions to avoid

Avoid mixing with any other cleaning product.

Incompatibility

Strong oxidizers. Strong acids. Chlorine bleach. Chlorinated detergents or sanitizers.

Hazardous Decomposition Products

Carbon oxides. Other substances.

Polymerization

No information available.

11. TOXICOLOGICAL INFORMATION

Component Information

Chemical Name	LD50 (oral, rat)	LD50 (dermal, rat/rabbit)	LC50 (inhalation, rat)
Ethylene glycol 107-21-1	4000 mg/kg	9530 µL/kg	-
Water 7732-18-5	90 mL/kg	-	-
Nonylphenol Ethoxylate 9016-45-9	1310 mg/kg	2 mL/kg	-
Ethanolamine 141-43-5	1720 mg/kg	1 mL/kg 1025 mg/kg	-
EDTA 64-02-8	10 g/kg	-	-

Synergistic Products

None known

Potential health effects

Sensitization

None known

Chronic toxicity

None known

Mutagenic effects

None known

Teratogenic effects

None known

Reproductive toxicity

None known

Target Organ Effects

See Section 2

Carcinogenic effects

See table below

Chemical Name	ACGIH OEL - Carcinogens	IARC	NTP - Known Carcinogens	NTP - Suspected Human Carcinogens	OSHA RTK Carcinogens
Ethylene glycol	A4	Not Listed	Not Listed	Not Listed	Not Listed
Water	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed
Nonylphenol Ethoxylate	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed
Ethanolamine	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed
EDTA	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed

12. ECOLOGICAL INFORMATIONEthylene glycol**Microtox Data***Pseudomonas putida* EC50=10000 mg/L (16 h)*Photobacterium phosphoreum* EC50=620 mg/L (30 min)*Photobacterium phosphoreum* EC50=620.0 mg/L (30 min)**Water Flea Data***Daphnia magna* EC50=46300 mg/L (48 h)Ethanolamine**Microtox Data***Pseudomonas putida* EC50=110 mg/L (17 h)*Nitrosomonas* EC50=12200 mg/L (2 h)*Photobacterium phosphoreum* EC50=13.7 mg/L (30 min)**Water Flea Data***Daphnia magna* hEC50 48 (65 mg/L)EDTA**Water Flea Data***Daphnia magna* hEC50 24 (610 mg/L)**13. DISPOSAL CONSIDERATIONS****Waste from residues / unused products**

Dispose in accordance with federal, state, and local regulations.

14. TRANSPORTATION INFORMATIONDOT

Not Regulated

TDG

Not Regulated

15. REGULATORY INFORMATIONUS EPA SARA 313

Chemical Name	US EPA SARA 313 Emission Reporting
Ethylene glycol	Listed

State Regulations

Chemical Name	New Jersey - RTK	Pennsylvania - RTK	California Prop. 65
Ethylene glycol	Listed	Listed	Not Listed
Water	Not Listed	Not Listed	Not Listed
Nonylphenol Ethoxylate	Not Listed	Not Listed	Not Listed
Ethanolamine	Listed	Listed	Not Listed
EDTA	Not Listed	Not Listed	Not Listed

International Inventories

Chemical Name	EINECS	DSL	NDSL	TSCA
Ethylene glycol	X	X	-	X

Water	X	X	-	X
Nonylphenol Ethoxylate	-	X	-	X
Ethanolamine	X	X	-	X
EDTA	X	X	-	X

CPR

This product has been classified in accordance with the hazard criteria of the Controlled Product Regulations and the MSDS contains all of the information required by the Controlled Product Regulations

16. OTHER INFORMATIONNFPA

Health - 2

Flammability - 0

Reactivity - 0

HMIS

Health - 2

Flammability - 0

Physical Hazard - 0

Prepared By

C. McHugh, Regulatory Affairs Specialist

The information accumulated herein is believed to be accurate, but is not warranted to be, whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.



turtle wax, inc
625 Willowbrook Ctr Pkwy
Willowbrook, Illinois 60527

Material Safety Data Sheet

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME TURTLE WAX RED RUBBING COMPOUND
PRODUCT CODE T-230(C)
CHEMICAL FAMILY Polishes and Cleaners
CHEMICAL NAME Mixture: water, polishing agents, soap, additives
FORMULA Mixture

MANUFACTURER

Turtle Wax, Inc.
625 Willowbrook Centre Parkway
Willowbrook, IL 60527
Phone: 630-455-3700
Fax: 630-455-3868

EMERGENCY TELEPHONE NUMBERS

Transportation:
CHEMTREC: 800-424-9300
Medical:
Contact your local Poison Control Center

2. POSITION/INFORMATION ON INGREDIENTS

COMPONENT	CAS NUMBER	CONCENTRATION (wt %)
White Petroleum Oil (White Oil)	8042-47-5	1-3%

EXPOSURE LIMITS 8 hrs. TWA(ppm)

	<u>OSHA PEL</u>	<u>ACGIH TLV</u>	CARCINOGEN (OSHA,NPT,IARC)
White Petroleum Oil (White Oil)	n/av	n/av	No

3. HAZARDS IDENTIFICATION

POTENTIAL HEALTH EFFECTS

INHALATION: Repeated or excessive inhalation of vapor can cause irritation, dizziness, and nausea. No chronic effects known.

INGESTION: Causes digestive system upsets, dizziness, nausea, and may cause chemical pneumonia, which may be fatal, if sucked into lungs. No chronic effects known.

SKIN CONTACT: Repeated or excessive contact can cause moderate irritation, de-fatting or dermatitis. No chronic effects known.

EYE CONTACT: Causes irritation. No chronic effects known.

4. **FIRST AID MEASURES**

EYE: Flush with water for 15 minutes. Get medical attention if effects persist.

SKIN: Remove contaminated clothing. Wash effected areas thoroughly with soap and water. Launder clothing before re-use.

INHALATION: Remove to fresh air. Use artificial respiration and oxygen if needed.

INGESTION: Rinse mouth. Do not induce vomiting. Get prompt medical attention. Aspiration into lungs can cause chemical pneumonitis which may be fatal.

5. **FIRE FIGHTING MEASURES**

FLASH POINT: (Seta Cl. Cup): >200°F (>93°C) Explosive Limits: Lower: n/av Upper: n/av

EXTINGUISHING MEDIA: Water Spray, Alcohol Foam, Carbon Dioxide, Dry Chemical

SPECIAL FIRE FIGHTING PROCEDURES: Avoid flow of material to sewers. See Sec. 8 for personal protection.

6. **ACCIDENTIAL RELEASE MEASURES**

SPILL OR LEAK PROCEDURES: Remove all ignition sources. Provide good ventilation. Take up spills and put into closed containers. Avoid flow to sewers. Floors may be slippery. See Section 8 for other protective measures.

7. **HANDLING AND STORAGE**

STORAGE TEMPERATURE (MIN./MAX.): 32 ° F (0 ° C)/ 120° F (49 C)

SHELF LIFE: 7 years minimum when the original container is kept tightly closed and properly stored.

SPECIAL SENSITIVITY: None.

HANDLING AND STORAGE PRECAUTIONS: Store in cool and ventilated places, but avoid freezing. Keep containers closed.

8. **EXPOSURE CONTROLS/PERSONAL PROTECTION**

EYE PROTECTION REQUIREMENTS: Wear goggles. Have convenient eye wash stations.

SKIN PROTECTION REQUIREMENTS: Wear solvent resistant gloves and other clothing as needed to prevent exposure.

RESPIRATOR/VENTILATION PROTECTION REQUIREMENTS: Provide sufficient ventilation to avoid exposure levels above the established TLV.

INGESTION PROTECTION REQUIREMENTS: Avoid swallowing or sucking into lungs.

EXPOSURE LIMITS: Not established for product as whole.

9. **PHYSICAL AND CHEMICAL PROPERTIES**

PHYSICAL FORM: cream semi-hard paste

COLOR: dark reddish brown

ODOR: typical

BOILING POINT: n/av

MELT / FREEZE POINT 100° - 110°F (38-43°C)

PH: 9.4 (1:1 with soft water)

SOLUBILITY IN WATER: Dispersible

SPECIFIC GRAVITY: 1.061

% NON-VOLATILE BY WEIGHT: 26.0%

VAPOR PRESSURE: n/av

VAPOR DENSITY: n/av

10. **REACTIVITY**

STABILITY: Stable

HAZARDOUS POLYMERIZATION: Does not occur.

INCOMPATIBILITIES: Strong oxidizers such as peroxides.

DECOMPOSITION PRODUCTS: When burned: CO₂, CO, Hydrocarbons.

11. **TOXICOLOGICAL INFORMATION**

ACUTE INHALATION: Can cause irritation, dizziness, and nausea.

CHRONIC INHALATION: None known

ACUTE SKIN CONTACT: Can cause irritation, de-fatting, or dermatitis.

CHRONIC SKIN CONTACT: None known

ACUTE EYE CONTACT: Causes irritation

12. **ECOLOGICAL INFORMATION**

No data available.

13. **DISPOSAL CONSIDERATIONS**

RCRA HAZARDOUS WASTE: Is not a RCRA hazardous waste.

WASTE DISPOSAL METHOD: Dispose of product in accordance with all local, state and federal laws and regulations.

14. **TRANSPORT INFORMATION**

DOT INFORMATION: Not regulated as a hazardous material.

PROPER SHIPPING NAME: None

TECHNICAL SHIPPING NAME: None

HAZARD CLASS: None

UN NUMBER: None(Canada) None

PRODUCT RQ (lbs): n/ap

LABEL: Non Bulk None
Bulk None

PLACARD: Non Bulk None
Bulk None

FREIGHT CLASS BULK: n/ap

FREIGHT CLASS PACKAGE: None

PRODUCT LABEL None

15. **REGULATORY INFORMATION**

TSCA STATUS: All ingredients are commercially available and listed by manufacturer. All ingredients are listed under TSCA.

CERCLA REPORTABLE QUANTITY: None

SARA TITLE III:

**SECTION 302 EXTREMELY
HAZARDOUS SUBSTANCES** None

**SECTION 311/312
HAZARD CATEGORIES**

Acute Health Yes

Chronic Health No

Fire No

Reactive No

Sudden Release of Pressure No

SECTION 313

<u>CHEMICAL NAME</u>	<u>CAS NUMBER</u>	<u>CONCENTRATION</u>
None		

CANADIAN STATUS: All materials contained in this product are listed on the Canadian Domestic Substances List. Consult Turtle Wax, Inc. regarding status of ingredients.

EUROPEAN UNION: All materials contained in this product are listed on EINECS.

STATE REGULATORY INFORMATION

The following chemicals are specifically listed by individual states; other product specific health and safety data in other sections of the MSDS may also be applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state.

COMPONENT/

CAS NUMBER

CONCENTRATION

STATE CODE

None

16. OTHER INFORMATION

HMIS CLASSIFICATION

Health 1

Flammability 1

Reactivity 0

PPI A

NFPA RATING

Health 1

Fire 1

Reactivity 0

Special None

REASON FOR ISSUE

Revised to ANSI format

PREPARED BY

James P. Heidel

TITLE

Technical Director, R&D

APPROVAL DATE

September 10, 2007

SUPERCEDES DATE

March 8, 2007

REVISION NUMBER

A - 1

This information is to the best of Turtle Wax, Inc.'s knowledge and belief, accurate and reliable. However, no representation, warranty, or guarantee is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his own particular use.

Material Safety Data Sheet
Ultimate Blue[®] Compressor Pump Oil

Date Issued/Revised: March 1, 2006

Supersedes: June 15, 2004

Section 1: Product and Company Identification

COMPANY: Jenny Products, Inc.
850 North Pleasant Avenue
Somerset, PA 15501

Telephone
Information: 1-814-445-3400

Product Code ES4, ESQ, ESG, ES4C, ESQC, ESGC
Product Label Name Ultimate Blue[®] Synthetic Compressor Pump Oil - ISO-100
Product Use Lubricating Oil

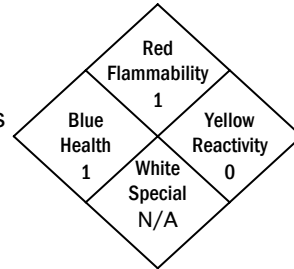
Section 2: Composition/Information on Ingredients

OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200)

This product is not formulated to contain ingredients that have exposure limits exceeding those established by US agencies.

*See Section 8 for exposure limits.

NFPA & HMIS Rating



Section 3: Hazards Identification

POTENTIAL HEALTH EFFECTS: Minor eye, inhalation and skin irritant.

*See Section 11 for toxicological information.

Section 4: First Aid Measures

EYE: Flush with water for 15-20 minutes. Seek medical attention if irritation develops.

SKIN: Wash immediately with soap and water. Remove contaminated clothing and launder before reuse. Discard shoes and leather articles saturated with the product. Obtain medical advice if irritation occurs.

INHALATION: Remove exposed person to fresh air. If breathing is labored give oxygen. If breathing has stopped apply artificial respiration. Get immediate medical attention.

INGESTION: DO NOT INDUCE VOMITING. If conscious, give 2 glasses of water. If vomiting does occur, keep head below hips to reduce risk of aspiration. Get immediate medical attention.

Section 5: Fire Fighting Measures

FLAMMABILITY PROPERTIES: Flash Point 507°F (264°C)
Method COC ASTM D-92
LFL/UFL Not Determined
Auto-ignition Temperature Not Determined

EXTINGUISHING MEDIA: Carbon dioxide, dry chemical, and alcohol foam.

FIREFIGHTING EQUIPMENT: Full bunker gear recommended including a positive pressure self-contained breathing apparatus.

Section 6: Accidental Release Measures

Isolate spill area. Provide adequate ventilation. Wear appropriate personal protection. Recover free product for recycle and/or disposal. Add sand, earth or other suitable absorbent to spill area. Prevent entry into sewers and waterways. Check under Transportation and Labeling (DOT/CERCLA) and Other Regulator Information Section (SARA) for hazardous substances to determine regulatory reporting requirements for spill.

Section 7: Handling and Storage

HANDLING: Keep containers closed. Avoid contact with eyes, skin or clothing. Wash hands after handling. Empty container may retain product residue which may exhibit hazards of product.

STORAGE: Keep away from heat or flame.

Section 8: Exposure Controls/Personal Protection

VENTILATION: Use adequate general or local exhaust ventilation to keep airborne concentrations below exposure limits.

RESPIRATORY: Use a NIOSH approved respirator when necessary.

SKIN: Use Viton or Nitrile gloves to avoid prolonged or repeated skin contact.

EYE: Use splash goggles or face shield where splashing is expected or can occur.

EXPOSURE LIMITS: The Threshold Limit Value (TLV) of 5 mg/m³ is suggested for oil mist.

Section 9: Physical and Chemical Properties

Physical State	Liquid
Boiling Point	Not Determined
Freezing/Melting Point	-49°F (-45°C)
Vapor Pressure	Not Determined
Vapor Density (Air=1)	Negligible
Evaporation Rate	Not Determined
Solubility in Water	Negligible
Specific Gravity (Water=1)	0.8550
Density, lb./gal.	7.119
Volatility (Volume)	Negligible
VOC.....	Unknown
pH.....	Essentially Neutral
Coefficient of Water/Oil Distribution	Not Determined
Odor	Mild, Bland, Hydrocarbon Odor
Odor Threshold	Not Determined
Appearance	Light Blue Transparent Colored Liquid
Viscosity, cSt @ 100°C	13.63
Viscosity, cSt @ 40°C	100.48
Viscosity Index	136

Section 10: Stability and Reactivity

STABILITY: Stable under moderately elevated temperatures and pressures.

INCOMPATIBILITY: Avoid contact with strong oxidants.

HAZARDOUS POLYMERIZATION: Will not occur.

HAZARDOUS DECOMPOSITION OF PRODUCT: Toxic oxides of carbon, aldehydes and other products of incomplete combustion.

Section 11: Toxicological Information

ACUTE EXPOSURE

- | | |
|-------------------------|---|
| Eye Irritation: | Moderate to strong eye irritation. Based on data from components or similar material. |
| Skin Irritation: | Not expected to be a primary skin irritant. Based on data from components or similar material. Prolonged or repeated skin contact as from clothing wet with material may cause dermatitis. Symptoms may include redness, edema, drying, defatting, and cracking of the skin. |
| Respiratory Irritation: | If material is misted or if vapors are generated from heating, exposure may cause irritation of mucous membranes and the upper respiratory tract similar to that observed with mineral oil. Based on data from components or similar materials. Under good industrial hygiene practices where all exposure limits are observed, respiratory irritation should not be a problem. |

CHRONIC EXPOSURE

- | | |
|------------------------|---|
| Chronic Toxicity: | No data available to indicate product present at greater than 1.0% are chronic health hazards. |
| Carcinogenicity: | No data available to indicate product present at greater than 0.1% are a carcinogenic hazard. |
| Mutagenicity: | No data available to indicate product present at greater than 1.0% present a mutagenic or genotoxic hazard. |
| Reproductive Toxicity: | No data available to indicate product present at greater than 1.0% present a reproductive hazard. |
| Teratogenicity: | No data available to indicate product present at greater than 1.0% present a teratogenic hazards. |

ADDITIONAL INFORMATION

- | | |
|------------------|---|
| Exposure Limits: | Under conditions, which may generate mists, observe the OSHA PEL of 5 mg per cubic meter. |
|------------------|---|

Material Safety Data Sheet
Ultimate Blue[®] Compressor Pump Oil

Date Issued/Revised: March 1, 2006

Supersedes: June 15, 2004

Section 12: Ecological Information

No data available on the adverse effects of this product on the environment.

Section 13: Disposal Considerations

If this product as supplied becomes a waste, it does not meet the criteria of a hazardous waste as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261.

Section 14: Transport Information

This product is not classified as hazardous material for DOT shipping. For further information relative to spills resulting from transportation incidents, refer to the latest DOT Emergency Response Guidebook for Hazardous Materials.

Section 15: Regulatory Information

U.S. Federal Regulations

OSHA Table Z Synthetic Base Stock (mist)
TSCA Not Applicable
CERCLA 40 CFR 302.4 Not Applicable
SARA Title III
Section 302 Extremely Hazardous Not Applicable
Section 311/312
Fire Hazard Yes
Reactive Hazard No
Release of Pressure No
Acute Health Hazard Yes
Chronic Health Hazard No
Section 313 Toxic Chemical Not Applicable

U.S. State Regulations

California (Prop 65)

Does not contain chemicals known to the state of California to cause cancer.

International Regulations

WHMIS All components listed

Section 16: Other Information

The information and recommendations contained herein are, to the best of our knowledge and belief, accurate and reliable as of the date issued. We makes no warranty or guarantee, expressed or implied, of their accuracy or reliability, and we shall not be liable for any loss or damage based upon the criteria supplied by the developers of these rating systems, together with our interpretation of the available data.



The Procter & Gamble Company
P&G Household Care
Fabric & Home Care Innovation Center
5299 Spring Grove Avenue
Cincinnati, OH 45217-1087

MATERIAL SAFETY DATA SHEET

MSDS #: RQ1309635 / RQ1310079
Supersedes: RQ1212667

Issue Date: 01/29/2014
Issue Date: 02/25/2013

SECTION I - PRODUCT IDENTIFICATION

Identity: **Liquid Hand Dishwashing Detergents**

Finished Product

Brands: **GAIN**

**Ultra Gain Original Fresh [96285659],
Ultra Gain Apple Berry Twist [96264781],
Ultra Gain Spring Lavender [96285595],
Ultra Gain Island Fresh [96285663],
Ultra Gain Bleach Alternative Honey Berry Hula [96285668],
Ultra Gain Lemon Zest Dishwashing Liquid/Antibacterial Hand Soap [96268213]),
GAIN Ultra Hawaiian Aloha [96390954]**

P&G Telephone Number: 1-800-253-2753
or call Local Poison Control Center or your physician.

SECTION II - HAZARDS IDENTIFICATION

Potential Health Hazards (Acute and Chronic): (See Section 11 for more information)

Ingestion: Ingestion may cause transient gastrointestinal irritation.

Eye Contact: May cause mild, transient irritation.

Skin: Transient irritation with prolonged exposure to concentrated material.

Inhalation: N/A

Signs and Symptoms of Exposure:

Ingestion: May result in nausea, vomiting, and/or diarrhea.

Eye Contact: May cause stinging, tearing, itching, swelling, and/or redness.

Skin: Prolonged contact with concentrated material may be drying or transiently irritating to skin.

Inhalation: N/A

Potential Environmental Effects: (See Section 12 for more information)

SECTION III - COMPOSITION AND INGREDIENTS

Ingredients listed on the product label are: biodegradable surfactants and **no phosphate**. For Gain Bleach Alternative, ingredients listed on the product label are: biodegradable surfactants, enzymes, and **no phosphate**. For Gain Lemon Zest Antibacterial Hand Soap, active ingredient is triclosan at 0.1%. Inactive ingredients for Gain Antibacterial Hand Soap are listed in the Drug Facts box on back label.

Hazardous Ingredients as defined by OSHA, 29 CFR 1910.1200. and/or WHMIS under the HPA:

<u>Chemical Name</u>	<u>Common Name</u>	<u>CAS No.</u>	<u>Composition Range</u>	<u>LD50/LC50</u>
Ethyl alcohol	Ethanol	64-17-5	0.1-1%	LD50(oral, rat) – 7.06 g/kg

These substances are listed because in their pure bulk form they meet the OSHA and/or WHMIS definition of hazardous. Any hazards associated with this finished product are listed in Section II of this MSDS.

SECTION IV – FIRST AID INFORMATION

First Aid Procedures:

Ingestion: Drink 1 or 2 glasses of water.

Eye Contact: Flush thoroughly with water for 15 minutes.

Skin: If prolonged contact occurs, rinse thoroughly with water. If spilled on clothing, change clothes. If symptoms persist or recur, seek medical attention.

Inhalation: N/A

Other: Consumer product package has the following precautionary statement on the back label: “For external use only. Keep out of the reach of children. If Dawn gets in eyes, rinse thoroughly with water. If swallowed, drink a glass of water to dilute.”

SECTION V - FIRE FIGHTING INFORMATION

Flammable Properties: The liquid hand dishwashing detergents have a flashpoint of 115-135°F (46.1-57.2°C) Pensky-Martens (Closed cup). However, the detergents do **not** sustain combustion according to ASTM D4206.

Flammable Properties:

Upper Flammable Limit: N/A

Lower Flammable Limit: N/A

Explosive Limits: UEL: N/A LEL: N/A

Auto-ignition Temperature: N/A

Hazardous Combustion Products: N/A

Explosion Data (Sensitivity to Mechanical Impact): N/A

Explosion Data (Sensitivity to Static Discharge): N/A

Extinguishing Media:

Suitable: CO₂, water or dry chemical may be used.

Unsuitable: N/K

Protection of Firefighters:

Specific Hazards Arising from the Material: None.

SECTION VI - ACCIDENTAL RELEASE MEASURES

Personal Precautions: None

Environmental Precautions: DISPOSAL IS TO BE PERFORMED IN COMPLIANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS. Solutions of the detergents may be allowed to be flushed down sewer - First check with your local water treatment plant. Recycling is recommended for undiluted scrap product. Do not landfill.

Steps To Be Taken in Case Material is Released or Spilled: Prevent spills from reaching a waterway. Sorbents may be used. Read “Waste Disposal Method” below for further information.

SECTION VII – HANDLING AND STORAGE

Precautions To Be Taken in Handling: No special precautions necessary.

Precautions To Be Taken in Storage: No special precautions necessary.

SECTION VIII - EXPOSURE CONTROLS / PERSONAL PROTECTION

Recommended Exposure Guidelines: N/A

Engineering Controls: N/A

Personal Protective Equipment (PPE): N/A

Eye/Face Protection: None required with normal household use.

Industrial Setting: For splash protection, use chemical goggles. Eye wash fountain is recommended.

Skin Protection: None required with normal household use.

Industrial Setting: Protective gloves (rubber, neoprene) should be used for prolonged direct contact.

Respiratory Protection: No special precautions for casual exposure.
Ventilation *Local Exhaust*: None required with normal consumer use. *Special*: None
Industrial (General): Normal/general dilution ventilation is acceptable. *Other*: None

SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

Appearance (color, physical form, shape): Clear, opaque or colored liquids.	Flash Point (Method Used): 115-135°F (46.1-57.2°C) Pensky-Martens (Closed cup) but do not sustain combustion according to ASTM D4206.
Odor: Perfumed	Reserve Alkalinity: N/A
Odor Threshold: N/A	Solubility in Water: Complete
Physical State: Liquid hand dishwashing solution	Decomposition Temperature: N/K
Vapor Pressure (mm Hg): N/K	Evaporation Rate (nBuOAc=1): N/K
Vapor Density (Air=1): N/K	Specific Gravity/Density: ca. 1
Boiling Point: N/K	Melting/Freezing Point: ~ 30 °F (-1.1°C)
Partition Coefficient (n-octanol/water): N/K	pH (10% solution): 9
Volatile Organic Compound (VOC): Not applicable - Product not regulated for VOC Content at State or Federal level	

SECTION X - STABILITY AND REACTIVITY

Chemical Stability: Stable
Conditions to Avoid: None known
Incompatible Materials: None
Hazardous Decomposition Products: None known
Possibility of Hazardous Reactions: None known

SECTION XI - TOXICOLOGICAL INFORMATION

Liquid hand dishwashing detergents have a relatively low order of toxicity, may cause transient irritation and are expected to be emetic.
Chronic Effects: No chronic health effects reported.
Target Organs: No target organs reported.
Carcinogenicity: This finished product is not carcinogenic. **NTP:** No **IARC:** No **OSHA:** No

SECTION XII - ECOLOGICAL INFORMATION

All surfactants are readily biodegradable.

SECTION XIII - DISPOSAL CONSIDERATIONS

Waste Disposal Method: DISPOSAL SHOULD BE IN ACCORDANCE WITH FEDERAL, STATE/PROVINCIAL AND LOCAL REGULATIONS

Non Household Setting: Products covered by this MSDS, in their original form, when disposed as waste, are considered **non hazardous waste** according to Federal RCRA regulations (40 CFR 261). Disposal should be in accordance with local, state and federal regulations. Solutions of diluted detergent in the course of use, may be allowed to be flushed down sewer. First check with your local water treatment plant. Recycling is recommended for undiluted scrap product. Do not landfill.

California Hazardous Waste: Not hazardous, in accordance with 22 CCR 66261.20 through 22 CCR 66261.24

Household Use: Household product is safe for disposal down the drain during detergent use or in the trash. Dispose of empty bottle in the trash or recycle where facilities exist.

SECTION XIV - TRANSPORT INFORMATION

Products covered by this MSDS, in their original form, are not regulated for transportation.

Ground Transport (US DOT): Not regulated

Air Transport (IATA): Not regulated

Marine/Water Transport (IMDG): Not regulated

SECTION XV - REGULATORY INFORMATION

United States

All intentionally-added components of this product are listed on the US TSCA Inventory.

This product is not subject to warning labeling under California Proposition 65.

EPA Reg. No.: Not Applicable

This product contains the following SARA 313/302/304/311/312 chemicals:

None

This product contains the following CERCLA chemicals:

Chemical Name	CAS Number	Max Range in Product (%)
Ethanol	64-17-5	1.0%

State Right-to-Know:

The following ingredients present in the finished product are listed on state right-to-know lists or state worker exposure lists:

Ingredient	CAS #	Max Level	State				
			IL	MA	NJ	PA	RI
Ethanol	64-17-5	1.0 %	X	X	X	X	X

Perfumes contained within the products covered by this MSDS comply with appropriate IFRA guidance

Canada

All ingredients are CEPA approved for import to Canada by Procter & Gamble. This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and this MSDS contains all information required by the Controlled Products Regulations.

SECTION XVI - OTHER INFORMATION

Perfumes contained within the products covered by this MSDS comply with appropriate IFRA guidance.

P&G Hazard Rating:	Health:	1	4=EXTREME
	Flammability:	1	3=HIGH
	Reactivity:	0	2=MODERATE
			1=SLIGHT
			0=NOT SIGNIFICANT

*N/A. - Not Applicable

*N/K. - Not Known

Data supplied is for use only in connection with occupational safety and health.

DISCLAIMER: This MSDS is intended to provide a brief summary of our knowledge and guidance regarding the use of this material. The information contained here has been compiled from sources considered by Procter & Gamble to be dependable and is accurate to the best of the Company's knowledge. It is not meant to be an all-inclusive document on worldwide hazard communication regulations.

This information is offered in good faith. Each user of this material needs to evaluate the conditions of use and design the appropriate protective mechanisms to prevent employee exposures, property damage or release to the environment. Procter & Gamble assumed no responsibility for injury to the recipient or third persons, or for any damage to any property resulting from misuse of the product.

UltraPro Premium Ice Melter with Instaheat

UltraPRO Products Safety Data Sheet

Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
Revision date: 09/29/2015 Supersedes: 09/01/2011 Version: 1.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name : UltraPro Premium Ice Melter with Instaheat
Product form : Mixture

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Ice Melter/De-Icer

1.3. Details of the supplier of the safety data sheet

UltraPRO Products
PO Box 195
Plumsteadville, PA 18949
215-857-2839

1.4. Emergency telephone number

Emergency number : 215-857-2839

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

2.2. Label elements

GHS-US labelling

No labelling applicable

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS-US)

No data available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	GHS Classification
Contains no hazardous ingredients at levels requiring disclosure by the OSHA Hazard Communication Standard (29 CFR 1910.1200).		100	
Sodium chloride	(CAS No) 7647-14-5	Proprietary	Not classified
Calcium chloride	(CAS No) 10043-52-4	Proprietary	Acute Oral Toxicity 4, Eye Irritant 2A
Potassium chloride	(CAS No) 7447-40-7	Proprietary	Not classified
Acetic acid, calcium magnesium salt	(CAS No) 76123-46-1	Proprietary	Not classified
Potassium acetate	(CAS No) 127-08-2	Proprietary	Not classified
Magnesium chloride, hexahydrate	(CAS No) 7791-18-6	Proprietary	Not classified

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : If exposed or concerned, get medical attention/advice. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before re-use. Never give anything to an unconscious person.

First-aid measures after inhalation : IF INHALED: Remove to fresh air and keep at rest in a comfortable position for breathing.

First-aid measures after skin contact : IF ON SKIN (or clothing): Remove affected clothing and wash all exposed skin with water for at least 15 minutes.

First-aid measures after eye contact : IF IN EYES: Immediately flush with plenty of water for at least 15 minutes. Remove contact lenses if present and easy to do so. Continue rinsing.

First-aid measures after ingestion : IF SWALLOWED: rinse mouth thoroughly. Do not induce vomiting without advice from poison control center or medical professional. Get medical attention if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation : May cause respiratory irritation.

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Symptoms/injuries after skin contact	: May cause skin irritation.
Symptoms/injuries after eye contact	: Direct contact with the eyes is likely to be irritating.
Symptoms/injuries after ingestion	: May cause gastrointestinal irritation.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Dry chemical. Foam. Water spray. Sand.
Unsuitable extinguishing media	: None known.

5.2. Special hazards arising from the substance or mixture

Fire hazard	: No data to indicate that product is flammable.
Explosion hazard	: Product is not explosive.
Reactivity	: Product is hygroscopic and may give off heat while dissolving.

5.3. Advice for firefighters

Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Do not dispose of fire-fighting water in the environment.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Spill should be handled by trained clean-up crews properly equipped with respiratory equipment and full chemical protective gear (see Section 8). Evacuate area. Ventilate area. Keep upwind.
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6.1.1. For non-emergency personnel

Protective equipment	: Wear Protective equipment as described in Section 8.
Emergency procedures	: Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment	: Wear suitable protective clothing, gloves and eye or face protection. Approved supplied-air respirator, in case of emergency.
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6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

For containment	: Contain and collect as any solid. Prevent entry to sewers and public waters.
Methods for cleaning up	: Sweep up loose material. Place residues in suitable, covered, and labeled container. Dispose of material in compliance with local, state, and federal regulations.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	: Do not handle until all safety precautions have been read and understood. Use appropriate personal protection equipment (PPE). Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. If diluting, the heat developed during diluting or dissolving is very high. Use cool water (less than 80°F) and add material to water.
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7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	: Keep container tightly closed. Store in a dry, cool and well-ventilated place. Protect from atmospheric moisture.
Incompatible materials	: Moisture. Refer to Section 10 on Incompatible Materials.
Storage area	: Store in a well-ventilated place.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Not applicable.

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8.2. Exposure controls

Appropriate engineering controls

: Provide adequate general and local exhaust ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Use explosion-proof equipment with flammable materials. Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

: Protective goggles. Gloves. Protective clothing.



Hand protection

: Use gloves chemically resistant to this material when prolonged or repeated contact could occur. Gloves should be classified under Standard EN 374 or ASTM F1296. Suggested glove materials are: Neoprene, Nitrile/butadiene rubber, Polyethylene, Ethyl vinyl alcohol laminate, PVC or vinyl.

Eye protection

: Use eye protection suitable to the environment. Avoid direct contact with eyes.

Skin and body protection

: Wear long sleeves, and chemically impervious PPE/coveralls to minimize bodily exposure.

Respiratory protection

: Use NIOSH-approved dust/particulate respirator. Where vapor, mist, or dust exceed PELs or other applicable OELs, use NIOSH-approved respiratory protective equipment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: Green colored crystals with pellets and flakes.
Color	: Green.
Odor	: No data available
Odor Threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Solubility	: No data available
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Product is hygroscopic and may give off heat while dissolving.

10.2. Chemical stability

Stable.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

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10.4. Conditions to avoid

Contact with certain metals.

10.5. Incompatible materials

Sulfuric acid. Metals may corrode in aqueous calcium chloride solutions. Avoid contact with brass, steel, aluminum, ferrous metals or alloys thereof. Leather clothing and shoes may be damaged by calcium chloride. Strong oxidizing agents.

10.6. Hazardous decomposition products

Reacts slowly with (some) metals: release of highly flammable gases/vapours hydrogen. Product attracts moisture and gives off heat while dissolving. May produce toxic and noxious fumes under extreme fire conditions. Strong oxidizing agents will release chlorine. Liberates chlorine upon thermal decomposition.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	: Not classified
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified
Symptoms/injuries after inhalation	: May cause respiratory irritation.
Symptoms/injuries after skin contact	: May cause skin irritation.
Symptoms/injuries after eye contact	: Direct contact with the eyes is likely to be irritating.
Symptoms/injuries after ingestion	: May cause gastrointestinal irritation.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Based largely or completely on data for major components: this material is practically non-toxic to aquatic organisms on an acute basis (LC50 greater than 100 mg/L in most sensitive species).

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Do not discharge to public wastewater systems without permit of pollution control authorities. No discharge to surface waters is allowed without an NPDES permit.

Waste disposal recommendations : Dispose of in accordance with local/national regulations. Do not allow the product to be released into the environment.

SECTION 14: Transport information

In accordance with DOT

Not hazardous for transport

Additional information

Other information : No supplementary information available.

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Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

UltraPro Premium Ice Melter with Instaheat	
All chemical substances in this product are listed in the EPA (Environment Protection Agency) TSCA (Toxic Substances Control Act) Inventory or are exempt	
SARA Section 311/312 Hazard Classes	None

15.2. International regulations

CANADA

No additional information available.

15.3. US State regulations

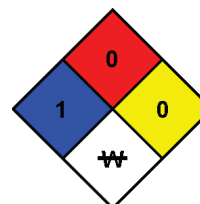
California Proposition 65

This product does not contain any substances known to the state of California to cause cancer and/or reproductive harm

SECTION 16: Other information

Revision date : 09/29/2015
Other information : Author: ZPT.

NFPA health hazard : 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.
NFPA fire hazard : 0 - Materials that will not burn.
NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.
NFPA specific hazard : W - Unusual reactivity with water. This indicates a potential hazard using water to fight a fire involving this material. When a compound is both water-reactive and an oxidizer, the W/bar symbol should go in this quadrant and the OX warning is placed immediately below the NFPA diamond.



HMIS III Rating

Health : 1
Flammability : 0
Physical : 0
Personal Protection :

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product

Material Safety Data Sheet



ULTRA SAN

Section 1. Chemical product and company identification

Trade name : ULTRA SAN
Product use : Sanitiser.
Supplier : Ecolab Food and Beverage
5105 Tomken Road
Mississauga ON L4W 2X5
1-800-352-5326

Code : 900043-37
Date of issue : 25-April-2008

EMERGENCY HEALTH INFORMATION: 1-800-328-0026
Outside United States and Canada CALL 1-651-222-5352 (in USA)

Section 2. Composition, information on ingredients

<u>Name</u>	<u>CAS number</u>	<u>% by weight</u>
sodium hypochlorite	7681-52-9	7 - 13

Section 3. Hazards identification

Physical state : Liquid. [Liquid.]

Emergency overview : DANGER !

CAUSES EYE BURNS.

CAUSES SEVERE SKIN IRRITATION. Untreated contact may cause severe irritation or chemical burns.

May cause burns to mouth, throat and stomach.

CAUSES RESPIRATORY TRACT IRRITATION.

Do not ingest. Do not get in eyes, on skin or on clothing. Avoid breathing vapours, spray or mists. Use only with adequate ventilation. Keep container closed. Wash thoroughly after handling.

Routes of entry : Skin contact, Eye contact, Inhalation, Ingestion

Potential acute health effects

Eyes : Corrosive to eyes.

Skin : Severely irritating to the skin. Untreated contact may cause severe irritation or chemical burns.

Inhalation : Irritating to respiratory system.

Ingestion : May cause burns to mouth, throat and stomach.

See toxicological information (section 11)

Section 4. First-aid measures

Eye contact : In case of contact, immediately flush eyes with cool running water. Remove contact lenses and continue flushing with plenty of water for at least 15 minutes. Get medical attention immediately.

Skin Contact : In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Inhalation : If inhaled, remove to fresh air. If exposed person is not breathing, give artificial respiration or oxygen applied by trained personnel. Get medical attention if irritation persists.

Ingestion : If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Section 5. Fire-fighting measures

Auto-ignition temperature	: Not available.
Flash point	: > 100°C
Flammable limits	: Not available.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: halogenated compounds metal oxide/oxides
Fire-fighting media and instructions	: Use an extinguishing agent suitable for the surrounding fire. Dyke area of fire to prevent runoff.

In a fire or if heated, a pressure increase will occur and the container may burst.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Risk of explosion of the product in the presence of mechanical impact: Not available.

Risk of explosion of the product in the presence of static discharge: Not available.

Section 6. Accidental release measures

Personal Precautions	: Immediately contact emergency personnel. Stop leak if without risk. Use suitable protective equipment. Keep unnecessary personnel away. Do not touch or walk through spilt material.
Environmental precautions	: Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Methods for cleaning up	: If emergency personnel are unavailable, contain spilt material. For small spills, add absorbent (soil may be used in the absence of other suitable materials), scoop up material and place in a sealable, liquid-proof container for disposal. For large spills, dyke spilt material or otherwise contain it to ensure runoff does not reach a waterway. Place spilt material in an appropriate container for disposal.

Section 7. Handling and storage

Handling	: Do not ingest. Do not get in eyes, on skin, or on clothing. Avoid breathing vapours, spray or mists. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling.
Storage	: Keep out of reach of children. Keep container in a cool, well-ventilated area. Keep container tightly closed. Do not store above the following temperature: 40°C

Section 8. Exposure controls, personal protection

Engineering measures : Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. Provide suitable facilities for quick drenching or flushing of the eyes and body in case of contact or splash hazard.

Personal protection :

Eyes	: Use chemical splash goggles. For continued or severe exposure wear a face shield over the goggles.
Hands	: Use chemical-resistant, impervious gloves.
Skin	: Wear suitable protective clothing.
Respiratory	: Avoid breathing vapours, spray or mists.

Name

Exposure limits

chlorine

ACGIH TLV (United States, 1/2006).STEL: 2.9 mg/m³ 15 minute(s).

STEL: 1 ppm 15 minute(s).

TWA: 1.5 mg/m³ 8 hour(s).

TWA: 0.5 ppm 8 hour(s).

Section 9. Physical and chemical properties

Physical state	: Liquid. [Liquid.]
Colour	: Yellow. [Light]
Odour	: chlorine
pH	: 12.5 [Conc. (% w/w): 100%]
Boiling/condensation point	: Not available.
Melting/freezing point	: Not available.
Specific gravity	: 1.154
Vapour pressure	: Not available.
Vapour density	: Not available.
Odour threshold	: Not available.
Evaporation rate	: Not available.
LogK _{ow}	: Not available.

Section 10. Stability and reactivity

Stability	: The product is stable. Under normal conditions of storage and use, hazardous polymerisation will not occur.
Conditions of instability	: Not available.
Reactivity	: Extremely reactive or incompatible with acids. Slightly reactive to reactive with metals. Mixing this product with acid or ammonia releases chlorine gas.
Hazardous Decomposition Products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Potential acute health effects

Eyes	: Corrosive to eyes.
Skin	: Severely irritating to the skin. Untreated contact may cause severe irritation or chemical burns.
Inhalation	: Irritating to respiratory system.
Ingestion	: May cause burns to mouth, throat and stomach.

Potential chronic health effects

Carcinogenic effects : No known significant effects or critical hazards.

<u>Ingredient name</u>	<u>ACGIH</u>	<u>IARC</u>	<u>NTP</u>	<u>OSHA</u>
Not applicable.				

Mutagenic effects	: No known significant effects or critical hazards.
Teratogenic effects	: No known significant effects or critical hazards.
Reproductive effects	: No known significant effects or critical hazards.
Sensitization to Product	: No known significant effects or critical hazards.
Synergistic products (toxicologically)	: Not available.

Toxicity data

<u>Ingredient name</u>	<u>Test</u>	<u>Route</u>	<u>Result</u>	<u>Species</u>
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sodium hypochlorite	LD50	Dermal	>10000 mg/kg	Rabbit
	LD50	Oral	5800 to 6800 mg/kg	Mouse
	LD50	Oral	5800 mg/kg	Mouse
	LD50	Oral	8200 mg/kg	Rat
	LC50	Inhalation	>10500 mg/m ³	Rat

Target organs : Contains material which may cause damage to the following organs: upper respiratory tract.

Section 12. Ecological information

Ecotoxicity

<u>Ingredient name</u>	<u>Species</u>	<u>Period</u>	<u>Result</u>
sodium hypochlorite	Daphnia	48 hours	Acute EC50 1.57 mg/L
	Daphnia	48 hours	Acute EC50 0.17 mg/L
	Daphnia	48 hours	Acute EC50 0.04 mg/L
	Fish	96 hours	Acute LC50 0.09 mg/L
	Fish	96 hours	Acute LC50 0.059 mg/L
	Fish	96 hours	Acute LC50 0.2 mg/L

Section 13. Disposal considerations

Waste disposal : The generation of waste should be avoided or minimised wherever possible. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Consult your local or regional authorities.

Section 14. Transport information

Regulatory information	UN number	Proper shipping name	Class	Packing group	Additional information
TDG Classification	UN1791	HYPOCHLORITE SOLUTION	8	III	<u>Explosive Limit and Limited Quantity Index</u> 5 <u>Passenger Carrying Road or Rail Index</u> 5

APPLIES ONLY DURING ROAD TRANSPORT

Any variation of the shipping description based on the packaging is not addressed.

Section 15. Regulatory information

WHMIS : Class E: Corrosive material

This product has been classified in accordance with the hazard criteria of the *Controlled Products Regulations* and the MSDS contains all the information required by the *Controlled Products Regulations*.

Section 16. Other information

Date of issue : 25-April-2008.
Responsible name : Regulatory Affairs
1-800-352-5326
Date of previous issue : 08-August-2005.

Notice to reader

The above information is believed to be correct with respect to the formula used to manufacture the product in the country of origin. As data, standards, and regulations change, and conditions of use and handling are beyond our control, NO WARRANTY, EXPRESS OR IMPLIED, IS MADE AS TO THE COMPLETENESS OR CONTINUING ACCURACY OF THIS INFORMATION.



Material Safety Data Sheet

Material Name: ULTRABOND 4085

ID: SAH00268

*** Section 1 - Chemical Product and Company Identification ***

Material Name: ULTRABOND 4085

Product Use

Sealer

Manufacturer Information

USA and Puerto Rico

MAPEI

1144 East Newport Center Drive

Deerfield Beach, FL 33442

Phone: 1-954-246-8888

Canada

MAPEI

2900 Francis-Hughes Avenue

Laval, QC H7L 3J5

Phone: 1-450-662-1212

IN THE EVENT OF A CHEMICAL EMERGENCY INVOLVING A SPILL, LEAK, FIRE, EXPLOSION, EXPOSURE OR ACCIDENT, CONTACT THE FOLLOWING NUMBERS:

Emergency 24 hour numbers:

(USA) CHEMTREC 1-800-424-9300

(Canada) CANUTEC 1-631-996-6666

*** Section 2 - Hazards Identification ***

Emergency Overview

This product has been evaluated using criteria specified in 29CFR 1910.1200 (Hazard Communication Standard). Extremely flammable; material will readily ignite at normal temperatures. This product is irritating to the eyes.

Hazard Statements

DANGER! EXTREMELY FLAMMABLE LIQUID AND VAPOR - VAPOR MAY CAUSE FLASH FIRE. IRRITANT. VAPOR HARMFUL. HARMFUL OR FATAL IF SWALLOWED. Irritating to eyes. Vapor accumulation can flash or explode when ignited. Wear suitable gloves, eye/face protection, and respiratory protection. Keep out of the reach of children.

Potential Health Effects: Eyes

This product is irritating to the eyes. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

Potential Health Effects: Skin

Prolonged and/or repeated skin contact with this product may cause irritation/dermatitis.

Potential Health Effects: Ingestion

Ingestion can cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Potential Health Effects: Inhalation

Excessive inhalation of this material causes headache, dizziness, nausea and incoordination. This product is an asphyxiant gas which can cause unconsciousness/death if OXYGEN levels are sufficiently reduced.

Medical Conditions Aggravated by Exposure

Hypersensitivity to product, allergies, and skin or respiratory disorders

Potential Environmental Effects

No information available for the product.

HMIS Ratings: Health: 2 Fire: 3 Reactivity: 0 Pers. Prot.: Safety glasses, gloves, synthetic apron, vapor respirator if airborne concentrations exceed exposure limits

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe * = Chronic hazard

*** Section 3 - Composition / Information on Ingredients ***

CAS #	Component	Percent
110-54-3	Hexane	10-30
64742-49-0	Naphtha, petroleum, hydrotreated light	10-30

Material Safety Data Sheet

Material Name: ULTRABOND 4085

ID: SAH00268

108-88-3	Toluene	10-30
Proprietary	Elastomeric polymer	7-13
67-64-1	Acetone	7-13
78-93-3	Methyl ethyl ketone	7-13
Proprietary	Phenolic resin	3-7
1309-48-4	Magnesium oxide	0.5-1.5

*** Section 4 - First Aid Measures ***

First Aid: Eyes

Get medical attention or advice. In case of contact, immediately flush eyes with large amounts of water, continuing to flush for 15 minutes.

First Aid: Skin

Get medical attention or advice. For skin contact flush with large amounts of water.

First Aid: Ingestion

If the material is swallowed, get immediate medical attention or advice.

First Aid: Inhalation

Get medical attention or advice. If inhaled, immediately remove the affected person to fresh air. If the affected person is not breathing, apply artificial respiration.

First Aid: Notes to Physician

Provide general supportive measures and treat symptomatically.

*** Section 5 - Fire Fighting Measures ***

General Fire Hazards

See Section 9 for Flammability Properties.

Extremely dangerous fire and explosion hazard. Vapors may be ignited by flame, sparks or contact with any hot surface (light bulb or steam pipes) under normal atmospheric conditions. Forms explosive mixtures with air.

Vapors are heavier than air and may travel along the ground to some distant source of ignition and flash back.

Hazardous Combustion Products

Irritating and toxic gases or fumes may be released during a fire. Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

Extinguishing Media

Dry chemical (preferred), foam, water.

Fire Fighting Equipment/Instructions

Wear self-contained breathing apparatus with a full facepiece operated in the positive pressure demand mode when fighting fires.

NFPA Ratings: Health: 2 Fire: 3 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

*** Section 6 - Accidental Release Measures ***

Personal Precautions

Eliminate ignition sources including sources of electrical, static or frictional sparks.

Containment Procedures

Contain the discharged material.

Environmental Precautions

Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.

Clean-Up Procedures

Attempt to reclaim the free product, if this is possible. Thoroughly wash the area with water after a spill or leak clean-up. Wear appropriate protective equipment and clothing during clean-up. Keep out of the reach of children.

Evacuation Procedures

Isolate area. Keep unnecessary personnel away.

Special Procedures

Wear appropriate protective equipment and clothing during clean-up.

Material Safety Data Sheet

Material Name: ULTRABOND 4085

ID: SAH00268

*** Section 7 - Handling and Storage ***

Handling Procedures

Keep this product from heat, sparks, or open flame. Use only in well ventilated areas. Avoid breathing vapors or mists of this product. Avoid getting this material into contact with your skin and eyes. Keep out of the reach of children.

Storage Procedures

Do not handle or store near an open flame, heat or other sources of ignition. Store in a cool, dry, well-ventilated area. Keep the container tightly closed.

*** Section 8 - Exposure Controls / Personal Protection ***

A: Component Exposure Limits

Hexane (110-54-3)

ACGIH:	Skin - potential significant contribution to overall exposure by the cutaneous route 50 ppm TWA
OSHA:	500 ppm TWA; 1800 mg/m3 TWA
NIOSH:	50 ppm TWA; 180 mg/m3 TWA
Alberta:	50 ppm TWA; 176 mg/m3 TWA Substance may be readily absorbed through intact skin
British Columbia:	20 ppm TWA Skin notation
Manitoba:	50 ppm TWA
New Brunswick:	50 ppm TWA; 176 mg/m3 TWA
NW Territories:	100 ppm TWA; 352 mg/m3 TWA 125 ppm STEL; 440 mg/m3 STEL
Nova Scotia:	50 ppm TWA Skin - potential significant contribution to overall exposure by the cutaneous route
Nunavut:	100 ppm TWA; 352 mg/m3 TWA 125 ppm STEL; 440 mg/m3 STEL
Ontario:	50 ppm TWAEV; 176 mg/m3 TWAEV
Quebec:	50 ppm TWAEV; 176 mg/m3 TWAEV Skin designation
Saskatchewan:	62.5 ppm STEL 50 ppm TWA
Yukon:	125 ppm STEL; 450 mg/m3 STEL 100 ppm TWA; 360 mg/m3 TWA

Material Safety Data Sheet

Material Name: ULTRABOND 4085

ID: SAH00268

Toluene (108-88-3)

ACGIH:	20 ppm TWA
OSHA:	200 ppm TWA 300 ppm Ceiling
NIOSH:	100 ppm TWA; 375 mg/m3 TWA 150 ppm STEL; 560 mg/m3 STEL
Alberta:	50 ppm TWA; 188 mg/m3 TWA Substance may be readily absorbed through intact skin
British Columbia:	Adverse reproductive effect 20 ppm TWA
Manitoba:	20 ppm TWA
New Brunswick:	50 ppm TWA; 188 mg/m3 TWA Skin - potential for cutaneous absorption
NW Territories:	100 ppm TWA; 375 mg/m3 TWA 150 ppm STEL; 560 mg/m3 STEL Skin notation
Nova Scotia:	20 ppm TWA
Nunavut:	100 ppm TWA; 375 mg/m3 TWA 150 ppm STEL; 560 mg/m3 STEL Skin notation
Ontario:	20 ppm TWAEV
Quebec:	50 ppm TWAEV; 188 mg/m3 TWAEV Skin designation
Saskatchewan:	60 ppm STEL 50 ppm TWA
Yukon:	Skin notation 150 ppm STEL; 560 mg/m3 STEL 100 ppm TWA; 375 mg/m3 TWA

Acetone (67-64-1)

ACGIH:	750 ppm STEL 500 ppm TWA
OSHA:	1000 ppm TWA; 2400 mg/m3 TWA
NIOSH:	250 ppm TWA; 590 mg/m3 TWA
Alberta:	500 ppm TWA; 1200 mg/m3 TWA 750 ppm STEL; 1800 mg/m3 STEL
British Columbia:	250 ppm TWA 500 ppm STEL
Manitoba:	500 ppm TWA 750 ppm STEL
New Brunswick:	500 ppm TWA; 1188 mg/m3 TWA 750 ppm STEL; 1782 mg/m3 STEL
NW Territories:	1000 ppm TWA; 2370 mg/m3 TWA 1250 ppm STEL; 2970 mg/m3 STEL
Nova Scotia:	500 ppm TWA 750 ppm STEL
Nunavut:	1000 ppm TWA; 2370 mg/m3 TWA 1250 ppm STEL; 2970 mg/m3 STEL
Ontario:	500 ppm TWAEV 750 ppm STEV
Quebec:	500 ppm TWAEV; 1190 mg/m3 TWAEV 1000 ppm STEV; 2380 mg/m3 STEV
Saskatchewan:	750 ppm STEL 500 ppm TWA
Yukon:	1250 ppm STEL; 3000 mg/m3 STEL 1000 ppm TWA; 2400 mg/m3 TWA

Material Safety Data Sheet

Material Name: ULTRABOND 4085

ID: SAH00268

Methyl ethyl ketone (78-93-3)

ACGIH:	300 ppm STEL 200 ppm TWA
OSHA:	200 ppm TWA; 590 mg/m3 TWA
NIOSH:	200 ppm TWA; 590 mg/m3 TWA 300 ppm STEL; 885 mg/m3 STEL
Alberta:	200 ppm TWA; 590 mg/m3 TWA 300 ppm STEL; 885 mg/m3 STEL
British Columbia:	50 ppm TWA 100 ppm STEL
Manitoba:	200 ppm TWA 300 ppm STEL
New Brunswick:	200 ppm TWA; 590 mg/m3 TWA 300 ppm STEL; 885 mg/m3 STEL
NW Territories:	200 ppm TWA; 590 mg/m3 TWA 300 ppm STEL; 885 mg/m3 STEL
Nova Scotia:	200 ppm TWA 300 ppm STEL
Nunavut:	200 ppm TWA; 590 mg/m3 TWA 300 ppm STEL; 885 mg/m3 STEL
Ontario:	200 ppm TWAEV; 590 mg/m3 TWAEV 300 ppm STEV; 885 mg/m3 STEV
Quebec:	50 ppm TWAEV; 150 mg/m3 TWAEV 100 ppm STEV; 300 mg/m3 STEV
Saskatchewan:	300 ppm STEL 200 ppm TWA
Yukon:	250 ppm STEL; 740 mg/m3 STEL 200 ppm TWA; 590 mg/m3 TWA

Magnesium oxide (1309-48-4)

ACGIH:	10 mg/m3 TWA inhalable fraction
OSHA:	15 mg/m3 TWA fume, total particulate
Alberta:	10 mg/m3 TWA (fume)
British Columbia:	10 mg/m3 TWA Mg fume, inhalable; 3 mg/m3 TWA Mg respirable dust and fume 10 mg/m3 STEL Mg respirable dust and fume
Manitoba:	10 mg/m3 TWA inhalable fraction
New Brunswick:	10 mg/m3 TWA fume
NW Territories:	10 mg/m3 TWA Mg fume 20 mg/m3 STEL Mg fume
Nova Scotia:	10 mg/m3 TWA inhalable fraction
Nunavut:	10 mg/m3 TWA Mg fume 20 mg/m3 STEL Mg fume
Ontario:	10 mg/m3 TWAEV inhalable
Quebec:	10 mg/m3 TWAEV Mg fume
Saskatchewan:	20 mg/m3 STEL (inhalable fraction) 10 mg/m3 TWA (inhalable fraction)
Yukon:	10 mg/m3 STEL (Mg, fume) 10 mg/m3 TWA (Mg, fume)

Engineering Controls

Use general ventilation.

PERSONAL PROTECTIVE EQUIPMENT

Personal Protective Equipment: Eyes/Face

Wear safety glasses with side shields.

Personal Protective Equipment: Skin

The use of nitrile-latex gloves is recommended.

Personal Protective Equipment: Respiratory

If airborne concentrations are above the applicable exposure limits, use NIOSH approved respiratory protection.

Personal Protective Equipment: General

Laundry contaminated clothing before reuse. Use good industrial hygiene practices in handling this material.

Material Safety Data Sheet

Material Name: ULTRABOND 4085

ID: SAH00268

*** Section 9 - Physical & Chemical Properties ***

Appearance:	Amber liquid	Odor:	Slight odor
Physical State:	Liquid	pH:	132°F - 232°F
Vapor Pressure:	N/A	Vapor Density:	Heavier than air
Boiling Point:	N/A	Melting Point:	N/A
Solubility (H2O):	N/A	Specific Gravity:	N/A
Evaporation Rate:	Slower than ether	VOC:	631 g/L
Octanol/H2O Coeff.:	N/A	Flash Point:	<20°F
Flash Point Method:	CC	Upper Flammability Limit (UFL):	1%
Lower Flammability Limit (LFL):	N/A	Burning Rate:	N/A
Auto Ignition:	N/A		

*** Section 10 - Chemical Stability & Reactivity Information ***

Chemical Stability

This is a stable material.

Chemical Stability: Conditions to Avoid

Keep away from heat, sparks, or open flame. Eliminate sources of ignition.

Incompatibility

This product may react with strong acids, bases and oxidizing agents.

Hazardous Decomposition

Irritating and/or toxic fumes and gases may be emitted upon the product's decomposition. Upon decomposition, this product may emit fumes of carbon monoxide, carbon dioxide, oxides of nitrogen, and other organic compounds.

Possibility of Hazardous Reactions

Will not occur.

*** Section 11 - Toxicological Information ***

Acute Dose Effects

A: General Product Information

No information available for the product.

B: Component Analysis - LD50/LC50

Hexane (110-54-3)

Inhalation LC50 Rat 48000 ppm 4 h; Oral LD50 Rat 25 g/kg; Dermal LD50 Rabbit 3000 mg/kg

Naphtha, petroleum, hydrotreated light (64742-49-0)

Inhalation LC50 Rat 73680 ppm 4 h; Oral LD50 Rat >5000 mg/kg; Dermal LD50 Rabbit >3160 mg/kg

Toluene (108-88-3)

Inhalation LC50 Rat 12.5 mg/L 4 h; Inhalation LC50 Rat >26700 ppm 1 h; Oral LD50 Rat 636 mg/kg; Dermal LD50 Rabbit 8390 mg/kg; Dermal LD50 Rat 12124 mg/kg

Acetone (67-64-1)

Oral LD50 Rat 5800 mg/kg

Methyl ethyl ketone (78-93-3)

Inhalation LC50 Mouse 32 g/m3 4 h; Oral LD50 Rat 2737 mg/kg; Dermal LD50 Rabbit 6480 mg/kg

Carcinogenicity

A: General Product Information

No information available for the product.

B: Component Carcinogenicity

Toluene (108-88-3)

ACGIH:	A4 - Not Classifiable as a Human Carcinogen
IARC:	Monograph 71 [1999]; Monograph 47 [1989] (Group 3 (not classifiable))

Material Safety Data Sheet

Material Name: ULTRABOND 4085

ID: SAH00268

Acetone (67-64-1)

ACGIH:	A4 - Not Classifiable as a Human Carcinogen
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Magnesium oxide (1309-48-4)

ACGIH:	A4 - Not Classifiable as a Human Carcinogen
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Sensitization

No information available for the product.

* * * Section 12 - Ecological Information * * *

Ecotoxicity

A: General Product Information

No information available for the product.

B: Component Analysis - Ecotoxicity - Aquatic Toxicity

Hexane (110-54-3)

Test & Species		Conditions
96 Hr LC50 Pimephales promelas	2.1-2.98 mg/L	[flow-through]
24 Hr EC50 Daphnia magna	>1000 mg/L	

Naphtha, petroleum, hydrotreated light (64742-49-0)

Test & Species		Conditions
96 Hr LC50 Chaetogammarus marinus	2.6 mg/L	

Toluene (108-88-3)

Test & Species		Conditions
96 Hr LC50 Pimephales promelas	15.22-19.05 mg/L	[flow-through] 1 day old
96 Hr LC50 Pimephales promelas	12.6 mg/L	[static]
96 Hr LC50 Oncorhynchus mykiss	5.89-7.81 mg/L	[flow-through]
96 Hr LC50 Oncorhynchus mykiss	14.1-17.16 mg/L	[static]
96 Hr LC50 Oncorhynchus mykiss	5.8 mg/L	[semi-static]
96 Hr LC50 Lepomis macrochirus	11.0-15.0 mg/L	[static]
96 Hr LC50 Oryzias latipes	54 mg/L	[static]
96 Hr LC50 Poecilia reticulata	28.2 mg/L	[semi-static]
96 Hr LC50 Poecilia reticulata	50.87-70.34 mg/L	[static]
96 Hr EC50 Pseudokirchneriella subcapitata	>433 mg/L	
72 Hr EC50 Pseudokirchneriella subcapitata	12.5 mg/L	[static]
48 Hr EC50 Daphnia magna	5.46 - 9.83 mg/L	[Static]
48 Hr EC50 Daphnia magna	11.5 mg/L	

Acetone (67-64-1)

Test & Species		Conditions
96 Hr LC50 Oncorhynchus mykiss	4.74-6.33 ml/L	
96 Hr LC50 Pimephales promelas	6210-8120 mg/L	[static]
96 Hr LC50 Lepomis macrochirus	8300 mg/L	
48 Hr EC50 Daphnia magna	10294 - 17704 mg/L	[Static]
48 Hr EC50 Daphnia magna	12600 - 12700 mg/L	

Methyl ethyl ketone (78-93-3)

Test & Species		Conditions
96 Hr LC50 Pimephales promelas	3130-3320 mg/L	[flow-through]
48 Hr EC50 Daphnia magna	>520 mg/L	
48 Hr EC50 Daphnia magna	5091 mg/L	
48 Hr EC50 Daphnia magna	4025 - 6440 mg/L	[Static]

Material Safety Data Sheet

Material Name: ULTRABOND 4085

ID: SAH00268

*** Section 13 - Disposal Considerations ***

US EPA Waste Number & Descriptions

A: General Product Information

No information available for the product.

B: Component Waste Numbers

Toluene (108-88-3)

RCRA:	waste number U220
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Acetone (67-64-1)

RCRA:	waste number U002 (Ignitable waste)
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Methyl ethyl ketone (78-93-3)

RCRA:	waste number U159 (Ignitable waste, Toxic waste) 200.0 mg/L regulatory level
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Disposal Instructions

Waste must be handled in accordance with all federal, state, provincial, and local regulations. Consult authorities before disposal.

See Section 7 for Handling Procedures. See Section 8 for Personal Protective Equipment recommendations.

*** Section 14 - Transportation Information ***

US DOT Information

Shipping Name: Adhesives

UN/NA #: UN1133 **Hazard Class:** 3 **Packing Group:** II

IATA Information

Shipping Name: Adhesives

UN #: UN1133 **Hazard Class:** 3 **Packing Group:** II

IMDG Information

Shipping Name: Adhesives

UN #: UN1133 **Hazard Class:** 3 **Packing Group:** II

*** Section 15 - Regulatory Information ***

US Federal Regulations

A: General Product Information

All components are on the U.S. EPA TSCA Inventory List. All components of this product are included, or are exempt from inclusion, in the Canadian Domestic Substance List unless otherwise noted.

B: Component Analysis

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65) and/or CERCLA (40 CFR 302.4).

Hexane (110-54-3)

SARA 313:	1.0 % de minimis concentration
CERCLA:	5000 lb final RQ; 2270 kg final RQ

Toluene (108-88-3)

SARA 313:	1.0 % de minimis concentration
CERCLA:	1000 lb final RQ; 454 kg final RQ

Acetone (67-64-1)

CERCLA:	5000 lb final RQ; 2270 kg final RQ
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Methyl ethyl ketone (78-93-3)

CERCLA:	5000 lb final RQ; 2270 kg final RQ
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Material Safety Data Sheet

Material Name: ULTRABOND 4085

ID: SAH00268

State Regulations

A: General Product Information

Other state regulations may apply. Check individual state requirements.

B: Component Analysis - State

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA	RI
Hexane	110-54-3	No	Yes	Yes	Yes	Yes	Yes
Toluene	108-88-3	Yes	Yes	Yes	Yes	Yes	Yes
Acetone	67-64-1	Yes	Yes	Yes	Yes	Yes	Yes
Methyl ethyl ketone	78-93-3	Yes	Yes	Yes	Yes	Yes	Yes
Magnesium oxide	1309-48-4	Yes	Yes	Yes	Yes	Yes	Yes

The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):
WARNING! This product contains a chemical known to the state of California to cause reproductive/developmental effects.

Additional Regulatory Information

A: General Product Information

Supplier(s) of proprietary component(s) state that these components are contained on the TSCA inventory.

B: Component Analysis - Inventory

Component	CAS #	TSCA	CAN	EEC
Hexane	110-54-3	Yes	DSL	EINECS
Naphtha, petroleum, hydrotreated light	64742-49-0	Yes	DSL	EINECS
Toluene	108-88-3	Yes	DSL	EINECS
Acetone	67-64-1	Yes	DSL	EINECS
Methyl ethyl ketone	78-93-3	Yes	DSL	EINECS
Magnesium oxide	1309-48-4	Yes	DSL	EINECS

* * * Section 16 - Other Information * * *

Reference

G1-2851-01

Other Information

Reasonable care has been taken in the preparation of this information, but the manufacturer makes no warranty of merchantability or any other warranty, expressed or implied, with respect to this information. The manufacturer makes no representations and assumes no liability for any direct, incidental or consequential damages resulting from its use. The information herein is presented in good faith and believed to be accurate as of the effective date given. It is the buyer's responsibility to ensure that its activities comply with Federal, State or provincial, and local laws.

Key/Legend

NA = Not available or Not Applicable. BLV=Biological Limit Values TLV = Threshold Limit Value. NFPA = National Fire Protection Association. HMIS = Hazardous Material Information System. CFR = Code of Federal Regulations. EPA = Environmental Protection Agency; TSCA = Toxic Substance Control Act; ACGIH = American Conference of Governmental Industrial Hygienists; IARC = International Agency for Research on Cancer; NIOSH = National Institute for Occupational Safety and Health; NTP = National Toxicology Program; OSHA = Occupational Safety and Health Administration., NJTSR = New Jersey Trade Secret Registry.

Contact: Product Safety Specialist

Contact Phone: 1-954-246-8888

End of Sheet SAH00268



Ultrabond ECO™ 185

Material Safety Data Sheet (MSDS)

English Version on pages 2 and 3.

Fiche signalétique (MSDS)

Version Française à la pages 4 et 5.

Hoja de Datos Material De seguridad (MSDS)

La versión en Español en las páginas 6 y 7.

Product Name: *Ultrabond ECO™ 185*Product Description: **Performance-Grade High-Tack Carpet Adhesive**

IN THE EVENT OF A CHEMICAL EMERGENCY INVOLVING A SPILL, LEAK, FIRE, EXPLOSION, EXPOSURE OR ACCIDENT CONTACT THE FOLLOWING NUMBERS:

EMERGENCY 24 HOUR NUMBER (USA) CHEMTREC 1-800-424-9300 (Canada) CANUTEC 1-613-996-6666**CONSUMER STATEMENT:**

CAUTION - EYE IRRITANT. NON-TOXIC.

WORK AND HYGIENE PRACTICE:

Remove contaminated clothing immediately. Wash hands, after each use and before eating, drinking, or using toiletries. Minimize contact of product on skins.

I - GENERAL INFORMATION**MANUFACTURER:**

<u>USA and Puerto Rico</u>	<u>Canada</u>
MAPEI CORPORATION	MAPEI INC.
1144 East Newport Center Drive	2900 Francis-Hughes Avenue
Deerfield Beach, FL 33442	Laval, QC H7L 3J5
Ph: (954) 246-8888	Ph: (450) 662-1212

MSDS PREPARED BY:

Regulatory Affairs Department - MAPEI North America

REVISION DATE (YYYY/MM/DD): 2005/07/15For most current MSDS, download document from: www.mapei.com**II - PHYSICAL CHARACTERISTICS**

Calculated VOC (See below.)	0 g/L
Boiling Point	>212°F (>100°C)
Vapor Pressure (mmHg)	1,0
Vapor Density (AIR=1)	1,10 - 1,20
Specific Gravity (H2O=1)	1,00 - 1,30
Melting/Freezing Point (F)	N/E
Evaporation Rate (Butyl Acetate=1)	Same as water.
Solubility in water	Soluble
pH (paste/liquid)	8,0 - 10,0
Appearance and Odor	Beige paste. Slight odor of latex.

(VOC per CA South Coast Air Quality Management District, Rule 1168)

III - HAZARD ASSESSMENT**Hazardous Components**

(specific chemical identity; common names):	OSHA (PEL)	ACGIH (TLV-TWA)	Other Limits Recommended	% Percent (Optional)
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THIS PRODUCT CONTAINS NO HAZARDOUS INGREDIENTS AS DEFINED BY US OSHA HAZARD COMMUNICATION STANDARD - 29 CFR 1910.1200 OR SECTION 13 OF THE CANADIAN HAZARDOUS PRODUCTS ACT.

For California (Proposition 65): This product contains no chemicals reportable under Proposition 65.

All ingredients are listed within or exempted from US TSCA and Canadian DSL.

(USA) - HMIS (Hazardous Materials Identification System) Rating: Health - 1 Fire - 0 Reactivity - 0 Protection - B *** = chronic effect

(Canada) - WHMIS (Workplace Hazardous Materials Information System) Classifications: Not regulated under WHMIS.

IV - TRANSPORTATION**By GROUND - USA and Puerto Rico (DOT):**

Not Regulated

By GROUND - Canada (TDG):

Not Regulated

By SEA (IMDG):

Not Regulated

By AIR (IATA):

Not Regulated

V - FIRE AND EXPLOSION HAZARD DATA

Flash Point: >212°F (>100°C) Lower Explosive Limit (%) - N/E Upper Explosive Limit (%) - N/E

Unusual Fire and Explosion Hazards - Some decomposition products may be harmful.

Extinguishing Media:

Will not burn except under extreme temperatures. Water spray, carbon dioxide, dry chemical or foam.

Special Fire Fighting Procedures:

Wear standard fire fighting gear with self-contained breathing apparatus.

VI - REACTIVITY DATA**Stability:** Stable**Conditions to Avoid:** None known.

Incompatibility (Materials to Avoid): Strong oxidizing agents, strong acids, and strong bases.

Hazard Decomposition of By-products: Carbon monoxide, carbon dioxide, oxides of nitrogen, and other unidentified organic compounds.

Polymerization: Will Not Occur **Conditions to Avoid:** None known.

VII - HEALTH HAZARD DATA

Routes of entry during normal usage: Inhalation? YES Skin? YES Ingestion? NO

Health Hazards:

Acute: No effects are suspected under normal professional use.

Chronic: None known.

Carcinogenicity: NTP - NO IARC - NO OSHA - NO

Signs and Symptoms of Overexposure:

No effects are suspected under normal professional use.

Medical Conditions That Can Be Aggravated by Exposure:

Allergies, skin and respiratory disorders. Product sensitivity.

VIII - EMERGENCY AND FIRST AID PROCEDURE

Eyes: Flush with cool water for 15 minutes while holding eyelid open. If irritation persists, seek medical attention immediately.

Skin: Avoid contact with skin. Remove contaminated clothing. Wash affected area thoroughly with soap and water. If irritation persists, seek immediate medical attention.

Inhalation: Remove to fresh air if allowable concentrations of any of the hazardous ingredients are exceeded. If not breathing, trained personnel should initiate artificial respirations and immediate medical attention should be obtained.

Ingestion: Do not induce vomiting. Do not give anything by mouth to an unconscious person. Seek medical attention immediately.

IX - PRECAUTIONS FOR SAFE HANDLING AND USE

Steps to be taken if Material is Leaked or Spilled:

Wear protective equipment. Contain by diking with inert absorbent materials and put into an approved waste container.

Waste Disposal Method: Dispose in accordance to local environmental regulation.

Precautions to be taken during Handling and Storage:

Keep container closed when not in use. Store at 60-95°F (15-35°C) and out of the sun. Use adequate ventilation to avoid breathing vapors when cover is removed.

Other Precautions: Avoid prolonged skins contact.

X - CONTROL MEASURES

Respiratory Protection:

If workplace exposure limit of product is exceeded, a NIOSH/MSHA approved air supplied respirator is required in absence of proper environmental control. Engineering or administrative controls should be implemented to reduce exposure.

Ventilation:	Local Exhaust - Use in WELL VENTILATED areas only.	Mechanical - Use only intrinsically safe devices.
	Special - N/A	Other - N/A

Eye Protection: Safety glasses or goggles as necessary to prevent eye contact.

Protective Gloves: Impervious. (Nitrile, rubber, or better)

Other Protective Equipment: As needed to minimize contact with skin.

N/A="Not Applicable" N/E="Not Established"

The information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of these data or the results to be obtained from the use thereof. MAPEI assumes no responsibility for personal injury or property damage to vendees, users, or third parties caused by the material. Such vendees or users assume all risks associated with the use of the material.

Nom du produit: *Ultrabond ECO™ 185*

Description du produit: **Adhésif à tapis à performance élevée et à pouvoir piégeant prolongé**

POUR TOUT PROBLÈME D'ORDRE CHIMIQUE AVEC DÉVERSEMENT, FUITE, INCENDIE, EXPLOSION, EXPOSITION OU ACCIDENT, COMPOSER LES NUMÉROS SUIVANTS :

URGENCE JOUR ET NUIT : (É.-U.) CHEMTREC 1-800-424-9300 (Canada) CANUTEC 1-613-996-6666

AVIS AUX CONSOMMATEURS :

AVERTISSEMENT - IRRITANT POUR LES YEUX. NON TOXIQUE.

HYGIÈNE ET PRATIQUES AU TRAVAIL :

Enlever immédiatement les vêtements souillés. Se laver les mains après chaque utilisation et avant de manger, de boire ou de se servir d'articles de toilette. Éviter autant que possible le contact du produit avec la peau.

I - RENSEIGNEMENTS GÉNÉRAUX

FABRICANTE :

É.-U. et Porto Rico Canada
MAPEI CORPORATION MAPEI INC.
1144 East Newport Center Drive 2900 Francis-Hughes Avenue
Deerfield Beach, FL 33442 Laval, QC H7L 3J5
Ph: (954) 246-8888 Ph: (450) 662-1212

FICHE SIGNALÉTIQUE RÉDIGÉE PAR :

Service des affaires réglementaires - MAPEI Amérique du Nord

DATE DE RÉVISION (YYYY/MM/DD): 2005/07/15

Télécharger la fiche signalétique la plus récente de :
www.mapei.com

II - CARACTÉRISTIQUES PHYSIQUES

COV calculé (voir plus bas)	0 g/L
Point d'ébullition	>212°F (>100°C)
Pression de Vapeur (mmHg)	1,0
Densité de Vapeur (AIR=1)	1,10 - 1,20
Gravité Spécifique (H2O=1)	1,00 - 1,30
Point de fusion	N/E
Rythme d'évaporation (acétate de butyle=1)	Celui de l'eau.
Solubilité dans l'eau	Soluble
pH (pâte/liquide)	8,0 - 10,0
Aspect et odeur	Pâte beige. Odeur légère de latex.

VOC calculé par (la Règle(l'Autorité) 1168, Zone de Qualité de l'air de Côte du (COV selon le règlement 1168, CA South Coast Air Quality Management District)

III - ÉVALUATION DES DANGERS

Ingrédients dangereux (désignation chimique spécifique; appellations courantes)

OSHA (PEL)	ACGIH (TLV-TWA)	Autres limites recommandées	Pourcentage (optionnel)
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CE PRODUIT NE CONTIENT PAS D'INGRÉDIENTS DANGEREUX DÉFINIS DANS LA RÉGLEMENTATION FÉDÉRALE AMÉRICAINE OSHA 29 CFR 1910.1200 NI DANS LA SECTION 13 DE LA LOI CANADIENNE SUR LES PRODUITS DANGEREUX.

Pour la Californie (Proposition 65) - Ce produit ne contient aucun des composés chimiques devant être déclarés en vertu de la Proposition 65.

Tous les ingrédients sont répertoriés aux É.-U., sous l'inventaire du TSCA, et, au Canada, dans la liste LIS.

(É.-U.) – Évaluations HMIS (Hazardous Materials Identification System) : Santé- 1 Feu- 0 Réactivité - 0 Protection - B ""=effet chroniquet

(Canada) – Classification SIMDUT (Système d'information sur les matières dangereuses utilisées au travail) : Non réglementé selon le SIMDUT.

IV - TRANSPORT

Par VOIE DE TERRE – É.-U. et Porto Rico (DOT) :

Non réglementé.

Par VOIE DE TERRE – Canada (TMD) :

Non réglementé.

Par VOIE D'EAU (IMDG) :

Non réglementé.

Par VOIE DES AIRS (IATA) :

Non réglementé.

V - DONNÉES SUR LES RISQUES D'INCENDIE ET D'EXPLOSION

Point d'éclair : >212°F (>100°C) Limite inférieure d'explosivité (%) - N/E Limite supérieure d'explosivité (%) - N/E

Dangers inhabituels d'incendie et d'explosion - Certains produits issus de la décomposition peuvent être nocifs.

Agent extincteur :

Le produit ne brûlera pas tant que la teneur en eau ne sera entièrement évaporée. Eau pulvérisée, dioxyde de carbone, poudre chimique ou mousse.

Règles à observer dans la lutte contre les feux spéciaux :

Porter les accessoires et les vêtements standards de lutte contre l'incendie, incluant un appareil respiratoire.

VI - DONNÉES SUR LA RÉACTIVITÉ

Stabilité : Stable

Conditions à éviter : Aucune connue

Incompatibilité (matériaux à éviter) : Oxydants forts, acides forts et bases fortes.

Risques de décomposition des sous-produits : Monoxyde de carbone, dioxyde de carbone, oxydes d'azote et autres composés organiques non identifiés.

Polymérisation: Ne se produira pas. **Conditions d'Éviter:** Aucune connue.

VII - DONNÉES SUR LES RISQUES POUR LA SANTÉ

Modes d'absorption durant un usage normal : Par inhalation? OUI Par la peau? OUI Par ingestion? NON

Risques pour la santé :

Effets aigus : Aucun risque suspecté en cas d'ingestion par suite d'exposition professionnelle.

Effets chroniques : Aucune connue.

Cancérogénicité : NTP -NON CIRC- NON OSHA - NON

Signes et symptômes de surexposition :

Aucun risque suspecté en cas d'ingestion par suite d'exposition professionnelle.

Conditions médicales susceptibles d'être aggravées par une exposition au produit :

Allergies, problèmes cutanés ou respiratoires. Sensibilité au produit.

VIII - URGENCE ET PREMIERS SOINS

Yeux : Rincer à l'eau froide pendant 15 minutes en tenant les paupières ouvertes. Si l'irritation persiste, consulter immédiatement un médecin.

Peau : Éviter tout contact avec la peau. Enlever les vêtements souillés. Rincer à fond à l'eau savonneuse la zone éclaboussée. Si l'irritation persiste, consulter un médecin immédiatement.

Inhalation : Sortir au grand air si la concentration admissible des produits dangereux est dépassée. En cas d'arrêt respiratoire, une ou des personnes formées devraient commencer la respiration artificielle. Appeler immédiatement un médecin.

Ingestion : Ne pas faire vomir. Ne jamais rien administrer oralement à une personne inconsciente. Appeler immédiatement un médecin.

IX - PRÉCAUTIONS EN VUE D'UNE MANUTENTION ET D'UN USAGE SÉCURITAIRES

Mesures à prendre en cas de fuite ou de déversement :

En se servant des accessoires de protection appropriés, placer le produit déversé dans un fût de stockage en poly ou dans tout autre contenant exigé par les éliminateurs locaux, puis entreposer dans un endroit sécuritaire, jusqu'à ce que le produit soit évacué selon la réglementation en vigueur.

Méthode d'évacuation des déchets : Évacuer les déchets selon les réglementations fédérale, provinciale (ou de l'État) et municipale en vigueur.

Précautions lors de la manutention et de l'entreposage :

Refermer le contenant lorsqu'on ne se sert pas du produit. Entreposer à 15 – 35°C (60 - 95°F) et à l'abri du soleil. Lorsque le contenant est ouvert, assurer une ventilation convenable afin d'éviter d'inhaler les vapeurs du produit.

Précaution additionnelle : Éviter un contact prolongé du produit avec la peau.

X - MESURES DE CONTRÔLE

Protection des voies respiratoires :

Dans l'éventualité d'un dépassement des limites d'exposition permises et en l'absence de contrôles environnementaux appropriés, porter un appareil respiratoire à adduction d'air approuvé par le NIOSH/MSHA. Il faut mettre en œuvre des mesures d'ingénierie et des mesures administratives de contrôle dans le but de réduire l'exposition au produit.

Ventilation: Locale - N'employer que dans des endroits BIEN AÉRÉS. Mécanique - N'utiliser que des appareils intrinsèquement sécuritaires.

Spéciale - S/O Autre - S/O

Protection des yeux : Porter des lunettes de sécurité ou anti-éclaboussures afin de prévenir le contact avec les yeux.

Gants de protection : Imperméables (nitrile, caoutchouc ou mieux).

Autres accessoires ou vêtements de protection : Jugé nécessaire afin de réduire le contact avec la peau.

S/O="Sans objet" N/D="Non déterminé"

L'information présentée dans les présentes s'appuie sur des données jugées exactes. Nous ne fournissons, toutefois, aucune garantie, expresse ou implicite, au chapitre de l'exactitude de ces données ni des résultats qui en découlent. MAPEI n'assume aucune responsabilité en matière de blessures ni de dommages matériels, imputables au produit et subis par les acquéreurs, les utilisateurs ou de tierces parties. Les acquéreurs et les utilisateurs assumeront tous les risques liés à l'utilisation du produit.

Nombre de producto: **Ultrabond ECO™ 185**
 Descripción de producto: **Adhesivo de alta adherencia y rendimiento para alfombras**

EN CASO DE UNA EMERGENCIA QUÍMICA QUE IMPLICA UN DERRAME, ESCAPE, FUEGO, EXPOSICIÓN O ACCIDENTE PONGASE EN CONTACTO CON LOS SIGUIENTES NÚMEROS:

EMERGENCIA NÚMERO de 24 HORAS: (EE.UU.) CHEMTREC 1-800-424-9300 (El Canadá) CANUTEC 1-613-996-666

COMISIONA DECLARACIÓN PARA EL CONSUMIDOR:

PRECAUCIÓN - IRRITANTE DE OJOS. NO TÓXICO.

PRÁCTICAS DE TRABAJO É HIGIENE:

Quite la ropa contaminada inmediatamente. Lavar las manos, después de cada uso y antes de comer, beber, o de usar productos personales. Minimice el contacto del producto en la piel.

I - INFORMACIÓN GENERAL

FABRICANTE :

EE.UU. y Puerto Rico Canadá
 MAPEI CORPORATION MAPEI INC.
 1144 East Newport Center Drive 2900 Francis-Hughes Avenue
 Deerfield Beach, FL 33442 Laval, QC H7L 3J5
 Ph: (954) 246-8888 Ph: (450) 662-1212

MSDS PREPARADO POR:

El departamento de Asuntos Regulatorios - Norteamérica

FECHA de REVISIÓN (YYYY/MM/DD): 2005/07/15

Obtenga el MSDS mas actual en www.mapei.com

II - CARACTERÍSTICAS FÍSICAS

Máximo VOC	0 g/L
Punto de ebullición	>212°F (>100°C)
Presión de Vapor (mmHg)	1,0
Densidad de Vapor (AIR=1)	1,10 - 1,20
Gravedad Especifica (H20=1)	1,00 - 1,30
Punto de fusión	N/E
Tarifa de Evaporación (Butyl Acetate=1)	Mismo como agua.
Solubilidad en el agua	Soluble
pH (pasta/el líquido)	8,0 - 10,0
Aspecto y Olor	La pasta beige. El olor leve de látex.

VOC deliberado por (la Regla 1168, Distrito de Calidad del aire de Costa de Sur - California)

III - EVALUACION DE RIESGOS

Componentes Arriesgados

(identidad específica química; nombres comunes):	OSHA (PEL)	ACGIH (TLV-TWA)	Otros Límites Recomendados	% Por ciento (de Opcional)
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ESTO PRODUCTO NO CONTIENE INGREDIENTES NOCIVOS COMO SON DEFINIDOS POR LA NORMA EE. UU. OSHA DE COMUNICACIÓN NOCIVA - 29 CFR 1910.1200 O DE ACUERDO CON LA SECCIÓN 13 DE LA ACTA DE PRODUCTOS NOCIVOS CANADIENSE.

Para California: Este Producto no contiene ningunas sustancias químicas denunciabiles bajo la proposición 65.

Todos los ingredientes están dentro de o exento del TSCA de EE. UU. y del DSL Canadiense.

(EE. UU) - HMIS (Sistema de Identificación de materiales peligrosos) Posición: Salud- 1 Fuego- 0 Reactividad- 0 Protección- B *** = Crónico

(Canadá) - WHMIS (Información de Materiales peligrosos de Lugar de trabajo Sistema) Clasificaciones: No regulado bajo WHMIS.

IV - TRANSPORTE

Vía Terrestre - EE.UU. y Puerto Rico (DOT):

No regulado.

Vía Terrestre - Canadá (TDG):

No regulado.

Vía Marítima (IMDG):

No regulado.

Vía Aérea (IATA):

No regulado.

V - DATOS DE RIESGO DE INCENDIO Y EXPLOSIÓN

Punto de inflamación: >212°F (>100°C) Límite Inferior Explosivo (%) - N/E Límite Superior Explosivo (%) - N/E

Fuego Insólito y Peligros de Explosión - Algunos productos de descomposición pueden ser dañinos.

Medios De Extinción:

No se quemará excepto bajo temperaturas extremas. El rocío de agua, el dióxido de carbón, químico seco o espuma.

Procedimientos Especiales Contra incendios:

Utilize equipo estándar contra incendios con aparato respiratorio integrado.

VI - DATOS DE REACTIVIDAD

ESTABILIDAD: Estable

Condiciones de Evitar: Ninguno sabido(conocido).

Incompatibilidad (Materiales a Evitar):

Agentes de oxidación fuertes, ácidos fuertes, y bases fuertes.

Descomposición de Riesgo por Productos:

Monóxido de carbono, dióxido de carbón, óxidos de nitrógeno, y otros compuestos no identificados orgánicos.

Polimerización: No ocurrirá.

Condiciones de Evitar: Ninguno sabido(conocido).

VII - DATOS DE RIESGO PARA LA SALUD

Las rutas de entrada: ¿Inhalación? SÍ ¿Piel? SÍ ¿Ingestión? NO

Peligros para la salud:

Agudo: No se sospechan ningunos efectos bajo uso profesional normal.

Crónico: Ninguno sabido(conocido).

Cancerígeno: NTP - NO IARC - NO OSHA - NO

Signos y Síntomas de Exceso de exposición:

No se sospechan ningunos efectos bajo uso profesional normal.

Condiciones Médicas Que Pueden Ser Agravadas por Exposición:

Alergias, desordenes de la piel y respiratorias. Sensibilidad al producto.

VIII - PROCEDIMIENTOS DE EMERGENCIA Y PRIMEROS AUXILIOS

Ojos: Sosteniendo el párpado abierto vierta agua fresca durante 15 minutos. Si la irritación persiste, busca atención médica inmediatamente.

Piel: Evite el contacto con la piel. Quite la ropa contaminada. Lave el área afectada completamente con jabón y agua. Si la irritación persiste, busca la atención médica inmediata.

Inhalación: Sacar al aire fresco si se exceden las concentraciones permitidas de cualquiera de los ingredientes peligrosos. Si no esta respirando, personal especializado debe de iniciar respiración artificial y se debe de obtener atención médica de inmediato.

Ingestión: No induzca vomito. No dé nada por la boca a una persona inconsciente. Busque la atención médica inmediatamente.

IX - PRECAUCIONES PARA MANEJO SEGURO Y EMPLEO

Pasos para ser tomados si el Material se Escapa se Derramado:

Usar equipo protectivo. Contener la dispersión por medio de materials absorbentes y poner en un contenedor aprobado de desecho.

Método de Recogida de basuras: Elimínelo de acuerdo con los reglamentos medioambientales locales.

Precauciones para ser tomadas durante Manejo y Almacenaje:

Mantenga el recipiente cerrado cuando no lo use. Almacénelo a 15 a 35°C (60 a 95°F) y lejos del sol. Ventile adecuadamente el espacio para evitar respirar los vapores que se emitan al retirar la tapa de la cubierta.

Otras Precauciones: Evite el contacto prolongado con la piel.

X - MEDIDAS DE CONTROL

Protección Respiratoria:

Si el límite de exposición al producto en el lugar de trabajo se excede, un respirador de aire aprobado por NIOSH/MSHA es requerido en la ausencia de control medioambiental apropiado. Controles de ingenieros o administrativos se deben de implementar a fin de reducir la exposición.

Ventilación: Gases de combustión Locales - Sólo use en áreas BIEN VENTILADAS. Mecánico - Sólo use dispositivos intrínsecamente seguros.
Especial - N/A Otro - N/A

Protección de Ojos: Gafas de seguridad son necesarios para prevenir contacto con los ojos.

Guantes Protectores: Impenetrable. (Nitrile, caucho, o bien)

Otro Equipo Protector: Como sea necesario para minimizar el contacto con la piel.

N/A="No Aplicable" N/E="No Establecido"

La información contenida aquí está basada en datos considerados exactos. Sin embargo, ninguna garantía es expresada o implicada en cuanto a la exactitud de estos datos o los resultados para ser obtenidos del uso del mismo. MAPEI no asume ninguna responsabilidad del daño corporal o daño de propiedad a compradores, usuarios, o a terceros causado por el material. Dichos compradores o usuarios asumen todo riesgo asociado con el empleo del material.



Ultrabond ECO™ 575

Material Safety Data Sheet (MSDS)

English Version on pages 2 and 3.

Fiche signalétique (MSDS)

Version Française à la pages 4 et 5.

Hoja de Datos Material De seguridad (MSDS)

La versión en Español en las páginas 6 y 7.

Product Name: **Ultra bond ECO™ 575**
Product Description: **Premium Cove Base Adhesive**

IN THE EVENT OF A CHEMICAL EMERGENCY INVOLVING A SPILL, LEAK, FIRE, EXPLOSION, EXPOSURE OR ACCIDENT CONTACT THE FOLLOWING NUMBERS:

EMERGENCY 24 HOUR NUMBER (USA) CHEMTREC 1-800-424-9300 (Canada) CANUTEC 1-613-996-6666

CONSUMER STATEMENT:

CAUTION - EYE IRRITANT. NON-TOXIC.

WORK AND HYGIENE PRACTICE:

Remove contaminated clothing immediately. Wash hands, after each use and before eating, drinking, or using toiletries. Minimize contact of product on skins.

I - GENERAL INFORMATION

MANUFACTURER:

USA and Puerto Rico Canada
MAPEI CORPORATION MAPEI INC.
1144 East Newport Center Drive 2900 Francis-Hughes Avenue
Deerfield Beach, FL 33442 Laval, QC H7L 3J5
Ph: (954) 246-8888 Ph: (450) 662-1212

MSDS PREPARED BY:

Regulatory Affairs Department - MAPEI North America

REVISION DATE (YYYY/MM/DD): 2008/11/06

For most current MSDS, download document from: www.mapei.com

II - PHYSICAL CHARACTERISTICS

Calculated VOC (See below.)	0 g/L
Boiling Point	>212°F (>100°C)
Vapor Pressure (mmHg)	1,0
Vapor Density (AIR=1)	1,10 - 1,20
Specific Gravity (H2O=1)	1,00 - 1,30
Melting/Freezing Point (F)	N/E
Evaporation Rate (Butyl Acetate=1)	Same as water.
Solubility in water	Soluble
pH (paste/liquid)	8,0 - 10,0
Appearance and Odor	Beige paste. Slight odor of latex.

(VOC per CA South Coast Air Quality Management District, Rule 1168)

III - HAZARD ASSESSMENT

Hazardous Components

(specific chemical identity; common names):	OSHA (PEL)	ACGIH (TLV TWA)	Other Limits Recommended	% Percent (Optional)
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THIS PRODUCT CONTAINS NO HAZARDOUS INGREDIENTS AS DEFINED BY US OSHA HAZARD COMMUNICATION STANDARD - 29 CFR 1910.1200 OR SECTION 13 OF THE CANADIAN HAZARDOUS PRODUCTS ACT.

For California (Proposition 65): This product contains no chemicals reportable under Proposition 65.

All ingredients are listed within or exempted from US TSCA and Canadian DSL.

(USA) - HMIS (Hazardous Materials Identification System) Rating: Health - 1 Fire - 0 Reactivity - 0 Protection - B *** = chronic effect

(Canada) - WHMIS (Workplace Hazardous Materials Information System) Classifications: Not regulated under WHMIS.

IV - TRANSPORTATION

By GROUND - USA and Puerto Rico (DOT):

Not Regulated

By GROUND - Canada (TDG):

Not Regulated

By SEA (IMDG):

Not Regulated

By AIR (IATA):

Not Regulated

V - FIRE AND EXPLOSION HAZARD DATA

Flash Point: >212°F (>100°C) Lower Explosive Limit (%) - N/E Upper Explosive Limit (%) - N/E

Unusual Fire and Explosion Hazards - Some decomposition products may be harmful.

Extinguishing Media:

Will not burn except under extreme temperatures. Water spray, carbon dioxide, dry chemical or foam.

Special Fire Fighting Procedures:

Wear standard fire fighting gear with self-contained breathing apparatus.

VI - REACTIVITY DATA

Stability: Stable

Conditions to Avoid: None known.

Page 2 of 7
Page 2 de 7
Páginas 2 de 7

Incompatibility (Materials to Avoid): Strong oxidizing agents, strong acids, and strong bases.

Hazard Decomposition of By-products: Carbon monoxide, carbon dioxide, oxides of nitrogen, and other unidentified organic compounds.

Polymerization: Will Not Occur

Conditions to Avoid: None known.

VII - HEALTH HAZARD DATA

Routes of entry during normal usage: Inhalation? YES Skin? YES Ingestion? NO

Health Hazards:

Acute: No effects are suspected under normal professional use.

Chronic: None known.

Carcinogenicity: NTP -NO IARC - NO OSHA - NO

Signs and Symptoms of Overexposure:

No effects are suspected under normal professional use.

Medical Conditions That Can Be Aggravated by Exposure:

Allergies, skin and respiratory disorders. Product sensitivity.

VIII - EMERGENCY AND FIRST AID PROCEDURE

Eyes: Flush with cool water for 15 minutes while holding eyelid open. If irritation persists, seek medical attention immediately.

Skin: Avoid contact with skin. Remove contaminated clothing. Wash affected area thoroughly with soap and water. If irritation persists, seek immediate medical attention.

Inhalation: Remove to fresh air if allowable concentrations of any of the hazardous ingredients are exceeded. If not breathing, trained personnel should initiate artificial respirations and immediate medical attention should be obtained.

Ingestion: Do not induce vomiting. Do not give anything by mouth to an unconscious person. Seek medical attention immediately.

IX - PRECAUTIONS FOR SAFE HANDLING AND USE

Steps to be taken if Material is Leaked or Spilled:

Wear protective equipment. Contain by diking with inert absorbent materials and put into an approved waste container.

Waste Disposal Method: Dispose in accordance to local environmental regulation.

Precautions to be taken during Handling and Storage:

Keep container closed when not in use. Store at 60-95°F (15-35°C) and out of the sun. Use adequate ventilation to avoid breathing vapors when cover is removed.

Other Precautions: Avoid prolonged skins contact.

X - CONTROL MEASURES

Respiratory Protection:

If workplace exposure limit of product is exceeded, a NIOSH/MSHA approved air supplied respirator is required in absence of proper environmental control. Engineering or administrative controls should be implemented to reduce exposure.

Ventilation: Local Exhaust - Use in WELL VENTILATED areas only. Mechanical - Use only intrinsically safe devices.
Special - N/A Other - N/A

Eye Protection: Safety glasses or goggles as necessary to prevent eye contact.

Protective Gloves: Impervious. (Nitrile, rubber, or better)

Other Protective Equipment: As needed to minimize contact with skin.

N/A="Not Applicable" N/E="Not Established"

The information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of these data or the results to be obtained from the use thereof. MAPEI assumes no responsibility for personal injury or property damage to vendees, users, or third parties caused by the material. Such vendees or users assume all risks associated with the use of the material.

Nom du produit: **Ultra bond ECOTM 575**
Description du produit: **Adhésif de qualité supérieure pour plinthes**

POUR TOUT PROBLÈME D'ORDRE CHIMIQUE AVEC DÉVERSEMENT, FUITE, INCENDIE, EXPLOSION, EXPOSITION OU ACCIDENT, COMPOSER LES NUMÉROS SUIVANTS :

URGENCE JOUR ET NUIT : (É.-U.) CHEMTREC 1-800-424-9300 (Canada) CANUTEC 1-613-996-6666

AVIS AUX CONSOMMATEURS :

AVERTISSEMENT - IRRITANT POUR LES YEUX. NON TOXIQUE.

HYGIÈNE ET PRATIQUES AU TRAVAIL :

Enlever immédiatement les vêtements souillés. Se laver les mains après chaque utilisation et avant de manger, de boire ou de se servir d'articles de toilette. Éviter autant que possible le contact du produit avec la peau.

I - RENSEIGNEMENTS GÉNÉRAUX

FABRICANTE :

É.-U. et Porto Rico Canada
MAPEI CORPORATION MAPEI INC.
1144 East Newport Center Drive 2900 Francis-Hughes Avenue
Deerfield Beach, FL 33442 Laval, QC H7L 3J5
Ph: (954) 246-8888 Ph: (450) 662-1212

FICHE SIGNALÉTIQUE RÉDIGÉE PAR :

Service des affaires réglementaires - MAPEI Amérique du Nord

DATE DE RÉVISION (YYYY/MM/DD): 2008/11/06

Télécharger la fiche signalétique la plus récente de :

www.mapei.com

II - CARACTÉRISTIQUES PHYSIQUES

COV calculé (voir plus bas)	0 g/L
Point d'ébullition	>212°F (>100°C)
Pression de Vapeur (mmHg)	1,0
Densité de Vapeur (AIR=1)	1,10 - 1,20
Gravité Spécifique (H2O=1)	1,00 - 1,30
Point de fusion	N/E
Rythme d'évaporation (acétate de butyle=1)	Celui de l'eau.
Solubilité dans l'eau	Soluble
pH (pâte/liquide)	8,0 - 10,0
Aspect et odeur	Pâte beige. Odeur légère de latex.

VOC calculé par (la Règle(l'Autorité) 1168, Zone de Qualité de l'air de Côte du (COV selon le règlement 1168, CA South Coast Air Quality Management District)

III - ÉVALUATION DES DANGERS

Ingrédients dangereux (désignation chimique spécifique; appellations courantes)

OSHA (PEL)	ACGIH (TLV-TWA)	Autres limites recommandées	Pourcentage (optionnel)
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CE PRODUIT NE CONTIENT PAS D'INGRÉDIENTS DANGEREUX DÉFINIS DANS LA RÉGLEMENTATION FÉDÉRALE AMÉRICAINE OSHA 29 CFR 191 0.1200 NI DANS LA SECTION 13 DE LA LOI CANADIENNE SUR LES PRODUITS DANGEREUX.

Pour la Californie (Proposition 65) - Ce produit ne contient aucun des composés chimiques devant être déclarés en vertu de la Proposition 65.

Tous les ingrédients sont répertoriés aux É.-U., sous l'inventaire du TSCA, et, au Canada, dans la liste LIS.

(É.-U.) – Évaluations HMIS (Hazardous Materials Identification System) : Santé- 1 Feu-0 Réactivité -0 Protection - B ***=effet chronique

(Canada) – Classification SIMDUT (Système d'information sur les matières dangereuses utilisées au travail) : Non réglementé selon le SIMDUT.

IV - TRANSPORT

Par VOIE DE TERRE – É.-U. et Porto Rico (DOT) :

Non réglementé.

Par VOIE D'EAU (IMDG) :

Non réglementé.

Par VOIE DE TERRE – Canada (TMD) :

Non réglementé.

Par VOIE DES AIRS (IATA) :

Non réglementé.

V - DONNÉES SUR LES RISQUES D'INCENDIE ET D'EXPLOSION

Point d'éclair : >212°F (>100°C) Limite inférieure d'explosivité (%) - N/E Limite supérieure d'explosivité (%) - N/E

Dangers inhabituels d'incendie et d'explosion - Certains produits issus de la décomposition peuvent être nocifs.

Agent extincteur :

Le produit ne brûlera pas tant que la teneur en eau ne sera entièrement évaporée. Eau pulvérisée, dioxyde de carbone, poudre chimique ou mousse.

Règles à observer dans la lutte contre les feux spéciaux :

Porter les accessoires et les vêtements standards de lutte contre l'incendie, incluant un appareil respiratoire.

VI - DONNÉES SUR LA RÉACTIVITÉ

Stabilité : Stable

Conditions à éviter : Aucune connue

Incompatibilité (matériaux à éviter) : Oxydants forts, acides forts et bases fortes.

Risques de décomposition des sous-produits : Monoxyde de carbone, dioxyde de carbone, oxydes d'azote et autres composés organiques non identifiés.

Polymérisation: Ne se produira pas. **Conditions d'Éviter:** Aucune connue.

VII - DONNÉES SUR LES RISQUES POUR LA SANTÉ

Modes d'absorption durant un usage normal : Par inhalation? OUI Par la peau? OUI Par ingestion? NON

Risques pour la santé :

Effets aigus : Aucun risque suspecté en cas d'ingestion par suite d'exposition professionnelle.

Effets chroniques : Aucune connue.

Cancérogénicité : NTP -NON CIRC- NON OSHA - NON

Signes et symptômes de surexposition :

Aucun risque suspecté en cas d'ingestion par suite d'exposition professionnelle.

Conditions médicales susceptibles d'être aggravées par une exposition au produit :

Allergies, problèmes cutanés ou respiratoires. Sensibilité au produit.

VIII - URGENCE ET PREMIERS SOINS

Yeux : Rincer à l'eau froide pendant 15 minutes en tenant les paupières ouvertes. Si l'irritation persiste, consulter immédiatement un médecin.

Peau : Éviter tout contact avec la peau. Enlever les vêtements souillés. Rincer à fond à l'eau savonneuse la zone éclaboussée. Si l'irritation persiste, consulter un médecin immédiatement.

Inhalation : Sortir au grand air si la concentration admissible des produits dangereux est dépassée. En cas d'arrêt respiratoire, une ou des personnes formées devraient commencer la respiration artificielle. Appeler immédiatement un médecin.

Ingestion : Ne pas faire vomir. Ne jamais rien administrer oralement à une personne inconsciente. Appeler immédiatement un médecin.

IX - PRÉCAUTIONS EN VUE D'UNE MANUTENTION ET D'UN USAGE SÉCURITAIRES

Mesures à prendre en cas de fuite ou de déversement :

En se servant des accessoires de protection appropriés, placer le produit déversé dans un fût de stockage en poly ou dans tout autre contenant exigé par les éliminateurs locaux, puis entreposer dans un endroit sécuritaire, jusqu'à ce que le produit soit évacué selon la réglementation en vigueur.

Méthode d'évacuation des déchets : Évacuer les déchets selon les réglementations fédérale, provinciale (ou de l'État) et municipale en vigueur.

Précautions lors de la manutention et de l'entreposage :

Refermer le contenant lorsqu'on ne se sert pas du produit. Entreposer à 15 – 35°C (60 - 95°F) et à l'abri du soleil. Lorsque le contenant est ouvert, assurer une ventilation convenable afin d'éviter d'inhaler les vapeurs du produit.

Précaution additionnelle : Éviter un contact prolongé du produit avec la peau.

X - MESURES DE CONTRÔLE

Protection des voies respiratoires :

Dans l'éventualité d'un dépassement des limites d'exposition permises et en l'absence de contrôles environnementaux appropriés, porter un appareil respiratoire à adduction d'air approuvé par le NIOSH/MSHA. Il faut mettre en œuvre des mesures d'ingénierie et des mesures administratives de contrôle dans le but de réduire l'exposition au produit.

Ventilation:	Locale -	N'employer que dans des endroits BIEN AÉRÉS.	Mécanique -	N'utiliser que des appareils intrinsèquement sécuritaires.
	Spéciale -	S/O	Autre -	S/O

Protection des yeux : Porter des lunettes de sécurité ou anti-éclaboussures afin de prévenir le contact avec les yeux.

Gants de protection : Imperméables (nitrile, caoutchouc ou mieux).

Autres accessoires ou vêtements de protection : Jugé nécessaire afin de réduire le contact avec la peau.

S/O="Sans objet" N/D="Non déterminé"

L'information présentée dans les présentes s'appuie sur des données jugées exactes. Nous ne fournissons, toutefois, aucune garantie, expresse ou implicite, au chapitre de l'exactitude de ces données ni des résultats qui en découlent. MAPEI n'assume aucune responsabilité en matière de blessures ni de dommages matériels, imputables au produit et subis par les acquéreurs, les utilisateurs ou de tierces parties. Les acquéreurs et les utilisateurs assumeront tous les risques reliés à l'utilisation du produit.

Nombre de producto:	Ultra bond ECO 575
Descripción de producto:	Adhesivo para molduras cóncavas de calidad superior

EN CASO DE UNA EMERGENCIA QUÍMICA QUE IMPLICA UN DERRAME, ESCAPE, FUEGO, EXPOSICIÓN O ACCIDENTE PONGASE EN CONTACTO CON LOS SIGUIENTES NÚMEROS:

EMERGENCIA NÚMERO de 24 HORAS: (EE.UU.) CHEMTREC 1-800-424-9300 (El Canadá) CANUTEC 1-613-996-666

COMISIONA DECLARACIÓN PARA EL CONSUMIDOR:

PRECAUCIÓN - IRRITANTE DE OJOS. NO TÓXICO.

PRÁCTICAS DE TRABAJO É HIGIENE:

Quite la ropa contaminada inmediatamente. Lavar las manos, después de cada uso y antes de comer, beber, o de usar productos personales. Minimice el contacto del producto en la piel.

I - INFORMACIÓN GENERAL

FABRICANTE :

EE.UU. y Puerto Rico Canadá
MAPEI CORPORATION MAPEI INC.
1144 East Newport Center Drive 2900 Francis-Hughes Avenue
Deerfield Beach, FL 33442 Laval, QC H7L 3J5
Ph: (954) 246-8888 Ph: (450) 662-1212

MSDS PREPARADO POR:

El departamento de Asuntos Regulatorios - Norteamérica

FECHA de REVISION (YYYY/MM/DD): 2008/11/06

Obtenga el MSDS mas actual en www.mapei.com

II - CARACTERÍSTICAS FÍSICAS

Máximo VOC

0 g/L

Punto de ebullición >212°F (>100°C)
Presión de Vapor (mmHg) 1,0
Densidad de Vapor (AIR=1) 1,10 - 1,20
Gravedad Específica (H2O=1) 1,00 - 1,30
Punto de fusión N/E
Tarifa de Evaporación (Butyl Acetate=1) Mismo como agua.
Solubilidad en el agua Soluble
pH (pasta/el líquido) 8,0 - 10,0
Aspecto y Olor La pasta beige. El olor leve de látex.

VOC deliberado por (la Regla 1168, Distrito de Calidad del aire de Costa de Sur - California)

III - EVALUACION DE RIESGOS

Componentes Arriesgados

(identidad específica química; nombres comunes):

OSHA (PEL)

ACGIH (TLV
TWA)

Otros Límites Recomendados

% Por ciento
(de Opcional)

ESTO PRODUCTO NO CONTIENE INGREDIENTES NOCIVOS COMO SON DEFINIDOS POR LA NORMA EE. UU. OSHA DE COMUNICACIÓN NOCIVA - 29 CFR 1910.1200 O DE ACUERDO CON LA SECCIÓN 13 DE LA ACTA DE PRODUCTOS NOCIVOS CANADIENSE.

Para California: Este Producto no contiene ningunas sustancias químicas denunciabiles bajo la proposición 65.

Todos los ingredientes están dentro de o exento del TSCA de EE. UU. y del DSL Canadiense.

(EE. UU) - HMIS (Sistema de Identificación de materiales peligrosos) Posición: Salud- 1 Fuego- 0 Reactividad- 0 Protección- B "*" = Crónico
(Canadá) - WHMIS (Información de Materiales peligrosos de Lugar de trabajo Sistema) Clasificaciones: No regulado bajo WHMIS.

IV - TRANSPORTE

Vía Terrestre - EE.UU. y Puerto Rico (DOT):

No regulado.

Vía Terrestre - Canadá (TDG):

No regulado.

Vía Marítima (IMDG):

No regulado.

Vía Aérea (IATA):

No regulado.

V - DATOS DE RIESGO DE INCENDIO Y EXPLOSIÓN

Punto de inflamación: >212°F (>100°C)

Límite Inferior Explosivo (%) - N/E

Límite Superior Explosivo (%) - N/E

Fuego Insólito y Peligros de Explosión - Algunos productos de descomposición pueden ser dañinos.

Medios De Extinción:

No se quemará excepto bajo temperaturas extremas. El rocío de agua, el dióxido de carbón, químico seco o espuma.

Procedimientos Especiales Contra incendios:

Utilize equipo estándar contra incendios con aparato respiratorio integrado.

VI - DATOS DE REACTIVIDAD ESTABILIDAD: Estable

Condiciones de Evitar: Ninguno sabido(conocido).

Incompatibilidad (Materiales a Evitar):

Agentes de oxidación fuertes, ácidos fuertes, y bases fuertes.

Descomposición de Riesgo por Productos: Monóxido de carbono, dióxido de carbón, óxidos de nitrógeno, y otros compuestos no identificados orgánicos.

Polimerización: No ocurrirá.

Condiciones de Evitar: Ninguno sabido(conocido).

VII - DATOS DE RIESGO PARA LA SALUD

Las rutas de entrada: ¿Inhalación? SÍ ¿Piel? SÍ ¿Ingestión? NO

Peligros para la salud:

Agudo: No se sospechan ningunos efectos bajo uso profesional normal.

Crónico: Ninguno sabido(conocido).

Cancerígeno: NTP -NO IARC - NO OSHA - NO

Signos y Síntomas de Exceso de exposición:

No se sospechan ningunos efectos bajo uso profesional normal.

Condiciones Médicas Que Pueden Ser Agravadas por Exposición:

Alergias, desordenes de la piel y respiratorias. Sensibilidad al producto.

VIII - PROCEDIMIENTOS DE EMERGENCIA Y PRIMEROS AUXILIOS

Ojos: Sosteniendo el párpado abierto vierta agua fresca durante 15 minutos. Si la irritación persiste, busca atención médica inmediatamente.

Piel: Evite el contacto con la piel. Quite la ropa contaminada. Lave el área afectada completamente con jabón y agua. Si la irritación persiste, busca la atención médica inmediata.

Inhalación: Sacar al aire fresco si se exceden las concentraciones permitidas de cualquiera de los ingredientes peligrosos. Si no esta respirando, personal especializado debe de iniciar respiración artificial y se debe de obtener atención médica de inmediato.

Ingestión: No induzca vomito. No dé nada por la boca a una persona inconsciente. Busque la atención médica inmediatamente.

IX - PRECAUCIONES PARA MANEJO SEGURO Y EMPLEO

Pasos para ser tomados si el Material se Escapa se Derramado:

Usar equipo protectivo. Contener la dispersión por medio de materials absorbentes y poner en un contenedor aprobado de desecho.

Método de Recogida de basuras: Elimínelo de acuerdo con los reglamentos medioambientales locales.

Precauciones para ser tomadas durante Manejo y Almacenaje:

Mantenga el recipiente cerrado cuando no lo use. Almacénelo a 15 a 35°C (60 a 95°F) y lejos del sol. Ventile adecuadamente el espacio para evitar respirar los vapores que se emitan al retirar la tapa de la cubierta.

Otras Precauciones: Evite el contacto prolongado con la piel.

X - MEDIDAS DE CONTROL

Protección Respiratoria:

Si el límite de exposición al producto en el lugar de trabajo se excede, un respirador de aire aprobado por NIOSH/MSHA es requerido en la ausencia de control medioambiental apropiado. Controles de ingenieros o administrativos se deben de implementar a fin de reducir la exposición.

Ventilación: Gases de combustión Locales - Sólo use en áreas BIEN VENTILADAS. Mecánico - Sólo use dispositivos intrínsecamente seguros.

Especial -

N/A

Otro -

N/A

Protección de Ojos: Gafas de seguridad son necesarios para prevenir contacto con los ojos.

Gautes Protectores: Impenetrable. (Nitrile, caucho, o bien)

Otro Equipo Protector: Como sea necesario para minimizar el contacto con la piel.

N/A="No Aplicable"

N/E="No Establecido"

La información contenida aquí está basada en datos considerados exactos. Sin embargo, ninguna garantía es expresada o implicada en cuanto a la exactitud de estos datos o los resultados para ser obtenidos del uso del mismo. MAPEI no asume ninguna responsabilidad del daño corporal o daño de propiedad a compradores, usuarios, o a terceros causado por el material. Dichos compradores o usuarios asumen todo riesgo asociado con el empleo del material.



Ultraflex® 1

Material Safety Data Sheet (MSDS)

English Version on pages 2 and 3.

Fiche signalétique (MSDS)

Version Française à la pages 4 et 5.

Hoja de Datos Material de seguridad (MSDS)

La versión en Español en las páginas 6 y 7.

Product Name: *Ultraflex® 1*Product Description: **Polymer-Modified Mortar**

IN THE EVENT OF A CHEMICAL EMERGENCY INVOLVING A SPILL, LEAK, FIRE, EXPLOSION, EXPOSURE OR ACCIDENT, CONTACT THE FOLLOWING NUMBERS:

EMERGENCY 24 HOUR NUMBER (USA) CHEMTREC 1-800-424-9300 (Canada) CANUTEC 1-613-996-6666**CONSUMER STATEMENT:**

DANGER - CORROSIVE. SKIN, EYE AND RESPIRATORY IRRITANT. CONTAINS KNOWN OR PROBABLE HUMAN CARCINOGEN.
HARMFUL OR FATAL IF SWALLOWED.

WORK AND HYGIENE PRACTICE:

Remove contaminated clothing immediately. Wash hands, after each use and before eating, drinking, or using toiletries. Minimize contact of product on skins.

I - GENERAL INFORMATION**MANUFACTURER:**

USA and Puerto Rico Canada
MAPEI CORPORATION MAPEI INC.
1144 East Newport Center Drive 2900 Francis-Hughes Avenue
Deerfield Beach, FL 33442 Laval, QC H7L 3J5
Ph: (954) 246-8888 Ph: (450) 662-1212

MSDS PREPARED BY:

Regulatory Affairs Department - MAPEI North America

REVISION DATE (YYYY/MM/DD): 2005/09/19For most current MSDS, download document from: www.mapei.com**II - PHYSICAL CHARACTERISTICS**

Calculated VOC (See below.)	0 g/L
Boiling Point	N/A
Vapor Pressure (mmHg)	N/A
Vapor Density (AIR=1)	N/A
Specific Gravity (H2O=1)	2,00 - 2,30
Melting/Freezing Point (F)	N/A
Evaporation Rate (Butyl Acetate=1)	N/A
Solubility in water	Soluble
pH (paste/liquid)	11,0 - 13,0
Appearance and Odor	Gray or white powder. General cement odor.

(VOC per CA South Coast Air Quality Management District, Rule 1168)

III - HAZARD ASSESSMENT**Hazardous Components**

(specific chemical identity; common names):

	OSHA (PEL)	ACGIH (TLV-TWA)	Other Limits Recommended	% Percent (Optional)
Silica Sand, Crystalline Quartz (CAS# 14808-60-7)	10mg/m ³	0,1mg/m ³	N/E	40 - 70
Hydraulic Cement (CAS# 65997-15-1)	15mg/m ³	10mg/m ³	N/E	15 - 40
Calcium Carbonate (CAS# 1317-65-3)	5mg/m ³	10mg/m ³	(Respirable dust only.)	5 - 10

For California (Proposition 65): This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive toxicity.

All ingredients are listed within or exempted from US TSCA and Canadian DSL.

(USA) - HMIS (Hazardous Materials Identification System) Rating: Health - 3 Fire - 0 Reactivity - 0 Protection - E *** = chronic effect

(Canada) - WHMIS (Workplace Hazardous Materials Information System) Classifications: E and D2A

IV - TRANSPORTATION**By GROUND - USA and Puerto Rico (DOT):**

Not Regulated

By GROUND - Canada (TDG):

Not Regulated

By SEA (IMDG):

Not Regulated

By AIR (IATA):

Not Regulated

V - FIRE AND EXPLOSION HAZARD DATA

Flash Point: N/A Lower Explosive Limit (%) - N/A Upper Explosive Limit (%) - N/A

Unusual Fire and Explosion Hazards - Some decomposition products may be harmful.

Extinguishing Media:

Will not burn except under extreme temperatures. Water spray, carbon dioxide, dry chemical or foam.

Special Fire Fighting Procedures:

Wear standard fire fighting gear with self-contained breathing apparatus.

VI - REACTIVITY DATA**Stability:** Stable**Conditions to Avoid:** None known.

Incompatibility (Materials to Avoid): Strong oxidizing agents, strong acids, and strong bases.

Hazard Decomposition of By-products: Carbon monoxide, carbon dioxide, oxides of nitrogen, and other unidentified organic compounds.

Polymerization: Will Not Occur **Conditions to Avoid:** None known.

VII - HEALTH HAZARD DATA

Routes of entry during normal usage: Inhalation? YES Skin? YES Ingestion? NO

Health Hazards:

Acute: Inhalation or contact can cause irritation to eyes, skin, nose or throat to sensitive people.

Chronic: Repeated (long term) inhalation of dust may result in silicosis.

Carcinogenicity: NTP - YES IARC - NO OSHA - NO *Crystalline Silica - NTP Rating 1*

Signs and Symptoms of Overexposure:

Dry skin, dermatitis, dry cough, irritated eyes from dust or any other potential adverse condition related to the alkaline nature of wet cement.

Medical Conditions That Can Be Aggravated by Exposure:

Allergies, skin and respiratory disorders. Product sensitivity.

VIII - EMERGENCY AND FIRST AID PROCEDURE

Eyes: Flush with cool water for 15 minutes while holding eyelid open. If irritation persists, seek medical attention immediately.

Skin: Avoid contact with skin. Remove contaminated clothing. Wash affected area thoroughly with soap and water. If irritation persists, seek immediate medical attention.

Inhalation: Remove to fresh air if allowable concentrations of any of the hazardous ingredients are exceeded. If not breathing, trained personnel should initiate artificial respirations and immediate medical attention should be obtained.

Ingestion: Do not induce vomiting. Do not give anything by mouth to an unconscious person. Seek medical attention immediately.

IX - PRECAUTIONS FOR SAFE HANDLING AND USE

Steps to be taken if Material is Leaked or Spilled:

Wear protective equipment. Contain by diking with inert absorbent materials and put into an approved waste container.

Waste Disposal Method: Dispose in accordance to local environmental regulation.

Precautions to be taken during Handling and Storage:

Store in a manner to prevent dusty conditions.

Other Precautions: Avoid prolonged skins contact.

X - CONTROL MEASURES

Respiratory Protection:

During work with dry product it is recommended to wear a NIOSH/MSHA approved respirator in absence of proper environmental control. Engineering or administrative controls should be implemented to reduce exposure to dust.

Ventilation:	Local Exhaust - Use in WELL VENTILATED areas only.	Mechanical - Use only intrinsically safe devices.
	Special - N/A	Other - N/A

Eye Protection: Safety glasses or goggles as necessary to prevent eye contact.

Protective Gloves: Impervious. (Nitrile, rubber, or better)

Other Protective Equipment: As needed to minimize contact with skin.

N/A="Not Applicable" N/E="Not Established"

The information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof. MAPEI assumes no responsibility for personal injury or property damage to vendees, users, or third parties caused by the material. All users assume all risks associated with the use of the material.

Nom du produit: *Ultraflex® 1*Description du produit: **Ciment-colle monocomposé**

POUR TOUT PROBLÈME D'ORDRE CHIMIQUE AVEC DÉVERSEMENT, FUITE, INCENDIE, EXPLOSION, EXPOSITION OU ACCIDENT, COMPOSER LES NUMÉROS SUIVANTS :

URGENCE JOUR ET NUIT : (É.-U.) CHEMTREC 1-800-424-9300 (Canada) CANUTEC 1-613-996-6666

AVIS AUX CONSOMMATEURS :

DANGER - CORROSIF. IRRITANT POUR LES YEUX, LA PEAU ET LES VOIES RESPIRATOIRES. CONTIENT DES INGRÉDIENTS RECONNUS OU POUVANT ÊTRE CANCÉROGÈNES POUR L'ÊTRE HUMAIN. NOCIF OU MORTEL SI AVALÉ.

HYGIÈNE ET PRATIQUES AU TRAVAIL :

Enlever immédiatement les vêtements souillés. Se laver les mains après chaque utilisation et avant de manger, de boire ou de se servir d'articles de toilette. Éviter autant que possible le contact du produit avec la peau.

I - RENSEIGNEMENTS GÉNÉRAUX**FABRICANTE :**

É.-U. et Porto Rico Canada
MAPEI CORPORATION MAPEI INC.
1144 East Newport Center Drive 2900 Francis-Hughes Avenue
Deerfield Beach, FL 33442 Laval, QC H7L 3J5
Ph: (954) 246-8888 Ph: (450) 662-1212

FICHE SIGNALÉTIQUE RÉDIGÉE PAR :

Service des affaires réglementaires - MAPEI Amérique du Nord

DATE DE RÉVISION (YYYY/MM/DD): 2005/09/19

Télécharger la fiche signalétique la plus récente de :
www.mapei.com

II - CARACTÉRISTIQUES PHYSIQUES

COV calculé (voir plus bas)	0 g/L
Point d'ébullition	S/O
Pression de Vapeur (mmHg)	S/O
Densité de Vapeur (AIR=1)	S/O
Gravité Spécifique (H2O=1)	2,00 - 2,30
Point de fusion	S/O
Rythme d'évaporation (acétate de butyle=1)	S/O
Solubilité dans l'eau	Soluble
pH (pâte/liquide)	11,0 - 13,0
Aspect et odeur	Poudre grise ou blanche. Odeur de ciment.

VOC calculé par (la Règle(l'Autorité) 1168, Zone de Qualité de l'air de Côte du (COV selon le règlement 1168, CA South Coast Air Quality Management District)

III - ÉVALUATION DES DANGERS**Ingrédients dangereux (désignation chimique spécifique; appellations courantes)**

	OSHA (PEL)	ACGIH (TLV-TWA)	Autres limites recommandées	Pourcentage (optionnel)
Silice (CAS# 14808-60-7)	10mg/m ³	0,1mg/m ³	N/E	40 - 70
Ciment Hydraulique (CAS# 65997-15-1)	15mg/m ³	10mg/m ³	N/E	15 - 40
Carbonate de Calcium (CAS# 1317-65-3)	5mg/m ³	10mg/m ³	(Respirable dust only.)	5 - 10

Pour la Californie (Proposition 65): Ce produit contient des produits chimiques connus à l'état de la Californie pour causer le cancer, des défauts de naissance ou d'autre toxicité reproductrice.

Tous les ingrédients sont répertoriés aux É.-U., sous l'inventaire du TSCA, et, au Canada, dans la liste LIS.

(É.-U.) – Évaluations HMIS (Hazardous Materials Identification System) : Santé- 3 Feu- 0 Réactivité - 0 Protection - E ***=effet chronique

(Canada) – Classification SIMDUT (Système d'information sur les matières dangereuses utilisées au travail) : E and D2A

IV - TRANSPORT**Par VOIE DE TERRE – É.-U. et Porto Rico (DOT) :**

Non réglementé.

Par VOIE DE TERRE – Canada (TMD) :

Non réglementé.

Par VOIE D'EAU (IMDG) :

Non réglementé.

Par VOIE DES AIRS (IATA) :

Non réglementé.

V - DONNÉES SUR LES RISQUES D'INCENDIE ET D'EXPLOSION

Point d'éclair : S/O Limite inférieure d'explosivité (%) - S/O Limite supérieure d'explosivité (%) - S/O

Dangers inhabituels d'incendie et d'explosion - Certains produits issus de la décomposition peuvent être nocifs.

Agent extincteur :

Le produit ne brûlera pas tant que la teneur en eau ne sera entièrement évaporée. Eau pulvérisée, dioxyde de carbone, poudre chimique ou mousse.

Règles à observer dans la lutte contre les feux spéciaux :

Porter les accessoires et les vêtements standards de lutte contre l'incendie, incluant un appareil respiratoire.

VI - DONNÉES SUR LA RÉACTIVITÉ

Stabilité : Stable

Conditions à éviter : Aucune connue

Incompatibilité (matériaux à éviter) : Oxydants forts, acides forts et bases fortes.

Risques de décomposition des sous-produits : Monoxyde de carbone, dioxyde de carbone, oxydes d'azote et autres composés organiques non identifiés.

Polymérisation: Ne se produira pas. **Conditions d'Éviter:** Aucune connue.

VII - DONNÉES SUR LES RISQUES POUR LA SANTÉ

Modes d'absorption durant un usage normal : Par inhalation? OUI Par la peau? OUI Par ingestion? NON

Risques pour la santé :

Effets aigus : L'inhalation ou le contact peut causer une irritation aux yeux, à la peau, au nez ou à la gorge chez les personnes sensibles.

Effets chroniques : L'inhalation (à long terme) de la poussière peut résulter en une silicose.

Cancérogénicité : NTP - OUI CIRC- NON OSHA - NON *Silice - NTP Rating 1*

Signes et symptômes de surexposition :

Peau sèche, dermatite, toux sèche, yeux irrités par la poussière ou toute autre condition difficile due à la nature alcaline du ciment humide.

Conditions médicales susceptibles d'être aggravées par une exposition au produit :

Allergies, problèmes cutanés ou respiratoires. Sensibilité au produit.

VIII - URGENCE ET PREMIERS SOINS

Yeux : Rincer à l'eau froide pendant 15 minutes en tenant les paupières ouvertes. Si l'irritation persiste, consulter immédiatement un médecin.

Peau : Éviter tout contact avec la peau. Enlever les vêtements souillés. Rincer à fond à l'eau savonneuse la zone éclaboussée. Si l'irritation persiste, consulter un médecin immédiatement.

Inhalation : Sortir au grand air si la concentration admissible des produits dangereux est dépassée. En cas d'arrêt respiratoire, une ou des personnes formées devraient commencer la respiration artificielle. Appeler immédiatement un médecin.

Ingestion : Ne pas faire vomir. Ne jamais rien administrer oralement à une personne inconsciente. Appeler immédiatement un médecin.

IX - PRÉCAUTIONS EN VUE D'UNE MANUTENTION ET D'UN USAGE SÉCURITAIRES

Mesures à prendre en cas de fuite ou de déversement :

En se servant des accessoires de protection appropriés, placer le produit déversé dans un fût de stockage en poly ou dans tout autre contenant exigé par les éliminateurs locaux, puis entreposer dans un endroit sécuritaire, jusqu'à ce que le produit soit évacué selon la réglementation en vigueur.

Méthode d'évacuation des déchets : Évacuer les déchets selon les réglementations fédérale, provinciale (ou de l'État) et municipale en vigueur.

Précautions lors de la manutention et de l'entreposage :

Entreposer de manière à prévenir les conditions poussiéreuses.

Précaution additionnelle : Éviter un contact prolongé du produit avec la peau.

X - MESURES DE CONTRÔLE

Protection des voies respiratoires :

Utiliser un masque à poussière approuvé par le NIOSH de catégorie N95 lorsque vous travaillez avec le produit sec.

Ventilation:	Locale -	N'employer que dans des endroits BIEN AÉRÉS.	Mécanique -	N'utiliser que des appareils intrinsèquement sécuritaires.
	Spéciale -	S/O	Autre -	S/O

Protection des yeux : Porter des lunettes de sécurité ou anti-éclaboussures afin de prévenir le contact avec les yeux.

Gants de protection : Imperméables (nitrile, caoutchouc ou mieux).

Autres accessoires ou vêtements de protection : Jugé nécessaire afin de réduire le contact avec la peau.

S/O="Sans objet" N/D="Non déterminé"

L'information présentée dans les présentes s'appuie sur des données jugées exactes. Nous ne fournissons, toutefois, aucune garantie, expresse ou implicite, au chapitre de l'exactitude de ces données ni des résultats qui en découlent. MAPEI n'assume aucune responsabilité en matière de blessures ni de dommages matériels, imputables au produit et subis par les acquéreurs, les utilisateurs ou de tierces parties. Les utilisateurs assumeront tous les risques reliés à l'utilisation du produit.

Nombre de producto: **Ultraflex® 1**
 Descripción de producto: **Mortero de un paso**

EN CASO DE UNA EMERGENCIA QUÍMICA QUE IMPLICA UN DERRAME, ESCAPE, FUEGO, EXPOSICIÓN O ACCIDENTE PONGASE EN CONTACTO CON LOS SIGUIENTES NÚMEROS:

EMERGENCIA NÚMERO de 24 HORAS: (EE.UU.) CHEMTREC 1-800-424-9300 (El Canadá) CANUTEC 1-613-996-666

COMISIONA DECLARACIÓN PARA EL CONSUMIDOR:

PELIGRO - CORROSIVO. IRRITANTE DE LA PIEL, LOS OJOS Y DEL SISTEMA RESPIRATORIO. CONTIENE CANCERÍGENOS HUMANOS CONOCIDOS Y POTENCIALES. DAÑINO O LETAL SI SE INGIERE.

PRÁCTICAS DE TRABAJO É HIGIENE:

Quite la ropa contaminada inmediatamente. Lavar las manos, después de cada uso y antes de comer, beber, o de usar productos personales. Minimice el contacto del producto en la piel.

I - INFORMACIÓN GENERAL

FABRICANTE :

EE.UU. y Puerto Rico **Canadá**
 MAPEI CORPORATION MAPEI INC.
 1144 East Newport Center Drive 2900 Francis-Hughes Avenue
 Deerfield Beach, FL 33442 Laval, QC H7L 3J5
 Ph: (954) 246-8888 Ph: (450) 662-1212

MSDS PREPARADO POR:

El departamento de Asuntos Regulatorios - Norteamérica

FECHA de REVISION (YYYY/MM/DD): 2005/09/19

Obtenga el MSDS mas actual en www.mapei.com

II - CARACTERÍSTICAS FÍSICAS

Máximo VOC	0 g/L
Punto de ebullición	N/A
Presión de Vapor (mmHg)	N/A
Densidad de Vapor (AIR=1)	N/A
Gravedad Específica (H2O=1)	2,00 - 2,30
Punto de fusión	N/A
Tarifa de Evaporación (Butyl Acetate=1)	N/A
Solubilidad en el agua	Soluble
pH (pasta/el líquido)	11,0 - 13,0
Aspecto y Olor	Polvo gris o blanco. Olor general de cemento.

VOC deliberado por (la Regla 1168, Distrito de Calidad del aire de Costa de Sur - California)

III - EVALUACION DE RIESGOS

Componentes Arriesgados

(identidad específica química; nombres comunes):	OSHA (PEL)	ACGIH (TLV-TWA)	Otros Límites Recomendados	% Por ciento (de Opcional)
Silice (CAS# 14808-60-7)	10mg/m ³	0,1mg/m ³	N/E	40 - 70
Cemento de Portland (CAS# 65997-15-1)	15mg/m ³	10mg/m ³	N/E	15 - 40
Carbonato de Calcio (CAS# 1317-65-3)	5mg/m ³	10mg/m ³	(Respirable dust only.)	5 - 10

Para California: Este Producto contiene sustancias químicas sabidas(conocidas) al estado de California para causar el cancer, defectos de nacimiento u otra toxicidad reproductiva.

Todos los ingredientes están dentro de o exento del TSCA de EE. UU. y del DSL Canadiense.

(EE. UU) - HMIS (Sistema de Identificación de materiales peligrosos) Posición: Salud- 3 Fuego- 0 Reactividad- 0 Protección- E *** = Crónico
 (Canadá) - WHMIS (Información de Materiales peligrosos de Lugar de trabajo Sistema) Clasificaciones: E and D2A

IV - TRANSPORTE

Vía Terrestre - EE.UU. y Puerto Rico (DOT):

No regulado.

Vía Terrestre - Canadá (TDG):

No regulado.

Vía Marítima (IMDG):

No regulado.

Vía Aérea (IATA):

No regulado.

V - DATOS DE RIESGO DE INCENDIO Y EXPLOSIÓN

Punto de inflamación: N/A **Límite Inferior Explosivo (%) -** N/A **Límite Superior Explosivo (%) -** N/A

Fuego Insólito y Peligros de Explosión - Algunos productos de descomposición pueden ser dañinos.

Medios De Extinción:

No se quemará excepto bajo temperaturas extremas. El rocío de agua, el dióxido de carbón, químico seco o espuma.

Procedimientos Especiales Contra incendios:

Utilize equipo estándar contra incendios con aparato respiratorio integrado.

VI - DATOS DE REACTIVIDAD **ESTABILIDAD:** Estable **Condiciones de Evitar:** Ninguno sabido(conocido).

Incompatibilidad (Materiales a Evitar): Agentes de oxidación fuertes, ácidos fuertes, y bases fuertes.

Descomposición de Riesgo por Productos: Monóxido de carbono, dióxido de carbón, óxidos de nitrógeno, y otros compuestos no identificados orgánicos.

Polimerización: No ocurrirá. **Condiciones de Evitar:** Ninguno sabido(conocido).

VII - DATOS DE RIESGO PARA LA SALUD

Las rutas de entrada: ¿Inhalación? SÍ ¿Piel? SÍ ¿Ingestión? NO

Peligros para la salud:

Agudo: Inhalación o contacto puede causar irritación a ojos, piel, nariz o garganta en personas sensibles.

Crónico: Inhalación repetida (tiempo prolongado) de polvo puede resultar en silicosis

Cancerígeno: NTP - SÍ IARC - NO OSHA - NO *Silice - NTP Rating 1*

Signos y Síntomas de Exceso de exposición:

Piel seca, dermatitis, tos seca, ojos irritados por el polvo o cualquier otra condición adversa potencial relacionada a la naturaleza alcalina de cemento mojado.

Condiciones Médicas Que Pueden Ser Agravadas por Exposición:

Alergias, desordenes de la piel y respiratorias. Sensibilidad al producto.

VIII - PROCEDIMIENTOS DE EMERGENCIA Y PRIMEROS AUXILIOS

Ojos: Sosteniendo el párpado abierto vierta agua fresca durante 15 minutos. Si la irritación persiste, busca atención médica inmediatamente.

Piel: Evite el contacto con la piel. Quite la ropa contaminada. Lave el área afectada completamente con jabón y agua. Si la irritación persiste, busca la atención médica inmediata.

Inhalación: Sacar al aire fresco si se exceden las concentraciones permitidas de cualquiera de los ingredientes peligrosos. Si no esta respirando, personal especializado debe de iniciar respiración artificial y se debe de obtener atención médica de inmediato.

Ingestión: No induzca vomito. No dé nada por la boca a una persona inconsciente. Busque la atención médica inmediatamente.

IX - PRECAUCIONES PARA MANEJO SEGURO Y EMPLEO

Pasos para ser tomados si el Material se Escapa se Derramado:

Usar equipo protectivo. Contener la dispersión por medio de materials absorbentes y poner en un contenedor aprobado de desecho.

Método de Recogida de basuras: Elimínelo de acuerdo con los reglamentos medioambientales locales.

Precauciones para ser tomadas durante Manejo y Almacenaje:

Almacenar de manera de evitar condiciones polvorientas.

Otras Precauciones: Evite el contacto prolongado con la piel.

X - MEDIDAS DE CONTROL

Protección Respiratoria:

Al trabajar con producto seco y en ausencia de controles ambientales se recomienda utilizar una mascar respiratoria aprobada por NIOSH/MSHA. Controles administrativos o de ingeniería se deben de implementar para reducir la exposición al polvo.

Ventilación: Gases de combustión Locales - Sólo use en áreas BIEN VENTILADAS. Mecánico - Sólo use dispositivos intrínsecamente seguros.
Especial - N/A Otro - N/A

Protección de Ojos: Gafas de seguridad son necesarios para prevenir contacto con los ojos.

Gautes Protectores: Impenetrable. (Nitrile, caucho, o bien)

Otro Equipo Protector: Como sea necesario para minimizar el contacto con la piel.

N/A="No Aplicable" N/E="No Establecido"

La información contenida aquí está basada en datos considerados exactos. Sin embargo, ninguna garantía es expresada o implicada en cuanto a la exactitud de estos datos o los resultados para ser obtenidos del uso del mismo. MAPEI no asume ninguna responsabilidad del daño corporal o daño de propiedad a compradores, usuarios, o a terceros causado por el material. Todos los usuarios asumen todo riesgo asociado con el empleo del material.

MATERIAL SAFETY DATA SHEET
(ESSENTIALLY SIMILAR TO OSHA FORM 20, COMPLIES WITH 29CFR 1910.1200)

HAZARD RATING: HEALTH - 1, FIRE - 0, REACTIVITY - 0
MINIMAL - 0 SLIGHT - 1 MODERATE - 2 SERIOUS - 3 SEVERE - 4

*****SECTION I: GENERAL INFORMATION*****

MANUFACTURED FOR: MKG SALES ASSOCIATES, INC.
ADDRESS: 130 MILLER ROAD
 MEDFORD, NJ 08055
TELEPHONE NUMBER: 609-953-4700
DATE ISSUED/REVISED: April 6, 2005
EMERGENCY RESPONSE NUMBER: **800-255-3924 CHEM-TEL**
PRODUCT #: **4042640**
PRODUCT NAME: **ULTRA-ZYME ENZYMES WITH BACTERIAL ACTION**
CHEMICAL NAME: BACTERIAL CULTURES
CHEMICAL FAMILY: LIQUID BACTERIAL/ENZYME DIGESTER

HAZARDOUS MATERIAL DESCRIPTION
(PROPER SHIPPING NAME, HAZARD CLASS, HAZARD ID NO. (49 CFR 172.101)
 NONE

*****SECTION II: HAZARDOUS INGREDIENTS*****
AS LISTED IN EPA 40CFR PARTS 261 & 116 AND/OR MASS. DEQE CMR 670.00

CHEMICAL NAME	CAS NO.	% BY WEIGHT	HAZARD DATA
		NONE	

CONTAINS NO INGREDIENT LISTED AS A CARCINOGEN OR POTENTIAL
CARCINOGEN BY IARC, NTP, OR OSHA.

*****SECTION III: PHYSICAL DATA*****

BOILING POINT/RANGE (F): COMPARABLE TO WATER
SPECIFIC GRAVITY (WATER=1): 1.0
% VOLATILE BY VOLUME: GREATER THAN 90%
EVAP. RATE (BUAC=1): COMPARABLE TO WATER (SLOWER)
WEIGHT/GALLON (WATER=8.33#): 8.33#
SOLUBILITY IN WATER: COMPLETE
VAPOR PRESSURE (MM/HG): COMP TO WATER
PHYSICAL STATE: OFF WHITE, MILKY LIQUID
VAPOR DENSITY (AIR=1): COMPARABLE TO WATER (HEAVIER)
ODOR: FRESH APPLE
pH: 7-8

*****SECTION IV: FIRE AND EXPLOSION HAZARD DATA*****

FLASH POINT (METHOD USED): NONE
FLAMMABLE LIMITS: LEL: NA UEL: NA
FIRE EXTINGUISHING MEDIA: WATER FOG, FOAM, GAS (CO2/HALON), DRY CHEMICAL
SPECIAL FIRE FIGHTING PROCEDURES: NONE
UNUSUAL FIRE AND EXPLOSION HAZARDS: NONE

*****SECTION V: HEALTH HAZARD DATA*****

THRESHOLD LIMIT VALUE: NOT ESTABLISHED
PRIMARY ROUTES OF ENTRY: SKIN ABSORPTION
EFFECTS OF OVEREXPOSURE:
...ACUTE - MAY CAUSE SLIGHT SKIN AND EYE IRRITATION.
...CHRONIC - MAY CAUSE SENSITIVITY TO SKIN IRRITATION AND DERMITITIS
EMERGENCY AND FIRST AID PROCEDURES:
...INHALATION - NO HAZARD.
...EYES - FLUSH THOROUGHLY WITH PLENTY OF WATER FOR AT LEAST 15
MINUTES, KEEPING EYELIDS APART. IF IRRITATION PERSISTS, GET MEDICAL
HELP.
...SKIN - SEE "EYES." WASH THOROUGHLY WITH SOAP AND WATER
...INGESTION - DRINK LARGE QUANTITIES OF WATER. GET MEDICAL
ATTENTION.

*****SECTION VI: REACTIVITY DATA*****

STABILITY: STABLE
HAZARDOUS POLYMERIZATION: WILL NOT OCCUR
CONDITIONS TO AVOID: EXCESSIVE EXPOSURE TO SKIN OR EYES AND
TEMPERATURES ABOVE 110°F
MATERIALS TO AVOID: DO NOT MIX WITH OTHER CHEMICALS. STRONG ACIDS
OR ALKALI MAY INACTIVATE BACTERIA CULTURES.
HAZARDOUS DECOMPOSITION PRODUCTS: NONE

*****SECTION VII: SPILL OR LEAK PROCEDURES*****

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: RINSE AREA
WITH WATER OR ABSORB WITH FLOOR ABSORBENT, SAWDUST OR RAGS.
WASTE DISPOSAL: PRODUCT IS BIODEGRADABLE. FLUSH DOWN SANITARY
SEWER OR PLACE IN TRASH RECEPTACLE FOR DISPOSAL.

*****SECTION VIII: SPECIAL PROTECTION INFORMATION*****

RESPIRATORY PROTECTION: NONE REQUIRED.
VENTILATION TYPE: LOCAL EXHAUST ADEQUATE.
PROTECTIVE GLOVES: RECOMMENDED.
EYE PROTECTION: RECOMMENDED.
OTHER PROTECTIVE EQUIPMENT: NONE REQUIRED

*****SECTION IX: SPECIAL PRECAUTIONS*****

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: AVOID CONTACT
WITH OPEN WOUNDS, EYES, EXCESSIVE SKIN CONTACT. DO NOT TAKE
INTERNALLY. DO NOT STORE ABOVE 110°F OR IN DIRECT SUNLIGHT. KEEP
FROM FREEZING. WASH HANDS AFTER USE.
OTHER PRECAUTIONS: KEEP OUT OF THE REACH OF CHILDREN. KEEP
CONTAINER CLOSED WHEN NOT IN USE.

FLINN SCIENTIFIC, INC.

Safety Data Sheet (SDS)

SDS #: 839.00

Revision Date: March 21, 2014

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Universal Indicator Solution

Flinn Scientific, Inc. P.O. Box 219, Batavia, IL 60510 (800) 452-1261

CHEMTREC Emergency Phone Number: (800) 424-9300

Signal Word **WARNING**

Pictograms



SECTION 2 — HAZARDS IDENTIFICATION

Hazard class: Flammable liquids (Category 3). Flammable liquid and vapor (H226). Keep away from heat, sparks, open flames, and hot surfaces. No smoking (P210).

Hazard class: Acute toxicity, oral and dermal (Category 5). May be harmful if swallowed or in contact with skin (H303+H313).

Hazard class: Serious eye damage or irritation (Category 2B). Causes eye irritation (H320).

SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Methyl red	845-10-3	$C_{15}H_{14}N_3O_2Na$	291.28	<0.05%
Bromthymol blue, sodium salt	34722-90-2	$C_{27}H_{27}Br_2O_3S$	646.38	<0.05%
Phenolphthalein	77-09-8	$NaC_{20}H_{14}O_4$	318.31	<0.05%
Sodium hydroxide	1310-73-2	NaOH	39.997	<0.05%
Ethyl alcohol, denatured	64-17-5	C_2H_5OH	46.07	55%
Water	7732-18-5	H_2O	18.00	45%

SECTION 4 — FIRST AID MEASURES

Call a POISON CENTER or physician if you feel unwell (P312).

If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing. **If in eyes:** Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing (P305+P351+P338). **If eye irritation persists:** Get medical advice or attention (P337+P313). **If on skin (or hair):** Immediately remove all contaminated clothing. Rinse skin with water (P303+P361+P353). **If swallowed:** Rinse mouth. Give large quantities of water for dilution. Call a physician or poison control at once, product contains denatured ethyl alcohol.

SECTION 5 — FIRE FIGHTING MEASURES

Class IC flammable liquid.

Flash point: 24 °C

When heated, releases flammable fumes.

In case of fire: Use a tri-class dry chemical fire extinguisher (P370+P378).

NFPA CODE

H-2

F-3

R-0

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Remove all ignition sources and ventilate area. Contain the spill with sand or other inert absorbent material and deposit in a sealed bag or container. See Sections 8 and 13 for further information.

SECTION 7 — HANDLING AND STORAGE

Flinn Suggested Chemical Storage Pattern: Organic #9. Store with dyes, indicators and stains. Keep container tightly closed and cool (P233+P235). Use explosion-proof electrical and ventilating equipment (P241). Take precautionary measures against static discharge (P243).

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Wear protective gloves, protective clothing, and eye protection (P280). Wash hands thoroughly after handling (P264). Will stain skin, clothing, and surfaces.

Exposure guidelines: (as ethyl alcohol) PEL 1000 ppm (OSHA), Ceiling 1000 ppm (ACGIH)

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

The color of this solution depends entirely on the pH of the pH indicator solution. solution. Slight alcohol odor.

SECTION 10 — STABILITY AND REACTIVITY

Avoid contact with open flame, sparks or other sources of ignition.

Shelf life: Indefinite, if stored properly.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Eye irritation, nausea, dizziness, headache.

ORL-MAN TLD₀: 29 mg/kg (as phenolphthalein)

Chronic effects: Liver damage, reproductive, teratogenic effects, carcinogen.

IHL-RAT LC₅₀: 20,000 ppm/10H (as ethyl alcohol)

SKN-RBT LD₅₀: N.A.

Target organs: Eyes, skin, central nervous system, liver, reproductive system.

N.A. = Not available, not all health aspects of this substance have been fully investigated.

SECTION 12 — ECOLOGICAL INFORMATION

Data not yet available.

SECTION 13 — DISPOSAL CONSIDERATIONS

Please review all federal, state and local regulations that may apply before proceeding.

Flinn Suggested Disposal Method #26b is one option.

SECTION 14 — TRANSPORT INFORMATION

Shipping name: Ethyl alcohol solution. Hazard class: 3, Flammable liquid. UN number: UN1170.

N/A = Not applicable

SECTION 15 — REGULATORY INFORMATION

Not listed.

SECTION 16 — OTHER INFORMATION

This Safety Data Sheet (SDS) is for guidance and is based upon information and tests believed to be reliable. Flinn Scientific, Inc. makes no guarantee of the accuracy or completeness of the data and shall not be liable for any damages relating thereto. The data is offered solely for your consideration, investigation, and verification. The data should not be confused with local, state, federal or insurance mandates, regulations, or requirements and CONSTITUTE NO WARRANTY. Any use of this data and information must be determined by the science instructor to be in accordance with applicable local, state or federal laws and regulations. The conditions or methods of handling, storage, use and disposal of the product(s) described are beyond the control of Flinn Scientific, Inc. and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THIS PRODUCT(S).

Consult your copy of the *Flinn Science Catalog/Reference Manual* for additional information about laboratory chemicals.

Revision Date: March 21, 2014



UTILITY
700 MAIN STREET, WESTBURY, NY 11590
(516) 997-6300 - FAX # (516) 997-6345

MATERIAL SAFETY DATA SHEET

PASTE SOLDERING FLUX

FOR CHEMICAL EMERGENCY: Spill, Leak, Fire, Exposure, or Accident - Call **INFOTRAC** - Day or Night: **1-800-535-5053**
THIS MSDS COMPLIES WITH 29 CFR 1910.1200 (HAZARD COMMUNICATION STANDARD) **IMPORTANT:** Read this MSDS before handling & disposing of this product. Pass this information on to employees, customers and users of this product.

PRODUCT IDENTIFICATION

DOT Shipping name: CONSUMER COMMODITY, ORM-D **CAS NO.:** MIXTURE
Chemical Family: CHLORIDE **UN/NA** #:N/R
DOT Hazard Class: N/R **DATE OF ISSUE:** 08/04

SECTION I - HAZARDOUS INGREDIENTS/EXPOSURE LIMITS

Hazardous Ingredients:	CAS #	TLV/PEL	AGENCY	TYPE	SARA-313(% Range)
ZINC CHLORIDE	7646-85-7	1 MG/M3	ACGIH	TWA	10-25%
AMMONIUM CHLORIDE	12125-02-9	10 MG/M3	ACGIH	TWA	<10%

SECTION II - EMERGENCY AND FIRST AID PROCEDURES

WARNING: CORROSIVE

EYE CONTACT: If product is splashed into eyes, flush eyes with clean water for at least 15 minutes and **seek medical attention.**

SKIN CONTACT: Remove contaminated shoes and clothing and cleanse affected areas thoroughly by washing with mild soap and water and **seek medical attention.**

INHALATION: (breathing) Not expected to be a hazard under normal operating conditions..

INGESTION: (swallowing) If swallowed, **seek emergency medical attention.** Do not induce vomiting. Offer victim water or milk. Do not give dilutents to someone who is unconscious or having trouble swallowing.

SECTION III - HEALTH HAZARDS / ROUTES OF ENTRY

EYE CONTACT: Eye contact with one or more components of this product can lead to conjunctivitis and corneal burns.

SKIN CONTACT: Contact with the skin can lead to severe burns or dermatitis and ulceration depending on duration of exposure.

SKIN ABSORPTION: Components of this product are not known to be skin absorbing agents.

INHALATION: (breathing) Not expected to be a hazard under normal operating conditions.

INGESTION: (swallowing) Ingestion can lead to stomach pains, nausea, vomiting, bloody diarrhea, edema, albuminuria, and shock.

SECTION IV - SPECIAL PROTECTION INFORMATION

VENTILATION: Use with adequate ventilation to maintain airborne concentrations below established exposure limits (see section I), Additional ventilation or exhaust systems may be required.

RESPIRATORY PROTECTION: None required under routine conditions of use. The use of respiratory protection is advised when concentrates exceed the established exposure limits (see Section I).

PROTECTIVE GLOVES: The use of gloves impermeable to the specific material handled is advised to prevent possible irritation.

EYE PROTECTION: Approved eye protection to safeguard against potential eye contact, irritation or injury is recommended.

SECTION V - REACTIVITY DATA

STABILITY: Stable

INCOMPATIBILITY: (materials to avoid) This product is incompatible with: Oxidizing agents, strong acids and bases potassium, bromine pentafluoride, nitrogen trioxide, cydorgen cyanide, iodine pentafluoride and potassium chlorate.

HAZARDOUS DECOMPOSITION PRODUCTS: Thermal decomposition in the presence of air may yield carbon monoxide, carbon dioxide.

HAZARDOUS POLYMERIZATION: Will not occur

SECTION VI - SPILL OR LEAK PROCEDURES

PRECAUTIONS IN CASE OF LEAK OR SPILL: Keep all sources of ignition and hot metal surfaces away from spill/release. Stop spill/release if it can be done without risk. Wear appropriate protective equipment including respiratory protection as conditions warrant (see Section IV). Prevent spilled material from entering sewers, storm drains, and natural waterways Spilled material may be absorbed by an appropriate absorbent **WASTE DISPOSAL METHOD:** Dispose of product in accordance with local, county, state, and federal regulations.



UTILITY
700 MAIN STREET, WESTBURY, NY 11590
(516) 997-6300 - FAX # (516) 997-6345

MATERIAL SAFETY DATA SHEET

PASTE SOLDERING FLUX

SECTION VII - STORAGE AND SPECIAL PRECAUTIONS

HANDLING AND STORAGE PRECAUTIONS: Avoid getting this product ON YOU or IN YOU. Wash hands after handling this product. Do not eat or drink while handling this product. Store product in properly labeled, closed containers. Always use this product in areas where adequate ventilation is provided.

SECTION VIII - FIRE AND EXPLOSION HAZARD DATA

EXTINGUISHING MEDIA: Extinguish with dry chemical, CO₂, or a universal type foam.

FIRE AND EXPLOSION HAZARD: May decompose during contact with flames, heating elements, or in combustion engines releasing irritating gases. Container may explode if heated due to resulting pressure rise.

FIRE FIGHTING PROCEDURES: Wear appropriate protective equipment including respiratory protection as conditions warrant (see Section IV). Stop spill/release if it can be done without risk. Water spray may be useful in minimizing or dispersing vapors and cooling equipment exposed to heat and flame. Avoid spreading burning liquid with water used for cooling purposes.

SECTION IX - PHYSICAL DATA

APPROXIMATE BOILING POINT (DEG F): >200

SPECIFIC GRAVITY (68 F): >1

RELATIVE EVAPORATION RATE (ESTIMATED): <1

VAPOR PRESSURE @20C mmHg (CALCULATED): <1

PER CENT VOLATILE: NONE

FLASH POINT (TCC, DEG F): >300

PER CENT SOLUBILITY IN WATER: NEGLIGIBLE

SECTION X - OTHER REGULATORY DATA

SARA

SECTION 302: NONE

SECTION 311 & 312: ACUTE

SECTION 313: See Section I.I

HMIS

Health: 1

Flammability: 0

Reactivity: 0

TSCA

All components are in full compliance with the TSCA inventory.

CALIFORNIA PROPOSITION 65

NOT LISTED

RCRA

Waste material would be a D002

CERCLA

ZINC CHLORIDE RQ: 1000 LBS.

CARCINOGENICITY:

NOT LISTED with NTP or IARC.

NOTICE

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MATERIAL SAFETY DATA SHEET



FIRST AID MEASURES

General Information: Not expected to be a health hazard when used under normal conditions.

Inhalation: No treatment necessary under normal conditions of use. If symptoms persist, obtain medical advice.

Skin Contact: Remove contaminated clothing. Flush exposed area with water and follow by washing with soap if available. If persistent irritation occurs, obtain medical attention. When using high pressure equipment, injection of product under the skin can occur. If high pressure injuries occur, the effected person should be sent immediately to a hospital. Do not wait for symptoms to develop. Obtain medical attention even in the absence of apparent wounds.

Eye Contact: Flush eye with copious quantities of water. If persistent irritation occurs, obtain medical attention.

Ingestion: In general no treatment is necessary unless large quantities are swallowed, however, get medical advice.

Advice to Physician: Treat symptomatically. High pressure injection injuries require prompt surgical intervention and possibly steroid therapy, to minimize tissue damage and loss of function. Because entry wounds are small and do not reflect the seriousness of the underlying damage, surgical exploration to determine the extent of involvement may be necessary. Local anesthetics or hot soaks should be avoided because they can contribute to swelling, vasospasm and ischaemia. Prompt surgical decompression, debridement and evacuation of foreign material should be performed under general anesthetics, and wide exploration is essential.

FIRE AND EXPLOSION HAZARD DATA

Clear fire area of all non-emergency personnel.

Flash point: Typical 400 °C / 752 °F (COC)

Upper / lower: Typical 1 - 10 %(V)(based on mineral oil)

Flammability or Explosion limits: Typical 1 - 10 %(V) (based on mineral oil)

Auto ignition temperature : > 320 °C / 608 °F

Specific Hazards : Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds.

Suitable Extinguishing Media: Foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.

Unsuitable Extinguishing Media: Do not use a jet stream of water.

Protective Equipment for Firefighters: Proper protective equipment including breathing apparatus must be worn when approaching a fire in a confined space.

ACCIDENTAL RELEASE MEASURES

Avoid contact with spilled or released material. For guidance on selection of personal protective equipment see Exposure Controls/Personal Protection Section of this Material Safety Data Sheet. See Disposal Considerations Section for information on disposal.

Observe all relevant local and international regulations.

Protective measures: Avoid contact with skin and eyes. Use appropriate containment to avoid environmental contamination. Prevent from spreading or entering drains, ditches or rivers by using sand, earth, or other appropriate barriers.

Clean Up Methods: Slippery when spilt. Avoid accidents, clean up immediately. Prevent from spreading by making a barrier with sand, earth or other containment material. Reclaim liquid directly or in an absorbent. Soak up residue with an absorbent such as clay, sand or other suitable material and dispose of properly.

Additional Advice: Local authorities should be advised if significant spillages cannot be contained.



HANDLING AND STORAGE

General Precautions: Use local exhaust ventilation if there is risk of inhalation of vapors, mists or aerosols. Properly dispose of any contaminated rags or cleaning materials in order to prevent fires. Use the information in this data sheet as input to a risk assessment of local circumstances to help determine appropriate controls for safe handling, storage and disposal of this material.

Handling: Avoid prolonged or repeated contact with skin. Avoid inhaling vapor and/or mists. When handling product in drums, safety footwear should be worn and proper handling equipment should be used.

Storage: Keep container tightly closed and in a cool, well-ventilated place. Use properly labeled and closeable containers. Storage Temperature: 0 - 50 °C / 32 - 122 °F

Recommended Materials: For containers or container linings, use mild steel or high density polyethylene.

Unsuitable Materials: PVC.

Additional Information: Polyethylene containers should not be exposed to high temperatures because of possible risk of distortion.

EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits

Material	Source Type	ppm	mg/m3	Notation
-----------------	--------------------	------------	--------------	-----------------

Oil mist, mineral		ACGIH TWA (Mist.)	5 mg/m3	
Oil mist, mineral		ACGIH STEL (Mist.)	10 mg/m3	

Exposure Controls: The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Select controls based on a risk assessment of local circumstances. Appropriate measures include: Adequate ventilation to control airborne concentrations. Where material is heated, sprayed or mist formed, there is greater potential for airborne concentrations to be generated.

Personal Protective Equipment: Personal protective equipment (PPE) should meet recommended national standards. Check with PPE suppliers.

Respiratory Protection: No respiratory protection is ordinarily required under normal conditions of use. In accordance with good industrial hygiene practices, precautions should be taken to avoid breathing of material. If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, select respiratory protection equipment suitable for the specific conditions of use and meeting relevant legislation. Check with respiratory protective equipment suppliers. Where air-filtering respirators are suitable, select an appropriate combination of mask and filter. Select a filter suitable for combined particulate /organic gases and vapors [boiling point >65 °C (149 °F)].

Hand Protection: Where hand contact with the product may occur the use of gloves approved to relevant standards (e.g. Europe: EN374, US: F739) made from the following materials may provide suitable chemical protection: PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturizer is recommended.

Eye Protection: Wear safety glasses or full face shield if splashes are likely to occur.

Protective Clothing: Skin protection not ordinarily required beyond standard issue work clothes.

Monitoring Methods: Monitoring of the concentration of substances in the breathing zone of workers, or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls. For some substances biological monitoring may also be appropriate.

Environmental Exposure Controls: Minimize release to the environment. An environmental assessment must be made to ensure compliance with local environmental legislation.



PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear light brown. Liquid at room temperature.
Odor: Slight hydrocarbon.
pH : Not applicable.
Initial Boiling Point and Boiling Range: > 280 °C / 536 °F estimated value(s)
Pour point: Typical -15 °C / 5 °F
Flash point: Typical 400 °C / 752 °F (COC)
Upper / lower Flammability or Explosion limits: Typical 1 - 10 %(V) (based on mineral oil)
Auto-ignition temperature : > 320 °C / 608 °F
Vapor pressure : < 0.5 Pa at 20 °C / 68 °F (estimated value(s))
Specific gravity : Typical 0.87
Density: Typical 7.45 g/cm³
Water solubility: Negligible.
n-octanol/water partition coefficient (log Pow): > 6 (based on information on similar products)
Kinematic viscosity: Typical 40 mm²/s at 40 °C / 104 °F
Vapor density (air=1): > 1 (estimated value(s))
Evaporation rate (nBuAc=1): Data not available

STABILITY AND REACTIVITY

Stability: Stable.
Conditions to Avoid: Extremes of temperature and direct sunlight.
Materials to Avoid: Strong oxidizing agents.
Hazardous Decomposition Products: Hazardous decomposition products are not expected to form during normal storage.

TOXICOLOGICAL INFORMATION

Basis for Assessment: Information given is based on data on the components and the toxicology of similar products.
Acute Oral Toxicity: Expected to be of low toxicity: LD50 > 5000 mg/kg, Rat
Acute Dermal Toxicity: Expected to be of low toxicity: LD50 > 5000 mg/kg, Rabbit
Acute Inhalation Toxicity: Not considered to be an inhalation hazard under normal conditions of use.
Skin Irritation: Expected to be slightly irritating. Prolonged or repeated skin contact without proper cleaning can clog the pores of the skin resulting in disorders such as oil acne/folliculitis.
Eye Irritation: Expected to be slightly irritating.
Respiratory Irritation: Inhalation of vapors or mists may cause irritation.
Sensitization: Not expected to be a skin sensitizer.
Repeated Dose Toxicity: Not expected to be a hazard.
Mutagenicity: Not considered a mutagenic hazard.
Carcinogenicity: Product contains mineral oils of types shown to be non-carcinogenic in animal skin-painting studies. Highly refined mineral oils are not classified as carcinogenic by the International Agency for Research on Cancer (IARC). Other components are not known to be associated with carcinogenic effects.
Reproductive and Developmental Toxicity: Not expected to be a hazard.



Additional Information: Used oils may contain harmful impurities that have accumulated during use. The concentration of such impurities will depend on use and they may present risks to health and the environment on disposal. ALL used oil should be handled with caution and skin contact avoided as far as possible. High pressure injection of product into the skin may lead to local necrosis if the product is not surgically removed.

ECOLOGICAL INFORMATION

Ecotoxicological data have not been determined specifically for this product. Information given is based on a knowledge of the components and the ecotoxicology of similar products.

Acute Toxicity: Poorly soluble mixture. May cause physical fouling of aquatic organisms. Expected to be practically non toxic: LL/EL/IL50 >100 mg/l (to aquatic organisms) (LL/EL50 expressed as the nominal amount of product required to prepare aqueous test extract). Mineral oil is not expected to cause any chronic effects to aquatic organisms at concentrations less than 1 mg/l.

Mobility: Liquid under most environmental conditions. Floats on water. If it enters soil, it will adsorb to soil particles and will not be mobile.

Persistence/degradability: Expected to be not readily biodegradable. Major constituents are expected to be inherently biodegradable, but the product contains components that may persist in the environment.

Bioaccumulation: Contains components with the potential for bioaccumulation.

Other Adverse Effects: Product is a mixture of non-volatile components, which are not expected to be released to air in any significant quantities. Not expected to have ozone depletion potential, photochemical ozone potential or global warming potential.

DISPOSAL CONSIDERATIONS

Material Disposal: Recover or recycle if possible. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste classification and disposal methods in compliance with applicable regulations. Do not dispose into the environment, in drains or in water courses.

Container Disposal: Dispose in accordance with prevailing regulations, preferably to a recognized collector or contractor. The competence of the collector or contractor should be established beforehand.

Local Legislation: Disposal should be in accordance with applicable regional, national, and local laws and regulations.

TRANSPORTATION INFORMATION

US Department of Transportation Classification (49CFR)

This material is not subject to DOT regulations under 49 CFR Parts 171-180.

IMDG

This material is not classified as dangerous under IMDG regulations.

IATA (Country variations may apply)

This material is not classified as dangerous under IATA regulations.



REGULATORY INFORMATION

The regulatory information is not intended to be comprehensive. Other regulations may apply to this material.

Federal Regulatory Status

Notification Status

EINECS	All components listed or polymer exempt.
TSCA	All components listed.
DSL	All components listed.

SARA Hazard Categories (311/312)

No SARA 311/312 Hazards.

State Regulatory Status

California Safe Drinking Water and Toxic Enforcement Act (Proposition 65)

This material does not contain any chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

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SAFETY DATA SHEET

Revision date 16-Dec-2016

Version 30

Supersedes Date: 16-Dec-2016

Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Code 007.0260949

Product Name VAL LTX DRYWALL PRMR TW

Other means of identification

No information available

Recommended use of the chemical and restrictions on use

Waterborne paint

Details of the supplier of the safety data sheet

See section 16 for more information

The Valspar Corporation
PO Box 1461
Minneapolis, MN 55440

E-mail address msds@valspar.com

Emergency telephone number

United States of America 1-888-345-5732

American Samoa, Guam, Northern Mariana Islands, Puerto Rico, U.S. Virgin Islands 1-800-255-3924

Section 2: HAZARDS IDENTIFICATION

Classification

Carcinogenicity	Category 1A
Specific target organ toxicity (repeated exposure)	Category 1

Label elements



Signal word

DANGER

HAZARD STATEMENTS

May cause cancer

Causes damage to organs through prolonged or repeated exposure

PREVENTION

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection. Do not breathe dust/fume/gas/mist/vapors/spray. Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product.

RESPONSE

IF exposed or concerned: Get medical advice/attention.

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Skin

Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention.

Inhalation

IF INHALED: Call a POISON CENTER or doctor if you feel unwell.

Ingestion

Do NOT induce vomiting. IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

STORAGE

Store locked up.

DISPOSAL

Dispose of contents/containers in accordance with local regulations.

HAZARDS NOT OTHERWISE CLASSIFIED (HNOC)

Not applicable.

OTHER HAZARDS

Not applicable.

UNKNOWN ACUTE TOXICITY

0% of the mixture consists of ingredient(s) of unknown toxicity.

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	weight-%
Quartz	14808-60-7	5 - 10
Titanium dioxide	13463-67-7	5 - 10
Silica, cristobalite	14464-46-1	1 - 3

*The exact percentage (concentration) of composition has been withheld as a trade secret.

Section 4: FIRST AID MEASURES

First Aid Measures

General advice

IF exposed or concerned: Get medical advice/attention.

Eye contact

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Skin Contact

Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention.

Inhalation

IF INHALED: Call a POISON CENTER or doctor if you feel unwell.

Ingestion

Do NOT induce vomiting. IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

Most important symptoms and effects, both acute and delayed

Symptoms No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

Section 5: FIRE FIGHTING MEASURES

Suitable extinguishing media

Dry chemical, CO2, water spray or alcohol-resistant foam.

Not to be used for safety reasons: Strong water jet

Specific hazards arising from the chemical

Burning produces heavy smoke. Fire may produce irritating and/or toxic gases. In the event of fire and/or explosion do not breathe fumes.

Special protective equipment for fire-fighters

Wear self-contained breathing apparatus and protective suit. Cool containers with flooding quantities of water until well after fire is out. Do not allow run-off from fire-fighting to enter drains or water courses.

Section 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions

Avoid breathing vapors or mists. Use personal protective equipment as required. Keep people away from and upwind of spill/leak. Avoid contact with skin, eyes or clothing.

For emergency responders

Use personal protection recommended in Section 8.

Environmental precautions

Do not allow into any sewer, on the ground or into any body of water. If the product contaminates lakes, rivers or sewage, inform appropriate authorities in accordance with local regulations. Prevent further leakage or spillage if safe to do so. Local authorities should be advised if significant spillages cannot be contained.

Methods and material for containment and cleaning up

Methods for containment

Prevent further leakage or spillage if safe to do so.

Methods for cleaning up

Dispose of waste product or used containers according to local regulations. Clean with detergents. Avoid solvent cleaners. Dam up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly.

Section 7: HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling

Use personal protection recommended in Section 8. Never use pressure to empty container. Comply with the health and safety at work laws. Prevent product from entering drains. Use only with adequate ventilation. Do not breathe dust/fume/gas/mist/vapors/spray.

General Hygiene Considerations

When using do not eat, drink or smoke. Wash contaminated clothing before reuse. Avoid contact with skin, eyes or clothing.

Conditions for safe storage, including any incompatibilities

Storage Conditions

Keep/store only in original container. Store in accordance with local regulations. Keep unauthorized personnel away. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Keep container tightly closed in a dry and well-ventilated place.

Incompatible materials

Strong bases. Strong oxidizing agents.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits

If S* appears in the OEL table, it indicates this chemical contains a skin notation.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Quartz 14808-60-7	TWA: 0.025 mg/m ³ respirable fraction	TWA: (30)/(%SiO ₂ + 2) mg/m ³ TWA total dust TWA: (250)/(%SiO ₂ + 5) mppcf TWA respirable fraction TWA: (10)/(%SiO ₂ + 2) mg/m ³ TWA respirable fraction	IDLH: 50 mg/m ³ respirable dust TWA: 0.05 mg/m ³ respirable dust
Titanium dioxide 13463-67-7	TWA: 10 mg/m ³	TWA: 15 mg/m ³ total dust	IDLH: 5000 mg/m ³
Silica, cristobalite 14464-46-1	TWA: 0.025 mg/m ³ respirable fraction	TWA: (1/2)(30)/(%SiO ₂ + 2) mg/m ³ TWA total dust TWA: (1/2)(250)/(%SiO ₂ + 5) mppcf TWA respirable fraction TWA: (1/2)(10)/(%SiO ₂ + 2) mg/m ³ TWA respirable fraction	IDLH: 25 mg/m ³ respirable dust TWA: 0.05 mg/m ³ respirable dust

Appropriate engineering controls

Engineering Controls

Ensure adequate ventilation, especially in confined areas. Provide local exhaust ventilation. In case of insufficient ventilation, wear suitable respiratory equipment.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear safety glasses with side shields (or goggles).

Skin and body protection

Wear suitable protective clothing.

Hand Protection

There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals. Ensure that the breakthrough time of the glove material is not exceeded. Refer to glove supplier for information on breakthrough time for specific gloves. The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed. Gloves should be replaced regularly and if there is any sign of damage to the glove material. Always ensure that gloves are free from defects and that they are stored and used correctly. The performance or effectiveness of the glove may be reduced by physical / chemical damage and poor maintenance. Wear protective gloves.

Respiratory protection

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Thermal Protection

No information available

Section 9: PHYSICAL AND CHEMICAL PROPERTIES**Information on basic physical and chemical properties**

Physical state	liquid
Appearance	No information available
Odor	Slight
Color	white
Odor Threshold	No information available
pH value	No information available
Melting point/freezing point	No information available
Boiling point / boiling range	No information available °C / °F
flash point	96 °C / 205 °F
evaporation rate	No information available
Flammability (solid, gas)	No information available
Flammability Limit in Air	
Upper flammability limit:	No information available
Lower flammability limit:	No information available
Vapor Pressure	No information available
vapor density	No information available
Density (lbs per US gallon)	11.04
specific gravity	No information available
Solubility(ies)	No information available
Partition coefficient	No information available
Autoignition temperature	No information available
Decomposition temperature	No information available
Kinematic viscosity	No information available
Dynamic viscosity	No information available

Other information**Section 10: STABILITY AND REACTIVITY**

Reactivity	No information available.
Chemical stability	Stable under normal conditions.
Possibility of Hazardous Reactions	None under normal processing.
Hazardous polymerization	None under normal processing.
Conditions to avoid	Heat, flames and sparks.
Incompatible materials	Strong bases. Strong oxidizing agents.
Hazardous Decomposition Products	Carbon monoxide. Carbon dioxide (CO ₂).

Section 11: TOXICOLOGICAL INFORMATION**Information on likely routes of exposure**

Eye contact
Not applicable
Skin Contact
Not applicable
Ingestion
Not applicable

Inhalation
Not applicable

Numerical measures of toxicity - Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Quartz 14808-60-7	= 500 mg/kg (Rat)	-	-
Titanium dioxide 13463-67-7	> 10000 mg/kg (Rat)	-	-
Silica, cristobalite 14464-46-1	-	-	-

Numerical measures of toxicity - Product Information

UNKNOWN ACUTE TOXICITY 0% of the mixture consists of ingredient(s) of unknown toxicity.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity

According to IARC, Volume 93, no significant exposure to primary particles of titanium dioxide is thought to occur from use in paints since the pigment is bound to other materials.

Chemical Name	ACGIH	IARC	NTP	OSHA
Quartz 14808-60-7	A2	Group 1	Known	X
Titanium dioxide 13463-67-7		Group 2B		X
Silica, cristobalite 14464-46-1	A2	Group 1	Known	X

ACGIH (American Conference of Governmental Industrial Hygienists)

A2 - Suspected Human Carcinogen.

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans. Group 2B - Possibly Carcinogenic to Humans.

NTP (National Toxicology Program)

Known - Known Carcinogen.

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present.

Skin corrosion/irritation	Not applicable
Serious eye damage/eye irritation	Not applicable
Skin sensitization	Not applicable
Respiratory sensitization	Not applicable
Germ cell mutagenicity	Not applicable
Carcinogenicity	May cause cancer
Reproductive Toxicity	Not applicable
Specific target organ toxicity (single exposure)	Not applicable
Specific target organ toxicity (repeated exposure)	Causes damage to organs through prolonged or repeated exposure
Aspiration hazard	Not applicable

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity

Environmental precautions Prevent product from entering drains.

Persistence and degradability

No information available

Bioaccumulation

No information available

Mobility

No information available

Other adverse effects

No information available

Section 13: DISPOSAL CONSIDERATIONS**Waste treatment methods****Disposal of wastes**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging

Improper disposal or reuse of this container may be dangerous and illegal. Empty containers must be scrapped or reconditioned.

Section 14: TRANSPORT INFORMATION

14.1 UN/ID no	DOT Not regulated	IMDG Not regulated	IATA Not regulated
14.2 Proper shipping name			

14.3 Hazard Class**14.4 Packing Group****14.5 Environmental hazard** Not applicable**14.6 Special Provisions****14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

No information available

The supplier may apply one of the following exceptions: Combustible Liquid (49 CFR 173.150(f)); Consumer Commodity (49 CFR 173.150(c), ICAO/IATA SP A112); Limited Quantity (49 CFR 173.150(b), ICAO Part 3 Chapter 4, IATA 2.7, IMDG Chapter 3.4); Viscous Liquid (49 CFR 173.121(b), IMDG 2.3.2.2, IATA 3.3.3.1.1, ICAO 3.2.2, ADR 2.2.3.1.5); Does Not Sustain Combustion (49 CFR 173.120(a), IATA 3.3.1.3, ICAO 3.1.3, IMDG 2.3.1.3, ADR 2.2.3.1.1 Note 1); or others as allowed under hazardous materials/dangerous goods regulations.

Section 15: REGULATORY INFORMATION**International Inventories****TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

All components are listed or exempt from listing.

DSL - Canadian Domestic Substances List

All components are listed or exempt from listing

US Federal Regulations

Chemical Name	SARA 313 - Threshold Values %	Hazardous air pollutants (HAPs) content
Ceramic materials and wares, chemicals 66402-68-4 5 - 10	1	

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	Yes
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

US State Regulations**Rule 66 status of product**

Not photochemically reactive.

California Proposition 65

WARNING! This product contains a chemical known in the State of California to cause cancer.

U.S. EPA Label information

EPA Pesticide registration number Not applicable

U.S. State Right-to-Know Regulations

Chemical Name
Water 7732-18-5
Proprietary Non-Hazardous Ingredient - Proprietary CAS
Quartz 14808-60-7
Titanium dioxide 13463-67-7
Proprietary Non-Hazardous Ingredient - Proprietary CAS
Ceramic materials and wares, chemicals 66402-68-4
Silica, cristobalite 14464-46-1

Section 16: OTHER INFORMATION**HMIS**

Health hazards 3*

* = Chronic Health Hazard

Flammability 1

Physical hazards 0

Personal Protection X

Supplier Address

Valspar Consumer Headquarters 8725 W. Higgins Rd. Suite 1000 Chicago, IL 60631 773-628-5500	The Valspar Corporation 4999 36th St. Grand Rapids, MI 49512 800-253-3957	Valspar Plasti-Kote 1636 Shawson Dr. Mississauga, Ontario L4W 1N7 905-671-8333
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Prepared By Product Stewardship

Revision date 16-Dec-2016

Revision Note No information available

Disclaimer

The information on this Safety Data Sheet (SDS) is based on the present state of our knowledge, current national legislation and guidelines. As the specific conditions of use of the product are outside the supplier's knowledge and control the user is responsible for ensuring that the requirements of relevant legislation are complied with. This SDS should not be construed as any guarantee of the technical performance or suitability for particular applications. UNLESS SUPPLIER AGREES OTHERWISE IN WRITING, SUPPLIER MAKES NO WARRANTIES, EXPRESS OR IMPLIED, AND DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR FREEDOM FROM PATENT INFRINGEMENT. SUPPLIER WILL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES.

End of Safety Data Sheet



Material Safety Data Sheet

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identification

Product ID: 009.0065735.007
Product Name: VAL LTX SAT FLR LT GRA
Product Use: Paint product.
Print date: 23/Mar/2010
Revision Date: 10/Mar/2010

Company Identification

The Valspar Corporation - Architectural Coatings Division
1191 Wheeling Road
Wheeling, IL 60090

Manufacturer's Phone: 1-847-520-8580

24-Hour Medical Emergency Phone: 1-888-345-5732

2. HAZARDS IDENTIFICATION

Primary Routes of Exposure:

Inhalation
Ingestion
Skin absorption

Eye Contact:

None known.

Skin Contact:

None known.

Ingestion:

None known.

Inhalation:

- May cause irritation of respiratory tract.

Carcinogens:

- Possible cancer hazard. Contains material which may cause cancer based on animal data.

3. COMPOSITION / INFORMATION ON HAZARDOUS INGREDIENTS

Ingredient Name CAS-No.	Approx. Weight %	Chemical Name
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3. COMPOSITION / INFORMATION ON HAZARDOUS INGREDIENTS

TITANIUM DIOXIDE 13463-67-7	5 - 10	Titanium dioxide
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If this section is blank there are no hazardous components per OSHA guidelines.

4. FIRST AID MEASURES

Eye Contact:

Get medical attention, if symptoms develop or persist. Immediately flush eye(s) with plenty of water.

Skin Contact:

Wash off with plenty of water.

Ingestion:

Get medical attention if symptoms occur

Inhalation:

Move to fresh air. Get medical attention, if symptoms develop or persist.

Medical conditions aggravated by exposure:

Any respiratory or skin condition.

5. FIRE FIGHTING MEASURES

Flash point (Fahrenheit):	205
Flash point (Celsius):	96
Lower explosive limit (%):	not determined
Upper explosive limit (%):	not determined
Autoignition temperature:	not determined
Sensitivity to impact:	no
Sensitivity to static discharge:	Sensitivity to static discharge is not expected.
Hazardous combustion products:	See Section 10.

Unusual fire and explosion hazards:

None known.

Extinguishing media:

Carbon dioxide, dry chemical, foam and/or water fog.

Fire fighting procedures:

Firefighters should be equipped with self-contained breathing apparatus and turn out gear. Keep containers and surroundings cool with water spray.

6. ACCIDENTAL RELEASE MEASURES

Action to be taken if material is released or spilled:

Ventilate the area. Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13). Avoid contact with eyes.

7. HANDLING AND STORAGE

Precautions to be taken in handling and storage:

Keep container closed when not in use. Do not freeze. Since emptied containers may contain product residue, follow all label warnings, even after container is emptied. Do not cut, drill, grind, or weld on or near this container.

8. PERSONAL PROTECTIVE EQUIPMENT AND EXPOSURE CONTROLS

Personal Protective Equipment

Eye and face protection:

Avoid contact with eyes. Wear chemical goggles if there is the possibility of contact or splashing in the eye.

Skin protection:

Appropriate chemical resistant gloves should be worn.

Respiratory protection:

If exposure cannot be controlled below applicable limits, use the appropriate NIOSH approved respirator such as an air purifying respirator with organic vapor cartridge and dust/mist filter. Consult the respirator manufacturer's literature to ensure that the respirator will provide adequate protection. Read and follow all respirator manufacturer's instructions.

Ventilation

Use only in well-ventilated areas. Ensure adequate ventilation, especially in confined areas.

Exposure Guidelines

OSHA Permissible Exposure Limits (PEL's)

Ingredient Name CAS-No.	Approx. Weight %	TWA (final)	Ceilings limits (final)	Skin designations
TITANIUM DIOXIDE 13463-67-7	5 - 10	15 mg/m ³ TWA dust total		

ACGIH Threshold Limit Value (TLV's)

Ingredient Name CAS-No.	Approx. Weight %	TWA	STEL	Ceiling limits	Skin designations
TITANIUM DIOXIDE 13463-67-7	5 - 10	10 mg/m ³ TWA			

9. PHYSICAL PROPERTIES

Odor:	Normal for this product type.
Physical State:	liquid
pH:	not determined
Vapor pressure:	24 mmHg @ 77°F (25°C)
Vapor density (air = 1.0):	0.6
Boiling point:	not determined
Solubility in water:	not determined
Coefficient of water/oil distribution:	not determined
Density (lbs per US gallon):	9.69
Specific Gravity:	1.16
Evaporation rate (butyl acetate = 1.0):	0.1
Flash point (Fahrenheit):	205
Flash point (Celsius):	96
Lower explosive limit (%):	not determined
Upper explosive limit (%):	not determined
Autoignition temperature:	not determined

10. STABILITY AND REACTIVITY

10. STABILITY AND REACTIVITY

Stability:

Stable under normal conditions.

Conditions to Avoid:

None known.

Incompatibility:

Avoid water-reactive materials, heat or contact with peroxides or other catalysts.

Hazardous Polymerization:

None anticipated.

Hazardous Decomposition Products:

Carbon monoxide and carbon dioxide. Metal oxide fumes.

Sensitivity to static discharge:

Sensitivity to static discharge is not expected.

11. TOXICOLOGICAL INFORMATION

Ingredient Name CAS-No.	Approx. Weight %	NIOSH - Selected LD50s and LC50s
TITANIUM DIOXIDE 13463-67-7	5 - 10	> 10000 mg/kg Oral LD50 Rat

Mutagens/Teratogens/Carcinogens:

Possible cancer hazard. Contains material which may cause cancer based on animal data.

Contains TIO2 which is listed by IARC as a possible human carcinogen (Group 2B) based on animal data. Neither long term animal studies, nor human epidemiology studies of workers exposed to TIO2 provide an adequate basis to conclude TIO2 is carcinogenic. TIO2 is not classified as a carcinogen by NTP, U.S. OSHA, or the U.S. EPA.

Ingredient Name CAS-No.	Approx. Weight %	IARC Group 1 - Human Evidence	IARC Group 2A - Limited Human Data	IARC Group 2B - Sufficient Animal Data
TITANIUM DIOXIDE 13463-67-7	5 - 10			Monograph 47 [1989]

Ingredient Name CAS-No.	Approx. Weight %	NTP Known Carcinogens	NTP Suspect Carcinogens	NTP Evidence of Carcinogenicity
TITANIUM DIOXIDE 13463-67-7	5 - 10			male rat-negative; female rat-negative; male mice-negative; female mice-negative

Ingredient Name CAS-No.	Approx. Weight %	OSHA - Hazard Communication Carcinogens	OSHA - Specifically Regulated Carcinogens	ACGIH Carcinogens
TITANIUM DIOXIDE 13463-67-7	5 - 10	Present		

12. ECOLOGICAL DATA

No information on ecology is available.

13. DISPOSAL CONSIDERATIONS

Disposal should be made in accordance with federal, state and local regulations.

14. TRANSPORTATION INFORMATION

U.S. Department of Transportation

Proper Shipping Name: PAINT, NOT REGULATED

14. TRANSPORTATION INFORMATION

U.S. Highway & Rail Shipments

The supplier may apply one of the following exceptions: Combustible Liquid, Consumer Commodity, Limited Quantity, Viscous Liquid, Does Not Sustain Combustion, or others, as allowed under 49CFR Hazmat Regulations. Please consult 49CFR Subchapter C to ensure that subsequent shipments comply with these exceptions.

Reportable Quantity Description:

International Air Transport Association (IATA):

Proper Shipping Name: PAINT, NOT REGULATED

International Maritime Organization (IMO):

Proper Shipping Name: PAINT, NOT REGULATED

15. REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS:

SARA 311/312 Hazard Class:

Acute:	yes
Chronic:	yes
Flammability:	no
Reactivity:	no
Sudden Pressure:	no

U.S. STATE REGULATIONS:

Right to Know:

The specific chemical identity of a component may be withheld as a trade secret under 34 Pennsylvania Code, Chapter 317.

Pennsylvania Right To Know:

TITANIUM DIOXIDE	13463-67-7
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Additional Non-Hazardous Materials

PROPRIETARY RESIN	Trade Secret
PROPRIETARY INERT	Trade Secret
WATER	7732-18-5

Rule 66 status of product	Not photochemically reactive.
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INTERNATIONAL REGULATIONS - Chemical Inventories

US TSCA Inventory:

All components of this product are in compliance with U.S. TSCA Chemical Substance Inventory Requirements.

Canada Domestic Substances List:

All components of this product are listed on the Domestic Substances List.

16. OTHER INFORMATION

HMIS Codes

Health:	1*
Flammability:	1
Reactivity:	1
PPE:	X - See Section 8 for Personal Protective Equipment (PPE).

Abbreviations:

OSHA - Occupational Safety and Health Administration, IARC - International Agency for Research on Cancer, NIOSH - National Institute of Occupational Safety and Health, NTP - National Toxicology Program, ACGIH - American Conference of Governmental Industrial Hygienists, SCAQMD - South Coast Air Quality Management District, TSCA - Toxic Substances Control Act, IATA - International Air Transport Association, IMO - International Maritime Organization, DOT - Department of Transportation, NA - Not applicable, NOT ESTAB - Not established, N.A.V. - Not available, RQ - Reportable quantity, WT - Weight, MG/CU M - Milligrams per cubic meter, G/L - Grams per liter, MM - Millimeters, MPPCF - Millions of particles per cubic foot, PPM - parts per million, PPT - parts per thousand, TCC/PM - Tag closed cup / Pensky-Martens, PB - Lead, PEL - Permissible exposure level, TWA - Time Weighted Average, STEL - Short term exposure limit, C - Celsius, F - Fahrenheit.

Disclaimer:

The data on this sheet represent typical values. Since application variables are a major factor in product performance, this information should serve only as a general guide. Valspar assumes no obligation or liability for use of this information. UNLESS VALSPAR AGREES OTHERWISE IN WRITING, VALSPAR MAKES NO WARRANTIES, EXPRESS OR IMPLIED, AND DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR FREEDOM FROM PATENT INFRINGEMENT. VALSPAR WILL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES. Your only remedy for any defect in this product is the replacement of the defective product, or a refund of its purchase price, at our option. This MSDS contains additional information required by the state of Pennsylvania.

Preparation Information:

Prepared By:	Regulatory Affairs Department
Print date:	23/Mar/2010
Revision Date:	10/Mar/2010



Material Safety Data Sheet

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identification

Product ID: 007.0098824
Product Name: SIG INT S/GLS BASE 4
Product Use: Paint product.
Print date: 13/Mar/2009
Revision Date: 06/Feb/2009

Company Identification

The Valspar Corporation - Architectural Coatings Division
1191 Wheeling Road
Wheeling, IL 60090

Manufacturer's Phone: 1-847-520-8580

24-Hour Medical Emergency Phone: 1-888-345-5732

2. HAZARDS IDENTIFICATION

Primary Routes of Exposure:

Inhalation
Ingestion
Skin absorption

Eye Contact:

None known.

Skin Contact:

None known.

Ingestion:

None known.

Inhalation:

- Harmful by inhalation.

This product contains ingredients that may contribute to the following potential chronic health effects:

- Prolonged exposure to respirable crystalline quartz silica may cause delayed chronic injury (silicosis).

Carcinogens:

- Cancer hazard. Contains material which can cause cancer.

3. COMPOSITION / INFORMATION ON HAZARDOUS INGREDIENTS

3. COMPOSITION / INFORMATION ON HAZARDOUS INGREDIENTS

Ingredient Name CAS-No.	Approx. Weight %	Chemical Name
SILICA 14808-60-7	1 - 5	QUARTZ (SiO ₂)

If this section is blank there are no hazardous components per OSHA guidelines.

4. FIRST AID MEASURES

Eye Contact:

Get medical attention, if symptoms develop or persist. Immediately flush eye(s) with plenty of water.

Skin Contact:

Wash off with plenty of water.

Ingestion:

Get medical attention if symptoms occur

Inhalation:

Move injured person into fresh air and keep person calm under observation. Get medical attention immediately.

Medical conditions aggravated by exposure:

Any respiratory or skin condition.

5. FIRE FIGHTING MEASURES

Flash point (Fahrenheit):

205°F (96°C)

Lower explosive limit:

not determined %

Upper explosive limit:

not determined %

Autoignition temperature:

not determined -°F (°C)

Sensitivity to impact:

no

Sensitivity to static discharge:

Sensitivity to static discharge is not expected.

Hazardous combustion products:

See Section 10.

Unusual fire and explosion hazards:

None known.

Extinguishing media:

Carbon dioxide, dry chemical, foam and/or water fog.

Fire fighting procedures:

Firefighters should be equipped with self-contained breathing apparatus and turn out gear. Keep containers and surroundings cool with water spray.

6. ACCIDENTAL RELEASE MEASURES

Action to be taken if material is released or spilled:

Ventilate the area. Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13). Avoid contact with eyes.

7. HANDLING AND STORAGE

Precautions to be taken in handling and storage:

Keep container closed when not in use. Do not freeze. Since emptied containers may contain product residue, follow all label warnings, even after container is emptied. Do not cut, drill, grind, or weld on or near this container.

8. PERSONAL PROTECTIVE EQUIPMENT AND EXPOSURE CONTROLS

Personal Protective Equipment

Eye and face protection:

Avoid contact with eyes. Wear chemical goggles if there is the possibility of contact or splashing in the eye.

Skin protection:

Appropriate chemical resistant gloves should be worn.

Respiratory protection:

If exposure cannot be controlled below applicable limits, use the appropriate NIOSH approved respirator such as an air purifying respirator with organic vapor cartridge and dust/mist filter. Consult the respirator manufacturer's literature to ensure that the respirator will provide adequate protection. Read and follow all respirator manufacturer's instructions.

Ventilation

Use only in well-ventilated areas. Ensure adequate ventilation, especially in confined areas.

Exposure Guidelines

OSHA Permissible Exposure Limits (PEL's)

Ingredient Name CAS-No.	Approx. Weight %	TWA (final)	Ceilings limits (final)	Skin designations
SILICA 14808-60-7	1 - 5	Respirable. Listed. Total dust. Listed.		

ACGIH Threshold Limit Value (TLV's)

Ingredient Name CAS-No.	Approx. Weight %	TWA	STEL	Ceiling limits	Skin designations
SILICA 14808-60-7	1 - 5	0.05 mg/m ³ Respirable fraction.			

9. PHYSICAL PROPERTIES

Odor:	Normal for this product type.
Physical State:	liquid
pH:	not determined
Vapor pressure:	24 mmHg @ 77°F (25°C)
Vapor density (air = 1.0):	0.6
Boiling point:	not determined
Solubility in water:	not determined
Coefficient of water/oil distribution:	not determined
Density (lbs per US gallon):	8.71
Specific Gravity:	1.04
Evaporation rate (butyl acetate = 1.0):	0.1
Flash point (Fahrenheit):	205°F (96°C)
Lower explosive limit:	not determined %
Upper explosive limit:	not determined %
Autoignition temperature:	not determined -°F (°C)

10. STABILITY AND REACTIVITY

Stability:	Stable under normal conditions.
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10. STABILITY AND REACTIVITY

Conditions to Avoid:

Incompatibility:

Hazardous Polymerization:

Hazardous Decomposition Products:

None known.

Avoid water-reactive materials, heat or contact with peroxides or other catalysts.

None anticipated.

Carbon monoxide and carbon dioxide. This product contains diarylide pigments. While they are not dangerous, they are, however, susceptible to decomposition to monoazoics and dichlorobenzidine at temperatures above 200 °C. Consequently, use at temperatures above 200 °C should be avoided.

Sensitivity to static discharge:

Sensitivity to static discharge is not expected.

11. TOXICOLOGICAL INFORMATION

Mutagens/Teratogens/Carcinogens:

Cancer hazard. Contains material which can cause cancer.

Contains crystalline silica. The IARC has determined that crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is carcinogenic to humans (group 1). Refer to IARC monograph 68 in conjunction with the use of these materials. Risk of cancer depends on the duration and level of exposure. In coatings products, risk is due primarily to inhalation of sanding dusts or respirable particles in spray mists. The NTP has also determined that crystalline silica is a known human carcinogen in the form of fine, breathable particles. Risk of cancer depends on duration and level of exposure in coatings products, risk is due primarily to inhalation of sanding dust or respirable particles in spray mist.

Ingredient Name CAS-No.	Approx. Weight %	California Prop 65 - Reproductive (Female)	California Prop 65 - Carcinogen
SILICA 14808-60-7	1 - 5		Listed: October 1, 1988 Carcinogenic.

Ingredient Name CAS-No.	Approx. Weight %	IARC Group 1 - Human Evidence	IARC Group 2A - Limited Human Data	IARC Group 2B - Sufficient Animal Data
SILICA 14808-60-7	1 - 5	Monograph 68, 1997; (inhaled in the form of quartz or cristobalite from occupational sources)		

Ingredient Name CAS-No.	Approx. Weight %	NTP Known Carcinogens	NTP Suspect Carcinogens	NTP Evidence of Carcinogenicity
SILICA 14808-60-7	1 - 5	Known carcinogen.		

Ingredient Name CAS-No.	Approx. Weight %	OSHA Select Carcinogens	OSHA Possible Select Carcinogens	ACGIH Carcinogens
SILICA 14808-60-7	1 - 5			Group A2 Suspected human carcinogen.

12. ECOLOGICAL DATA

No information on ecology is available.

13. DISPOSAL CONSIDERATIONS

Disposal should be made in accordance with federal, state and local regulations.

14. TRANSPORTATION INFORMATION

U.S. Department of Transportation

Proper Shipping Name: PAINT, NOT REGULATED
UN ID Number: NRPAIN

U.S. Highway & Rail Shipments

The supplier may apply one of the following exceptions: Combustible Liquid, Consumer Commodity, Limited Quantity, Viscous Liquid, Does Not Sustain Combustion, or others, as allowed under 49CFR Hazmat Regulations. Please consult 49CFR Subchapter C to ensure that subsequent shipments comply with these exceptions.

Reportable Quantity Description:

International Air Transport Association (IATA):

Proper Shipping Name: PAINT, NOT REGULATED
UN ID Number: NRPAIN

International Maritime Organization (IMO):

Proper Shipping Name: PAINT, NOT REGULATED
Non-Bulk UN ID Number: NRPAIN

15. REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS:

SARA 311/312 Hazard Class:

Acute: yes
Chronic: yes
Flammability: no
Reactivity: no
Sudden Pressure: no

U.S. STATE REGULATIONS:

Right to Know:

The specific chemical identity of a component may be withheld as a trade secret under 34 Pennsylvania Code, Chapter 317.

Pennsylvania Right To Know:

SILICA 14808-60-7

Additional Non-Hazardous Materials

WATER 7732-18-5
PROPRIETARY RESIN Trade Secret

California Proposition 65:

WARNING! This product contains a chemical known in the State of California to cause cancer.

Rule 66 status of product Not photochemically reactive.

INTERNATIONAL REGULATIONS - Chemical Inventories

US TSCA Inventory:

All components of this product are in compliance with U.S. TSCA Chemical Substance Inventory Requirements.

Canada Domestic Substances List:

All components of this product are listed on the Domestic Substances List.

16. OTHER INFORMATION

HMIS Codes

Health:	2*
Flammability:	1
Reactivity:	1
PPE:	X - See Section 8 for Personal Protective Equipment (PPE).

Abbreviations:

OSHA - Occupational Safety and Health Administration, IARC - International Agency for Research on Cancer, NIOSH - National Institute of Occupational Safety and Health, NTP - National Toxicology Program, ACGIH - American Conference of Governmental Industrial Hygienists, SCAQMD - South Coast Air Quality Management District, TSCA - Toxic Substances Control Act, IATA - International Air Transport Association, IMO - International Maritime Organization, DOT - Department of Transportation, NA - Not applicable, NOT ESTAB - Not established, N.A.V. - Not available, RQ - Reportable quantity, WT - Weight, MG/CU M - Milligrams per cubic meter, G/L - Grams per liter, MM - Millimeters, MPPCF - Millions of particles per cubic foot, PPM - parts per million, PPT - parts per thousand, TCC/PM - Tag closed cup / Pensky-Martens, PB - Lead, PEL - Permissible exposure level, TWA - Time Weighted Average, STEL - Short term exposure limit, C - Celsius, F - Fahrenheit.

Disclaimer:

The data on this sheet represent typical values. Since application variables are a major factor in product performance, this information should serve only as a general guide. Valspar assumes no obligation or liability for use of this information. UNLESS VALSPAR AGREES OTHERWISE IN WRITING, VALSPAR MAKES NO WARRANTIES, EXPRESS OR IMPLIED, AND DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR FREEDOM FROM PATENT INFRINGEMENT. VALSPAR WILL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES. Your only remedy for any defect in this product is the replacement of the defective product, or a refund of its purchase price, at our option. This MSDS contains additional information required by the state of Pennsylvania.

Preparation Information:

Prepared By:	Regulatory Affairs Department
Print date:	13/Mar/2009
Revision Date:	06/Feb/2009



Material Safety Data Sheet

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identification

Product ID: 007.0203261
Product Name: VALSPAR LTX CHALKBRD BLACK
Product Use: Paint product.
Print date: 22/Mar/2014
Revision Date: 21/Mar/2014

Company Identification

The Valspar Corporation - Architectural Coatings Division
1191 Wheeling Road
Wheeling, IL 60090

Manufacturer's Phone: 1-847-520-8580

24-Hour Medical Emergency Phone: 1-888-345-5732

2. HAZARDS IDENTIFICATION

Primary Routes of Exposure:

Inhalation
Ingestion
Skin absorption

Eye Contact:
None known.

Skin Contact:
None known.

Ingestion:
None known.

Inhalation:
None known.

Carcinogens:

- Possible cancer hazard. Contains material which may cause cancer based on animal data.

3. COMPOSITION / INFORMATION ON HAZARDOUS INGREDIENTS

Ingredient Name CAS-No.	Approx. Weight %	Chemical Name
C.I. PIGMENT BLACK 7 1333-86-4	.1 - 1	Carbon black

If this section is blank there are no hazardous components per OSHA guidelines.

4. FIRST AID MEASURES**Eye Contact:**

Get medical attention, if symptoms develop or persist. Immediately flush eye(s) with plenty of water.

Skin Contact:

Wash off with plenty of water.

Ingestion:

Get medical attention if symptoms occur

Inhalation:

Get medical attention, if symptoms develop or persist. Move to fresh air.

Medical conditions aggravated by exposure:

Any respiratory or skin condition.

5. FIRE FIGHTING MEASURES

Flash point (Fahrenheit):	205
Flash point (Celsius):	96
Lower explosive limit (%):	not determined
Upper explosive limit (%):	not determined
Autoignition temperature:	not determined
Sensitivity to impact:	no
Sensitivity to static discharge:	Sensitivity to static discharge is not expected.
Hazardous combustion products:	See Section 10.

Unusual fire and explosion hazards:

None known.

Extinguishing media:

Carbon dioxide, dry chemical, foam and/or water fog.

Fire fighting procedures:

Firefighters should be equipped with self-contained breathing apparatus and turn out gear. Keep containers and surroundings cool with water spray.

6. ACCIDENTAL RELEASE MEASURES**Action to be taken if material is released or spilled:**

Ventilate the area. Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13). Avoid contact with eyes.

7. HANDLING AND STORAGE

Precautions to be taken in handling and storage:

Keep container closed when not in use. Do not freeze. Since emptied containers may contain product residue, follow all label warnings, even after container is emptied. Do not cut, drill, grind, or weld on or near this container.

8. PERSONAL PROTECTIVE EQUIPMENT AND EXPOSURE CONTROLS

Personal Protective Equipment

Eye and face protection:

Avoid contact with eyes. Wear chemical goggles if there is the possibility of contact or splashing in the eye.

Skin protection:

Appropriate chemical resistant gloves should be worn.

Respiratory protection:

If exposure cannot be controlled below applicable limits, use the appropriate NIOSH approved respirator such as an air purifying respirator with organic vapor cartridge and dust/mist filter. Consult the respirator manufacturer's literature to ensure that the respirator will provide adequate protection. Read and follow all respirator manufacturer's instructions.

Ventilation

Ensure adequate ventilation, especially in confined areas.

Exposure Guidelines

OSHA Permissible Exposure Limits (PEL's)

Ingredient Name CAS-No.	Approx. Weight %	TWA (final)	Ceilings limits (final)	Skin designations
C.I. PIGMENT BLACK 7 1333-86-4	.1 - 1	3.5 mg/m ³ TWA		

ACGIH Threshold Limit Value (TLV's)

Ingredient Name CAS-No.	Approx. Weight %	TWA	STEL	Ceiling limits	Skin designations
C.I. PIGMENT BLACK 7 1333-86-4	.1 - 1	3.5 mg/m ³ TWA			

9. PHYSICAL PROPERTIES

Odor:	Normal for this product type.
Physical State:	liquid
pH:	not determined
Vapor pressure:	24 mmHg @ 77°F (25°C)
Vapor density (air = 1.0):	0.6
Boiling point:	212°F (100°C)
Solubility in water:	not determined
Coefficient of water/oil distribution:	not determined
Density (lbs per US gallon):	9.71
Specific Gravity:	1.16
Evaporation rate (butyl acetate = 1.0):	0.1
Flash point (Fahrenheit):	205
Flash point (Celsius):	96

9. PHYSICAL PROPERTIES

Lower explosive limit (%):

not determined

Upper explosive limit (%):

not determined

Autoignition temperature:

not determined

10. STABILITY AND REACTIVITY

Stability:

Stable under normal conditions.

Conditions to Avoid:

None known.

Incompatibility:

Avoid water-reactive materials, heat or contact with peroxides or other catalysts.

Hazardous Polymerization:

None anticipated.

Hazardous Decomposition Products:

Carbon monoxide and carbon dioxide.

Sensitivity to static discharge:

Sensitivity to static discharge is not expected.

11. TOXICOLOGICAL INFORMATION

Ingredient Name CAS-No.	Approx. Weight %	NIOSH - Selected LD50s and LC50s
C.I. PIGMENT BLACK 7 1333-86-4	.1 - 1	> 15400 mg/kg Oral LD50 Rat > 3 g/kg Dermal LD50 Rabbit

Mutagens/Teratogens/Carcinogens:

Possible cancer hazard. Contains material which may cause cancer based on animal data.

IARC has classified carbon black as possibly carcinogenic to humans (Group 2B).

Ingredient Name CAS-No.	Approx. Weight %	IARC Group 1 - Human Evidence	IARC Group 2A - Limited Human Data	IARC Group 2B - Sufficient Animal Data
C.I. PIGMENT BLACK 7 1333-86-4	.1 - 1			Monograph 65 [1996]

Ingredient Name CAS-No.	Approx. Weight %	OSHA - Hazard Communication Carcinogens	OSHA - Specifically Regulated Carcinogens	ACGIH Carcinogens
C.I. PIGMENT BLACK 7 1333-86-4	.1 - 1	Present		

12. ECOLOGICAL DATA

No information on ecology is available.

13. DISPOSAL CONSIDERATIONS

Disposal should be made in accordance with federal, state and local regulations.

14. TRANSPORTATION INFORMATION

U.S. Department of Transportation

UN ID Number (msds):

NRPAIN

Proper Shipping Name:

PAINT, NOT REGULATED

14. TRANSPORTATION INFORMATION

U.S Hazmat and/or International DG shipment exceptions

The supplier may apply one of the following exceptions: Combustible Liquid, Consumer Commodity, Limited Quantity, Viscous Liquid, Does Not Sustain Combustion, or others, as allowed under 49CFR Hazmat Regulations. Please consult 49CFR Subchapter C to ensure that subsequent shipments comply with these exceptions.

Reportable Quantity Description:

International Air Transport Association (IATA):

Proper shipping name: NOT REGULATED

International Maritime Organization (IMO):

Proper shipping name: NOT REGULATED
Marine Pollutant No

15. REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS:

SARA 311/312 Hazard Class:

Acute:	no
Chronic:	yes
Flammability:	no
Reactivity:	no
Sudden Pressure:	no

U.S. STATE REGULATIONS:

Right to Know:

The specific chemical identity of a component may be withheld as a trade secret under 34 Pennsylvania Code, Chapter 317.

Pennsylvania Right To Know:

Additional Non-Hazardous Materials

WATER	7732-18-5
PROPRIETARY INERT	Trade Secret
PROPRIETARY RESIN	Trade Secret
PROPRIETARY RESIN	Trade Secret

Rule 66 status of product Not photochemically reactive.

INTERNATIONAL REGULATIONS - Chemical Inventories

US TSCA Inventory:

All components of this product are in compliance with U.S. TSCA Chemical Substance Inventory Requirements.

Canada Domestic Substances List:

All components of this product are listed on the Domestic Substances List.

16. OTHER INFORMATION

HMIS Codes

Health:	0*
Flammability:	0
Reactivity:	1
PPE:	X - See Section 8 for Personal Protective Equipment (PPE).

Abbreviations:

OSHA - Occupational Safety and Health Administration, IARC - International Agency for Research on Cancer, NIOSH - National Institute of Occupational Safety and Health, NTP - National Toxicology Program, ACGIH - American Conference of Governmental Industrial Hygienists, SCAQMD - South Coast Air Quality Management District, TSCA - Toxic Substances Control Act, IATA - International Air Transport Association, IMO - International Maritime Organization, DOT - Department of Transportation, NA - Not applicable, NOT ESTAB - Not established, N.A.V. - Not available, RQ - Reportable quantity, WT - Weight, MG/CU M - Milligrams per cubic meter, G/L - Grams per liter, MM - Millimeters, MPPCF - Millions of particles per cubic foot, PPM - parts per million, PPT - parts per thousand, TCC/PM - Tag closed cup / Pensky-Martens, PB - Lead, PEL - Permissible exposure level, TWA - Time Weighted Average, STEL - Short term exposure limit, C - Celsius, F - Fahrenheit.

Disclaimer:

The data on this sheet represent typical values. Since application variables are a major factor in product performance, this information should serve only as a general guide. Valspar assumes no obligation or liability for use of this information. UNLESS VALSPAR AGREES OTHERWISE IN WRITING, VALSPAR MAKES NO WARRANTIES, EXPRESS OR IMPLIED, AND DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR FREEDOM FROM PATENT INFRINGEMENT. VALSPAR WILL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES. Your only remedy for any defect in this product is the replacement of the defective product, or a refund of its purchase price, at our option. This MSDS contains additional information required by the state of Pennsylvania.

Preparation Information:

Prepared By:	Regulatory Affairs Department
Print date:	22/Mar/2014
Revision Date:	21/Mar/2014

Material Safety Data Sheet

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identification

Product ID: 007.0168215
Product Name: VAL LX STN BLK PRMR TW
Product Use: Paint product.
Print date: 11/Jun/2014
Revision Date: 21/Mar/2014

Company Identification

The Valspar Corporation - Architectural Coatings Division
1191 Wheeling Road
Wheeling, IL 60090

Manufacturer's Phone: 1-847-520-8580

24-Hour Medical Emergency Phone: 1-888-345-5732

2. HAZARDS IDENTIFICATION

Primary Routes of Exposure:

Inhalation
Ingestion
Skin absorption

Eye Contact:

- May cause eye irritation.

Skin Contact:

- Causes mild skin irritation.

Ingestion:

None known.

Inhalation:

- May cause irritation of respiratory tract.
- Harmful by inhalation.

Target Organ and Other Health Effects:

- Kidney injury may occur.

This product contains ingredients that may contribute to the following potential chronic health effects:

- Prolonged exposure over TLV may produce pneumoconiosis.
- Chronic exposure may cause permanent damage of health.
- Prolonged exposure to respirable crystalline quartz silica may cause delayed chronic injury (silicosis).

Carcinogens:

- Possible cancer hazard. Contains material which may cause cancer based on animal data.
- Cancer hazard. Contains material which can cause cancer.

3. COMPOSITION / INFORMATION ON HAZARDOUS INGREDIENTS

Ingredient Name CAS-No.	Approx. Weight %	Chemical Name
PROPRIETARY INERT	10 - 15	PROPRIETARY INERT
TITANIUM DIOXIDE 13463-67-7	5 - 10	Titanium dioxide
PROPRIETARY INERT	5 - 10	PROPRIETARY INERT
ZINC OXIDE 1314-13-2	1 - 5	ZINC OXIDE
SILICA 14808-60-7	.1 - 1	QUARTZ (SiO ₂)

If this section is blank there are no hazardous components per OSHA guidelines.

4. FIRST AID MEASURES**Eye Contact:**

Get medical attention, if symptoms develop or persist. Immediately flush eye(s) with plenty of water.

Skin Contact:

Wash off with plenty of water.

Ingestion:

Get medical attention if symptoms occur

Inhalation:

Move injured person into fresh air and keep person calm under observation. Get medical attention immediately.

Medical conditions aggravated by exposure:

Any respiratory or skin condition.

5. FIRE FIGHTING MEASURES

Flash point (Fahrenheit):	205
Flash point (Celsius):	96
Lower explosive limit (%):	not determined
Upper explosive limit (%):	not determined
Autoignition temperature:	not determined
Sensitivity to impact:	no
Sensitivity to static discharge:	Sensitivity to static discharge is not expected.
Hazardous combustion products:	See Section 10.

Unusual fire and explosion hazards:

None known.

Extinguishing media:

Carbon dioxide, dry chemical, foam and/or water fog.

Fire fighting procedures:

Firefighters should be equipped with self-contained breathing apparatus and turn out gear. Keep containers and surroundings cool with water spray.

6. ACCIDENTAL RELEASE MEASURES

Action to be taken if material is released or spilled:

Ventilate the area. Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13). Avoid contact with eyes.

7. HANDLING AND STORAGE

Precautions to be taken in handling and storage:

Keep container closed when not in use. Do not freeze. Since emptied containers may contain product residue, follow all label warnings, even after container is emptied. Do not cut, drill, grind, or weld on or near this container.

8. PERSONAL PROTECTIVE EQUIPMENT AND EXPOSURE CONTROLS

Personal Protective Equipment

Eye and face protection:

Wear safety glasses or goggles to protect against exposure.

Skin protection:

Appropriate chemical resistant gloves should be worn.

Respiratory protection:

If exposure cannot be controlled below applicable limits, use the appropriate NIOSH approved respirator such as an air purifying respirator with organic vapor cartridge and dust/mist filter. Consult the respirator manufacturer's literature to ensure that the respirator will provide adequate protection. Read and follow all respirator manufacturer's instructions.

Ventilation

Use only in well-ventilated areas. Ensure adequate ventilation, especially in confined areas.

Exposure Guidelines

OSHA Permissible Exposure Limits (PEL's)

Ingredient Name CAS-No.	Approx. Weight %	TWA (final)	Ceilings limits (final)	Skin designations
PROPRIETARY INERT	10 - 15	15 mg/m ³ TWA dust total 5 mg/m ³ TWA respirable fraction		
TITANIUM DIOXIDE 13463-67-7	5 - 10	15 mg/m ³ TWA dust total		
PROPRIETARY INERT	5 - 10	Respirable. Listed. Total dust. Listed.		
ZINC OXIDE 1314-13-2	1 - 5	15 mg/m ³ TWA dust total 5 mg/m ³ TWA fume 5 mg/m ³ TWA respirable fraction		
SILICA 14808-60-7	.1 - 1	(30)/(%SiO ₂ + 2) mg/m ³ TWA, total dust (250)/(%SiO ₂ + 5) mppcf TWA, respirable fraction (10)/(%SiO ₂ + 2) mg/m ³ TWA, respirable fraction		

ACGIH Threshold Limit Value (TLV's)

Ingredient Name CAS-No.	Approx. Weight %	TWA	STEL	Ceiling limits	Skin designations
PROPRIETARY INERT	10 - 15	2 mg/m ³ TWA particulate matter containing no asbestos and <1% crystalline silica, respirable fraction			
TITANIUM DIOXIDE 13463-67-7	5 - 10	10 mg/m ³ TWA			
PROPRIETARY INERT	5 - 10	2 mg/m ³ TWA particulate matter containing no asbestos and <1% crystalline silica, respirable fraction			
ZINC OXIDE 1314-13-2	1 - 5	2 mg/m ³ TWA respirable fraction	10 mg/m ³ STEL respirable fraction		
SILICA 14808-60-7	.1 - 1	0.025 mg/m ³ TWA respirable fraction			

9. PHYSICAL PROPERTIES

Odor:	Normal for this product type.
Physical State:	liquid
pH:	not determined
Vapor pressure:	24 mmHg @ 77°F (25°C)
Vapor density (air = 1.0):	0.6
Boiling point:	212°F (100°C)
Solubility in water:	not determined
Coefficient of water/oil distribution:	not determined
Density (lbs per US gallon):	10.7
Specific Gravity:	1.28
Evaporation rate (butyl acetate = 1.0):	0.1
Flash point (Fahrenheit):	205
Flash point (Celsius):	96
Lower explosive limit (%):	not determined
Upper explosive limit (%):	not determined
Autoignition temperature:	not determined

10. STABILITY AND REACTIVITY

Stability:	Stable under normal conditions.
Conditions to Avoid:	None known.
Incompatibility:	Strong oxidizing agents
Hazardous Polymerization:	None anticipated.
Hazardous Decomposition Products:	Silicon dioxide. Carbon monoxide and carbon dioxide. Halogenated compounds Metal oxide fumes.

Sensitivity to static discharge:	Sensitivity to static discharge is not expected.
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11. TOXICOLOGICAL INFORMATION

11. TOXICOLOGICAL INFORMATION

Ingredient Name CAS-No.	Approx. Weight %	NIOSH - Selected LD50s and LC50s
TITANIUM DIOXIDE 13463-67-7	5 - 10	> 10000 mg/kg Oral LD50 Rat
ZINC OXIDE 1314-13-2	1 - 5	> 5000 mg/kg Oral LD50 Rat
SILICA 14808-60-7	.1 - 1	= 500 mg/kg Oral LD50 Rat

Mutagens/Teratogens/Carcinogens:

Possible cancer hazard. Contains material which may cause cancer based on animal data. Cancer hazard. Contains material which can cause cancer.

Contains TIO2 which is listed by IARC as a possible human carcinogen (Group 2B) based on animal data. Neither long term animal studies, nor human epidemiology studies of workers exposed to TIO2 provide an adequate basis to conclude TIO2 is carcinogenic. TIO2 is not classified as a carcinogen by NTP, U.S. OSHA, or the U.S. EPA. Contains crystalline silica. The IARC has determined that crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is carcinogenic to humans (group 1). Refer to IARC monograph 68 in conjunction with the use of these materials. Risk of cancer depends on the duration and level of exposure. In coatings products, risk is due primarily to inhalation of sanding dusts or respirable particles in spray mists. The NTP has also determined that crystalline silica is a known human carcinogen in the form of fine, breathable particles. Risk of cancer depends on duration and level of exposure in coatings products, risk is due primarily to inhalation of sanding dust or respirable particles in spray mist.

Ingredient Name CAS-No.	Approx. Weight %	California Prop 65 - Reproductive (Female)	California Prop 65 - Carcinogen
SILICA 14808-60-7	.1 - 1		Listed. initial date 10/1/88 - carcinogen

Ingredient Name CAS-No.	Approx. Weight %	IARC Group 1 - Human Evidence	IARC Group 2A - Limited Human Data	IARC Group 2B - Sufficient Animal Data
TITANIUM DIOXIDE 13463-67-7	5 - 10			Monograph 47 [1989]
SILICA 14808-60-7	.1 - 1	Monograph 68 [1997]		

Ingredient Name CAS-No.	Approx. Weight %	NTP Known Carcinogens	NTP Suspect Carcinogens
SILICA 14808-60-7	.1 - 1	Known Human Carcinogen	

Ingredient Name CAS-No.	Approx. Weight %	OSHA - Hazard Communication Carcinogens	OSHA - Specifically Regulated Carcinogens	ACGIH Carcinogens
TITANIUM DIOXIDE 13463-67-7	5 - 10	Present		
SILICA 14808-60-7	.1 - 1	Present		A2 Suspected Human Carcinogen

12. ECOLOGICAL DATA

No information on ecology is available.

13. DISPOSAL CONSIDERATIONS

Disposal should be made in accordance with federal, state and local regulations.

14. TRANSPORTATION INFORMATION

U.S. Department of Transportation

UN ID Number (msds):

NRPAIN

Proper Shipping Name:

PAINT, NOT REGULATED

U.S Hazmat and/or International DG shipment exceptions

The supplier may apply one of the following exceptions: Combustible Liquid, Consumer Commodity, Limited Quantity, Viscous Liquid, Does Not Sustain Combustion, or others, as allowed under 49CFR Hazmat Regulations. Please consult 49CFR Subchapter C to ensure that subsequent shipments comply with these exceptions.

Reportable Quantity Description:

International Air Transport Association (IATA):

Proper shipping name:

NOT REGULATED

International Maritime Organization (IMO):

Proper shipping name:

NOT REGULATED

Marine Pollutant

No

15. REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS:

Ingredient Name CAS-No.	Approx. Weight %	SARA 302	SARA 313	CERCLA RQ in lbs.
ZINC OXIDE 1314-13-2	1 - 5		YES	

SARA 311/312 Hazard Class:

Acute: yes
Chronic: yes
Flammability: no
Reactivity: no
Sudden Pressure: no

U.S. STATE REGULATIONS:

Right to Know:

The specific chemical identity of a component may be withheld as a trade secret under 34 Pennsylvania Code, Chapter 317.

Pennsylvania Right To Know:

PROPRIETARY INERT	Trade Secret
PROPRIETARY INERT	Trade Secret
ZINC OXIDE	1314-13-2
TITANIUM DIOXIDE	13463-67-7

Additional Non-Hazardous Materials

WATER	7732-18-5
PROPRIETARY RESIN	Trade Secret
PROPRIETARY RESIN	Trade Secret

California Proposition 65:

WARNING! This product contains a chemical known in the State of California to cause cancer.

INTERNATIONAL REGULATIONS - Chemical Inventories**US TSCA Inventory:**

All components of this product are in compliance with U.S. TSCA Chemical Substance Inventory Requirements.

Canada Domestic Substances List:

All components of this product are listed on the Domestic Substances List.

16. OTHER INFORMATION**HMIS Codes**

Health:	2*
Flammability:	0
Reactivity:	1
PPE:	X - See Section 8 for Personal Protective Equipment (PPE).

Abbreviations:

OSHA - Occupational Safety and Health Administration, IARC - International Agency for Research on Cancer, NIOSH - National Institute of Occupational Safety and Health, NTP - National Toxicology Program, ACGIH - American Conference of Governmental Industrial Hygienists, SCAQMD - South Coast Air Quality Management District, TSCA - Toxic Substances Control Act, IATA - International Air Transport Association, IMO - International Maritime Organization, DOT - Department of Transportation, NA - Not applicable, NOT ESTAB - Not established, N.A.V. - Not available, RQ - Reportable quantity, WT - Weight, MG/CU M - Milligrams per cubic meter, G/L - Grams per liter, MM - Millimeters, MPPCF - Millions of particles per cubic foot, PPM - parts per million, PPT - parts per thousand, TCC/PM - Tag closed cup / Pensky-Martens, PB - Lead, PEL - Permissible exposure level, TWA - Time Weighted Average, STEL - Short term exposure limit, C - Celsius, F - Fahrenheit.

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Preparation Information:

Prepared By:	Regulatory Affairs Department
Print date:	11/Jun/2014
Revision Date:	21/Mar/2014

Material Safety Data Sheet

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identification

Product ID: 007.0222145
Product Name: VAL ULT IN-EX GLS BLK
Product Use: Paint product.
Print date: 12/Feb/2014
Revision Date: 28/Jan/2014

Company Identification

The Valspar Corporation - Architectural Coatings Division
1191 Wheeling Road
Wheeling, IL 60090

Manufacturer's Phone: 1-847-520-8580

24-Hour Medical Emergency Phone: 1-888-345-5732

2. HAZARDS IDENTIFICATION

Primary Routes of Exposure:

Inhalation
Ingestion
Skin absorption

Eye Contact:

- Moderate eye irritation

Skin Contact:

- Causes skin irritation.

Ingestion:

- Irritation of the mouth, throat, and stomach.

Inhalation:

- Causes respiratory tract irritation.

Target Organ and Other Health Effects:

- Kidney injury may occur.
- Liver injury may occur.

Carcinogens:

- Possible cancer hazard. Contains material which may cause cancer based on animal data.

3. COMPOSITION / INFORMATION ON HAZARDOUS INGREDIENTS

Ingredient Name CAS-No.	Approx. Weight %	Chemical Name
C.I. PIGMENT BLACK 7 1333-86-4	1 - 5	Carbon black
BENZOPHENONE 119-61-9	.1 - 1	Benzophenone

If this section is blank there are no hazardous components per OSHA guidelines.

4. FIRST AID MEASURES

Eye Contact:

Get medical attention, if symptoms develop or persist. Immediately flush eye(s) with plenty of water. Remove any contact lenses and open eyes wide apart.

Skin Contact:

Remove contaminated clothing and shoes. Wash off immediately with plenty of water for at least 15 minutes. Get medical attention, if symptoms develop or persist.

Ingestion:

Rinse mouth with water. Give one or two glasses of water. Only induce vomiting at the instruction of medical personnel. Get medical attention.

Inhalation:

Move injured person into fresh air and keep person calm under observation. Get medical attention, if symptoms develop or persist.

Medical conditions aggravated by exposure:

Any respiratory or skin condition.

5. FIRE FIGHTING MEASURES

Flash point (Fahrenheit):	205
Flash point (Celsius):	96
Lower explosive limit (%):	not determined
Upper explosive limit (%):	not determined
Autoignition temperature:	not determined
Sensitivity to impact:	no
Sensitivity to static discharge:	Sensitivity to static discharge is not expected.
Hazardous combustion products:	See Section 10.

Unusual fire and explosion hazards:

None known.

Extinguishing media:

Carbon dioxide, dry chemical, foam and/or water fog.

Fire fighting procedures:

Firefighters should be equipped with self-contained breathing apparatus and turn out gear. Keep containers and surroundings cool with water spray.

6. ACCIDENTAL RELEASE MEASURES

6. ACCIDENTAL RELEASE MEASURES

Action to be taken if material is released or spilled:

Ventilate the area. Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13). Avoid contact with eyes.

7. HANDLING AND STORAGE

Precautions to be taken in handling and storage:

Keep container closed when not in use. Do not freeze. Since emptied containers may contain product residue, follow all label warnings, even after container is emptied. Do not cut, drill, grind, or weld on or near this container.

8. PERSONAL PROTECTIVE EQUIPMENT AND EXPOSURE CONTROLS

Personal Protective Equipment

Eye and face protection:

Wear safety glasses or goggles to protect against exposure.

Skin protection:

Appropriate chemical resistant gloves should be worn.

Respiratory protection:

If exposure cannot be controlled below applicable limits, use the appropriate NIOSH approved respirator such as an air purifying respirator with organic vapor cartridge and dust/mist filter. Consult the respirator manufacturer's literature to ensure that the respirator will provide adequate protection. Read and follow all respirator manufacturer's instructions.

Ventilation

Use only in well-ventilated areas. Ensure adequate ventilation, especially in confined areas.

Exposure Guidelines

OSHA Permissible Exposure Limits (PEL's)

Ingredient Name CAS-No.	Approx. Weight %	TWA (final)	Ceilings limits (final)	Skin designations
C.I. PIGMENT BLACK 7 1333-86-4	1 - 5	3.5 mg/m ³ TWA		

ACGIH Threshold Limit Value (TLV's)

Ingredient Name CAS-No.	Approx. Weight %	TWA	STEL	Ceiling limits	Skin designations
C.I. PIGMENT BLACK 7 1333-86-4	1 - 5	3.5 mg/m ³ TWA			

9. PHYSICAL PROPERTIES

Odor:	Normal for this product type.
Physical State:	liquid
pH:	not determined
Vapor pressure:	24 mmHg @ 77°F (25°C)
Vapor density (air = 1.0):	0.6
Boiling point:	212°F (100°C)
Solubility in water:	not determined

9. PHYSICAL PROPERTIES

Coefficient of water/oil distribution:	not determined
Density (lbs per US gallon):	8.78
Specific Gravity:	1.05
Evaporation rate (butyl acetate = 1.0):	0.1
Flash point (Fahrenheit):	205
Flash point (Celsius):	96
Lower explosive limit (%):	not determined
Upper explosive limit (%):	not determined
Autoignition temperature:	not determined

10. STABILITY AND REACTIVITY

Stability:	Stable under normal conditions.
Conditions to Avoid:	None known.
Incompatibility:	Avoid water-reactive materials, heat or contact with peroxides or other catalysts.
Hazardous Polymerization:	None anticipated.
Hazardous Decomposition Products:	Carbon monoxide and carbon dioxide.

Sensitivity to static discharge: Sensitivity to static discharge is not expected.

11. TOXICOLOGICAL INFORMATION

Ingredient Name CAS-No.	Approx. Weight %	NIOSH - Selected LD50s and LC50s
C.I. PIGMENT BLACK 7 1333-86-4	1 - 5	> 15400 mg/kg Oral LD50 Rat > 3 g/kg Dermal LD50 Rabbit
BENZOPHENONE 119-61-9	.1 - 1	= 3535 mg/kg Dermal LD50 Rabbit > 10 g/kg Oral LD50 Rat

Mutagens/Teratogens/Carcinogens:

Possible cancer hazard. Contains material which may cause cancer based on animal data.

IARC has classified carbon black as possibly carcinogenic to humans (Group 2B).

Ingredient Name CAS-No.	Approx. Weight %	California Prop 65 - Reproductive (Female)	California Prop 65 - Carcinogen
BENZOPHENONE 119-61-9	.1 - 1		listed 22-Jun-12

Ingredient Name CAS-No.	Approx. Weight %	IARC Group 1 - Human Evidence	IARC Group 2A - Limited Human Data	IARC Group 2B - Sufficient Animal Data
C.I. PIGMENT BLACK 7 1333-86-4	1 - 5			Monograph 65 [1996]
BENZOPHENONE 119-61-9	.1 - 1			Monograph 101 [in preparation]

Ingredient Name CAS-No.	Approx. Weight %	OSHA - Hazard Communication Carcinogens	OSHA - Specifically Regulated Carcinogens	ACGIH Carcinogens
C.I. PIGMENT BLACK 7 1333-86-4	1 - 5	Present		

12. ECOLOGICAL DATA

No information on ecology is available.

13. DISPOSAL CONSIDERATIONS

Disposal should be made in accordance with federal, state and local regulations.

14. TRANSPORTATION INFORMATION

U.S. Department of Transportation

UN ID Number (msds):

NRPAIN

Proper Shipping Name:

PAINT, NOT REGULATED

U.S Hazmat and/or International DG shipment exceptions

The supplier may apply one of the following exceptions: Combustible Liquid, Consumer Commodity, Limited Quantity, Viscous Liquid, Does Not Sustain Combustion, or others, as allowed under 49CFR Hazmat Regulations. Please consult 49CFR Subchapter C to ensure that subsequent shipments comply with these exceptions.

Reportable Quantity Description:

International Air Transport Association (IATA):

Proper shipping name:

NOT REGULATED

International Maritime Organization (IMO):

Proper shipping name:

NOT REGULATED

Marine Pollutant

No

15. REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS:

SARA 311/312 Hazard Class:

Acute: yes

Chronic: yes

Flammability: no

Reactivity: no

Sudden Pressure: no

U.S. STATE REGULATIONS:

Right to Know:

The specific chemical identity of a component may be withheld as a trade secret under 34 Pennsylvania Code, Chapter 317.

Pennsylvania Right To Know:

C.I. PIGMENT BLACK 7

1333-86-4

Additional Non-Hazardous Materials

PROPRIETARY RESIN

Trade Secret

WATER

7732-18-5

California Proposition 65:

WARNING! This product contains a chemical known in the State of California to cause cancer.

Rule 66 status of product

Not photochemically reactive.

INTERNATIONAL REGULATIONS - Chemical Inventories

US TSCA Inventory:

All components of this product are in compliance with U.S. TSCA Chemical Substance Inventory Requirements.

Canada Domestic Substances List:

All components of this product are listed on the Domestic Substances List.

16. OTHER INFORMATION

HMIS Codes

Health:	2*
Flammability:	0
Reactivity:	1
PPE:	X - See Section 8 for Personal Protective Equipment (PPE).

Abbreviations:

OSHA - Occupational Safety and Health Administration, IARC - International Agency for Research on Cancer, NIOSH - National Institute of Occupational Safety and Health, NTP - National Toxicology Program, ACGIH - American Conference of Governmental Industrial Hygienists, SCAQMD - South Coast Air Quality Management District, TSCA - Toxic Substances Control Act, IATA - International Air Transport Association, IMO - International Maritime Organization, DOT - Department of Transportation, NA - Not applicable, NOT ESTAB - Not established, N.A.V. - Not available, RQ - Reportable quantity, WT - Weight, MG/CU M - Milligrams per cubic meter, G/L - Grams per liter, MM - Millimeters, MPPCF - Millions of particles per cubic foot, PPM - parts per million, PPT - parts per thousand, TCC/PM - Tag closed cup / Pensky-Martens, PB - Lead, PEL - Permissible exposure level, TWA - Time Weighted Average, STEL - Short term exposure limit, C - Celsius, F - Fahrenheit.

Disclaimer:

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Preparation Information:

Prepared By:	Regulatory Affairs Department
Print date:	12/Feb/2014
Revision Date:	28/Jan/2014

Material Safety Data Sheet

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identification

Product ID: 007.0161751
Product Name: SIG INT S/GLS RED BASE
Product Use: Paint product.
Print date: 27/Jan/2014
Revision Date: 27/Jan/2014

Company Identification

The Valspar Corporation - Architectural Coatings Division
1191 Wheeling Road
Wheeling, IL 60090

Manufacturer's Phone: 1-847-520-8580

24-Hour Medical Emergency Phone: 1-888-345-5732

2. HAZARDS IDENTIFICATION

Primary Routes of Exposure:

Inhalation
Ingestion
Skin absorption

Eye Contact:

- Moderate eye irritation

Skin Contact:

- Causes skin irritation.

Ingestion:

- Irritation of the mouth, throat, and stomach.

Inhalation:

- Causes respiratory tract irritation.

Target Organ and Other Health Effects:

- Kidney injury may occur.
- Liver injury may occur.

This product contains ingredients that may contribute to the following potential chronic health effects:

- Prolonged exposure over TLV may produce pneumoconiosis.
- Chronic exposure may cause permanent damage of health.
- Prolonged exposure to respirable crystalline quartz silica may cause delayed chronic injury (silicosis).

Carcinogens:

- Possible cancer hazard. Contains material which may cause cancer based on animal data.
- Cancer hazard. Contains material which can cause cancer.

3. COMPOSITION / INFORMATION ON HAZARDOUS INGREDIENTS

Ingredient Name CAS-No.	Approx. Weight %	Chemical Name
PROPRIETARY INERT	5 - 10	PROPRIETARY INERT
PROPRIETARY INERT	1 - 5	PROPRIETARY INERT
SILICA 14808-60-7	.1 - 1	QUARTZ (SiO ₂)
BENZOPHENONE 119-61-9	.1 - 1	Benzophenone

If this section is blank there are no hazardous components per OSHA guidelines.

4. FIRST AID MEASURES**Eye Contact:**

Get medical attention, if symptoms develop or persist. Immediately flush eye(s) with plenty of water. Remove any contact lenses and open eyes wide apart.

Skin Contact:

Remove contaminated clothing and shoes. Wash off immediately with plenty of water for at least 15 minutes. Get medical attention, if symptoms develop or persist.

Ingestion:

Rinse mouth with water. Give one or two glasses of water. Only induce vomiting at the instruction of medical personnel. Get medical attention.

Inhalation:

Move injured person into fresh air and keep person calm under observation. Get medical attention, if symptoms develop or persist.

Medical conditions aggravated by exposure:

Any respiratory or skin condition.

5. FIRE FIGHTING MEASURES

Flash point (Fahrenheit):	205
Flash point (Celsius):	96
Lower explosive limit (%):	not determined
Upper explosive limit (%):	not determined
Autoignition temperature:	not determined
Sensitivity to impact:	no
Sensitivity to static discharge:	Sensitivity to static discharge is not expected.
Hazardous combustion products:	See Section 10.

Unusual fire and explosion hazards:

None known.

Extinguishing media:

Carbon dioxide, dry chemical, foam and/or water fog.

Fire fighting procedures:

Firefighters should be equipped with self-contained breathing apparatus and turn out gear. Keep containers and surroundings cool with water spray.

6. ACCIDENTAL RELEASE MEASURES

Action to be taken if material is released or spilled:

Ventilate the area. Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13). Avoid contact with eyes.

7. HANDLING AND STORAGE

Precautions to be taken in handling and storage:

Keep container closed when not in use. Do not freeze. Since emptied containers may contain product residue, follow all label warnings, even after container is emptied. Do not cut, drill, grind, or weld on or near this container.

8. PERSONAL PROTECTIVE EQUIPMENT AND EXPOSURE CONTROLS

Personal Protective Equipment

Eye and face protection:

Wear safety glasses or goggles to protect against exposure.

Skin protection:

Appropriate chemical resistant gloves should be worn.

Respiratory protection:

If exposure cannot be controlled below applicable limits, use the appropriate NIOSH approved respirator such as an air purifying respirator with organic vapor cartridge and dust/mist filter. Consult the respirator manufacturer's literature to ensure that the respirator will provide adequate protection. Read and follow all respirator manufacturer's instructions.

Ventilation

Use only in well-ventilated areas. Ensure adequate ventilation, especially in confined areas.

Exposure Guidelines

OSHA Permissible Exposure Limits (PEL's)

Ingredient Name CAS-No.	Approx. Weight %	TWA (final)	Ceilings limits (final)	Skin designations
PROPRIETARY INERT	5 - 10	15 mg/m ³ TWA dust total 5 mg/m ³ TWA respirable fraction		
PROPRIETARY INERT	1 - 5	15 mg/m ³ TWA dust total 5 mg/m ³ TWA respirable fraction		
SILICA 14808-60-7	.1 - 1	(30)/(%SiO ₂ + 2) mg/m ³ TWA, total dust (250)/(%SiO ₂ + 5) mppcf TWA, respirable fraction (10)/(%SiO ₂ + 2) mg/m ³ TWA, respirable fraction		

ACGIH Threshold Limit Value (TLV's)

Ingredient Name CAS-No.	Approx. Weight %	TWA	STEL	Ceiling limits	Skin designations
PROPRIETARY INERT	5 - 10	10 mg/m ³ Inhalable particles. 3 mg/m ³ Respirable particles.			
PROPRIETARY INERT	1 - 5	2 mg/m ³ TWA particulate matter containing no asbestos and <1% crystalline silica, respirable fraction			
SILICA 14808-60-7	.1 - 1	0.025 mg/m ³ TWA respirable fraction			

9. PHYSICAL PROPERTIES

Odor:	Normal for this product type.
Physical State:	liquid
pH:	not determined
Vapor pressure:	24 mmHg @ 77°F (25°C)
Vapor density (air = 1.0):	0.6
Boiling point:	212°F (100°C)
Solubility in water:	not determined
Coefficient of water/oil distribution:	not determined
Density (lbs per US gallon):	9.16
Specific Gravity:	1.1
Evaporation rate (butyl acetate = 1.0):	0.1
Flash point (Fahrenheit):	205
Flash point (Celsius):	96
Lower explosive limit (%):	not determined
Upper explosive limit (%):	not determined
Autoignition temperature:	not determined

10. STABILITY AND REACTIVITY

Stability:	Stable under normal conditions.
Conditions to Avoid:	None known.
Incompatibility:	Avoid water-reactive materials, heat or contact with peroxides or other catalysts.
Hazardous Polymerization:	None anticipated.
Hazardous Decomposition Products:	Carbon monoxide and carbon dioxide.

Sensitivity to static discharge: Sensitivity to static discharge is not expected.

11. TOXICOLOGICAL INFORMATION

Ingredient Name CAS-No.	Approx. Weight %	NIOSH - Selected LD50s and LC50s
SILICA 14808-60-7	.1 - 1	= 500 mg/kg Oral LD50 Rat
BENZOPHENONE 119-61-9	.1 - 1	= 3535 mg/kg Dermal LD50 Rabbit > 10 g/kg Oral LD50 Rat

Mutagens/Teratogens/Carcinogens:

Possible cancer hazard. Contains material which may cause cancer based on animal data. Cancer hazard. Contains material which can cause cancer.

Contains crystalline silica. The IARC has determined that crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is carcinogenic to humans (group 1). Refer to IARC monograph 68 in conjunction with the use of these materials. Risk of cancer depends on the duration and level of exposure. In coatings products, risk is due primarily to inhalation of sanding dusts or respirable particles in spray mists. The NTP has also determined that crystalline silica is a known human carcinogen in the form of fine, breathable particles. Risk of cancer depends on duration and level of exposure in coatings products, risk is due primarily to inhalation of sanding dust or respirable particles in spray mist.

Ingredient Name CAS-No.	Approx. Weight %	California Prop 65 - Reproductive (Female)	California Prop 65 - Carcinogen
SILICA 14808-60-7	.1 - 1		Listed. initial date 10/1/88 - carcinogen
BENZOPHENONE 119-61-9	.1 - 1		listed 22-Jun-12

Ingredient Name CAS-No.	Approx. Weight %	IARC Group 1 - Human Evidence	IARC Group 2A - Limited Human Data	IARC Group 2B - Sufficient Animal Data
SILICA 14808-60-7	.1 - 1	Monograph 68 [1997]		
BENZOPHENONE 119-61-9	.1 - 1			Monograph 101 [in preparation]

Ingredient Name CAS-No.	Approx. Weight %	NTP Known Carcinogens	NTP Suspect Carcinogens
SILICA 14808-60-7	.1 - 1	Known Human Carcinogen	

Ingredient Name CAS-No.	Approx. Weight %	OSHA - Hazard Communication Carcinogens	OSHA - Specifically Regulated Carcinogens	ACGIH Carcinogens
SILICA 14808-60-7	.1 - 1	Present		A2 Suspected Human Carcinogen

12. ECOLOGICAL DATA

No information on ecology is available.

13. DISPOSAL CONSIDERATIONS

Disposal should be made in accordance with federal, state and local regulations.

14. TRANSPORTATION INFORMATION

U.S. Department of Transportation

UN ID Number (msds):

Proper Shipping Name:

NRPAIN

PAINT, NOT REGULATED

U.S Hazmat and/or International DG shipment exceptions

The supplier may apply one of the following exceptions: Combustible Liquid, Consumer Commodity, Limited Quantity, Viscous Liquid, Does Not Sustain Combustion, or others, as allowed under 49CFR Hazmat Regulations. Please consult 49CFR Subchapter C to ensure that subsequent shipments comply with these exceptions.

Reportable Quantity Description:**International Air Transport Association (IATA):**

Proper shipping name:

NOT REGULATED

International Maritime Organization (IMO):

Proper shipping name:

NOT REGULATED

Marine Pollutant

No

15. REGULATORY INFORMATION**U.S. FEDERAL REGULATIONS:****SARA 311/312 Hazard Class:**

Acute: yes

Chronic: yes

Flammability: no

Reactivity: no

Sudden Pressure: no

U.S. STATE REGULATIONS:**Right to Know:**

The specific chemical identity of a component may be withheld as a trade secret under 34 Pennsylvania Code, Chapter 317.

Pennsylvania Right To Know:

PROPRIETARY INERT

Trade Secret

PROPRIETARY INERT

Trade Secret

Additional Non-Hazardous Materials

WATER

7732-18-5

PROPRIETARY RESIN

Trade Secret

California Proposition 65:

WARNING: This product contains chemicals known to the State of California to cause cancer.

Rule 66 status of product

Not photochemically reactive.

INTERNATIONAL REGULATIONS - Chemical Inventories**US TSCA Inventory:**

All components of this product are in compliance with U.S. TSCA Chemical Substance Inventory Requirements.

Canada Domestic Substances List:

All components of this product are listed on the Domestic Substances List.

16. OTHER INFORMATION**HMIS Codes**

Health: 2*

Flammability: 0

Reactivity: 1

PPE: X - See Section 8 for Personal Protective Equipment (PPE).

Abbreviations:

OSHA - Occupational Safety and Health Administration, IARC - International Agency for Research on Cancer, NIOSH - National Institute of Occupational Safety and Health, NTP - National Toxicology Program, ACGIH - American Conference of Governmental Industrial Hygienists, SCAQMD - South Coast Air Quality Management District, TSCA - Toxic Substances Control Act, IATA - International Air Transport Association, IMO - International Maritime Organization, DOT - Department of Transportation, NA - Not applicable, NOT ESTAB - Not established, N.A.V. - Not available, RQ - Reportable quantity, WT - Weight, MG/CU M - Milligrams per cubic meter, G/L - Grams per liter, MM - Millimeters, MPPCF - Millions of particles per cubic foot, PPM - parts per million, PPT - parts per thousand, TCC/PM - Tag closed cup / Pensky-Martens, PB - Lead, PEL - Permissible exposure level, TWA - Time Weighted Average, STEL - Short term exposure limit, C - Celsius, F - Fahrenheit.

Disclaimer:

The data on this sheet represent typical values. Since application variables are a major factor in product performance, this information should serve only as a general guide. Valspar assumes no obligation or liability for use of this information. UNLESS VALSPAR AGREES OTHERWISE IN WRITING, VALSPAR MAKES NO WARRANTIES, EXPRESS OR IMPLIED, AND DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR FREEDOM FROM PATENT INFRINGEMENT. VALSPAR WILL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES. Your only remedy for any defect in this product is the replacement of the defective product, or a refund of its purchase price, at our option. This MSDS contains additional information required by the state of Pennsylvania.

Preparation Information:

Prepared By:	Regulatory Affairs Department
Print date:	27/Jan/2014
Revision Date:	27/Jan/2014

Material Safety Data Sheet

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identification

Product ID: 007.0391655
Product Name: VAL ULT INT SAT ULTWHT/A
Product Use: Paint product.
Print date: 28/May/2014
Revision Date: 28/May/2014

Company Identification

The Valspar Corporation - Architectural Coatings Division
1191 Wheeling Road
Wheeling, IL 60090

Manufacturer's Phone: 1-847-520-8580

24-Hour Medical Emergency Phone: 1-888-345-5732

2. HAZARDS IDENTIFICATION

Primary Routes of Exposure:

Inhalation
Ingestion
Skin absorption

Eye Contact:

- Moderate eye irritation

Skin Contact:

- Causes skin irritation.

Ingestion:

- Irritation of the mouth, throat, and stomach.

Inhalation:

- Causes respiratory tract irritation.

Target Organ and Other Health Effects:

- Kidney injury may occur.
- Liver injury may occur.

Carcinogens:

- Possible cancer hazard. Contains material which may cause cancer based on animal data.

3. COMPOSITION / INFORMATION ON HAZARDOUS INGREDIENTS

Ingredient Name CAS-No.	Approx. Weight %	Chemical Name
TITANIUM DIOXIDE 13463-67-7	15 - 20	Titanium dioxide
BENZOPHENONE 119-61-9	.1 - 1	Benzophenone

If this section is blank there are no hazardous components per OSHA guidelines.

4. FIRST AID MEASURES

Eye Contact:

Get medical attention, if symptoms develop or persist. Immediately flush eye(s) with plenty of water. Remove any contact lenses and open eyes wide apart.

Skin Contact:

Remove contaminated clothing and shoes. Wash off immediately with plenty of water for at least 15 minutes. Get medical attention, if symptoms develop or persist.

Ingestion:

Rinse mouth with water. Give one or two glasses of water. Only induce vomiting at the instruction of medical personnel. Get medical attention.

Inhalation:

Move injured person into fresh air and keep person calm under observation. Get medical attention, if symptoms develop or persist.

Medical conditions aggravated by exposure:

Any respiratory or skin condition.

5. FIRE FIGHTING MEASURES

Flash point (Fahrenheit):	205
Flash point (Celsius):	96
Lower explosive limit (%):	not determined
Upper explosive limit (%):	not determined
Autoignition temperature:	not determined
Sensitivity to impact:	no
Sensitivity to static discharge:	Sensitivity to static discharge is not expected.
Hazardous combustion products:	See Section 10.

Unusual fire and explosion hazards:

None known.

Extinguishing media:

Carbon dioxide, dry chemical, foam and/or water fog.

Fire fighting procedures:

Firefighters should be equipped with self-contained breathing apparatus and turn out gear. Keep containers and surroundings cool with water spray.

6. ACCIDENTAL RELEASE MEASURES

6. ACCIDENTAL RELEASE MEASURES

Action to be taken if material is released or spilled:

Ventilate the area. Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13). Avoid contact with eyes.

7. HANDLING AND STORAGE

Precautions to be taken in handling and storage:

Keep container closed when not in use. Do not freeze. Since emptied containers may contain product residue, follow all label warnings, even after container is emptied. Do not cut, drill, grind, or weld on or near this container.

8. PERSONAL PROTECTIVE EQUIPMENT AND EXPOSURE CONTROLS

Personal Protective Equipment

Eye and face protection:

Wear safety glasses or goggles to protect against exposure.

Skin protection:

Appropriate chemical resistant gloves should be worn.

Respiratory protection:

If exposure cannot be controlled below applicable limits, use the appropriate NIOSH approved respirator such as an air purifying respirator with organic vapor cartridge and dust/mist filter. Consult the respirator manufacturer's literature to ensure that the respirator will provide adequate protection. Read and follow all respirator manufacturer's instructions.

Ventilation

Use only in well-ventilated areas. Ensure adequate ventilation, especially in confined areas.

Exposure Guidelines

OSHA Permissible Exposure Limits (PEL's)

Ingredient Name CAS-No.	Approx. Weight %	TWA (final)	Ceilings limits (final)	Skin designations
TITANIUM DIOXIDE 13463-67-7	15 - 20	15 mg/m ³ TWA dust total		

ACGIH Threshold Limit Value (TLV's)

Ingredient Name CAS-No.	Approx. Weight %	TWA	STEL	Ceiling limits	Skin designations
TITANIUM DIOXIDE 13463-67-7	15 - 20	10 mg/m ³ TWA			

9. PHYSICAL PROPERTIES

Odor:

Normal for this product type.

Physical State:

liquid

pH:

not determined

Vapor pressure:

24 mmHg @ 77°F (25°C)

Vapor density (air = 1.0):

0.6

Boiling point:

212°F (100°C)

Solubility in water:

not determined

9. PHYSICAL PROPERTIES

Coefficient of water/oil distribution:	not determined
Density (lbs per US gallon):	10.59
Specific Gravity:	1.27
Evaporation rate (butyl acetate = 1.0):	0.1
Flash point (Fahrenheit):	205
Flash point (Celsius):	96
Lower explosive limit (%):	not determined
Upper explosive limit (%):	not determined
Autoignition temperature:	not determined

10. STABILITY AND REACTIVITY

Stability:	Stable under normal conditions.
Conditions to Avoid:	None known.
Incompatibility:	Strong oxidizing agents
Hazardous Polymerization:	None anticipated.
Hazardous Decomposition Products:	Carbon monoxide and carbon dioxide. Metal oxide fumes.

Sensitivity to static discharge: Sensitivity to static discharge is not expected.

11. TOXICOLOGICAL INFORMATION

Ingredient Name CAS-No.	Approx. Weight %	NIOSH - Selected LD50s and LC50s
TITANIUM DIOXIDE 13463-67-7	15 - 20	> 10000 mg/kg Oral LD50 Rat
BENZOPHENONE 119-61-9	.1 - 1	= 3535 mg/kg Dermal LD50 Rabbit > 10 g/kg Oral LD50 Rat

Mutagens/Teratogens/Carcinogens:

Possible cancer hazard. Contains material which may cause cancer based on animal data.

Contains TIO2 which is listed by IARC as a possible human carcinogen (Group 2B) based on animal data. Neither long term animal studies, nor human epidemiology studies of workers exposed to TIO2 provide an adequate basis to conclude TIO2 is carcinogenic. TIO2 is not classified as a carcinogen by NTP, U.S. OSHA, or the U.S. EPA.

Ingredient Name CAS-No.	Approx. Weight %	California Prop 65 - Reproductive (Female)	California Prop 65 - Carcinogen
BENZOPHENONE 119-61-9	.1 - 1		listed 22-Jun-12

Ingredient Name CAS-No.	Approx. Weight %	IARC Group 1 - Human Evidence	IARC Group 2A - Limited Human Data	IARC Group 2B - Sufficient Animal Data
TITANIUM DIOXIDE 13463-67-7	15 - 20			Monograph 47 [1989]
BENZOPHENONE 119-61-9	.1 - 1			Monograph 101 [in preparation]

Ingredient Name CAS-No.	Approx. Weight %	OSHA - Hazard Communication Carcinogens	OSHA - Specifically Regulated Carcinogens	ACGIH Carcinogens
TITANIUM DIOXIDE 13463-67-7	15 - 20	Present		

12. ECOLOGICAL DATA

No information on ecology is available.

13. DISPOSAL CONSIDERATIONS

Disposal should be made in accordance with federal, state and local regulations.

14. TRANSPORTATION INFORMATION

U.S. Department of Transportation

UN ID Number (msds):

NRPAIN

Proper Shipping Name:

PAINT, NOT REGULATED

U.S Hazmat and/or International DG shipment exceptions

The supplier may apply one of the following exceptions: Combustible Liquid, Consumer Commodity, Limited Quantity, Viscous Liquid, Does Not Sustain Combustion, or others, as allowed under 49CFR Hazmat Regulations. Please consult 49CFR Subchapter C to ensure that subsequent shipments comply with these exceptions.

Reportable Quantity Description:

International Air Transport Association (IATA):

Proper shipping name:

NOT REGULATED

International Maritime Organization (IMO):

Proper shipping name:

NOT REGULATED

Marine Pollutant

No

15. REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS:

SARA 311/312 Hazard Class:

Acute: yes

Chronic: yes

Flammability: no

Reactivity: no

Sudden Pressure: no

U.S. STATE REGULATIONS:

Right to Know:

The specific chemical identity of a component may be withheld as a trade secret under 34 Pennsylvania Code, Chapter 317.

Pennsylvania Right To Know:

TITANIUM DIOXIDE

13463-67-7

Additional Non-Hazardous Materials

WATER

7732-18-5

PROPRIETARY RESIN

Trade Secret

PROPRIETARY RESIN

Trade Secret

PROPRIETARY INERT

Trade Secret

PROPRIETARY INERT

Trade Secret

California Proposition 65:

WARNING! This product contains a chemical known in the State of California to cause cancer.

Rule 66 status of product

Not photochemically reactive.

INTERNATIONAL REGULATIONS - Chemical Inventories**US TSCA Inventory:**

All components of this product are in compliance with U.S. TSCA Chemical Substance Inventory Requirements.

Canada Domestic Substances List:

All components of this product are listed on the Domestic Substances List.

16. OTHER INFORMATION**HMIS Codes**

Health:	2*
Flammability:	0
Reactivity:	1
PPE:	X - See Section 8 for Personal Protective Equipment (PPE).

Abbreviations:

OSHA - Occupational Safety and Health Administration, IARC - International Agency for Research on Cancer, NIOSH - National Institute of Occupational Safety and Health, NTP - National Toxicology Program, ACGIH - American Conference of Governmental Industrial Hygienists, SCAQMD - South Coast Air Quality Management District, TSCA - Toxic Substances Control Act, IATA - International Air Transport Association, IMO - International Maritime Organization, DOT - Department of Transportation, NA - Not applicable, NOT ESTAB - Not established, N.A.V. - Not available, RQ - Reportable quantity, WT - Weight, MG/CU M - Milligrams per cubic meter, G/L - Grams per liter, MM - Millimeters, MPPCF - Millions of particles per cubic foot, PPM - parts per million, PPT - parts per thousand, TCC/PM - Tag closed cup / Pensky-Martens, PB - Lead, PEL - Permissible exposure level, TWA - Time Weighted Average, STEL - Short term exposure limit, C - Celsius, F - Fahrenheit.

Disclaimer:

The data on this sheet represent typical values. Since application variables are a major factor in product performance, this information should serve only as a general guide. Valspar assumes no obligation or liability for use of this information. UNLESS VALSPAR AGREES OTHERWISE IN WRITING, VALSPAR MAKES NO WARRANTIES, EXPRESS OR IMPLIED, AND DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR FREEDOM FROM PATENT INFRINGEMENT. VALSPAR WILL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES. Your only remedy for any defect in this product is the replacement of the defective product, or a refund of its purchase price, at our option. This MSDS contains additional information required by the state of Pennsylvania.

Preparation Information:

Prepared By:	Regulatory Affairs Department
Print date:	28/May/2014
Revision Date:	28/May/2014

Material Safety Data Sheet

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identification

Product ID: 007.0391663
Product Name: VAL ULT INT S/G WHITE
Product Use: Paint product.
Print date: 30/May/2014
Revision Date: 28/May/2014

Company Identification

The Valspar Corporation - Architectural Coatings Division
1191 Wheeling Road
Wheeling, IL 60090

Manufacturer's Phone: 1-847-520-8580

24-Hour Medical Emergency Phone: 1-888-345-5732

2. HAZARDS IDENTIFICATION

Primary Routes of Exposure:

Inhalation
Ingestion
Skin absorption

Eye Contact:

- Moderate eye irritation

Skin Contact:

- Causes skin irritation.

Ingestion:

- Irritation of the mouth, throat, and stomach.

Inhalation:

- Causes respiratory tract irritation.

Target Organ and Other Health Effects:

- Kidney injury may occur.
- Liver injury may occur.

This product contains ingredients that may contribute to the following potential chronic health effects:

- Prolonged exposure to respirable crystalline quartz silica may cause delayed chronic injury (silicosis).
- Chronic exposure may cause permanent damage of health.

Carcinogens:

- Possible cancer hazard. Contains material which may cause cancer based on animal data.
- Cancer hazard. Contains material which can cause cancer.

3. COMPOSITION / INFORMATION ON HAZARDOUS INGREDIENTS

Ingredient Name CAS-No.	Approx. Weight %	Chemical Name
TITANIUM DIOXIDE 13463-67-7	15 - 20	Titanium dioxide
SILICA 14808-60-7	1 - 5	QUARTZ (SiO ₂)
PROPRIETARY INERT	1 - 5	PROPRIETARY INERT
PROPRIETARY INERT	1 - 5	PROPRIETARY INERT
BENZOPHENONE 119-61-9	.1 - 1	Benzophenone

If this section is blank there are no hazardous components per OSHA guidelines.

4. FIRST AID MEASURES**Eye Contact:**

Get medical attention, if symptoms develop or persist. Immediately flush eye(s) with plenty of water. Remove any contact lenses and open eyes wide apart.

Skin Contact:

Remove contaminated clothing and shoes. Wash off immediately with plenty of water for at least 15 minutes. Get medical attention, if symptoms develop or persist.

Ingestion:

Rinse mouth with water. Give one or two glasses of water. Only induce vomiting at the instruction of medical personnel. Get medical attention.

Inhalation:

Move injured person into fresh air and keep person calm under observation. Get medical attention, if symptoms develop or persist.

Medical conditions aggravated by exposure:

Any respiratory or skin condition.

5. FIRE FIGHTING MEASURES

Flash point (Fahrenheit):	205
Flash point (Celsius):	96
Lower explosive limit (%):	not determined
Upper explosive limit (%):	not determined
Autoignition temperature:	not determined
Sensitivity to impact:	no
Sensitivity to static discharge:	Sensitivity to static discharge is not expected.
Hazardous combustion products:	See Section 10.

Unusual fire and explosion hazards:

None known.

Extinguishing media:

Carbon dioxide, dry chemical, foam and/or water fog.

Fire fighting procedures:

Firefighters should be equipped with self-contained breathing apparatus and turn out gear. Keep containers and surroundings cool with water spray.

6. ACCIDENTAL RELEASE MEASURES**Action to be taken if material is released or spilled:**

Ventilate the area. Avoid breathing dust or vapor. Use self-containing breathing apparatus or airmask for large spills in a confined area. Wipe, scrape or soak up in an inert material and put in a container for disposal. See section 7, "Handling and Storage", for proper container and storage procedures. Avoid contact with eyes.

7. HANDLING AND STORAGE**Precautions to be taken in handling and storage:**

Keep container closed when not in use. Do not freeze. Since emptied containers may contain product residue, follow all label warnings, even after container is emptied. Do not cut, drill, grind, or weld on or near this container.

8. PERSONAL PROTECTIVE EQUIPMENT AND EXPOSURE CONTROLS**Personal Protective Equipment****Eye and face protection:**

Wear safety glasses or goggles to protect against exposure.

Skin protection:

Appropriate chemical resistant gloves should be worn.

Respiratory protection:

If exposure cannot be controlled below applicable limits, use the appropriate NIOSH approved respirator such as an air purifying respirator with organic vapor cartridge and dust/mist filter. Consult the respirator manufacturer's literature to ensure that the respirator will provide adequate protection. Read and follow all respirator manufacturer's instructions.

Ventilation

Use only in well-ventilated areas. Ensure adequate ventilation, especially in confined areas.

Exposure Guidelines**OSHA Permissible Exposure Limits (PEL's)**

Ingredient Name CAS-No.	Approx. Weight %	TWA (final)	Ceilings limits (final)	Skin designations
TITANIUM DIOXIDE 13463-67-7	15 - 20	15 mg/m ³ TWA dust total		
SILICA 14808-60-7	1 - 5	(30)/(%SiO ₂ + 2) mg/m ³ TWA, total dust (250)/(%SiO ₂ + 5) mppcf TWA, respirable fraction (10)/(%SiO ₂ + 2) mg/m ³ TWA, respirable fraction		
PROPRIETARY INERT	1 - 5	20 mppcf or 80 mg/m ³ / %SiO ₂		

ACGIH Threshold Limit Value (TLV's)

Ingredient Name CAS-No.	Approx. Weight %	TWA	STEL	Ceiling limits	Skin designations
TITANIUM DIOXIDE 13463-67-7	15 - 20	10 mg/m ³ TWA			

Ingredient Name CAS-No.	Approx. Weight %	TWA	STEL	Ceiling limits	Skin designations
SILICA 14808-60-7	1 - 5	0.025 mg/m ³ TWA respirable fraction			
PROPRIETARY INERT	1 - 5	1 mg/m ³ TWA respirable fraction			

9. PHYSICAL PROPERTIES

Odor:	Normal for this product type.
Physical State:	liquid
pH:	not determined
Vapor pressure:	24 mmHg @ 77°F (25°C)
Vapor density (air = 1.0):	0.6
Boiling point:	212°F (100°C)
Solubility in water:	not determined
Coefficient of water/oil distribution:	not determined
Density (lbs per US gallon):	10.32
Evaporation rate (butyl acetate = 1.0):	0.1
Flash point (Fahrenheit):	205
Flash point (Celsius):	96
Lower explosive limit (%):	not determined
Upper explosive limit (%):	not determined
Autoignition temperature:	not determined

10. STABILITY AND REACTIVITY

Stability:	Stable under normal conditions.
Conditions to Avoid:	None known.
Incompatibility:	Strong oxidizing agents
Hazardous Polymerization:	None anticipated.
Hazardous Decomposition Products:	Carbon monoxide and carbon dioxide. Metal oxide fumes.

Sensitivity to static discharge: Sensitivity to static discharge is not expected.

11. TOXICOLOGICAL INFORMATION

Ingredient Name CAS-No.	Approx. Weight %	NIOSH - Selected LD50s and LC50s
TITANIUM DIOXIDE 13463-67-7	15 - 20	> 10000 mg/kg Oral LD50 Rat
SILICA 14808-60-7	1 - 5	= 500 mg/kg Oral LD50 Rat
PROPRIETARY INERT	1 - 5	> 5000 mg/kg Oral LD50 Rat
BENZOPHENONE 119-61-9	.1 - 1	= 3535 mg/kg Dermal LD50 Rabbit > 10 g/kg Oral LD50 Rat

Mutagens/Teratogens/Carcinogens:

Possible cancer hazard. Contains material which may cause cancer based on animal data. Cancer hazard. Contains material which can cause cancer.

Contains TIO2 which is listed by IARC as a possible human carcinogen (Group 2B) based on animal data. Neither long term animal studies, nor human epidemiology studies of workers exposed to TIO2 provide an adequate basis to conclude TIO2 is carcinogenic. TIO2 is not classified as a carcinogen by NTP, U.S. OSHA, or the U.S. EPA. Contains crystalline silica. The IARC has determined that crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is carcinogenic to humans (group 1). Refer to IARC monograph 68 in conjunction with the use of these materials. Risk of cancer depends on the duration and level of exposure. In coatings products, risk is due primarily to inhalation of sanding dusts or respirable particles in spray mists. The NTP has also determined that crystalline silica is a known human carcinogen in the form of fine, breathable particles. Risk of cancer depends on duration and level of exposure in coatings products, risk is due primarily to inhalation of sanding dust or respirable particles in spray mist.

Ingredient Name CAS-No.	Approx. Weight %	California Prop 65 - Reproductive (Female)	California Prop 65 - Carcinogen
SILICA 14808-60-7	1 - 5		Listed. initial date 10/1/88 - carcinogen
BENZOPHENONE 119-61-9	.1 - 1		listed 22-Jun-12

Ingredient Name CAS-No.	Approx. Weight %	IARC Group 1 - Human Evidence	IARC Group 2A - Limited Human Data	IARC Group 2B - Sufficient Animal Data
TITANIUM DIOXIDE 13463-67-7	15 - 20			Monograph 47 [1989]
SILICA 14808-60-7	1 - 5	Monograph 68 [1997]		
BENZOPHENONE 119-61-9	.1 - 1			Monograph 101 [in preparation]

Ingredient Name CAS-No.	Approx. Weight %	NTP Known Carcinogens	NTP Suspect Carcinogens
SILICA 14808-60-7	1 - 5	Known Human Carcinogen	

Ingredient Name CAS-No.	Approx. Weight %	OSHA - Hazard Communication Carcinogens	OSHA - Specifically Regulated Carcinogens	ACGIH Carcinogens
TITANIUM DIOXIDE 13463-67-7	15 - 20	Present		
SILICA 14808-60-7	1 - 5	Present		A2 Suspected Human Carcinogen

12. ECOLOGICAL DATA

No information on ecology is available.

13. DISPOSAL CONSIDERATIONS

Disposal should be made in accordance with federal, state and local regulations.

14. TRANSPORTATION INFORMATION

U.S. Department of Transportation

UN ID Number (msds):

Proper Shipping Name:

NRPAIN

PAINT, NOT REGULATED

14. TRANSPORTATION INFORMATION

U.S Hazmat and/or International DG shipment exceptions

The supplier may apply one of the following exceptions: Combustible Liquid, Consumer Commodity, Limited Quantity, Viscous Liquid, Does Not Sustain Combustion, or others, as allowed under 49CFR Hazmat Regulations. Please consult 49CFR Subchapter C to ensure that subsequent shipments comply with these exceptions.

Reportable Quantity Description:

International Air Transport Association (IATA):

Proper shipping name: NOT REGULATED

International Maritime Organization (IMO):

Proper shipping name: NOT REGULATED
Marine Pollutant No

15. REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS:

SARA 311/312 Hazard Class:

Acute:	yes
Chronic:	yes
Flammability:	no
Reactivity:	no
Sudden Pressure:	no

U.S. STATE REGULATIONS:

Right to Know:

The specific chemical identity of a component may be withheld as a trade secret under 34 Pennsylvania Code, Chapter 317.

Pennsylvania Right To Know:

SILICA	14808-60-7
PROPRIETARY INERT	Trade Secret
TITANIUM DIOXIDE	13463-67-7
PROPRIETARY INERT	Trade Secret

Additional Non-Hazardous Materials

PROPRIETARY RESIN	Trade Secret
PROPRIETARY RESIN	Trade Secret
WATER	7732-18-5

California Proposition 65:

WARNING: This product contains chemicals known to the State of California to cause cancer.

Rule 66 status of product Not photochemically reactive.

INTERNATIONAL REGULATIONS - Chemical Inventories

US TSCA Inventory:

All components of this product are in compliance with U.S. TSCA Chemical Substance Inventory Requirements.

Canada Domestic Substances List:

All components of this product are listed on the Domestic Substances List.

16. OTHER INFORMATION

16. OTHER INFORMATION

HMIS Codes

Health:	2*
Flammability:	0
Reactivity:	1
PPE:	X - See Section 8 for Personal Protective Equipment (PPE).

Abbreviations:

OSHA - Occupational Safety and Health Administration, IARC - International Agency for Research on Cancer, NIOSH - National Institute of Occupational Safety and Health, NTP - National Toxicology Program, ACGIH - American Conference of Governmental Industrial Hygienists, SCAQMD - South Coast Air Quality Management District, TSCA - Toxic Substances Control Act, IATA - International Air Transport Association, IMO - International Maritime Organization, DOT - Department of Transportation, NA - Not applicable, NOT ESTAB - Not established, N.A.V. - Not available, RQ - Reportable quantity, WT - Weight, MG/CU M - Milligrams per cubic meter, G/L - Grams per liter, MM - Millimeters, MPPCF - Millions of particles per cubic foot, PPM - parts per million, PPT - parts per thousand, TCC/PM - Tag closed cup / Pensky-Martens, PB - Lead, PEL - Permissible exposure level, TWA - Time Weighted Average, STEL - Short term exposure limit, C - Celsius, F - Fahrenheit.

Disclaimer:

The data on this sheet represent typical values. Since application variables are a major factor in product performance, this information should serve only as a general guide. Valspar assumes no obligation or liability for use of this information. UNLESS VALSPAR AGREES OTHERWISE IN WRITING, VALSPAR MAKES NO WARRANTIES, EXPRESS OR IMPLIED, AND DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR FREEDOM FROM PATENT INFRINGEMENT. VALSPAR WILL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES. Your only remedy for any defect in this product is the replacement of the defective product, or a refund of its purchase price, at our option. This MSDS contains additional information required by the state of Pennsylvania.

Preparation Information:

Prepared By:	Regulatory Affairs Department
Print date:	30/May/2014
Revision Date:	28/May/2014



Material Safety Data Sheet

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identification

Product ID: 400.0002002.076
Product Name: T-2 FLAT BLACK 6UC
Product Use: Paint product.
Print date: 04/Sep/2013
Revision Date: 04/Sep/2013

Company Identification

The Valspar Corporation
1000 Lake Road
Medina, OH 44256

Manufacturer's Phone: 1-330-725-4511

24-Hour Medical Emergency Phone: 1-888-345-5732

2. HAZARDS IDENTIFICATION

Primary Routes of Exposure:

Inhalation
Ingestion
Skin absorption

Eye Contact:

- Severe eye irritation

Skin Contact:

- Causes skin irritation.
- Dermatitis
- May cause defatting of the skin.
- May cause sensitization by skin contact.

Ingestion:

- Irritation of the mouth, throat, and stomach.
- Harmful if swallowed.

- Aspiration hazard if swallowed - can enter lungs and cause damage.

Inhalation:

- Causes respiratory tract irritation.
- Harmful by inhalation.
- Asphyxia
- May cause sensitization by inhalation.

Acute Other Health Effects:

- May cause frostbite
- Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

Target Organ and Other Health Effects:

- Causes headache, drowsiness or other effects to the central nervous system.
- Cardiac arrhythmias
- Blood disorders
- Kidney injury may occur.
- Liver injury may occur.

This product contains ingredients that may contribute to the following potential chronic health effects:

- Notice: Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.
- Possible sensitization.

Carcinogens:

- Possible cancer hazard. Contains material which may cause cancer based on animal data.

3. COMPOSITION / INFORMATION ON HAZARDOUS INGREDIENTS

Ingredient Name CAS-No.	Approx. Weight %	Chemical Name
DIMETHYL KETONE- EXEMPT SOLVENT 67-64-1	35 - 40	Acetone
PROPANE 74-98-6	15 - 20	Propane
METHYL ISOBUTYL KETONE 108-10-1	10 - 15	Methylisobutyl ketone
BUTANE 106-97-8	5 - 10	Butane
BUTYL ACETATE 123-86-4	5 - 10	n-Butyl acetate
PROPRIETARY INERT	1 - 5	PROPRIETARY INERT
ETHYL 3- ETHOXYPROPIONATE 763-69-9	1 - 5	Ethyl 3-ethoxypropionate
C.I. PIGMENT BLACK 7 1333-86-4	.1 - 1	Carbon black
COBALT OCTOATE 136-52-7	.1 - 1	Hexanoic acid, 2-ethyl-, cobalt(2+) salt

If this section is blank there are no hazardous components per OSHA guidelines.

4. FIRST AID MEASURES

Eye Contact:

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. If medical assistance is not immediately available, flush an additional 15 minutes. Get medical attention immediately.

Skin Contact:

Remove contaminated clothing and shoes. Wash off immediately with plenty of water for at least 15 minutes. Get medical attention, if symptoms develop or persist.

Ingestion:

Rinse mouth with water. Give one or two glasses of water. Only induce vomiting at the instruction of medical personnel. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. If vomiting occurs, keep head lower than hips to prevent aspiration. Get medical attention immediately.

Inhalation:

Move injured person into fresh air and keep person calm under observation. Get medical attention immediately. For breathing difficulties, oxygen may be necessary. If breathing stops, provide artificial respiration. Do not give direct mouth-to-mouth resuscitation if inhaled. To protect rescuer, use air-viva, oxy-viva or one-way mask. Resuscitate in a well-ventilated area.

Medical conditions aggravated by exposure:

Any respiratory or skin condition.

5. FIRE FIGHTING MEASURES

Flash point (Fahrenheit):	-31
Flash point (Celsius):	-35
Lower explosive limit (%):	1
Upper explosive limit (%):	13
Autoignition temperature:	not determined
Sensitivity to impact:	no
Sensitivity to static discharge:	Subject to static discharge hazards. Please see bonding and grounding information in Section 7.
Hazardous combustion products:	See Section 10.

Unusual fire and explosion hazards:

None known.

Extinguishing media:

Carbon dioxide, dry chemical, foam and/or water fog.

Fire fighting procedures:

Firefighters should be equipped with self-contained breathing apparatus and turn out gear. Keep containers and surroundings cool with water spray.

6. ACCIDENTAL RELEASE MEASURES

Action to be taken if material is released or spilled:

Ventilate the area. Avoid breathing dust or vapor. Use self-containing breathing apparatus or airmask for large spills in a confined area. Wipe, scrape or soak up in an inert material and put in a container for disposal. See section 7, "Handling and Storage", for proper container and storage procedures. Remove all sources of ignition. Soak up with inert absorbent material. Use only non-sparking tools. Avoid contact with eyes.

7. HANDLING AND STORAGE

7. HANDLING AND STORAGE

Precautions to be taken in handling and storage:

Keep away from heat, sparks and open flame. - No smoking. Keep container closed when not in use. Do not store above 120 degrees F. (49 degrees C). Based on flash point and vapor pressure, suitable storage should be provided in accordance with OSHA regulation 1910.106, Ontario OH&S regulation 851 section 22. Empty containers may contain product residue, including flammable or explosive vapors. Do not cut, puncture or weld on or near container. All label warnings must be observed until the container has been commercially cleaned or reconditioned. If the product is used near or above the flashpoint, an ignition hazard may be present. Activities, uses, or operations which liberate vapor (such as mixing or free fall of liquids) may also present an ignition hazard. Please ensure containers and other interconnected equipment are properly bonded and grounded at all times.

8. PERSONAL PROTECTIVE EQUIPMENT AND EXPOSURE CONTROLS

Personal Protective Equipment

Eye and face protection:

Wear safety glasses or goggles to protect against exposure.

Skin protection:

Appropriate chemical resistant gloves should be worn.

Other Personnel Protection Data:

To prevent skin contact wear protective clothing covering all exposed areas.

Respiratory protection:

If exposure cannot be controlled below applicable limits, use the appropriate NIOSH approved respirator such as an air purifying respirator with organic vapor cartridge and dust/mist filter. Consult the respirator manufacturer's literature to ensure that the respirator will provide adequate protection. Read and follow all respirator manufacturer's instructions.

Ventilation

Use only in well-ventilated areas. Ensure adequate ventilation, especially in confined areas. Ovens used for curing should contain a fresh air purge to prevent vapours from accumulating and creating a possible explosive mixture. Where the product is used in a hazardous classified area, use explosion-proof electrical/ventilating/lighting/equipment.

Exposure Guidelines

OSHA Permissible Exposure Limits (PEL's)

Ingredient Name CAS-No.	Approx. Weight %	TWA (final)	Ceilings limits (final)	Skin designations
DIMETHYL KETONE- EXEMPT SOLVENT 67-64-1	35 - 40	1000 ppm TWA 2400 mg/m ³ TWA		
PROPANE 74-98-6	15 - 20	1000 ppm TWA 1800 mg/m ³ TWA		
METHYL ISOBUTYL KETONE 108-10-1	10 - 15	100 ppm TWA 410 mg/m ³ TWA		
BUTYL ACETATE 123-86-4	5 - 10	150 ppm TWA 710 mg/m ³ TWA		
PROPRIETARY INERT	1 - 5	20 mppcf or 80 mg/m ³ / %SiO ₂		
C.I. PIGMENT BLACK 7 1333-86-4	.1 - 1	3.5 mg/m ³ TWA		

ACGIH Threshold Limit Value (TLV's)

Ingredient Name CAS-No.	Approx. Weight %	TWA	STEL	Ceiling limits	Skin designations
DIMETHYL KETONE- EXEMPT SOLVENT 67-64-1	35 - 40	500 ppm TWA	750 ppm STEL		
PROPANE 74-98-6	15 - 20	1000 ppm TWA Aliphatic hydrocarbon gases: Alkane C1-C4			
METHYL ISOBUTYL KETONE 108-10-1	10 - 15	20 ppm TWA	75 ppm STEL		
BUTANE 106-97-8	5 - 10	1000 ppm TWA Aliphatic hydrocarbon gases: Alkane C1-C4			
BUTYL ACETATE 123-86-4	5 - 10	150 ppm TWA	200 ppm STEL		
C.I. PIGMENT BLACK 7 1333-86-4	.1 - 1	3.5 mg/m ³ TWA			

9. PHYSICAL PROPERTIES

Odor:	Normal for this product type.
Physical State:	Aerosol
pH:	not determined
Vapor pressure:	NOT DETERMINED mmHg @ 68°F (20°C)
Vapor density (air = 1.0):	5.0
Boiling point:	-44°F (-42°C)
Solubility in water:	not determined
Coefficient of water/oil distribution:	not determined
Density (lbs per US gallon):	6.3
Specific Gravity:	.76
Evaporation rate (butyl acetate = 1.0):	5.6
Flash point (Fahrenheit):	-31
Flash point (Celsius):	-35
Lower explosive limit (%):	1
Upper explosive limit (%):	13
Autoignition temperature:	not determined

10. STABILITY AND REACTIVITY

Stability:	Stable under normal conditions.
Conditions to Avoid:	Heat.
Incompatibility:	Strong oxidizing agents
Hazardous Polymerization:	None anticipated.
Hazardous Decomposition Products:	Carbon monoxide and carbon dioxide.

Sensitivity to static discharge:	Subject to static discharge hazards. Please see bonding and grounding information in Section 7.
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11. TOXICOLOGICAL INFORMATION

11. TOXICOLOGICAL INFORMATION

Ingredient Name CAS-No.	Approx. Weight %	NIOSH - Selected LD50s and LC50s
DIMETHYL KETONE- EXEMPT SOLVENT 67-64-1	35 - 40	= 5800 mg/kg Oral LD50 Rat
PROPANE 74-98-6	15 - 20	= 658 mg/L Inhalation LC50 Rat 4 h
METHYL ISOBUTYL KETONE 108-10-1	10 - 15	= 2080 mg/kg Oral LD50 Rat = 8.2 mg/L Inhalation LC50 Rat 4 h > 16000 mg/kg Dermal LD50 Rabbit
BUTANE 106-97-8	5 - 10	= 658 mg/L Inhalation LC50 Rat 4 h
BUTYL ACETATE 123-86-4	5 - 10	= 10768 mg/kg Oral LD50 Rat = 390 ppm Inhalation LC50 Rat 4 h > 17600 mg/kg Dermal LD50 Rabbit
ETHYL 3- ETHOXYPROPIONATE 763-69-9	1 - 5	= 10 mL/kg Dermal LD50 Rabbit = 3200 mg/kg Oral LD50 Rat
C.I. PIGMENT BLACK 7 1333-86-4	.1 - 1	> 15400 mg/kg Oral LD50 Rat > 3 g/kg Dermal LD50 Rabbit

Mutagens/Teratogens/Carcinogens:

Possible cancer hazard. Contains material which may cause cancer based on animal data.

IARC has classified carbon black as possibly carcinogenic to humans (Group 2B). The International Agency For Research On Cancer (IARC) has determined that Cobalt and Cobalt Compounds are substances that are possibly carcinogenic to humans (IARC group 2B).

Ingredient Name CAS-No.	Approx. Weight %	California Prop 65 - Reproductive (Female)	California Prop 65 - Carcinogen
METHYL ISOBUTYL KETONE 108-10-1	10 - 15		carcinogen, initial date 11/04/11

Ingredient Name CAS-No.	Approx. Weight %	IARC Group 1 - Human Evidence	IARC Group 2A - Limited Human Data	IARC Group 2B - Sufficient Animal Data
METHYL ISOBUTYL KETONE 108-10-1	10 - 15			Monograph 101 [in preparation]
C.I. PIGMENT BLACK 7 1333-86-4	.1 - 1			Monograph 65 [1996]
COBALT OCTOATE 136-52-7	.1 - 1			Monograph 52 [1991]

Ingredient Name CAS-No.	Approx. Weight %	OSHA - Hazard Communication Carcinogens	OSHA - Specifically Regulated Carcinogens	ACGIH Carcinogens
METHYL ISOBUTYL KETONE 108-10-1	10 - 15			A3 Confirmed Animal Carcinogen with Unknown Relevance to Humans
C.I. PIGMENT BLACK 7 1333-86-4	.1 - 1	Present		
COBALT OCTOATE 136-52-7	.1 - 1	Present		

12. ECOLOGICAL DATA

No information on ecology is available.

13. DISPOSAL CONSIDERATIONS

Disposal should be made in accordance with federal, state and local regulations.

14. TRANSPORTATION INFORMATION

U.S. Department of Transportation

UN ID Number (msds):

CONCOM

Proper Shipping Name:

CONSUMER COMMODITY ORM-D [Paint]

U.S Hazmat and/or International DG shipment exceptions

The supplier may apply one of the following exceptions: Combustible Liquid, Consumer Commodity, Limited Quantity, Viscous Liquid, Does Not Sustain Combustion, or others, as allowed under 49CFR Hazmat Regulations. Please consult 49CFR Subchapter C to ensure that subsequent shipments comply with these exceptions.

Reportable Quantity Description:

International Air Transport Association (IATA):

UN/ID No:

UN1950

Proper shipping name:

AEROSOLS, FLAMMABLE

Hazard Class:

2.1

International Maritime Organization (IMO):

UN/ID No:

UN1950

Proper shipping name:

AEROSOLS, FLAMMABLE

Hazard Class:

2.1

Marine Pollutant

No

15. REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS:

Ingredient Name CAS-No.	Approx. Weight %	SARA 302	SARA 313	CERCLA RQ in lbs.
DIMETHYL KETONE- EXEMPT SOLVENT 67-64-1	35 - 40			5000
METHYL ISOBUTYL KETONE 108-10-1	10 - 15		form R reporting required for 1.0% de minimis concentration	5000
BUTYL ACETATE 123-86-4	5 - 10			5000
COBALT OCTOATE 136-52-7	.1 - 1		YES	10

SARA 311/312 Hazard Class:

Acute: yes

Chronic: yes

Flammability: yes

Reactivity: no

Sudden Pressure: yes

U.S. STATE REGULATIONS:

Right to Know:

The specific chemical identity of a component may be withheld as a trade secret under 34 Pennsylvania Code, Chapter 317.

Pennsylvania Right To Know:

BUTYL ACETATE	123-86-4
PROPRIETARY INERT	Trade Secret
ETHYL 3-ETHOXYPROPIONATE	763-69-9
METHYL ISOBUTYL KETONE	108-10-1
DIMETHYL KETONE- EXEMPT SOLVENT	67-64-1
PROPANE	74-98-6
BUTANE	106-97-8

Additional Non-Hazardous Materials

PROPRIETARY RESIN	Trade Secret
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California Proposition 65:

WARNING! This product contains a chemical known in the State of California to cause cancer.

Rule 66 status of product

Not photochemically reactive.

INTERNATIONAL REGULATIONS - Chemical Inventories**US TSCA Inventory:**

All components of this product are in compliance with U.S. TSCA Chemical Substance Inventory Requirements.

Canada Domestic Substances List:

All components of this product are listed on the Domestic Substances List.

16. OTHER INFORMATION**HMIS Codes**

Health:	2*
Flammability:	4
Reactivity:	1
PPE:	X - See Section 8 for Personal Protective Equipment (PPE).

Abbreviations:

OSHA - Occupational Safety and Health Administration, IARC - International Agency for Research on Cancer, NIOSH - National Institute of Occupational Safety and Health, NTP - National Toxicology Program, ACGIH - American Conference of Governmental Industrial Hygienists, SCAQMD - South Coast Air Quality Management District, TSCA - Toxic Substances Control Act, IATA - International Air Transport Association, IMO - International Maritime Organization, DOT - Department of Transportation, NA - Not applicable, NOT ESTAB - Not established, N.A.V. - Not available, RQ - Reportable quantity, WT - Weight, MG/CU M - Milligrams per cubic meter, G/L - Grams per liter, MM - Millimeters, MPPCF - Millions of particles per cubic foot, PPM - parts per million, PPT - parts per thousand, TCC/PM - Tag closed cup / Pensky-Martens, PB - Lead, PEL - Permissible exposure level, TWA - Time Weighted Average, STEL - Short term exposure limit, C - Celsius, F - Fahrenheit.

Disclaimer:

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Preparation Information:

Prepared By:

Regulatory Affairs Department

Print date:

04/Sep/2013

Revision Date:

04/Sep/2013



Material Safety Data Sheet

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identification

Product ID: 400.0002302.076
Product Name: HP-12 WHITE 1500 DEGREE 6UC
Product Use: Paint product.
Print date: 10/Dec/2013
Revision Date: 10/Dec/2013

Company Identification

The Valspar Corporation
1000 Lake Road
Medina, OH 44256

Manufacturer's Phone: 1-330-725-4511

24-Hour Medical Emergency Phone: 1-888-345-5732

2. HAZARDS IDENTIFICATION

Primary Routes of Exposure:

Inhalation
Ingestion
Skin absorption

Eye Contact:

- Severe eye irritation
- Risk of serious damage to eyes.

Skin Contact:

- Causes skin irritation.
- May cause defatting of the skin.
- Dermatitis
- Harmful if absorbed through skin.
- Can be absorbed through skin.

Ingestion:

- Irritation of the mouth, throat, and stomach.
- Aspiration hazard if swallowed - can enter lungs and cause damage.

Inhalation:

- Causes respiratory tract irritation.
- Harmful by inhalation.
- Asphyxia

Acute Other Health Effects:

- May cause frostbite
- Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

Target Organ and Other Health Effects:

- Causes headache, drowsiness or other effects to the central nervous system.
- Cardiac arrhythmias
- Liver injury may occur.
- Kidney injury may occur.
- Hearing loss.
- Blood disorders

This product contains ingredients that may contribute to the following potential chronic health effects:

- Notice: Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

Carcinogens:

- Possible cancer hazard. Contains material which may cause cancer based on animal data.

3. COMPOSITION / INFORMATION ON HAZARDOUS INGREDIENTS

Ingredient Name CAS-No.	Approx. Weight %	Chemical Name
DIMETHYL KETONE- EXEMPT SOLVENT 67-64-1	35 - 40	Acetone
PROPANE 74-98-6	15 - 20	Propane
ISOBUTYL ACETATE 110-19-0	10 - 15	Isobutyl acetate
BUTANE 106-97-8	10 - 15	Butane
TITANIUM DIOXIDE 13463-67-7	5 - 10	Titanium dioxide
ACETIC ACID ESTER 88230-35-7	1 - 5	Hexanol, acetate, branched and linear
N-BUTYL ALCOHOL 71-36-3	1 - 5	n-Butyl alcohol
NAPHTHA 64742-89-8	1 - 5	SOLVENT NAPHTHA, PETROLEUM, LIGHT ALIPH
XYLENE 1330-20-7	1 - 5	Xylenes (o-, m-, p- isomers)
ETHYLBENZENE 100-41-4	.1 - 1	Ethyl benzene

If this section is blank there are no hazardous components per OSHA guidelines.

4. FIRST AID MEASURES

Eye Contact:

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. If medical assistance is not immediately available, flush an additional 15 minutes. Get medical attention immediately.

Skin Contact:

Remove contaminated clothing and shoes. Wash off immediately with plenty of water for at least 15 minutes. Get medical attention, if symptoms develop or persist.

Ingestion:

Rinse mouth with water. Give one or two glasses of water. Only induce vomiting at the instruction of medical personnel. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. If vomiting occurs, keep head lower than hips to prevent aspiration. Get medical attention immediately.

Inhalation:

Move injured person into fresh air and keep person calm under observation. Get medical attention immediately. For breathing difficulties, oxygen may be necessary. If breathing stops, provide artificial respiration. Do not give direct mouth-to-mouth resuscitation if inhaled. To protect rescuer, use air-viva, oxy-viva or one-way mask. Resuscitate in a well-ventilated area.

Medical conditions aggravated by exposure:

Any respiratory or skin condition.

5. FIRE FIGHTING MEASURES

Flash point (Fahrenheit):	-31
Flash point (Celsius):	-35
Lower explosive limit (%):	1
Upper explosive limit (%):	13
Autoignition temperature:	not determined
Sensitivity to impact:	no
Sensitivity to static discharge:	Subject to static discharge hazards. Please see bonding and grounding information in Section 7.
Hazardous combustion products:	See Section 10.

Unusual fire and explosion hazards:

None known.

Extinguishing media:

Carbon dioxide, dry chemical, foam and/or water fog.

Fire fighting procedures:

Firefighters should be equipped with self-contained breathing apparatus and turn out gear. Keep containers and surroundings cool with water spray.

6. ACCIDENTAL RELEASE MEASURES

Action to be taken if material is released or spilled:

Ventilate the area. Avoid breathing dust or vapor. Use self-containing breathing apparatus or airmask for large spills in a confined area. Wipe, scrape or soak up in an inert material and put in a container for disposal. See section 7, "Handling and Storage", for proper container and storage procedures. Remove all sources of ignition. Soak up with inert absorbent material. Use only non-sparking tools. Avoid contact with eyes.

7. HANDLING AND STORAGE

7. HANDLING AND STORAGE

Precautions to be taken in handling and storage:

Keep away from heat, sparks and open flame. - No smoking. Keep container closed when not in use. Do not store above 120 degrees F. (49 degrees C). Based on flash point and vapor pressure, suitable storage should be provided in accordance with OSHA regulation 1910.106, Ontario OH&S regulation 851 section 22. Empty containers may contain product residue, including flammable or explosive vapors. Do not cut, puncture or weld on or near container. All label warnings must be observed until the container has been commercially cleaned or reconditioned. If the product is used near or above the flashpoint, an ignition hazard may be present. Activities, uses, or operations which liberate vapor (such as mixing or free fall of liquids) may also present an ignition hazard. Please ensure containers and other interconnected equipment are properly bonded and grounded at all times.

8. PERSONAL PROTECTIVE EQUIPMENT AND EXPOSURE CONTROLS

Personal Protective Equipment

Eye and face protection:

Wear chemical goggles with splash shields or face shield. Contact lenses should not be worn when working with chemicals because contact lenses may contribute to the severity of an eye injury in case of exposure.

Skin protection:

Appropriate chemical resistant gloves should be worn.

Other Personnel Protection Data:

To prevent skin contact wear protective clothing covering all exposed areas. Ensure that eyewash stations and safety showers are close to the workstation location.

Respiratory protection:

If exposure cannot be controlled below applicable limits, use the appropriate NIOSH approved respirator such as an air purifying respirator with organic vapor cartridge and dust/mist filter. Consult the respirator manufacturer's literature to ensure that the respirator will provide adequate protection. Read and follow all respirator manufacturer's instructions.

Ventilation

Use only in well-ventilated areas. Ensure adequate ventilation, especially in confined areas. Ovens used for curing should contain a fresh air purge to prevent vapours from accumulating and creating a possible explosive mixture. Where the product is used in a hazardous classified area, use explosion-proof electrical/ventilating/lighting/equipment.

Exposure Guidelines

OSHA Permissible Exposure Limits (PEL's)

Ingredient Name CAS-No.	Approx. Weight %	TWA (final)	Ceilings limits (final)	Skin designations
DIMETHYL KETONE- EXEMPT SOLVENT 67-64-1	35 - 40	1000 ppm TWA 2400 mg/m ³ TWA		
PROPANE 74-98-6	15 - 20	1000 ppm TWA 1800 mg/m ³ TWA		
ISOBUTYL ACETATE 110-19-0	10 - 15	150 ppm TWA 700 mg/m ³ TWA		
TITANIUM DIOXIDE 13463-67-7	5 - 10	15 mg/m ³ TWA dust total		
N-BUTYL ALCOHOL 71-36-3	1 - 5	100 ppm TWA 300 mg/m ³ TWA		
XYLENE 1330-20-7	1 - 5	100 ppm TWA 435 mg/m ³ TWA		
ETHYLBENZENE 100-41-4	.1 - 1	100 ppm TWA 435 mg/m ³ TWA		

ACGIH Threshold Limit Value (TLV's)

Ingredient Name CAS-No.	Approx. Weight %	TWA	STEL	Ceiling limits	Skin designations
DIMETHYL KETONE- EXEMPT SOLVENT 67-64-1	35 - 40	500 ppm TWA	750 ppm STEL		
PROPANE 74-98-6	15 - 20	1000 ppm TWA Aliphatic hydrocarbon gases: Alkane C1-C4			
ISOBUTYL ACETATE 110-19-0	10 - 15	150 ppm TWA			
BUTANE 106-97-8	10 - 15	1000 ppm TWA Aliphatic hydrocarbon gases: Alkane C1-C4			
TITANIUM DIOXIDE 13463-67-7	5 - 10	10 mg/m ³ TWA			
N-BUTYL ALCOHOL 71-36-3	1 - 5	20 ppm TWA			
XYLENE 1330-20-7	1 - 5	100 ppm TWA	150 ppm STEL		
ETHYLBENZENE 100-41-4	.1 - 1	100 ppm TWA	125 ppm STEL		

9. PHYSICAL PROPERTIES

Odor:	Normal for this product type.
Physical State:	Aerosol
pH:	not determined
Vapor pressure:	NOT DETERMINED mmHg @ 68°F (20°C)
Vapor density (air = 1.0):	5.0
Boiling point:	-44°F (-42°C)
Solubility in water:	not determined
Coefficient of water/oil distribution:	not determined
Density (lbs per US gallon):	6.33
Specific Gravity:	.76
Evaporation rate (butyl acetate = 1.0):	5.6
Flash point (Fahrenheit):	-31
Flash point (Celsius):	-35
Lower explosive limit (%):	1
Upper explosive limit (%):	13
Autoignition temperature:	not determined

10. STABILITY AND REACTIVITY

Stability:	Stable under normal conditions.
Conditions to Avoid:	Heat.
Incompatibility:	Strong oxidizing agents
Hazardous Polymerization:	None anticipated.
Hazardous Decomposition Products:	Carbon monoxide and carbon dioxide. Metal oxide fumes.

Sensitivity to static discharge:	Subject to static discharge hazards. Please see bonding and grounding information in Section 7.
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11. TOXICOLOGICAL INFORMATION

Ingredient Name CAS-No.	Approx. Weight %	NIOSH - Selected LD50s and LC50s
DIMETHYL KETONE- EXEMPT SOLVENT 67-64-1	35 - 40	= 5800 mg/kg Oral LD50 Rat
PROPANE 74-98-6	15 - 20	= 658 mg/L Inhalation LC50 Rat 4 h
ISOBUTYL ACETATE 110-19-0	10 - 15	= 13400 mg/kg Oral LD50 Rat > 5000 mg/kg Dermal LD50 Rabbit
BUTANE 106-97-8	10 - 15	= 658 mg/L Inhalation LC50 Rat 4 h
TITANIUM DIOXIDE 13463-67-7	5 - 10	> 10000 mg/kg Oral LD50 Rat
N-BUTYL ALCOHOL 71-36-3	1 - 5	= 3400 mg/kg Dermal LD50 Rabbit = 790 mg/kg Oral LD50 Rat = 8000 ppm Inhalation LC50 Rat 4 h > 17.7 mg/L Inhalation LC50 Rat 4 h
NAPHTHA 64742-89-8	1 - 5	= 3000 mg/kg Dermal LD50 Rabbit = 5000 mg/kg Oral LD50 Mouse
XYLENE 1330-20-7	1 - 5	= 4300 mg/kg Oral LD50 Rat = 47635 mg/L Inhalation LC50 Rat 4 h = 5000 ppm Inhalation LC50 Rat 4 h > 1700 mg/kg Dermal LD50 Rabbit
ETHYLBENZENE 100-41-4	.1 - 1	= 15354 mg/kg Dermal LD50 Rabbit = 17.2 mg/L Inhalation LC50 Rat 4 h = 3500 mg/kg Oral LD50 Rat

Mutagens/Teratogens/Carcinogens:

Possible cancer hazard. Contains material which may cause cancer based on animal data.

Contains ethylbenzene, which has been determined by NTP to be an animal carcinogen with no known relevance to humans. IARC has classified ethylbenzene as possibly carcinogenic to humans (2b) on the basis of sufficient evidence of carcinogenicity in laboratory animals but inadequate evidence of cancer in humans. Contains TIO2 which is listed by IARC as a possible human carcinogen (Group 2B) based on animal data. Neither long term animal studies, nor human epidemiology studies of workers exposed to TIO2 provide an adequate basis to conclude TIO2 is carcinogenic. TIO2 is not classified as a carcinogen by NTP, U.S. OSHA, or the U.S. EPA.

Ingredient Name CAS-No.	Approx. Weight %	California Prop 65 - Reproductive (Female)	California Prop 65 - Carcinogen
ETHYLBENZENE 100-41-4	.1 - 1		Listed. initial date 6/11/04 - carcinogen

Ingredient Name CAS-No.	Approx. Weight %	IARC Group 1 - Human Evidence	IARC Group 2A - Limited Human Data	IARC Group 2B - Sufficient Animal Data
TITANIUM DIOXIDE 13463-67-7	5 - 10			Monograph 47 [1989]
ETHYLBENZENE 100-41-4	.1 - 1			Monograph 77 [2000]

Ingredient Name CAS-No.	Approx. Weight %	OSHA - Hazard Communication Carcinogens	OSHA - Specifically Regulated Carcinogens	ACGIH Carcinogens
TITANIUM DIOXIDE 13463-67-7	5 - 10	Present		

Ingredient Name CAS-No.	Approx. Weight %	OSHA - Hazard Communication Carcinogens	OSHA - Specifically Regulated Carcinogens	ACGIH Carcinogens
ETHYLBENZENE 100-41-4	.1 - 1	Present		A3 Confirmed Animal Carcinogen with Unknown Relevance to Humans

12. ECOLOGICAL DATA

No information on ecology is available.

13. DISPOSAL CONSIDERATIONS

Disposal should be made in accordance with federal, state and local regulations.

14. TRANSPORTATION INFORMATION

U.S. Department of Transportation

UN ID Number (msds):

CONCOM

Proper Shipping Name:

CONSUMER COMMODITY ORM-D [Paint]

U.S Hazmat and/or International DG shipment exceptions

The supplier may apply one of the following exceptions: Combustible Liquid, Consumer Commodity, Limited Quantity, Viscous Liquid, Does Not Sustain Combustion, or others, as allowed under 49CFR Hazmat Regulations. Please consult 49CFR Subchapter C to ensure that subsequent shipments comply with these exceptions.

Reportable Quantity Description:

International Air Transport Association (IATA):

UN/ID No:

UN1950

Proper shipping name:

AEROSOLS, FLAMMABLE

Hazard Class:

2.1

International Maritime Organization (IMO):

UN/ID No:

UN1950

Proper shipping name:

AEROSOLS, FLAMMABLE

Hazard Class:

2.1

Marine Pollutant

No

15. REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS:

Ingredient Name CAS-No.	Approx. Weight %	SARA 302	SARA 313	CERCLA RQ in lbs.
DIMETHYL KETONE- EXEMPT SOLVENT 67-64-1	35 - 40			5000
ISOBUTYL ACETATE 110-19-0	10 - 15			5000
N-BUTYL ALCOHOL 71-36-3	1 - 5		form R reporting required for 1.0% de minimis concentration	5000
XYLENE 1330-20-7	1 - 5		form R reporting required for 1.0% de minimis concentration	100

15. REGULATORY INFORMATION

ETHYLBENZENE 100-41-4	.1 - 1		form R reporting required for 1.0% de minimis concentration	1000
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SARA 311/312 Hazard Class:

Acute: yes
Chronic: yes
Flammability: yes
Reactivity: no
Sudden Pressure: yes

U.S. STATE REGULATIONS:

Right to Know:

The specific chemical identity of a component may be withheld as a trade secret under 34 Pennsylvania Code, Chapter 317.

Pennsylvania Right To Know:

DIMETHYL KETONE- EXEMPT SOLVENT	67-64-1
ACETIC ACID ESTER	88230-35-7
ISOBUTYL ACETATE	110-19-0
XYLENE	1330-20-7
TITANIUM DIOXIDE	13463-67-7
N-BUTYL ALCOHOL	71-36-3
NAPHTHA	64742-89-8
PROPANE	74-98-6
BUTANE	106-97-8

California Proposition 65:

WARNING! This product contains a chemical known in the State of California to cause cancer.

Rule 66 status of product

Not photochemically reactive.

INTERNATIONAL REGULATIONS - Chemical Inventories

US TSCA Inventory:

All components of this product are in compliance with U.S. TSCA Chemical Substance Inventory Requirements.

Canada Domestic Substances List:

All components of this product are listed on the Domestic Substances List.

16. OTHER INFORMATION

HMIS Codes

Health: 2*
Flammability: 4
Reactivity: 1
PPE: X - See Section 8 for Personal Protective Equipment (PPE).

Abbreviations:

OSHA - Occupational Safety and Health Administration, IARC - International Agency for Research on Cancer, NIOSH - National Institute of Occupational Safety and Health, NTP - National Toxicology Program, ACGIH - American Conference of Governmental Industrial Hygienists, SCAQMD - South Coast Air Quality Management District, TSCA - Toxic Substances Control Act, IATA - International Air Transport Association, IMO - International Maritime Organization, DOT - Department of Transportation, NA - Not applicable, NOT ESTAB - Not established, N.A.V. - Not available, RQ - Reportable quantity, WT - Weight, MG/CU M - Milligrams per cubic meter, G/L - Grams per liter, MM - Millimeters, MPPCF - Millions of particles per cubic foot, PPM - parts per million, PPT - parts per thousand, TCC/PM - Tag closed cup / Pensky-Martens, PB - Lead, PEL - Permissible exposure level, TWA - Time Weighted Average, STEL - Short term exposure limit, C - Celsius, F - Fahrenheit.

Disclaimer:

The data on this sheet represent typical values. Since application variables are a major factor in product performance, this information should serve only as a general guide. Valspar assumes no obligation or liability for use of this information. UNLESS VALSPAR AGREES OTHERWISE IN WRITING, VALSPAR MAKES NO WARRANTIES, EXPRESS OR IMPLIED, AND DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR FREEDOM FROM PATENT INFRINGEMENT. VALSPAR WILL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES. Your only remedy for any defect in this product is the replacement of the defective product, or a refund of its purchase price, at our option. This MSDS contains additional information required by the state of Pennsylvania.

Preparation Information:

Prepared By:	Regulatory Affairs Department
Print date:	10/Dec/2013
Revision Date:	10/Dec/2013



Material Safety Data Sheet

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identification

Product ID: 400.0002209.076
Product Name: FL-9 CAUTION ORANGE 6UC
Product Use: Paint product.
Print date: 05/Sep/2013
Revision Date: 05/Sep/2013

Company Identification

The Valspar Corporation
1000 Lake Road
Medina, OH 44256

Manufacturer's Phone: 1-330-725-4511

24-Hour Medical Emergency Phone: 1-888-345-5732

2. HAZARDS IDENTIFICATION

Primary Routes of Exposure:

Inhalation
Ingestion
Skin absorption

Eye Contact:

- Moderate eye irritation

Skin Contact:

- May cause defatting of the skin.
- Causes skin irritation.
- Harmful if absorbed through skin.
- May cause sensitization by skin contact.

Ingestion:

- Irritation of the mouth, throat, and stomach.
- Harmful if swallowed.

- Aspiration hazard if swallowed - can enter lungs and cause damage.

Inhalation:

- Causes respiratory tract irritation.
- Harmful by inhalation.
- Asphyxia
- May cause sensitization by inhalation.
- May cause pulmonary edema.
- May cause damage to nasal and respiratory passages.
- May cause chemical pneumonia.

Acute Other Health Effects:

- May cause frostbite
- Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

Target Organ and Other Health Effects:

- Causes headache, drowsiness or other effects to the central nervous system.
- Kidney injury may occur.
- Cardiac arrhythmias
- Liver injury may occur.
- Unconsciousness

This product contains ingredients that may contribute to the following potential chronic health effects:

- Notice: Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.
- Contains formaldehyde which is considered a potential carcinogen by the Occupational Health and Safety Administration.
- Possible sensitization.

Carcinogens:

- Cancer hazard. Contains material which can cause cancer.

3. COMPOSITION / INFORMATION ON HAZARDOUS INGREDIENTS

Ingredient Name CAS-No.	Approx. Weight %	Chemical Name
NAPHTHA 64742-89-8	30 - 35	SOLVENT NAPHTHA, PETROLEUM, LIGHT ALIPH
PROPRIETARY INERT	20 - 25	PROPRIETARY INERT
PROPANE 74-98-6	15 - 20	Propane
BUTANE 106-97-8	10 - 15	Butane
BUTYL ACETATE 123-86-4	1 - 5	n-Butyl acetate
PROPRIETARY RESIN	1 - 5	PROPRIETARY RESIN
FORMALDEHYDE 50-00-0	0 - .099	Formaldehyde

If this section is blank there are no hazardous components per OSHA guidelines.

4. FIRST AID MEASURES

Eye Contact:

Get medical attention, if symptoms develop or persist. Immediately flush eye(s) with plenty of water. Remove any contact lenses and open eyes wide apart.

Skin Contact:

Remove contaminated clothing and shoes. Wash off immediately with plenty of water for at least 15 minutes. Get medical attention, if symptoms develop or persist.

Ingestion:

Rinse mouth with water. Give one or two glasses of water. Only induce vomiting at the instruction of medical personnel. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. If vomiting occurs, keep head lower than hips to prevent aspiration. Get medical attention immediately.

Inhalation:

Move injured person into fresh air and keep person calm under observation. Get medical attention immediately. For breathing difficulties, oxygen may be necessary. If breathing stops, provide artificial respiration. Do not give direct mouth-to-mouth resuscitation if inhaled. To protect rescuer, use air-viva, oxy-viva or one-way mask. Resuscitate in a well-ventilated area. Place unconscious person on the side in the recovery position and ensure breathing.

Medical conditions aggravated by exposure:

Any respiratory or skin condition.

5. FIRE FIGHTING MEASURES

Flash point (Fahrenheit):	-31
Flash point (Celsius):	-35
Lower explosive limit (%):	1
Upper explosive limit (%):	9.5
Autoignition temperature:	not determined
Sensitivity to impact:	no
Sensitivity to static discharge:	Subject to static discharge hazards. Please see bonding and grounding information in Section 7.
Hazardous combustion products:	See Section 10.

Unusual fire and explosion hazards:

None known.

Extinguishing media:

Carbon dioxide, dry chemical, foam and/or water fog.

Fire fighting procedures:

Firefighters should be equipped with self-contained breathing apparatus and turn out gear. Keep containers and surroundings cool with water spray.

6. ACCIDENTAL RELEASE MEASURES

Action to be taken if material is released or spilled:

Ventilate the area. Avoid breathing dust or vapor. Use self-containing breathing apparatus or airmask for large spills in a confined area. Wipe, scrape or soak up in an inert material and put in a container for disposal. See section 7, "Handling and Storage", for proper container and storage procedures. Remove all sources of ignition. Soak up with inert absorbent material. Use only non-sparking tools. Avoid contact with eyes.

7. HANDLING AND STORAGE

7. HANDLING AND STORAGE

Precautions to be taken in handling and storage:

Keep away from heat, sparks and open flame. - No smoking. Keep container closed when not in use. Do not store above 120 degrees F. (49 degrees C). Based on flash point and vapor pressure, suitable storage should be provided in accordance with OSHA regulation 1910.106, Ontario OH&S regulation 851 section 22. Empty containers may contain product residue, including flammable or explosive vapors. Do not cut, puncture or weld on or near container. All label warnings must be observed until the container has been commercially cleaned or reconditioned. If the product is used near or above the flashpoint, an ignition hazard may be present. Activities, uses, or operations which liberate vapor (such as mixing or free fall of liquids) may also present an ignition hazard. Please ensure containers and other interconnected equipment are properly bonded and grounded at all times.

8. PERSONAL PROTECTIVE EQUIPMENT AND EXPOSURE CONTROLS

Personal Protective Equipment

Eye and face protection:

Wear safety glasses or goggles to protect against exposure.

Skin protection:

Appropriate chemical resistant gloves should be worn.

Other Personnel Protection Data:

To prevent skin contact wear protective clothing covering all exposed areas.

Respiratory protection:

If exposure cannot be controlled below applicable limits, use the appropriate NIOSH approved respirator such as an air purifying respirator with organic vapor cartridge and dust/mist filter. Consult the respirator manufacturer's literature to ensure that the respirator will provide adequate protection. Read and follow all respirator manufacturer's instructions.

Ventilation

Use only in well-ventilated areas. Ensure adequate ventilation, especially in confined areas. Ovens used for curing should contain a fresh air purge to prevent vapours from accumulating and creating a possible explosive mixture. Where the product is used in a hazardous classified area, use explosion-proof electrical/ventilating/lighting/equipment.

Exposure Guidelines

OSHA Permissible Exposure Limits (PEL's)

Ingredient Name CAS-No.	Approx. Weight %	TWA (final)	Ceilings limits (final)	Skin designations
PROPRIETARY INERT	20 - 25	15 mg/m ³ TWA total dust 5 mg/m ³ TWA respirable fraction		
PROPANE 74-98-6	15 - 20	1000 ppm TWA 1800 mg/m ³ TWA		
BUTYL ACETATE 123-86-4	1 - 5	150 ppm TWA 710 mg/m ³ TWA		
FORMALDEHYDE 50-00-0	0 - .099	0.75 ppm TWA		

ACGIH Threshold Limit Value (TLV's)

Ingredient Name CAS-No.	Approx. Weight %	TWA	STEL	Ceiling limits	Skin designations
PROPRIETARY INERT	20 - 25	10 mg/m ³ TWA			

Ingredient Name CAS-No.	Approx. Weight %	TWA	STEL	Ceiling limits	Skin designations
PROPANE 74-98-6	15 - 20	1000 ppm TWA Aliphatic hydrocarbon gases: Alkane C1-C4			
BUTANE 106-97-8	10 - 15	1000 ppm TWA Aliphatic hydrocarbon gases: Alkane C1-C4			
BUTYL ACETATE 123-86-4	1 - 5	150 ppm TWA	200 ppm STEL		
FORMALDEHYDE 50-00-0	0 - .099			0.3 ppm Ceiling	

9. PHYSICAL PROPERTIES

Odor:	Normal for this product type.
Physical State:	Aerosol
pH:	not determined
Vapor pressure:	NOT DETERMINED mmHg @ 68°F (20°C)
Vapor density (air = 1.0):	4
Boiling point:	-44°F (-42°C)
Solubility in water:	not determined
Coefficient of water/oil distribution:	not determined
Density (lbs per US gallon):	7.14
Specific Gravity:	.86
Evaporation rate (butyl acetate = 1.0):	1.4
Flash point (Fahrenheit):	-31
Flash point (Celsius):	-35
Lower explosive limit (%):	1
Upper explosive limit (%):	9.5
Autoignition temperature:	not determined

10. STABILITY AND REACTIVITY

Stability:	Stable under normal conditions.
Conditions to Avoid:	Heat.
Incompatibility:	Strong oxidizing agents
Hazardous Polymerization:	None anticipated.
Hazardous Decomposition Products:	Carbon monoxide and carbon dioxide. Oxides of sulfur. Nitrogen compounds.

Sensitivity to static discharge:	Subject to static discharge hazards. Please see bonding and grounding information in Section 7.
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11. TOXICOLOGICAL INFORMATION

Ingredient Name CAS-No.	Approx. Weight %	NIOSH - Selected LD50s and LC50s
NAPHTHA 64742-89-8	30 - 35	= 3000 mg/kg Dermal LD50 Rabbit = 5000 mg/kg Oral LD50 Mouse
PROPANE 74-98-6	15 - 20	= 658 mg/L Inhalation LC50 Rat 4 h

11. TOXICOLOGICAL INFORMATION

BUTANE 106-97-8	10 - 15	= 658 mg/L Inhalation LC50 Rat 4 h
BUTYL ACETATE 123-86-4	1 - 5	= 10768 mg/kg Oral LD50 Rat = 390 ppm Inhalation LC50 Rat 4 h > 17600 mg/kg Dermal LD50 Rabbit
FORMALDEHYDE 50-00-0	0 - .099	= 0.578 mg/L Inhalation LC50 Rat 4 h = 500 mg/kg Oral LD50 Rat

Mutagens/Teratogens/Carcinogens:

Possible mutagen

Cancer hazard. Contains material which can cause cancer.

Ingredient Name CAS-No.	Approx. Weight %	California Prop 65 - Reproductive (Female)	California Prop 65 - Carcinogen
FORMALDEHYDE 50-00-0	0 - .099		Listed. initial date 1/1/88 - carcinogen

Ingredient Name CAS-No.	Approx. Weight %	IARC Group 1 - Human Evidence	IARC Group 2A - Limited Human Data	IARC Group 2B - Sufficient Animal Data
FORMALDEHYDE 50-00-0	0 - .099	Supplement 7 [1987] Monograph 62 [1995] Supplement 7 [1987]		

Ingredient Name CAS-No.	Approx. Weight %	NTP Known Carcinogens	NTP Suspect Carcinogens
FORMALDEHYDE 50-00-0	0 - .099		Reasonably Anticipated To Be A Human Carcinogen

Ingredient Name CAS-No.	Approx. Weight %	OSHA - Hazard Communication Carcinogens	OSHA - Specifically Regulated Carcinogens	ACGIH Carcinogens
FORMALDEHYDE 50-00-0	0 - .099	Present	Irritant and potential cancer hazard - see 29 CFR 1910.1048	A2 Suspected Human Carcinogen

12. ECOLOGICAL DATA

No information on ecology is available.

13. DISPOSAL CONSIDERATIONS

Disposal should be made in accordance with federal, state and local regulations.

14. TRANSPORTATION INFORMATION

U.S. Department of Transportation

UN ID Number (msds):

Proper Shipping Name:

CONCOM

CONSUMER COMMODITY ORM-D [Paint]

U.S Hazmat and/or International DG shipment exceptions

The supplier may apply one of the following exceptions: Combustible Liquid, Consumer Commodity, Limited Quantity, Viscous Liquid, Does Not Sustain Combustion, or others, as allowed under 49CFR Hazmat Regulations. Please consult 49CFR Subchapter C to ensure that subsequent shipments comply with these exceptions.

Reportable Quantity Description:**International Air Transport Association (IATA):**

UN/ID No: UN1950
Proper shipping name: AEROSOLS, FLAMMABLE
Hazard Class: 2.1

International Maritime Organization (IMO):

UN/ID No: UN1950
Proper shipping name: AEROSOLS, FLAMMABLE
Hazard Class: 2.1
Marine Pollutant: No

15. REGULATORY INFORMATION**U.S. FEDERAL REGULATIONS:**

Ingredient Name CAS-No.	Approx. Weight %	SARA 302	SARA 313	CERCLA RQ in lbs.
BUTYL ACETATE 123-86-4	1 - 5			5000
FORMALDEHYDE 50-00-0	0 - .099	EPCRA RQ = 100 lb	form R reporting required for 0.1% de minimis concentration	100

SARA 311/312 Hazard Class:

Acute: yes
Chronic: yes
Flammability: yes
Reactivity: no
Sudden Pressure: yes

U.S. STATE REGULATIONS:**Right to Know:**

The specific chemical identity of a component may be withheld as a trade secret under 34 Pennsylvania Code, Chapter 317.

Pennsylvania Right To Know:

PROPANE 74-98-6
BUTANE 106-97-8
PROPRIETARY INERT Trade Secret
BUTYL ACETATE 123-86-4
PROPRIETARY RESIN Trade Secret
NAPHTHA 64742-89-8

Additional Non-Hazardous Materials

DYED PROPRIETARY POLYMER UNKNOWN
PROPRIETARY RESIN Trade Secret

California Proposition 65:

WARNING! This product contains a chemical known in the State of California to cause cancer.

Rule 66 status of product

Not photochemically reactive.

INTERNATIONAL REGULATIONS - Chemical Inventories

US TSCA Inventory:

All components of this product are in compliance with U.S. TSCA Chemical Substance Inventory Requirements.

Canada Domestic Substances List:

All components of this product are listed on the Domestic Substances List.

16. OTHER INFORMATION**HMIS Codes**

Health:	2*
Flammability:	4
Reactivity:	1
PPE:	X - See Section 8 for Personal Protective Equipment (PPE).

Abbreviations:

OSHA - Occupational Safety and Health Administration, IARC - International Agency for Research on Cancer, NIOSH - National Institute of Occupational Safety and Health, NTP - National Toxicology Program, ACGIH - American Conference of Governmental Industrial Hygienists, SCAQMD - South Coast Air Quality Management District, TSCA - Toxic Substances Control Act, IATA - International Air Transport Association, IMO - International Maritime Organization, DOT - Department of Transportation, NA - Not applicable, NOT ESTAB - Not established, N.A.V. - Not available, RQ - Reportable quantity, WT - Weight, MG/CU M - Milligrams per cubic meter, G/L - Grams per liter, MM - Millimeters, MPPCF - Millions of particles per cubic foot, PPM - parts per million, PPT - parts per thousand, TCC/PM - Tag closed cup / Pensky-Martens, PB - Lead, PEL - Permissible exposure level, TWA - Time Weighted Average, STEL - Short term exposure limit, C - Celsius, F - Fahrenheit.

Disclaimer:

The data on this sheet represent typical values. Since application variables are a major factor in product performance, this information should serve only as a general guide. Valspar assumes no obligation or liability for use of this information. UNLESS VALSPAR AGREES OTHERWISE IN WRITING, VALSPAR MAKES NO WARRANTIES, EXPRESS OR IMPLIED, AND DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR FREEDOM FROM PATENT INFRINGEMENT. VALSPAR WILL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES. Your only remedy for any defect in this product is the replacement of the defective product, or a refund of its purchase price, at our option. This MSDS contains additional information required by the state of Pennsylvania.

Preparation Information:

Prepared By:	Regulatory Affairs Department
Print date:	05/Sep/2013
Revision Date:	05/Sep/2013

Material Safety Data Sheet

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identification

Product ID: 400.0000615.076
Product Name: 615 BUMPER CHROME 6UC
Product Use: Paint product.
Print date: 13/Nov/2013
Revision Date: 15/Oct/2013

Company Identification

The Valspar Corporation
1000 Lake Road
Medina, OH 44256

Manufacturer's Phone: 1-330-725-4511

24-Hour Medical Emergency Phone: 1-888-345-5732

2. HAZARDS IDENTIFICATION

Primary Routes of Exposure:

Inhalation
Ingestion
Skin absorption

Eye Contact:

- Moderate eye irritation
- Risk of serious damage to eyes.

Skin Contact:

- Causes skin irritation.

Ingestion:

- Irritation of the mouth, throat, and stomach.
- Aspiration hazard if swallowed - can enter lungs and cause damage.

Inhalation:

- Causes respiratory tract irritation.
- Harmful by inhalation.
- Asphyxia

Acute Other Health Effects:

- May cause frostbite
- Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

Target Organ and Other Health Effects:

- Causes headache, drowsiness or other effects to the central nervous system.
- Liver injury may occur.
- Cardiac arrhythmias
- Kidney injury may occur.

This product contains ingredients that may contribute to the following potential chronic health effects:

- Notice: Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

Teratogens:

- May cause birth defects.
- Female reproductive toxin.

3. COMPOSITION / INFORMATION ON HAZARDOUS INGREDIENTS

Ingredient Name CAS-No.	Approx. Weight %	Chemical Name
ETHYLBENZENE 100-41-4	30 - 35	Ethyl benzene
PROPANE 74-98-6	15 - 20	Propane
TOLUENE 108-88-3	10 - 15	Toluene
BUTANE 106-97-8	10 - 15	Butane
STODDARD SOLVENT 8052-41-3	1 - 5	Stoddard solvent
ALUMINUM 7429-90-5	1 - 5	Aluminum

If this section is blank there are no hazardous components per OSHA guidelines.

4. FIRST AID MEASURES**Eye Contact:**

Remove any contact lenses and open eyes wide apart. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If medical assistance is not immediately available, flush an additional 15 minutes. Get medical attention immediately.

Skin Contact:

Remove contaminated clothing and shoes. Wash off immediately with plenty of water for at least 15 minutes. Get medical attention, if symptoms develop or persist.

Ingestion:

Rinse mouth with water. Give one or two glasses of water. Only induce vomiting at the instruction of medical personnel. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. If vomiting occurs, keep head lower than hips to prevent aspiration. Get medical attention immediately.

Inhalation:

Move injured person into fresh air and keep person calm under observation. Get medical attention immediately. For breathing difficulties, oxygen may be necessary. If breathing stops, provide artificial respiration. Do not give direct mouth-to-mouth resuscitation if inhaled. To protect rescuer, use air-viva, oxy-viva or one-way mask. Resuscitate in a well-ventilated area.

Medical conditions aggravated by exposure:

Any respiratory or skin condition.

5. FIRE FIGHTING MEASURES

Flash point (Fahrenheit):	-31
Flash point (Celsius):	-35
Lower explosive limit (%):	1
Upper explosive limit (%):	9.5
Autoignition temperature:	not determined
Sensitivity to impact:	no
Sensitivity to static discharge:	Subject to static discharge hazards. Please see bonding and grounding information in Section 7.
Hazardous combustion products:	See Section 10.

Unusual fire and explosion hazards:

Contaminated rags, wipes, saw dust, etc., may catch fire spontaneously. Store waste under water in closed metal containers or in approved self-closing containers designed to prevent spontaneous combustion until disposed of in compliance with applicable regulations. Oxidizing Material

Extinguishing media:

Carbon dioxide, dry chemical, foam and/or water fog.

Fire fighting procedures:

Firefighters should be equipped with self-contained breathing apparatus and turn out gear. Keep containers and surroundings cool with water spray.

6. ACCIDENTAL RELEASE MEASURES

Action to be taken if material is released or spilled:

Ventilate the area. Avoid breathing dust or vapor. Use self-containing breathing apparatus or airmask for large spills in a confined area. Wipe, scrape or soak up in an inert material and put in a container for disposal. See section 7, "Handling and Storage", for proper container and storage procedures. Remove all sources of ignition. Soak up with inert absorbent material. Use only non-sparking tools. Avoid contact with eyes.

7. HANDLING AND STORAGE

Precautions to be taken in handling and storage:

This coating contains aluminum pigment, store in a dry area. Aluminum may react with water, acids and caustics slowly producing gas and heat. In a sealed drum this may cause a pressure build-up over a period of time and drum should be vented before opening. Keep away from heat, sparks and open flame. - No smoking. Keep container closed when not in use. Do not store above 120 degrees F. (49 degrees C). Based on flash point and vapor pressure, suitable storage should be provided in accordance with OSHA regulation 1910.106, Ontario OH&S regulation 851 section 22. Empty containers may contain product residue, including flammable or explosive vapors. Do not cut, puncture or weld on or near container. All label warnings must be observed until the container has been commercially cleaned or reconditioned. If the product is used near or above the flashpoint, an ignition hazard may be present. Activities, uses, or operations which liberate vapor (such as mixing or free fall of liquids) may also present an ignition hazard. Please ensure containers and other interconnected equipment are properly bonded and grounded at all times.

8. PERSONAL PROTECTIVE EQUIPMENT AND EXPOSURE CONTROLS

Personal Protective Equipment**Eye and face protection:**

Wear chemical goggles with splash shields or face shield. Contact lenses should not be worn when working with chemicals because contact lenses may contribute to the severity of an eye injury in case of exposure.

Skin protection:

Appropriate chemical resistant gloves should be worn.

Other Personnel Protection Data:

Usual industrial work clothes. Ensure that eyewash stations and safety showers are close to the workstation location.

Respiratory protection:

If exposure cannot be controlled below applicable limits, use the appropriate NIOSH approved respirator such as an air purifying respirator with organic vapor cartridge and dust/mist filter. Consult the respirator manufacturer's literature to ensure that the respirator will provide adequate protection. Read and follow all respirator manufacturer's instructions.

Ventilation

Use only in well-ventilated areas. Ensure adequate ventilation, especially in confined areas. Ovens used for curing should contain a fresh air purge to prevent vapours from accumulating and creating a possible explosive mixture. Where the product is used in a hazardous classified area, use explosion-proof electrical/ventilating/lighting/equipment.

Exposure Guidelines

OSHA Permissible Exposure Limits (PEL's)

Ingredient Name CAS-No.	Approx. Weight %	TWA (final)	Ceilings limits (final)	Skin designations
ETHYLBENZENE 100-41-4	30 - 35	100 ppm TWA 435 mg/m ³ TWA		
PROPANE 74-98-6	15 - 20	1000 ppm TWA 1800 mg/m ³ TWA		
TOLUENE 108-88-3	10 - 15	200 ppm TWA	= 300 ppm Ceiling	
STODDARD SOLVENT 8052-41-3	1 - 5	2900 mg/m ³ TWA 500 ppm TWA		
ALUMINUM 7429-90-5	1 - 5	15 mg/m ³ TWA dust total 5 mg/m ³ TWA respirable fraction		

ACGIH Threshold Limit Value (TLV's)

Ingredient Name CAS-No.	Approx. Weight %	TWA	STEL	Ceiling limits	Skin designations
ETHYLBENZENE 100-41-4	30 - 35	100 ppm TWA	125 ppm STEL		
PROPANE 74-98-6	15 - 20	1000 ppm TWA Aliphatic hydrocarbon gases: Alkane C1-C4			
TOLUENE 108-88-3	10 - 15	20 ppm TWA			Can be absorbed through the skin.
BUTANE 106-97-8	10 - 15	1000 ppm TWA Aliphatic hydrocarbon gases: Alkane C1-C4			
STODDARD SOLVENT 8052-41-3	1 - 5	100 ppm TWA			
ALUMINUM 7429-90-5	1 - 5	1 mg/m ³ TWA respirable fraction			

9. PHYSICAL PROPERTIES

Odor:	Normal for this product type.
Physical State:	Aerosol
pH:	not determined
Vapor pressure:	NOT DETERMINED mmHg @ 68°F (20°C)
Vapor density (air = 1.0):	5
Boiling point:	-44°F (-42°C)
Solubility in water:	not determined
Coefficient of water/oil distribution:	not determined
Density (lbs per US gallon):	6.32
Specific Gravity:	.76
Evaporation rate (butyl acetate = 1.0):	2.24
Flash point (Fahrenheit):	-31
Flash point (Celsius):	-35
Lower explosive limit (%):	1
Upper explosive limit (%):	9.5
Autoignition temperature:	not determined

10. STABILITY AND REACTIVITY

Stability:	Stable under normal conditions.
Conditions to Avoid:	This product may react with water, acids, and caustics, slowly producing gas and heat. Heat.
Incompatibility:	Strong oxidizing agents
Hazardous Polymerization:	None anticipated.
Hazardous Decomposition Products:	Carbon monoxide and carbon dioxide.
Sensitivity to static discharge:	Subject to static discharge hazards. Please see bonding and grounding information in Section 7.

11. TOXICOLOGICAL INFORMATION

Ingredient Name CAS-No.	Approx. Weight %	NIOSH - Selected LD50s and LC50s
ETHYLBENZENE 100-41-4	30 - 35	= 15354 mg/kg Dermal LD50 Rabbit = 17.2 mg/L Inhalation LC50 Rat 4 h = 3500 mg/kg Oral LD50 Rat
PROPANE 74-98-6	15 - 20	= 658 mg/L Inhalation LC50 Rat 4 h
TOLUENE 108-88-3	10 - 15	= 12.5 mg/L Inhalation LC50 Rat 4 h = 12124 mg/kg Dermal LD50 Rat = 636 mg/kg Oral LD50 Rat = 8390 mg/kg Dermal LD50 Rabbit > 26700 ppm Inhalation LC50 Rat 1 h
BUTANE 106-97-8	10 - 15	= 658 mg/L Inhalation LC50 Rat 4 h

Mutagens/Teratogens/Carcinogens:

May cause birth defects. Female reproductive toxin.

Contains ethylbenzene, which has been determined by NTP to be an animal carcinogen with no known relevance to humans. IARC has classified ethylbenzene as possibly carcinogenic to humans (2b) on the basis of sufficient evidence of carcinogenicity in laboratory animals but inadequate evidence of cancer in humans.

Ingredient Name CAS-No.	Approx. Weight %	California Prop 65 - Developmental Toxicity	California Prop 65 - Reproductive (Male)
TOLUENE 108-88-3	10 - 15	Listed. initial date 1/1/91 - developmental toxicity	

Ingredient Name CAS-No.	Approx. Weight %	California Prop 65 - Reproductive (Female)	California Prop 65 - Carcinogen
ETHYLBENZENE 100-41-4	30 - 35		Listed. initial date 6/11/04 - carcinogen
TOLUENE 108-88-3	10 - 15	Listed. Initial date 8/1/09 - female reproductive toxicity	

Ingredient Name CAS-No.	Approx. Weight %	IARC Group 1 - Human Evidence	IARC Group 2A - Limited Human Data	IARC Group 2B - Sufficient Animal Data
ETHYLBENZENE 100-41-4	30 - 35			Monograph 77 [2000]

Ingredient Name CAS-No.	Approx. Weight %	OSHA - Hazard Communication Carcinogens	OSHA - Specifically Regulated Carcinogens	ACGIH Carcinogens
ETHYLBENZENE 100-41-4	30 - 35	Present		A3 Confirmed Animal Carcinogen with Unknown Relevance to Humans

12. ECOLOGICAL DATA

No information on ecology is available.

13. DISPOSAL CONSIDERATIONS

Disposal should be made in accordance with federal, state and local regulations.

14. TRANSPORTATION INFORMATION

U.S. Department of Transportation

UN ID Number (msds):

CONCOM

Proper Shipping Name:

CONSUMER COMMODITY ORM-D [Paint]

U.S Hazmat and/or International DG shipment exceptions

The supplier may apply one of the following exceptions: Combustible Liquid, Consumer Commodity, Limited Quantity, Viscous Liquid, Does Not Sustain Combustion, or others, as allowed under 49CFR Hazmat Regulations. Please consult 49CFR Subchapter C to ensure that subsequent shipments comply with these exceptions.

Reportable Quantity Description:

International Air Transport Association (IATA):

UN/ID No:

UN1950

Proper shipping name:

AEROSOLS, FLAMMABLE

Hazard Class:

2.1

International Maritime Organization (IMO):

UN/ID No:

UN1950

Proper shipping name:

AEROSOLS, FLAMMABLE

Hazard Class:

2.1

Marine Pollutant

No

15. REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS:

Ingredient Name CAS-No.	Approx. Weight %	SARA 302	SARA 313	CERCLA RQ in lbs.
ETHYLBENZENE 100-41-4	30 - 35		form R reporting required for 1.0% de minimis concentration	1000
TOLUENE 108-88-3	10 - 15		form R reporting required for 1.0% de minimis concentration	1000
ALUMINUM 7429-90-5	1 - 5		Form R reporting required for 1.0 % de minimis concentration	

SARA 311/312 Hazard Class:

Acute: yes
Chronic: yes
Flammability: yes
Reactivity: no
Sudden Pressure: yes

U.S. STATE REGULATIONS:

Right to Know:

The specific chemical identity of a component may be withheld as a trade secret under 34 Pennsylvania Code, Chapter 317.

Pennsylvania Right To Know:

STODDARD SOLVENT	8052-41-3
TOLUENE	108-88-3
ETHYLBENZENE	100-41-4
ALUMINUM	7429-90-5
PROPANE	74-98-6
BUTANE	106-97-8

Additional Non-Hazardous Materials

PROPRIETARY RESIN	Trade Secret
PROPRIETARY RESIN	Trade Secret

California Proposition 65:

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

Rule 66 status of product

Photochemically reactive.

INTERNATIONAL REGULATIONS - Chemical Inventories

US TSCA Inventory:

All components of this product are in compliance with U.S. TSCA Chemical Substance Inventory Requirements.

Canada Domestic Substances List:

All components of this product are listed on the Domestic Substances List.

16. OTHER INFORMATION

HMIS Codes

Health:	2*
Flammability:	4
Reactivity:	1
PPE:	X - See Section 8 for Personal Protective Equipment (PPE).

Abbreviations:

OSHA - Occupational Safety and Health Administration, IARC - International Agency for Research on Cancer, NIOSH - National Institute of Occupational Safety and Health, NTP - National Toxicology Program, ACGIH - American Conference of Governmental Industrial Hygienists, SCAQMD - South Coast Air Quality Management District, TSCA - Toxic Substances Control Act, IATA - International Air Transport Association, IMO - International Maritime Organization, DOT - Department of Transportation, NA - Not applicable, NOT ESTAB - Not established, N.A.V. - Not available, RQ - Reportable quantity, WT - Weight, MG/CU M - Milligrams per cubic meter, G/L - Grams per liter, MM - Millimeters, MPPCF - Millions of particles per cubic foot, PPM - parts per million, PPT - parts per thousand, TCC/PM - Tag closed cup / Pensky-Martens, PB - Lead, PEL - Permissible exposure level, TWA - Time Weighted Average, STEL - Short term exposure limit, C - Celsius, F - Fahrenheit.

Disclaimer:

The data on this sheet represent typical values. Since application variables are a major factor in product performance, this information should serve only as a general guide. Valspar assumes no obligation or liability for use of this information. UNLESS VALSPAR AGREES OTHERWISE IN WRITING, VALSPAR MAKES NO WARRANTIES, EXPRESS OR IMPLIED, AND DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR FREEDOM FROM PATENT INFRINGEMENT. VALSPAR WILL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES. Your only remedy for any defect in this product is the replacement of the defective product, or a refund of its purchase price, at our option. This MSDS contains additional information required by the state of Pennsylvania.

Preparation Information:

Prepared By:	Regulatory Affairs Department
Print date:	13/Nov/2013
Revision Date:	15/Oct/2013



Material Safety Data Sheet

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identification

Product ID:	405.0000198.076	
Product Name:	198 HOT ROD YELLOW	2U
Product Use:	Paint product.	
Print date:	23/Jan/2014	
Revision Date:	23/Jan/2014	

Company Identification

The Valspar Corporation
1000 Lake Road
Medina, OH 44256

Manufacturer's Phone: 1-330-725-4511

24-Hour Medical Emergency Phone: 1-888-345-5732

2. HAZARDS IDENTIFICATION

Primary Routes of Exposure:

Inhalation
Ingestion
Skin absorption

Eye Contact:

- Severe eye irritation

Skin Contact:

- Causes skin irritation.
- May cause defatting of the skin.
- Dermatitis
- Can be absorbed through skin.

Ingestion:

- Irritation of the mouth, throat, and stomach.
- Harmful if swallowed.

- Aspiration hazard if swallowed - can enter lungs and cause damage.

Inhalation:

- Causes respiratory tract irritation.
- Harmful by inhalation.
- Asphyxia

Acute Other Health Effects:

- May cause frostbite
- Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

Target Organ and Other Health Effects:

- Causes headache, drowsiness or other effects to the central nervous system.
- Liver injury may occur.
- Cardiac arrhythmias
- Kidney injury may occur.
- Blood disorders

This product contains ingredients that may contribute to the following potential chronic health effects:

- Notice: Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

Carcinogens:

- Possible cancer hazard. Contains material which may cause cancer based on animal data.

3. COMPOSITION / INFORMATION ON HAZARDOUS INGREDIENTS

Ingredient Name CAS-No.	Approx. Weight %	Chemical Name
DIMETHYL KETONE- EXEMPT SOLVENT 67-64-1	40 - 45	Acetone
PROPANE 74-98-6	10 - 15	Propane
XYLENE 1330-20-7	5 - 10	Xylenes (o-, m-, p- isomers)
BUTANE 106-97-8	5 - 10	Butane
ETHYL 3- ETHOXYPROPIONATE 763-69-9	1 - 5	Ethyl 3-ethoxypropionate
ETHYL ACETATE 141-78-6	1 - 5	Acetic acid ethyl ester
ETHYLBENZENE 100-41-4	1 - 5	Ethyl benzene
METHYL ETHYL KETONE 78-93-3	1 - 5	Methyl ethyl ketone
PROPRIETARY RESIN	1 - 5	PROPRIETARY RESIN
TITANIUM DIOXIDE 13463-67-7	1 - 5	Titanium dioxide

If this section is blank there are no hazardous components per OSHA guidelines.

4. FIRST AID MEASURES

Eye Contact:

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. If medical assistance is not immediately available, flush an additional 15 minutes. Get medical attention immediately.

Skin Contact:

Remove contaminated clothing and shoes. Wash off immediately with plenty of water for at least 15 minutes. Get medical attention, if symptoms develop or persist.

Ingestion:

Rinse mouth with water. Give one or two glasses of water. Only induce vomiting at the instruction of medical personnel. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. If vomiting occurs, keep head lower than hips to prevent aspiration. Get medical attention immediately.

Inhalation:

Move injured person into fresh air and keep person calm under observation. Get medical attention immediately. For breathing difficulties, oxygen may be necessary. If breathing stops, provide artificial respiration. Do not give direct mouth-to-mouth resuscitation if inhaled. To protect rescuer, use air-viva, oxy-viva or one-way mask. Resuscitate in a well-ventilated area.

Medical conditions aggravated by exposure:

Any respiratory or skin condition.

5. FIRE FIGHTING MEASURES

Flash point (Fahrenheit):	-31
Flash point (Celsius):	-35
Lower explosive limit (%):	1
Upper explosive limit (%):	13
Autoignition temperature:	not determined
Sensitivity to impact:	no
Sensitivity to static discharge:	Subject to static discharge hazards. Please see bonding and grounding information in Section 7.
Hazardous combustion products:	See Section 10.

Unusual fire and explosion hazards:

Contaminated rags, wipes, saw dust, etc., may catch fire spontaneously. Store waste under water in closed metal containers or in approved self-closing containers designed to prevent spontaneous combustion until disposed of in compliance with applicable regulations. Oxidizing Material

Extinguishing media:

Carbon dioxide, dry chemical, foam and/or water fog.

Fire fighting procedures:

Firefighters should be equipped with self-contained breathing apparatus and turn out gear. Keep containers and surroundings cool with water spray.

6. ACCIDENTAL RELEASE MEASURES

Action to be taken if material is released or spilled:

Ventilate the area. Avoid breathing dust or vapor. Use self-containing breathing apparatus or airmask for large spills in a confined area. Wipe, scrape or soak up in an inert material and put in a container for disposal. See section 7, "Handling and Storage", for proper container and storage procedures. Remove all sources of ignition. Soak up with inert absorbent material. Use only non-sparking tools. Avoid contact with eyes.

7. HANDLING AND STORAGE

7. HANDLING AND STORAGE

Precautions to be taken in handling and storage:

Keep away from heat, sparks and open flame. - No smoking. Keep container closed when not in use. Do not store above 120 degrees F. (49 degrees C). Based on flash point and vapor pressure, suitable storage should be provided in accordance with OSHA regulation 1910.106, Ontario OH&S regulation 851 section 22. Empty containers may contain product residue, including flammable or explosive vapors. Do not cut, puncture or weld on or near container. All label warnings must be observed until the container has been commercially cleaned or reconditioned. If the product is used near or above the flashpoint, an ignition hazard may be present. Activities, uses, or operations which liberate vapor (such as mixing or free fall of liquids) may also present an ignition hazard. Please ensure containers and other interconnected equipment are properly bonded and grounded at all times.

8. PERSONAL PROTECTIVE EQUIPMENT AND EXPOSURE CONTROLS

Personal Protective Equipment

Eye and face protection:

Wear safety glasses or goggles to protect against exposure.

Skin protection:

Appropriate chemical resistant gloves should be worn.

Other Personnel Protection Data:

To prevent skin contact wear protective clothing covering all exposed areas.

Respiratory protection:

If exposure cannot be controlled below applicable limits, use the appropriate NIOSH approved respirator such as an air purifying respirator with organic vapor cartridge and dust/mist filter. Consult the respirator manufacturer's literature to ensure that the respirator will provide adequate protection. Read and follow all respirator manufacturer's instructions.

Ventilation

Use only in well-ventilated areas. Ensure adequate ventilation, especially in confined areas. Ovens used for curing should contain a fresh air purge to prevent vapours from accumulating and creating a possible explosive mixture. Where the product is used in a hazardous classified area, use explosion-proof electrical/ventilating/lighting/equipment.

Exposure Guidelines

OSHA Permissible Exposure Limits (PEL's)

Ingredient Name CAS-No.	Approx. Weight %	TWA (final)	Ceilings limits (final)	Skin designations
DIMETHYL KETONE- EXEMPT SOLVENT 67-64-1	40 - 45	1000 ppm TWA 2400 mg/m ³ TWA		
PROPANE 74-98-6	10 - 15	1000 ppm TWA 1800 mg/m ³ TWA		
XYLENE 1330-20-7	5 - 10	100 ppm TWA 435 mg/m ³ TWA		
ETHYL ACETATE 141-78-6	1 - 5	1400 mg/m ³ TWA 400 ppm TWA		
ETHYLBENZENE 100-41-4	1 - 5	100 ppm TWA 435 mg/m ³ TWA		
METHYL ETHYL KETONE 78-93-3	1 - 5	200 ppm TWA 590 mg/m ³ TWA		
TITANIUM DIOXIDE 13463-67-7	1 - 5	15 mg/m ³ TWA dust total		

ACGIH Threshold Limit Value (TLV's)

Ingredient Name CAS-No.	Approx. Weight %	TWA	STEL	Ceiling limits	Skin designations
DIMETHYL KETONE- EXEMPT SOLVENT 67-64-1	40 - 45	500 ppm TWA	750 ppm STEL		
PROPANE 74-98-6	10 - 15	1000 ppm TWA Aliphatic hydrocarbon gases: Alkane C1-C4			
XYLENE 1330-20-7	5 - 10	100 ppm TWA	150 ppm STEL		
BUTANE 106-97-8	5 - 10	1000 ppm TWA Aliphatic hydrocarbon gases: Alkane C1-C4			
ETHYL ACETATE 141-78-6	1 - 5	400 ppm TWA			
ETHYLBENZENE 100-41-4	1 - 5	100 ppm TWA	125 ppm STEL		
METHYL ETHYL KETONE 78-93-3	1 - 5	200 ppm TWA	300 ppm STEL		
TITANIUM DIOXIDE 13463-67-7	1 - 5	10 mg/m ³ TWA			

9. PHYSICAL PROPERTIES

Odor:	Normal for this product type.
Physical State:	Aerosol
pH:	not determined
Vapor pressure:	NOT DETERMINED mmHg @ 68°F (20°C)
Vapor density (air = 1.0):	5.0
Boiling point:	-44°F (-42°C)
Solubility in water:	not determined
Coefficient of water/oil distribution:	not determined
Density (lbs per US gallon):	6.44
Specific Gravity:	.77
Evaporation rate (butyl acetate = 1.0):	6.2
Flash point (Fahrenheit):	-31
Flash point (Celsius):	-35
Lower explosive limit (%):	1
Upper explosive limit (%):	13
Autoignition temperature:	not determined

10. STABILITY AND REACTIVITY

Stability:	Stable under normal conditions.
Conditions to Avoid:	Heat.
Incompatibility:	Strong oxidizing agents
Hazardous Polymerization:	None anticipated.
Hazardous Decomposition Products:	Carbon monoxide and carbon dioxide.

Sensitivity to static discharge:	Subject to static discharge hazards. Please see bonding and grounding information in Section 7.
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11. TOXICOLOGICAL INFORMATION

Ingredient Name CAS-No.	Approx. Weight %	NIOSH - Selected LD50s and LC50s
DIMETHYL KETONE- EXEMPT SOLVENT 67-64-1	40 - 45	= 5800 mg/kg Oral LD50 Rat
PROPANE 74-98-6	10 - 15	= 658 mg/L Inhalation LC50 Rat 4 h
XYLENE 1330-20-7	5 - 10	= 4300 mg/kg Oral LD50 Rat = 47635 mg/L Inhalation LC50 Rat 4 h = 5000 ppm Inhalation LC50 Rat 4 h > 1700 mg/kg Dermal LD50 Rabbit
BUTANE 106-97-8	5 - 10	= 658 mg/L Inhalation LC50 Rat 4 h
ETHYL 3- ETHOXYPROPIONATE 763-69-9	1 - 5	= 10 mL/kg Dermal LD50 Rabbit = 3200 mg/kg Oral LD50 Rat
ETHYL ACETATE 141-78-6	1 - 5	= 5620 mg/kg Oral LD50 Rat > 18000 mg/kg Dermal LD50 Rabbit > 20 mL/kg Dermal LD50 Rabbit
ETHYLBENZENE 100-41-4	1 - 5	= 15354 mg/kg Dermal LD50 Rabbit = 17.2 mg/L Inhalation LC50 Rat 4 h = 3500 mg/kg Oral LD50 Rat
METHYL ETHYL KETONE 78-93-3	1 - 5	= 2737 mg/kg Oral LD50 Rat = 32 g/m ³ Inhalation LC50 Mouse 4 h = 6480 mg/kg Dermal LD50 Rabbit
PROPRIETARY RESIN	1 - 5	> 5 g/kg Oral LD50 Rat
TITANIUM DIOXIDE 13463-67-7	1 - 5	> 10000 mg/kg Oral LD50 Rat

Mutagens/Teratogens/Carcinogens:

Possible cancer hazard. Contains material which may cause cancer based on animal data.

Contains ethylbenzene, which has been determined by NTP to be an animal carcinogen with no known relevance to humans. IARC has classified ethylbenzene as possibly carcinogenic to humans (2b) on the basis of sufficient evidence of carcinogenicity in laboratory animals but inadequate evidence of cancer in humans. Contains TIO2 which is listed by IARC as a possible human carcinogen (Group 2B) based on animal data. Neither long term animal studies, nor human epidemiology studies of workers exposed to TIO2 provide an adequate basis to conclude TIO2 is carcinogenic. TIO2 is not classified as a carcinogen by NTP, U.S. OSHA, or the U.S. EPA.

Ingredient Name CAS-No.	Approx. Weight %	California Prop 65 - Reproductive (Female)	California Prop 65 - Carcinogen
ETHYLBENZENE 100-41-4	1 - 5		Listed. initial date 6/11/04 - carcinogen

Ingredient Name CAS-No.	Approx. Weight %	IARC Group 1 - Human Evidence	IARC Group 2A - Limited Human Data	IARC Group 2B - Sufficient Animal Data
ETHYLBENZENE 100-41-4	1 - 5			Monograph 77 [2000]
TITANIUM DIOXIDE 13463-67-7	1 - 5			Monograph 47 [1989]

Ingredient Name CAS-No.	Approx. Weight %	OSHA - Hazard Communication Carcinogens	OSHA - Specifically Regulated Carcinogens	ACGIH Carcinogens
ETHYLBENZENE 100-41-4	1 - 5	Present		A3 Confirmed Animal Carcinogen with Unknown Relevance to Humans
TITANIUM DIOXIDE 13463-67-7	1 - 5	Present		

12. ECOLOGICAL DATA

No information on ecology is available.

13. DISPOSAL CONSIDERATIONS

Disposal should be made in accordance with federal, state and local regulations.

14. TRANSPORTATION INFORMATION

U.S. Department of Transportation

UN ID Number (msds):

Proper Shipping Name:

CONCOM

CONSUMER COMMODITY ORM-D [Paint]

U.S Hazmat and/or International DG shipment exceptions

The supplier may apply one of the following exceptions: Combustible Liquid, Consumer Commodity, Limited Quantity, Viscous Liquid, Does Not Sustain Combustion, or others, as allowed under 49CFR Hazmat Regulations. Please consult 49CFR Subchapter C to ensure that subsequent shipments comply with these exceptions.

Reportable Quantity Description:

International Air Transport Association (IATA):

UN/ID No:

Proper shipping name:

Hazard Class:

UN1950

AEROSOLS, FLAMMABLE

2.1

International Maritime Organization (IMO):

UN/ID No:

Proper shipping name:

Hazard Class:

Marine Pollutant

UN1950

AEROSOLS, FLAMMABLE

2.1

No

15. REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS:

Ingredient Name CAS-No.	Approx. Weight %	SARA 302	SARA 313	CERCLA RQ in lbs.
DIMETHYL KETONE- EXEMPT SOLVENT 67-64-1	40 - 45			5000
XYLENE 1330-20-7	5 - 10		form R reporting required for 1.0% de minimis concentration	100
ETHYL ACETATE 141-78-6	1 - 5			5000

15. REGULATORY INFORMATION

ETHYLBENZENE 100-41-4	1 - 5		form R reporting required for 1.0% de minimis concentration	1000
METHYL ETHYL KETONE 78-93-3	1 - 5			5000

SARA 311/312 Hazard Class:

Acute: yes
Chronic: yes
Flammability: yes
Reactivity: no
Sudden Pressure: yes

U.S. STATE REGULATIONS:

Right to Know:

The specific chemical identity of a component may be withheld as a trade secret under 34 Pennsylvania Code, Chapter 317.

Pennsylvania Right To Know:

PROPANE	74-98-6
BUTANE	106-97-8
ETHYL ACETATE	141-78-6
ETHYLBENZENE	100-41-4
XYLENE	1330-20-7
ETHYL 3-ETHOXYPROPIONATE	763-69-9
DIMETHYL KETONE- EXEMPT SOLVENT	67-64-1
PROPRIETARY RESIN	Trade Secret
METHYL ETHYL KETONE	78-93-3
TITANIUM DIOXIDE	13463-67-7

Additional Non-Hazardous Materials

PROPRIETARY RESIN	Trade Secret
PROPRIETARY RESIN	Trade Secret

California Proposition 65:

WARNING! This product contains a chemical known in the State of California to cause cancer.

Rule 66 status of product

Photochemically reactive.

INTERNATIONAL REGULATIONS - Chemical Inventories

US TSCA Inventory:

All components of this product are in compliance with U.S. TSCA Chemical Substance Inventory Requirements.

Canada Domestic Substances List:

All components of this product are listed on the Domestic Substances List.

16. OTHER INFORMATION

HMIS Codes

Health:	2*
Flammability:	4
Reactivity:	1
PPE:	X - See Section 8 for Personal Protective Equipment (PPE).

Abbreviations:

OSHA - Occupational Safety and Health Administration, IARC - International Agency for Research on Cancer, NIOSH - National Institute of Occupational Safety and Health, NTP - National Toxicology Program, ACGIH - American Conference of Governmental Industrial Hygienists, SCAQMD - South Coast Air Quality Management District, TSCA - Toxic Substances Control Act, IATA - International Air Transport Association, IMO - International Maritime Organization, DOT - Department of Transportation, NA - Not applicable, NOT ESTAB - Not established, N.A.V. - Not available, RQ - Reportable quantity, WT - Weight, MG/CU M - Milligrams per cubic meter, G/L - Grams per liter, MM - Millimeters, MPPCF - Millions of particles per cubic foot, PPM - parts per million, PPT - parts per thousand, TCC/PM - Tag closed cup / Pensky-Martens, PB - Lead, PEL - Permissible exposure level, TWA - Time Weighted Average, STEL - Short term exposure limit, C - Celsius, F - Fahrenheit.

Disclaimer:

The data on this sheet represent typical values. Since application variables are a major factor in product performance, this information should serve only as a general guide. Valspar assumes no obligation or liability for use of this information. UNLESS VALSPAR AGREES OTHERWISE IN WRITING, VALSPAR MAKES NO WARRANTIES, EXPRESS OR IMPLIED, AND DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR FREEDOM FROM PATENT INFRINGEMENT. VALSPAR WILL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES. Your only remedy for any defect in this product is the replacement of the defective product, or a refund of its purchase price, at our option. This MSDS contains additional information required by the state of Pennsylvania.

Preparation Information:

Prepared By:	Regulatory Affairs Department
Print date:	23/Jan/2014
Revision Date:	23/Jan/2014



Material Safety Data Sheet

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identification

Product ID: 410.0065025.076
Product Name: VAL65025 PREM SATIN SUMPTUOUS PURPLE 6U
Product Use: Paint product.
Print date: 31/Mar/2013
Revision Date: 08/Feb/2013

Company Identification

The Valspar Corporation
1000 Lake Road
Medina, OH 44256

Manufacturer's Phone: 1-330-725-4511

24-Hour Medical Emergency Phone: 1-888-345-5732

2. HAZARDS IDENTIFICATION

Primary Routes of Exposure:

Inhalation
Ingestion
Skin absorption

Eye Contact:

- Severe eye irritation
- Risk of serious damage to eyes.

Skin Contact:

- May cause defatting of the skin.
- Causes skin irritation.
- Harmful if absorbed through skin.

Ingestion:

- Irritation of the mouth, throat, and stomach.
- Harmful if swallowed.

- Aspiration hazard if swallowed - can enter lungs and cause damage.

Inhalation:

- Causes respiratory tract irritation.
- Harmful by inhalation.
- Asphyxia

Acute Other Health Effects:

- Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.
- May cause frostbite

Target Organ and Other Health Effects:

- Cardiac arrhythmias
- Blood disorders
- Causes headache, drowsiness or other effects to the central nervous system.
- Kidney injury may occur.
- Contains glycol ether which has been shown to cause blood effects damage in laboratory animals.

This product contains ingredients that may contribute to the following potential chronic health effects:

- Notice: Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

Carcinogens:

- Possible cancer hazard. Contains material which may cause cancer based on animal data.

3. COMPOSITION / INFORMATION ON HAZARDOUS INGREDIENTS

Ingredient Name CAS-No.	Approx. Weight %	Chemical Name
DIMETHYL KETONE- EXEMPT SOLVENT 67-64-1	40 - 45	Acetone
PROPANE 74-98-6	15 - 20	Propane
BUTANE 106-97-8	5 - 10	Butane
BUTYL ACETATE 123-86-4	5 - 10	n-Butyl acetate
ETHYLENE GLYCOL MONOPROPYL ETHER 2807-30-9	1 - 5	Ethylene glycol monopropyl ether
ISOBUTYL ACETATE 110-19-0	1 - 5	Isobutyl acetate
TITANIUM DIOXIDE 13463-67-7	1 - 5	Titanium dioxide
PROPRIETARY INERT	1 - 5	PROPRIETARY INERT

If this section is blank there are no hazardous components per OSHA guidelines.

4. FIRST AID MEASURES

4. FIRST AID MEASURES

Eye Contact:

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. If medical assistance is not immediately available, flush an additional 15 minutes. Get medical attention immediately.

Skin Contact:

Remove contaminated clothing and shoes. Wash off immediately with plenty of water for at least 15 minutes. Get medical attention, if symptoms develop or persist.

Ingestion:

Rinse mouth with water. Give one or two glasses of water. Only induce vomiting at the instruction of medical personnel. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. If vomiting occurs, keep head lower than hips to prevent aspiration. Get medical attention immediately.

Inhalation:

Move injured person into fresh air and keep person calm under observation. Get medical attention immediately. For breathing difficulties, oxygen may be necessary. If breathing stops, provide artificial respiration. Do not give direct mouth-to-mouth resuscitation if inhaled. To protect rescuer, use air-viva, oxy-viva or one-way mask. Resuscitate in a well-ventilated area.

Medical conditions aggravated by exposure:

Any respiratory or skin condition.

5. FIRE FIGHTING MEASURES

Flash point (Fahrenheit):	-31
Flash point (Celsius):	-35
Lower explosive limit (%):	1
Upper explosive limit (%):	16
Autoignition temperature:	not determined
Sensitivity to impact:	no
Sensitivity to static discharge:	Subject to static discharge hazards. Please see bonding and grounding information in Section 7. See Section 10.
Hazardous combustion products:	

Unusual fire and explosion hazards:

None known.

Extinguishing media:

Carbon dioxide, dry chemical, foam and/or water fog.

Fire fighting procedures:

Firefighters should be equipped with self-contained breathing apparatus and turn out gear. Keep containers and surroundings cool with water spray.

6. ACCIDENTAL RELEASE MEASURES

Action to be taken if material is released or spilled:

Ventilate the area. Avoid breathing dust or vapor. Use self-containing breathing apparatus or airmask for large spills in a confined area. Wipe, scrape or soak up in an inert material and put in a container for disposal. See section 7, "Handling and Storage", for proper container and storage procedures. Remove all sources of ignition. Soak up with inert absorbent material. Use only non-sparking tools. Avoid contact with eyes.

7. HANDLING AND STORAGE

7. HANDLING AND STORAGE

Precautions to be taken in handling and storage:

Keep away from heat, sparks and open flame. - No smoking. Keep container closed when not in use. Do not store above 120 degrees F. (49 degrees C). Based on flash point and vapor pressure, suitable storage should be provided in accordance with OSHA regulation 1910.106, Ontario OH&S regulation 851 section 22. Empty containers may contain product residue, including flammable or explosive vapors. Do not cut, puncture or weld on or near container. All label warnings must be observed until the container has been commercially cleaned or reconditioned. If the product is used near or above the flashpoint, an ignition hazard may be present. Activities, uses, or operations which liberate vapor (such as mixing or free fall of liquids) may also present an ignition hazard. Please ensure containers and other interconnected equipment are properly bonded and grounded at all times.

8. PERSONAL PROTECTIVE EQUIPMENT AND EXPOSURE CONTROLS

Personal Protective Equipment

Eye and face protection:

Wear chemical goggles with splash shields or face shield. Contact lenses should not be worn when working with chemicals because contact lenses may contribute to the severity of an eye injury in case of exposure.

Skin protection:

Appropriate chemical resistant gloves should be worn.

Other Personnel Protection Data:

Ensure that eyewash stations and safety showers are close to the workstation location. To prevent skin contact wear protective clothing covering all exposed areas.

Respiratory protection:

If exposure cannot be controlled below applicable limits, use the appropriate NIOSH approved respirator such as an air purifying respirator with organic vapor cartridge and dust/mist filter. Consult the respirator manufacturer's literature to ensure that the respirator will provide adequate protection. Read and follow all respirator manufacturer's instructions.

Ventilation

Use only in well-ventilated areas. Ensure adequate ventilation, especially in confined areas. Ovens used for curing should contain a fresh air purge to prevent vapours from accumulating and creating a possible explosive mixture. Where the product is used in a hazardous classified area, use explosion-proof electrical/ventilating/lighting/equipment.

Exposure Guidelines

OSHA Permissible Exposure Limits (PEL's)

Ingredient Name CAS-No.	Approx. Weight %	TWA (final)	Ceilings limits (final)	Skin designations
DIMETHYL KETONE- EXEMPT SOLVENT 67-64-1	40 - 45	1000 ppm TWA 2400 mg/m ³ TWA		
PROPANE 74-98-6	15 - 20	1000 ppm TWA 1800 mg/m ³ TWA		
BUTYL ACETATE 123-86-4	5 - 10	150 ppm TWA 710 mg/m ³ TWA		
ISOBUTYL ACETATE 110-19-0	1 - 5	150 ppm TWA 700 mg/m ³ TWA		
TITANIUM DIOXIDE 13463-67-7	1 - 5	15 mg/m ³ TWA dust total		
PROPRIETARY INERT	1 - 5	20 mppcf or 80 mg/m ³ / %SiO ₂		

ACGIH Threshold Limit Value (TLV's)

Ingredient Name CAS-No.	Approx. Weight %	TWA	STEL	Ceiling limits	Skin designations
DIMETHYL KETONE- EXEMPT SOLVENT 67-64-1	40 - 45	500 ppm TWA	750 ppm STEL		
PROPANE 74-98-6	15 - 20	1000 ppm TWA Aliphatic hydrocarbon gases: Alkane C1-C4			
BUTANE 106-97-8	5 - 10	1000 ppm TWA Aliphatic hydrocarbon gases: Alkane C1-C4			
BUTYL ACETATE 123-86-4	5 - 10	150 ppm TWA	200 ppm STEL		
ISOBUTYL ACETATE 110-19-0	1 - 5	150 ppm TWA			
TITANIUM DIOXIDE 13463-67-7	1 - 5	10 mg/m ³ TWA			

9. PHYSICAL PROPERTIES

Odor:	Normal for this product type.
Physical State:	Aerosol
pH:	not determined
Vapor pressure:	NOT DETERMINED mmHg @ 68°F (20°C)
Vapor density (air = 1.0):	4
Boiling point:	-44°F (-42°C)
Solubility in water:	not determined
Coefficient of water/oil distribution:	not determined
Density (lbs per US gallon):	6.4
Specific Gravity:	.77
Evaporation rate (butyl acetate = 1.0):	5.6
Flash point (Fahrenheit):	-31
Flash point (Celsius):	-35
Lower explosive limit (%):	1
Upper explosive limit (%):	16
Autoignition temperature:	not determined

10. STABILITY AND REACTIVITY

Stability:	Stable under normal conditions.
Conditions to Avoid:	Heat.
Incompatibility:	Strong oxidizing agents
Hazardous Polymerization:	None anticipated.
Hazardous Decomposition Products:	Carbon monoxide and carbon dioxide.

Sensitivity to static discharge:	Subject to static discharge hazards. Please see bonding and grounding information in Section 7.
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11. TOXICOLOGICAL INFORMATION

Ingredient Name CAS-No.	Approx. Weight %	NIOSH - Selected LD50s and LC50s
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11. TOXICOLOGICAL INFORMATION

DIMETHYL KETONE- EXEMPT SOLVENT 67-64-1	40 - 45	= 5800 mg/kg Oral LD50 Rat
PROPANE 74-98-6	15 - 20	= 658 mg/L Inhalation LC50 Rat 4 h
BUTANE 106-97-8	5 - 10	= 658 mg/L Inhalation LC50 Rat 4 h
BUTYL ACETATE 123-86-4	5 - 10	= 10768 mg/kg Oral LD50 Rat = 390 ppm Inhalation LC50 Rat 4 h > 17600 mg/kg Dermal LD50 Rabbit
ETHYLENE GLYCOL MONOPROPYL ETHER 2807-30-9	1 - 5	= 3089 mg/kg Oral LD50 Rat = 960 µL/kg Dermal LD50 Rabbit
ISOBUTYL ACETATE 110-19-0	1 - 5	= 13400 mg/kg Oral LD50 Rat > 5000 mg/kg Dermal LD50 Rabbit
TITANIUM DIOXIDE 13463-67-7	1 - 5	> 10000 mg/kg Oral LD50 Rat

Mutagens/Teratogens/Carcinogens:

Possible cancer hazard. Contains material which may cause cancer based on animal data.

Contains TIO2 which is listed by IARC as a possible human carcinogen (Group 2B) based on animal data. Neither long term animal studies, nor human epidemiology studies of workers exposed to TIO2 provide an adequate basis to conclude TIO2 is carcinogenic. TIO2 is not classified as a carcinogen by NTP, U.S. OSHA, or the U.S. EPA.

Ingredient Name CAS-No.	Approx. Weight %	IARC Group 1 - Human Evidence	IARC Group 2A - Limited Human Data	IARC Group 2B - Sufficient Animal Data
TITANIUM DIOXIDE 13463-67-7	1 - 5			Monograph 47 [1989]

Ingredient Name CAS-No.	Approx. Weight %	OSHA - Hazard Communication Carcinogens	OSHA - Specifically Regulated Carcinogens	ACGIH Carcinogens
TITANIUM DIOXIDE 13463-67-7	1 - 5	Present		

12. ECOLOGICAL DATA

No information on ecology is available.

13. DISPOSAL CONSIDERATIONS

Disposal should be made in accordance with federal, state and local regulations.

14. TRANSPORTATION INFORMATION

U.S. Department of Transportation

UN ID Number (msds):

CONCOM

Proper Shipping Name:

CONSUMER COMMODITY ORM-D [Paint]

U.S Hazmat and/or International DG shipment exceptions

The supplier may apply one of the following exceptions: Combustible Liquid, Consumer Commodity, Limited Quantity, Viscous Liquid, Does Not Sustain Combustion, or others, as allowed under 49CFR Hazmat Regulations. Please consult 49CFR Subchapter C to ensure that subsequent shipments comply with these exceptions.

Reportable Quantity Description:**International Air Transport Association (IATA):**

UN/ID No: UN1950
Proper shipping name: AEROSOLS, FLAMMABLE
Hazard Class: 2.1

International Maritime Organization (IMO):

UN/ID No: UN1950
Proper shipping name: AEROSOLS, FLAMMABLE
Hazard Class: 2.1
Marine Pollutant: No

15. REGULATORY INFORMATION**U.S. FEDERAL REGULATIONS:**

Ingredient Name CAS-No.	Approx. Weight %	SARA 302	SARA 313	CERCLA RQ in lbs.
DIMETHYL KETONE- EXEMPT SOLVENT 67-64-1	40 - 45			5000
BUTYL ACETATE 123-86-4	5 - 10			5000
ETHYLENE GLYCOL MONOPROPYL ETHER 2807-30-9	1 - 5		YES	
ISOBUTYL ACETATE 110-19-0	1 - 5			5000

SARA 311/312 Hazard Class:

Acute: yes
Chronic: yes
Flammability: yes
Reactivity: no
Sudden Pressure: yes

U.S. STATE REGULATIONS:**Right to Know:**

The specific chemical identity of a component may be withheld as a trade secret under 34 Pennsylvania Code, Chapter 317.

Pennsylvania Right To Know:

BUTYL ACETATE 123-86-4
TITANIUM DIOXIDE 13463-67-7
PROPRIETARY INERT Trade Secret
ISOBUTYL ACETATE 110-19-0
ETHYLENE GLYCOL MONOPROPYL ETHER 2807-30-9
DIMETHYL KETONE- EXEMPT SOLVENT 67-64-1
PROPANE 74-98-6
BUTANE 106-97-8

Additional Non-Hazardous Materials

PROPRIETARY RESIN Trade Secret

Rule 66 status of product

Not photochemically reactive.

INTERNATIONAL REGULATIONS - Chemical Inventories

US TSCA Inventory:

All components of this product are in compliance with U.S. TSCA Chemical Substance Inventory Requirements.

Canada Domestic Substances List:

All components of this product are listed on the Domestic Substances List.

16. OTHER INFORMATION

HMIS Codes

Health:	2*
Flammability:	4
Reactivity:	1
PPE:	X - See Section 8 for Personal Protective Equipment (PPE).

Abbreviations:

OSHA - Occupational Safety and Health Administration, IARC - International Agency for Research on Cancer, NIOSH - National Institute of Occupational Safety and Health, NTP - National Toxicology Program, ACGIH - American Conference of Governmental Industrial Hygienists, SCAQMD - South Coast Air Quality Management District, TSCA - Toxic Substances Control Act, IATA - International Air Transport Association, IMO - International Maritime Organization, DOT - Department of Transportation, NA - Not applicable, NOT ESTAB - Not established, N.A.V. - Not available, RQ - Reportable quantity, WT - Weight, MG/CU M - Milligrams per cubic meter, G/L - Grams per liter, MM - Millimeters, MPPCF - Millions of particles per cubic foot, PPM - parts per million, PPT - parts per thousand, TCC/PM - Tag closed cup / Pensky-Martens, PB - Lead, PEL - Permissible exposure level, TWA - Time Weighted Average, STEL - Short term exposure limit, C - Celsius, F - Fahrenheit.

Disclaimer:

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Preparation Information:

Prepared By:	Regulatory Affairs Department
Print date:	31/Mar/2013
Revision Date:	08/Feb/2013



Material Safety Data Sheet

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identification

Product ID: 410.0065054.076
Product Name: VAL65054 PREM PRIMER WHITE 6U
Product Use: Paint product.
Print date: 30/Dec/2013
Revision Date: 30/Dec/2013

Company Identification

The Valspar Corporation
1000 Lake Road
Medina, OH 44256

Manufacturer's Phone: 1-330-725-4511

24-Hour Medical Emergency Phone: 1-888-345-5732

2. HAZARDS IDENTIFICATION

Primary Routes of Exposure:

Inhalation
Ingestion
Skin absorption

Eye Contact:

- Severe eye irritation

Skin Contact:

- Causes skin irritation.
- May cause defatting of the skin.
- Dermatitis
- Can be absorbed through skin.

Ingestion:

- Irritation of the mouth, throat, and stomach.
- Harmful if swallowed.

- Aspiration hazard if swallowed - can enter lungs and cause damage.

Inhalation:

- Causes respiratory tract irritation.
- Harmful by inhalation.
- Asphyxia

Acute Other Health Effects:

- May cause frostbite
- Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

Target Organ and Other Health Effects:

- Causes headache, drowsiness or other effects to the central nervous system.
- Cardiac arrhythmias
- Kidney injury may occur.
- Blood disorders
- Liver injury may occur.

This product contains ingredients that may contribute to the following potential chronic health effects:

- Notice: Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.
- Prolonged exposure over TLV may produce pneumoconiosis.

Carcinogens:

- Possible cancer hazard. Contains material which may cause cancer based on animal data.

3. COMPOSITION / INFORMATION ON HAZARDOUS INGREDIENTS

Ingredient Name CAS-No.	Approx. Weight %	Chemical Name
DIMETHYL KETONE- EXEMPT SOLVENT 67-64-1	35 - 40	Acetone
PROPANE 74-98-6	15 - 20	Propane
BUTANE 106-97-8	5 - 10	Butane
XYLENE 1330-20-7	5 - 10	Xylenes (o-, m-, p- isomers)
TITANIUM DIOXIDE 13463-67-7	5 - 10	Titanium dioxide
PROPRIETARY INERT	1 - 5	PROPRIETARY INERT
BARIUM METABORATE 13701-59-2	1 - 5	Barium metaborate
MINERAL SPIRITS 64742-47-8	1 - 5	Petroleum distillates, hydrotreated light
ISOBUTYL ACETATE 110-19-0	1 - 5	Isobutyl acetate
ETHYLBENZENE 100-41-4	1 - 5	Ethyl benzene

If this section is blank there are no hazardous components per OSHA guidelines.

4. FIRST AID MEASURES

Eye Contact:

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. If medical assistance is not immediately available, flush an additional 15 minutes. Get medical attention immediately.

Skin Contact:

Remove contaminated clothing and shoes. Wash off immediately with plenty of water for at least 15 minutes. Get medical attention, if symptoms develop or persist.

Ingestion:

Rinse mouth with water. Give one or two glasses of water. Only induce vomiting at the instruction of medical personnel. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. If vomiting occurs, keep head lower than hips to prevent aspiration. Get medical attention immediately.

Inhalation:

Move injured person into fresh air and keep person calm under observation. Get medical attention immediately. For breathing difficulties, oxygen may be necessary. If breathing stops, provide artificial respiration. Do not give direct mouth-to-mouth resuscitation if inhaled. To protect rescuer, use air-viva, oxy-viva or one-way mask. Resuscitate in a well-ventilated area.

Medical conditions aggravated by exposure:

Any respiratory or skin condition.

5. FIRE FIGHTING MEASURES

Flash point (Fahrenheit):	-31
Flash point (Celsius):	-35
Lower explosive limit (%):	1
Upper explosive limit (%):	13
Autoignition temperature:	not determined
Sensitivity to impact:	no
Sensitivity to static discharge:	Subject to static discharge hazards. Please see bonding and grounding information in Section 7.
Hazardous combustion products:	See Section 10.

Unusual fire and explosion hazards:

Contaminated rags, wipes, saw dust, etc., may catch fire spontaneously. Store waste under water in closed metal containers or in approved self-closing containers designed to prevent spontaneous combustion until disposed of in compliance with applicable regulations. Oxidizing Material

Extinguishing media:

Carbon dioxide, dry chemical, foam and/or water fog.

Fire fighting procedures:

Firefighters should be equipped with self-contained breathing apparatus and turn out gear. Keep containers and surroundings cool with water spray.

6. ACCIDENTAL RELEASE MEASURES

Action to be taken if material is released or spilled:

Ventilate the area. Avoid breathing dust or vapor. Use self-containing breathing apparatus or airmask for large spills in a confined area. Wipe, scrape or soak up in an inert material and put in a container for disposal. See section 7, "Handling and Storage", for proper container and storage procedures. Remove all sources of ignition. Soak up with inert absorbent material. Use only non-sparking tools. Avoid contact with eyes.

7. HANDLING AND STORAGE

7. HANDLING AND STORAGE

Precautions to be taken in handling and storage:

Keep away from heat, sparks and open flame. - No smoking. Keep container closed when not in use. Do not store above 120 degrees F. (49 degrees C). Based on flash point and vapor pressure, suitable storage should be provided in accordance with OSHA regulation 1910.106, Ontario OH&S regulation 851 section 22. Empty containers may contain product residue, including flammable or explosive vapors. Do not cut, puncture or weld on or near container. All label warnings must be observed until the container has been commercially cleaned or reconditioned. If the product is used near or above the flashpoint, an ignition hazard may be present. Activities, uses, or operations which liberate vapor (such as mixing or free fall of liquids) may also present an ignition hazard. Please ensure containers and other interconnected equipment are properly bonded and grounded at all times.

8. PERSONAL PROTECTIVE EQUIPMENT AND EXPOSURE CONTROLS

Personal Protective Equipment

Eye and face protection:

Wear safety glasses or goggles to protect against exposure.

Skin protection:

Appropriate chemical resistant gloves should be worn.

Other Personnel Protection Data:

To prevent skin contact wear protective clothing covering all exposed areas.

Respiratory protection:

If exposure cannot be controlled below applicable limits, use the appropriate NIOSH approved respirator such as an air purifying respirator with organic vapor cartridge and dust/mist filter. Consult the respirator manufacturer's literature to ensure that the respirator will provide adequate protection. Read and follow all respirator manufacturer's instructions.

Ventilation

Use only in well-ventilated areas. Ensure adequate ventilation, especially in confined areas. Ovens used for curing should contain a fresh air purge to prevent vapours from accumulating and creating a possible explosive mixture. Where the product is used in a hazardous classified area, use explosion-proof electrical/ventilating/lighting/equipment.

Exposure Guidelines

OSHA Permissible Exposure Limits (PEL's)

Ingredient Name CAS-No.	Approx. Weight %	TWA (final)	Ceilings limits (final)	Skin designations
DIMETHYL KETONE- EXEMPT SOLVENT 67-64-1	35 - 40	1000 ppm TWA 2400 mg/m ³ TWA		
PROPANE 74-98-6	15 - 20	1000 ppm TWA 1800 mg/m ³ TWA		
XYLENE 1330-20-7	5 - 10	100 ppm TWA 435 mg/m ³ TWA		
TITANIUM DIOXIDE 13463-67-7	5 - 10	15 mg/m ³ TWA dust total		
PROPRIETARY INERT	1 - 5	15 mg/m ³ TWA dust total 5 mg/m ³ TWA respirable fraction		
BARIUM METABORATE 13701-59-2	1 - 5	0.5 mg/m ³ TWA Ba		
ISOBUTYL ACETATE 110-19-0	1 - 5	150 ppm TWA 700 mg/m ³ TWA		
ETHYLBENZENE 100-41-4	1 - 5	100 ppm TWA 435 mg/m ³ TWA		

ACGIH Threshold Limit Value (TLV's)

Ingredient Name CAS-No.	Approx. Weight %	TWA	STEL	Ceiling limits	Skin designations
DIMETHYL KETONE- EXEMPT SOLVENT 67-64-1	35 - 40	500 ppm TWA	750 ppm STEL		
PROPANE 74-98-6	15 - 20	1000 ppm TWA Aliphatic hydrocarbon gases: Alkane C1-C4			
BUTANE 106-97-8	5 - 10	1000 ppm TWA Aliphatic hydrocarbon gases: Alkane C1-C4			
XYLENE 1330-20-7	5 - 10	100 ppm TWA	150 ppm STEL		
TITANIUM DIOXIDE 13463-67-7	5 - 10	10 mg/m ³ TWA			
PROPRIETARY INERT	1 - 5	2 mg/m ³ TWA particulate matter containing no asbestos and <1% crystalline silica, respirable fraction			
BARIUM METABORATE 13701-59-2	1 - 5	2 mg/m ³ TWA inhalable fraction 0.5 mg/m ³ TWA Ba	6 mg/m ³ STEL inhalable fraction		
ISOBUTYL ACETATE 110-19-0	1 - 5	150 ppm TWA			
ETHYLBENZENE 100-41-4	1 - 5	100 ppm TWA	125 ppm STEL		

9. PHYSICAL PROPERTIES

Odor:	Normal for this product type.
Physical State:	Aerosol
pH:	not determined
Vapor pressure:	NOT DETERMINED mmHg @ 68°F (20°C)
Vapor density (air = 1.0):	5.1
Boiling point:	-44°F (-42°C)
Solubility in water:	not determined
Coefficient of water/oil distribution:	not determined
Density (lbs per US gallon):	6.77
Specific Gravity:	.81
Evaporation rate (butyl acetate = 1.0):	5.6
Flash point (Fahrenheit):	-31
Flash point (Celsius):	-35
Lower explosive limit (%):	1
Upper explosive limit (%):	13
Autoignition temperature:	not determined

10. STABILITY AND REACTIVITY

10. STABILITY AND REACTIVITY

Stability:

Stable under normal conditions.

Conditions to Avoid:

Heat.

Incompatibility:

Strong oxidizing agents

Hazardous Polymerization:

None anticipated.

Hazardous Decomposition Products:

Carbon monoxide and carbon dioxide. Metal oxide fumes.

Sensitivity to static discharge:

Subject to static discharge hazards. Please see bonding and grounding information in Section 7.

11. TOXICOLOGICAL INFORMATION

Ingredient Name CAS-No.	Approx. Weight %	NIOSH - Selected LD50s and LC50s
DIMETHYL KETONE- EXEMPT SOLVENT 67-64-1	35 - 40	= 5800 mg/kg Oral LD50 Rat
PROPANE 74-98-6	15 - 20	= 658 mg/L Inhalation LC50 Rat 4 h
BUTANE 106-97-8	5 - 10	= 658 mg/L Inhalation LC50 Rat 4 h
XYLENE 1330-20-7	5 - 10	= 4300 mg/kg Oral LD50 Rat = 47635 mg/L Inhalation LC50 Rat 4 h = 5000 ppm Inhalation LC50 Rat 4 h > 1700 mg/kg Dermal LD50 Rabbit
TITANIUM DIOXIDE 13463-67-7	5 - 10	> 10000 mg/kg Oral LD50 Rat
BARIUM METABORATE 13701-59-2	1 - 5	= 3800 mg/kg Oral LD50 Rat
MINERAL SPIRITS 64742-47-8	1 - 5	> 2000 mg/kg Dermal LD50 Rabbit > 5.2 mg/L Inhalation LC50 Rat 4 h > 5000 mg/kg Oral LD50 Rat
ISOBUTYL ACETATE 110-19-0	1 - 5	= 13400 mg/kg Oral LD50 Rat > 5000 mg/kg Dermal LD50 Rabbit
ETHYLBENZENE 100-41-4	1 - 5	= 15354 mg/kg Dermal LD50 Rabbit = 17.2 mg/L Inhalation LC50 Rat 4 h = 3500 mg/kg Oral LD50 Rat

Mutagens/Teratogens/Carcinogens:

Possible cancer hazard. Contains material which may cause cancer based on animal data.

Contains ethylbenzene, which has been determined by NTP to be an animal carcinogen with no known relevance to humans. IARC has classified ethylbenzene as possibly carcinogenic to humans (2b) on the basis of sufficient evidence of carcinogenicity in laboratory animals but inadequate evidence of cancer in humans. Contains TIO2 which is listed by IARC as a possible human carcinogen (Group 2B) based on animal data. Neither long term animal studies, nor human epidemiology studies of workers exposed to TIO2 provide an adequate basis to conclude TIO2 is carcinogenic. TIO2 is not classified as a carcinogen by NTP, U.S. OSHA, or the U.S. EPA.

Ingredient Name CAS-No.	Approx. Weight %	California Prop 65 - Reproductive (Female)	California Prop 65 - Carcinogen
ETHYLBENZENE 100-41-4	1 - 5		Listed. initial date 6/11/04 - carcinogen

Ingredient Name CAS-No.	Approx. Weight %	IARC Group 1 - Human Evidence	IARC Group 2A - Limited Human Data	IARC Group 2B - Sufficient Animal Data
TITANIUM DIOXIDE 13463-67-7	5 - 10			Monograph 47 [1989]
ETHYLBENZENE 100-41-4	1 - 5			Monograph 77 [2000]

Ingredient Name CAS-No.	Approx. Weight %	OSHA - Hazard Communication Carcinogens	OSHA - Specifically Regulated Carcinogens	ACGIH Carcinogens
TITANIUM DIOXIDE 13463-67-7	5 - 10	Present		
ETHYLBENZENE 100-41-4	1 - 5	Present		A3 Confirmed Animal Carcinogen with Unknown Relevance to Humans

12. ECOLOGICAL DATA

No information on ecology is available.

13. DISPOSAL CONSIDERATIONS

Disposal should be made in accordance with federal, state and local regulations.

14. TRANSPORTATION INFORMATION

U.S. Department of Transportation

UN ID Number (msds):

CONCOM

Proper Shipping Name:

CONSUMER COMMODITY ORM-D [Paint]

U.S Hazmat and/or International DG shipment exceptions

The supplier may apply one of the following exceptions: Combustible Liquid, Consumer Commodity, Limited Quantity, Viscous Liquid, Does Not Sustain Combustion, or others, as allowed under 49CFR Hazmat Regulations. Please consult 49CFR Subchapter C to ensure that subsequent shipments comply with these exceptions.

Reportable Quantity Description:

International Air Transport Association (IATA):

UN/ID No:

UN1950

Proper shipping name:

AEROSOLS, FLAMMABLE

Hazard Class:

2.1

International Maritime Organization (IMO):

UN/ID No:

UN1950

Proper shipping name:

AEROSOLS, FLAMMABLE

Hazard Class:

2.1

Marine Pollutant

No

15. REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS:

Ingredient Name CAS-No.	Approx. Weight %	SARA 302	SARA 313	CERCLA RQ in lbs.
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DIMETHYL KETONE- EXEMPT SOLVENT 67-64-1	35 - 40			5000
XYLENE 1330-20-7	5 - 10		form R reporting required for 1.0% de minimis concentration	100
BARIUM METABORATE 13701-59-2	1 - 5		YES	
ISOBUTYL ACETATE 110-19-0	1 - 5			5000
ETHYLBENZENE 100-41-4	1 - 5		form R reporting required for 1.0% de minimis concentration	1000

Acute:	yes
Chronic:	yes
Flammability:	yes
Reactivity:	no
Sudden Pressure:	yes

The specific chemical identity of a component may be withheld as a trade secret under 34 Pennsylvania Code, Chapter 317.

PROPANE	74-98-6	
BUTANE	106-97-8	
ISOBUTYL ACETATE	110-19-0	
DIMETHYL KETONE- EXEMPT SOLVENT		67-64-1
ETHYLBENZENE	100-41-4	
BARIUM METABORATE	13701-59-2	
TITANIUM DIOXIDE	13463-67-7	
PROPRIETARY INERT	Trade Secret	
MINERAL SPIRITS	64742-47-8	
XYLENE	1330-20-7	

PROPRIETARY RESIN Trade Secret

WARNING! This product contains a chemical known in the State of California to cause cancer.

Rule 66 status of product	Photochemically reactive.
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All components of this product are in compliance with U.S. TSCA Chemical Substance Inventory Requirements.

Canada Domestic Substances List:
All components of this product are listed on the Domestic Substances List.

16. OTHER INFORMATION

HMIS Codes

Health:	2*
Flammability:	4
Reactivity:	1
PPE:	X - See Section 8 for Personal Protective Equipment (PPE).

Abbreviations:

OSHA - Occupational Safety and Health Administration, IARC - International Agency for Research on Cancer, NIOSH - National Institute of Occupational Safety and Health, NTP - National Toxicology Program, ACGIH - American Conference of Governmental Industrial Hygienists, SCAQMD - South Coast Air Quality Management District, TSCA - Toxic Substances Control Act, IATA - International Air Transport Association, IMO - International Maritime Organization, DOT - Department of Transportation, NA - Not applicable, NOT ESTAB - Not established, N.A.V. - Not available, RQ - Reportable quantity, WT - Weight, MG/CU M - Milligrams per cubic meter, G/L - Grams per liter, MM - Millimeters, MPPCF - Millions of particles per cubic foot, PPM - parts per million, PPT - parts per thousand, TCC/PM - Tag closed cup / Pensky-Martens, PB - Lead, PEL - Permissible exposure level, TWA - Time Weighted Average, STEL - Short term exposure limit, C - Celsius, F - Fahrenheit.

Disclaimer:

The data on this sheet represent typical values. Since application variables are a major factor in product performance, this information should serve only as a general guide. Valspar assumes no obligation or liability for use of this information. UNLESS VALSPAR AGREES OTHERWISE IN WRITING, VALSPAR MAKES NO WARRANTIES, EXPRESS OR IMPLIED, AND DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR FREEDOM FROM PATENT INFRINGEMENT. VALSPAR WILL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES. Your only remedy for any defect in this product is the replacement of the defective product, or a refund of its purchase price, at our option. This MSDS contains additional information required by the state of Pennsylvania.

Preparation Information:

Prepared By:	Regulatory Affairs Department
Print date:	30/Dec/2013
Revision Date:	30/Dec/2013



Material Safety Data Sheet

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identification

Product ID: 410.0065058.076
Product Name: VAL65058 PREM GLOSS CLEAR 6UC
Product Use: Paint product.
Print date: 05/Jun/2014
Revision Date: 05/Jun/2014

Company Identification

The Valspar Corporation
1000 Lake Road
Medina, OH 44256

Manufacturer's Phone: 1-330-725-4511

24-Hour Medical Emergency Phone: 1-888-345-5732

2. HAZARDS IDENTIFICATION

Primary Routes of Exposure:

Inhalation
Ingestion
Skin absorption

Eye Contact:

- Severe eye irritation

Skin Contact:

- May cause defatting of the skin.

Ingestion:

- Irritation of the mouth, throat, and stomach.
- Harmful if swallowed.
- Aspiration hazard if swallowed - can enter lungs and cause damage.

Inhalation:

- Causes respiratory tract irritation.
- Harmful by inhalation.
- Asphyxia

Acute Other Health Effects:

- May cause frostbite
- Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

Target Organ and Other Health Effects:

- Causes headache, drowsiness or other effects to the central nervous system.
- Blood disorders
- Cardiac arrhythmias
- Kidney injury may occur.

This product contains ingredients that may contribute to the following potential chronic health effects:

- Notice: Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

3. COMPOSITION / INFORMATION ON HAZARDOUS INGREDIENTS

Ingredient Name CAS-No.	Approx. Weight %	Chemical Name
DIMETHYL KETONE- EXEMPT SOLVENT 67-64-1	30 - 35	Acetone
ISOBUTYL ACETATE 110-19-0	25 - 30	Isobutyl acetate
PROPANE 74-98-6	10 - 15	Propane
BUTANE 106-97-8	5 - 10	Butane
ETHYL 3- ETHOXYPROPIONATE 763-69-9	5 - 10	Ethyl 3-ethoxypropionate

If this section is blank there are no hazardous components per OSHA guidelines.

4. FIRST AID MEASURES

Eye Contact:

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. If medical assistance is not immediately available, flush an additional 15 minutes. Get medical attention immediately.

Skin Contact:

Remove contaminated clothing and shoes. Wash off immediately with plenty of water for at least 15 minutes. Get medical attention, if symptoms develop or persist.

Ingestion:

Rinse mouth with water. Give one or two glasses of water. Only induce vomiting at the instruction of medical personnel. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. If vomiting occurs, keep head lower than hips to prevent aspiration. Get medical attention immediately.

Inhalation:

Move injured person into fresh air and keep person calm under observation. Get medical attention immediately. For breathing difficulties, oxygen may be necessary. If breathing stops, provide artificial respiration. Do not give direct mouth-to-mouth resuscitation if inhaled. To protect rescuer, use air-viva, oxy-viva or one-way mask. Resuscitate in a well-ventilated area.

Medical conditions aggravated by exposure:

Any respiratory or skin condition.

5. FIRE FIGHTING MEASURES

Flash point (Fahrenheit):	-31
Flash point (Celsius):	-35
Lower explosive limit (%):	1
Upper explosive limit (%):	13
Autoignition temperature:	not determined
Sensitivity to impact:	no
Sensitivity to static discharge:	Subject to static discharge hazards. Please see bonding and grounding information in Section 7.
Hazardous combustion products:	See Section 10.

Unusual fire and explosion hazards:

None known.

Extinguishing media:

Carbon dioxide, dry chemical, foam and/or water fog.

Fire fighting procedures:

Firefighters should be equipped with self-contained breathing apparatus and turn out gear. Keep containers and surroundings cool with water spray.

6. ACCIDENTAL RELEASE MEASURES**Action to be taken if material is released or spilled:**

Ventilate the area. Avoid breathing dust or vapor. Use self-containing breathing apparatus or airmask for large spills in a confined area. Wipe, scrape or soak up in an inert material and put in a container for disposal. See section 7, "Handling and Storage", for proper container and storage procedures. Remove all sources of ignition. Soak up with inert absorbent material. Use only non-sparking tools. Avoid contact with eyes.

7. HANDLING AND STORAGE**Precautions to be taken in handling and storage:**

Keep away from heat, sparks and open flame. - No smoking. Keep container closed when not in use. Do not store above 120 degrees F. (49 degrees C). Based on flash point and vapor pressure, suitable storage should be provided in accordance with OSHA regulation 1910.106, Ontario OH&S regulation 851 section 22. Empty containers may contain product residue, including flammable or explosive vapors. Do not cut, puncture or weld on or near container. All label warnings must be observed until the container has been commercially cleaned or reconditioned. If the product is used near or above the flashpoint, an ignition hazard may be present. Activities, uses, or operations which liberate vapor (such as mixing or free fall of liquids) may also present an ignition hazard. Please ensure containers and other interconnected equipment are properly bonded and grounded at all times.

8. PERSONAL PROTECTIVE EQUIPMENT AND EXPOSURE CONTROLS**Personal Protective Equipment****Eye and face protection:**

Wear safety glasses or goggles to protect against exposure.

Skin protection:

Appropriate chemical resistant gloves should be worn.

Other Personnel Protection Data:

Usual industrial work clothes.

Respiratory protection:

If exposure cannot be controlled below applicable limits, use the appropriate NIOSH approved respirator such as an air purifying respirator with organic vapor cartridge and dust/mist filter. Consult the respirator manufacturer's literature to ensure that the respirator will provide adequate protection. Read and follow all respirator manufacturer's instructions.

Ventilation

Use only in well-ventilated areas. Ensure adequate ventilation, especially in confined areas. Ovens used for curing should contain a fresh air purge to prevent vapours from accumulating and creating a possible explosive mixture. Where the product is used in a hazardous classified area, use explosion-proof electrical/ventilating/lighting/equipment.

Exposure Guidelines

OSHA Permissible Exposure Limits (PEL's)

Ingredient Name CAS-No.	Approx. Weight %	TWA (final)	Ceilings limits (final)	Skin designations
DIMETHYL KETONE- EXEMPT SOLVENT 67-64-1	30 - 35	1000 ppm TWA 2400 mg/m ³ TWA		
ISOBUTYL ACETATE 110-19-0	25 - 30	150 ppm TWA 700 mg/m ³ TWA		
PROPANE 74-98-6	10 - 15	1000 ppm TWA 1800 mg/m ³ TWA		

ACGIH Threshold Limit Value (TLV's)

Ingredient Name CAS-No.	Approx. Weight %	TWA	STEL	Ceiling limits	Skin designations
DIMETHYL KETONE- EXEMPT SOLVENT 67-64-1	30 - 35	500 ppm TWA	750 ppm STEL		
ISOBUTYL ACETATE 110-19-0	25 - 30	150 ppm TWA			
PROPANE 74-98-6	10 - 15	1000 ppm TWA Aliphatic hydrocarbon gases: Alkane C1-C4			
BUTANE 106-97-8	5 - 10	1000 ppm TWA Aliphatic hydrocarbon gases: Alkane C1-C4			

9. PHYSICAL PROPERTIES

Odor:

Normal for this product type.

Physical State:

Aerosol

pH:

not determined

Vapor pressure:

NOT DETERMINED mmHg @ 68°F (20°C)

Vapor density (air = 1.0):

5.0

Boiling point:

-44°F (-42°C)

Solubility in water:

not determined

Coefficient of water/oil distribution:

not determined

9. PHYSICAL PROPERTIES

Density (lbs per US gallon):	6.38
Specific Gravity:	.77
Evaporation rate (butyl acetate = 1.0):	5.6
Flash point (Fahrenheit):	-31
Flash point (Celsius):	-35
Lower explosive limit (%):	1
Upper explosive limit (%):	13
Autoignition temperature:	not determined

10. STABILITY AND REACTIVITY

Stability:	Stable under normal conditions.
Conditions to Avoid:	Heat.
Incompatibility:	Strong oxidizing agents
Hazardous Polymerization:	None anticipated.
Hazardous Decomposition Products:	Carbon monoxide and carbon dioxide.

Sensitivity to static discharge: Subject to static discharge hazards. Please see bonding and grounding information in Section 7.

11. TOXICOLOGICAL INFORMATION

Ingredient Name CAS-No.	Approx. Weight %	NIOSH - Selected LD50s and LC50s
DIMETHYL KETONE- EXEMPT SOLVENT 67-64-1	30 - 35	= 5800 mg/kg Oral LD50 Rat
ISOBUTYL ACETATE 110-19-0	25 - 30	= 13400 mg/kg Oral LD50 Rat > 5000 mg/kg Dermal LD50 Rabbit
PROPANE 74-98-6	10 - 15	= 658 mg/L Inhalation LC50 Rat 4 h
BUTANE 106-97-8	5 - 10	= 658 mg/L Inhalation LC50 Rat 4 h
ETHYL 3- ETHOXYPROPIONATE 763-69-9	5 - 10	= 10 mL/kg Dermal LD50 Rabbit = 3200 mg/kg Oral LD50 Rat

Mutagens/Teratogens/Carcinogens:

12. ECOLOGICAL DATA

No information on ecology is available.

13. DISPOSAL CONSIDERATIONS

Disposal should be made in accordance with federal, state and local regulations.

14. TRANSPORTATION INFORMATION

U.S. Department of Transportation

UN ID Number (msds):

Proper Shipping Name:

CONCOM

CONSUMER COMMODITY ORM-D [Paint]

14. TRANSPORTATION INFORMATION

U.S Hazmat and/or International DG shipment exceptions

The supplier may apply one of the following exceptions: Combustible Liquid, Consumer Commodity, Limited Quantity, Viscous Liquid, Does Not Sustain Combustion, or others, as allowed under 49CFR Hazmat Regulations. Please consult 49CFR Subchapter C to ensure that subsequent shipments comply with these exceptions.

Reportable Quantity Description:

International Air Transport Association (IATA):

UN/ID No:	UN1950
Proper shipping name:	AEROSOLS, FLAMMABLE
Hazard Class:	2.1

International Maritime Organization (IMO):

UN/ID No:	UN1950
Proper shipping name:	AEROSOLS, FLAMMABLE
Hazard Class:	2.1
Marine Pollutant	No

15. REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS:

Ingredient Name CAS-No.	Approx. Weight %	SARA 302	SARA 313	CERCLA RQ in lbs.
DIMETHYL KETONE- EXEMPT SOLVENT 67-64-1	30 - 35			5000
ISOBUTYL ACETATE 110-19-0	25 - 30			5000

SARA 311/312 Hazard Class:

Acute:	yes
Chronic:	yes
Flammability:	yes
Reactivity:	no
Sudden Pressure:	yes

U.S. STATE REGULATIONS:

Right to Know:

The specific chemical identity of a component may be withheld as a trade secret under 34 Pennsylvania Code, Chapter 317.

Pennsylvania Right To Know:

PROPANE	74-98-6
BUTANE	106-97-8
DIMETHYL KETONE- EXEMPT SOLVENT	67-64-1
ETHYL 3-ETHOXYPROPIONATE	763-69-9
ISOBUTYL ACETATE	110-19-0

Additional Non-Hazardous Materials

PROPRIETARY RESIN	Trade Secret
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Rule 66 status of product

Not photochemically reactive.

INTERNATIONAL REGULATIONS - Chemical Inventories

US TSCA Inventory:

All components of this product are in compliance with U.S. TSCA Chemical Substance Inventory Requirements.

Canada Domestic Substances List:

All components of this product are listed on the Domestic Substances List.

16. OTHER INFORMATION**HMIS Codes**

Health:	2*
Flammability:	4
Reactivity:	1
PPE:	X - See Section 8 for Personal Protective Equipment (PPE).

Abbreviations:

OSHA - Occupational Safety and Health Administration, IARC - International Agency for Research on Cancer, NIOSH - National Institute of Occupational Safety and Health, NTP - National Toxicology Program, ACGIH - American Conference of Governmental Industrial Hygienists, SCAQMD - South Coast Air Quality Management District, TSCA - Toxic Substances Control Act, IATA - International Air Transport Association, IMO - International Maritime Organization, DOT - Department of Transportation, NA - Not applicable, NOT ESTAB - Not established, N.A.V. - Not available, RQ - Reportable quantity, WT - Weight, MG/CU M - Milligrams per cubic meter, G/L - Grams per liter, MM - Millimeters, MPPCF - Millions of particles per cubic foot, PPM - parts per million, PPT - parts per thousand, TCC/PM - Tag closed cup / Pensky-Martens, PB - Lead, PEL - Permissible exposure level, TWA - Time Weighted Average, STEL - Short term exposure limit, C - Celsius, F - Fahrenheit.

Disclaimer:

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Preparation Information:

Prepared By:	Regulatory Affairs Department
Print date:	05/Jun/2014
Revision Date:	05/Jun/2014



Material Safety Data Sheet

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identification

Product ID: 465.0066009.076
Product Name: VAL66009 BRILL GOLD SPR 6UC
Product Use: Paint product.
Print date: 07/Jun/2014
Revision Date: 07/Jun/2014

Company Identification

The Valspar Corporation
1000 Lake Road
Medina, OH 44256

Manufacturer's Phone: 1-330-725-4511

24-Hour Medical Emergency Phone: 1-888-345-5732

2. HAZARDS IDENTIFICATION

Primary Routes of Exposure:

Inhalation
Ingestion
Skin absorption

Eye Contact:

- Severe eye irritation

Skin Contact:

- May cause defatting of the skin.
- Dermatitis
- Causes skin irritation.

Ingestion:

- Irritation of the mouth, throat, and stomach.
- Aspiration hazard if swallowed - can enter lungs and cause damage.

Inhalation:

- Causes respiratory tract irritation.
- Asphyxia

Acute Other Health Effects:

- May cause frostbite
- Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

Target Organ and Other Health Effects:

- Causes headache, drowsiness or other effects to the central nervous system.
- Cardiac arrhythmias
- Kidney injury may occur.
- Blood disorders

This product contains ingredients that may contribute to the following potential chronic health effects:

- Notice: Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.
- Exposure may result in irritation and metal-fume fever, metallic taste, and discoloration of the skin and hair.
- Systemic toxicity

3. COMPOSITION / INFORMATION ON HAZARDOUS INGREDIENTS

Ingredient Name CAS-No.	Approx. Weight %	Chemical Name
DIMETHYL KETONE- EXEMPT SOLVENT 67-64-1	25 - 30	Acetone
PROPANE 74-98-6	20 - 25	Propane
BUTANE 106-97-8	10 - 15	Butane
ISOBUTYL ACETATE 110-19-0	5 - 10	Isobutyl acetate
MINERAL SPIRITS 64742-47-8	5 - 10	Petroleum distillates, hydrotreated light
DIMETHYL KETONE 67-64-1	5 - 10	Acetone
COPPER 7440-50-8	5 - 10	Copper
ZINC 7440-66-6	1 - 5	Zinc

If this section is blank there are no hazardous components per OSHA guidelines.

4. FIRST AID MEASURES

Eye Contact:

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. If medical assistance is not immediately available, flush an additional 15 minutes. Get medical attention immediately.

Skin Contact:

Remove contaminated clothing and shoes. Wash off immediately with plenty of water for at least 15 minutes. Get medical attention, if symptoms develop or persist.

Ingestion:

Rinse mouth with water. Give one or two glasses of water. Only induce vomiting at the instruction of medical personnel. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. If vomiting occurs, keep head lower than hips to prevent aspiration. Get medical attention immediately.

Inhalation:

Move injured person into fresh air and keep person calm under observation. For breathing difficulties, oxygen may be necessary. If breathing stops, provide artificial respiration. Do not give direct mouth-to-mouth resuscitation if inhaled. To protect rescuer, use air-viva, oxy-viva or one-way mask. Resuscitate in a well-ventilated area. Get medical attention immediately.

Medical conditions aggravated by exposure:

Any respiratory or skin condition.

5. FIRE FIGHTING MEASURES

Flash point (Fahrenheit):	-31
Flash point (Celsius):	-35
Lower explosive limit (%):	1
Upper explosive limit (%):	13
Autoignition temperature:	not determined
Sensitivity to impact:	no
Sensitivity to static discharge:	Subject to static discharge hazards. Please see bonding and grounding information in Section 7.
Hazardous combustion products:	See Section 10.

Unusual fire and explosion hazards:

None known.

Extinguishing media:

Carbon dioxide, dry chemical, foam and/or water fog.

Fire fighting procedures:

Firefighters should be equipped with self-contained breathing apparatus and turn out gear. Keep containers and surroundings cool with water spray.

6. ACCIDENTAL RELEASE MEASURES

Action to be taken if material is released or spilled:

Ventilate the area. Avoid breathing dust or vapor. Use self-containing breathing apparatus or airmask for large spills in a confined area. Wipe, scrape or soak up in an inert material and put in a container for disposal. See section 7, "Handling and Storage", for proper container and storage procedures. Remove all sources of ignition. Soak up with inert absorbent material. Use only non-sparking tools. Avoid contact with eyes.

7. HANDLING AND STORAGE

Precautions to be taken in handling and storage:

Keep away from heat, sparks and open flame. - No smoking. Keep container closed when not in use. Do not store above 120 degrees F. (49 degrees C). Based on flash point and vapor pressure, suitable storage should be provided in accordance with OSHA regulation 1910.106, Ontario OH&S regulation 851 section 22. Empty containers may contain product residue, including flammable or explosive vapors. Do not cut, puncture or weld on or near container. All label warnings must be observed until the container has been commercially cleaned or reconditioned. If the product is used near or above the flashpoint, an ignition hazard may be present. Activities, uses, or operations which liberate vapor (such as mixing or free fall of liquids) may also present an ignition hazard. Please ensure containers and other interconnected equipment are properly bonded and grounded at all times.

8. PERSONAL PROTECTIVE EQUIPMENT AND EXPOSURE CONTROLS

8. PERSONAL PROTECTIVE EQUIPMENT AND EXPOSURE CONTROLS

Personal Protective Equipment

Eye and face protection:

Wear safety glasses or goggles to protect against exposure.

Skin protection:

Appropriate chemical resistant gloves should be worn.

Other Personnel Protection Data:

To prevent skin contact wear protective clothing covering all exposed areas.

Respiratory protection:

If exposure cannot be controlled below applicable limits, use the appropriate NIOSH approved respirator such as an air purifying respirator with organic vapor cartridge and dust/mist filter. Consult the respirator manufacturer's literature to ensure that the respirator will provide adequate protection. Read and follow all respirator manufacturer's instructions.

Ventilation

Use only in well-ventilated areas. Ensure adequate ventilation, especially in confined areas. Ovens used for curing should contain a fresh air purge to prevent vapours from accumulating and creating a possible explosive mixture. Where the product is used in a hazardous classified area, use explosion-proof electrical/ventilating/lighting/equipment.

Exposure Guidelines

OSHA Permissible Exposure Limits (PEL's)

Ingredient Name CAS-No.	Approx. Weight %	TWA (final)	Ceilings limits (final)	Skin designations
DIMETHYL KETONE- EXEMPT SOLVENT 67-64-1	25 - 30	1000 ppm TWA 2400 mg/m ³ TWA		
PROPANE 74-98-6	20 - 25	1000 ppm TWA 1800 mg/m ³ TWA		
ISOBUTYL ACETATE 110-19-0	5 - 10	150 ppm TWA 700 mg/m ³ TWA		
DIMETHYL KETONE 67-64-1	5 - 10	1000 ppm TWA 2400 mg/m ³ TWA		
COPPER 7440-50-8	5 - 10	0.1 mg/m ³ TWA fume 1 mg/m ³ TWA dust and mist		

ACGIH Threshold Limit Value (TLV's)

Ingredient Name CAS-No.	Approx. Weight %	TWA	STEL	Ceiling limits	Skin designations
DIMETHYL KETONE- EXEMPT SOLVENT 67-64-1	25 - 30	500 ppm TWA	750 ppm STEL		
PROPANE 74-98-6	20 - 25	1000 ppm TWA Aliphatic hydrocarbon gases: Alkane C1-C4			
BUTANE 106-97-8	10 - 15	1000 ppm TWA Aliphatic hydrocarbon gases: Alkane C1-C4			
ISOBUTYL ACETATE 110-19-0	5 - 10	150 ppm TWA			
DIMETHYL KETONE 67-64-1	5 - 10	500 ppm TWA	750 ppm STEL		

Ingredient Name CAS-No.	Approx. Weight %	TWA	STEL	Ceiling limits	Skin designations
COPPER 7440-50-8	5 - 10	0.2 mg/m ³ TWA fume			

9. PHYSICAL PROPERTIES

Odor:	Normal for this product type.
Physical State:	Aerosol
pH:	not determined
Vapor pressure:	NOT DETERMINED mmHg @ 68°F (20°C)
Vapor density (air = 1.0):	5.1
Boiling point:	-44°F (-42°C)
Solubility in water:	not determined
Coefficient of water/oil distribution:	not determined
Density (lbs per US gallon):	5.87
Specific Gravity:	.7
Evaporation rate (butyl acetate = 1.0):	5.6
Flash point (Fahrenheit):	-31
Flash point (Celsius):	-35
Lower explosive limit (%):	1
Upper explosive limit (%):	13
Autoignition temperature:	not determined

10. STABILITY AND REACTIVITY

Stability:	Stable under normal conditions.
Conditions to Avoid:	Heat.
Incompatibility:	Strong oxidizing agents
Hazardous Polymerization:	None anticipated.
Hazardous Decomposition Products:	Carbon monoxide and carbon dioxide. Metal oxide fumes.

Sensitivity to static discharge:	Subject to static discharge hazards. Please see bonding and grounding information in Section 7.
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11. TOXICOLOGICAL INFORMATION

Ingredient Name CAS-No.	Approx. Weight %	NIOSH - Selected LD50s and LC50s
DIMETHYL KETONE- EXEMPT SOLVENT 67-64-1	25 - 30	= 5800 mg/kg Oral LD50 Rat
PROPANE 74-98-6	20 - 25	= 658 mg/L Inhalation LC50 Rat 4 h
BUTANE 106-97-8	10 - 15	= 658 mg/L Inhalation LC50 Rat 4 h
ISOBUTYL ACETATE 110-19-0	5 - 10	= 13400 mg/kg Oral LD50 Rat > 5000 mg/kg Dermal LD50 Rabbit
MINERAL SPIRITS 64742-47-8	5 - 10	> 2000 mg/kg Dermal LD50 Rabbit > 5.2 mg/L Inhalation LC50 Rat 4 h > 5000 mg/kg Oral LD50 Rat
DIMETHYL KETONE 67-64-1	5 - 10	= 5800 mg/kg Oral LD50 Rat

Mutagens/Teratogens/Carcinogens: None known.

12. ECOLOGICAL DATA

No information on ecology is available.

13. DISPOSAL CONSIDERATIONS

Disposal should be made in accordance with federal, state and local regulations.

14. TRANSPORTATION INFORMATION

U.S. Department of Transportation

UN ID Number (msds):

Proper Shipping Name:

CONCOM

CONSUMER COMMODITY ORM-D [Paint]

U.S Hazmat and/or International DG shipment exceptions

The supplier may apply one of the following exceptions: Combustible Liquid, Consumer Commodity, Limited Quantity, Viscous Liquid, Does Not Sustain Combustion, or others, as allowed under 49CFR Hazmat Regulations. Please consult 49CFR Subchapter C to ensure that subsequent shipments comply with these exceptions.

Reportable Quantity Description:

International Air Transport Association (IATA):

UN/ID No:

Proper shipping name:

Hazard Class:

UN1950

AEROSOLS, FLAMMABLE

2.1

International Maritime Organization (IMO):

UN/ID No:

Proper shipping name:

Hazard Class:

Marine Pollutant

UN1950

AEROSOLS, FLAMMABLE

2.1

No

15. REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS:

Ingredient Name CAS-No.	Approx. Weight %	SARA 302	SARA 313	CERCLA RQ in lbs.
DIMETHYL KETONE- EXEMPT SOLVENT 67-64-1	25 - 30			5000
ISOBUTYL ACETATE 110-19-0	5 - 10			5000
DIMETHYL KETONE 67-64-1	5 - 10			5000
COPPER 7440-50-8	5 - 10		form R reporting required for 1.0% de minimis concentration	5000
ZINC 7440-66-6	1 - 5		form R reporting required for 1.0% de minimis concentration (only fume or dust)	1000

SARA 311/312 Hazard Class:

Acute: yes

Chronic:	yes
Flammability:	yes
Reactivity:	no
Sudden Pressure:	yes

U.S. STATE REGULATIONS:

Right to Know:

The specific chemical identity of a component may be withheld as a trade secret under 34 Pennsylvania Code, Chapter 317.

Pennsylvania Right To Know:

PROPANE	74-98-6	
BUTANE	106-97-8	
DIMETHYL KETONE- EXEMPT SOLVENT		67-64-1
MINERAL SPIRITS	64742-47-8	
ISOBUTYL ACETATE	110-19-0	
DIMETHYL KETONE	67-64-1	
ZINC	7440-66-6	
COPPER	7440-50-8	

Additional Non-Hazardous Materials

PROPRIETARY RESIN	Trade Secret
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Rule 66 status of product Not photochemically reactive.

INTERNATIONAL REGULATIONS - Chemical Inventories

US TSCA Inventory:

All components of this product are in compliance with U.S. TSCA Chemical Substance Inventory Requirements.

Canada Domestic Substances List:

All components of this product are listed on the Domestic Substances List.

16. OTHER INFORMATION

HMIS Codes

Health:	2*
Flammability:	4
Reactivity:	1
PPE:	X - See Section 8 for Personal Protective Equipment (PPE).

Abbreviations:

OSHA - Occupational Safety and Health Administration, IARC - International Agency for Research on Cancer, NIOSH - National Institute of Occupational Safety and Health, NTP - National Toxicology Program, ACGIH - American Conference of Governmental Industrial Hygienists, SCAQMD - South Coast Air Quality Management District, TSCA - Toxic Substances Control Act, IATA - International Air Transport Association, IMO - International Maritime Organization, DOT - Department of Transportation, NA - Not applicable, NOT ESTAB - Not established, N.A.V. - Not available, RQ - Reportable quantity, WT - Weight, MG/CU M - Milligrams per cubic meter, G/L - Grams per liter, MM - Millimeters, MPPCF - Millions of particles per cubic foot, PPM - parts per million, PPT - parts per thousand, TCC/PM - Tag closed cup / Pensky-Martens, PB - Lead, PEL - Permissible exposure level, TWA - Time Weighted Average, STEL - Short term exposure limit, C - Celsius, F - Fahrenheit.

Disclaimer:

The data on this sheet represent typical values. Since application variables are a major factor in product performance, this information should serve only as a general guide. Valspar assumes no obligation or liability for use of this information. UNLESS VALSPAR AGREES OTHERWISE IN WRITING, VALSPAR MAKES NO WARRANTIES, EXPRESS OR IMPLIED, AND DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR FREEDOM FROM PATENT INFRINGEMENT. VALSPAR WILL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES. Your only remedy for any defect in this product is the replacement of the defective product, or a refund of its purchase price, at our option. This MSDS contains additional information required by the state of Pennsylvania.

Preparation Information:

Prepared By:	Regulatory Affairs Department
Print date:	07/Jun/2014
Revision Date:	07/Jun/2014



Material Safety Data Sheet

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identification

Product ID: 410.0085010.076
Product Name: VAL85010 PREM GLOSS GOLD ABUNDANCE 6UC
Product Use: Paint product.
Print date: 05/Jun/2014
Revision Date: 05/Jun/2014

Company Identification

The Valspar Corporation
1000 Lake Road
Medina, OH 44256

Manufacturer's Phone: 1-330-725-4511

24-Hour Medical Emergency Phone: 1-888-345-5732

2. HAZARDS IDENTIFICATION

Primary Routes of Exposure:

Inhalation
Ingestion
Skin absorption

Eye Contact:

- Severe eye irritation
- Risk of serious damage to eyes.

Skin Contact:

- Causes skin irritation.
- May cause defatting of the skin.
- Harmful if absorbed through skin.
- Can be absorbed through skin.

Ingestion:

- Irritation of the mouth, throat, and stomach.

- Harmful if swallowed.
- Aspiration hazard if swallowed - can enter lungs and cause damage.

Inhalation:

- Causes respiratory tract irritation.
- Harmful by inhalation.
- Asphyxia

Acute Other Health Effects:

- May cause frostbite
- Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

Target Organ and Other Health Effects:

- Causes headache, drowsiness or other effects to the central nervous system.
- Cardiac arrhythmias
- Kidney injury may occur.
- Blood disorders
- Contains glycol ether which has been shown to cause blood effects damage in laboratory animals.
- Liver injury may occur.

This product contains ingredients that may contribute to the following potential chronic health effects:

- Notice: Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

Carcinogens:

- Possible cancer hazard. Contains material which may cause cancer based on animal data.

3. COMPOSITION / INFORMATION ON HAZARDOUS INGREDIENTS

Ingredient Name CAS-No.	Approx. Weight %	Chemical Name
DIMETHYL KETONE- EXEMPT SOLVENT 67-64-1	35 - 40	Acetone
PROPANE 74-98-6	15 - 20	Propane
BUTANE 106-97-8	5 - 10	Butane
BUTYL ACETATE 123-86-4	5 - 10	n-Butyl acetate
ETHYLENE GLYCOL MONOPROPYL ETHER 2807-30-9	1 - 5	Ethylene glycol monopropyl ether
ETHYL 3- ETHOXYPROPIONATE 763-69-9	1 - 5	Ethyl 3-ethoxypropionate
XYLENE 1330-20-7	1 - 5	Xylenes (o-, m-, p- isomers)
ISOBUTYL ACETATE 110-19-0	1 - 5	Isobutyl acetate
TITANIUM DIOXIDE 13463-67-7	1 - 5	Titanium dioxide
ETHYLBENZENE 100-41-4	.1 - 1	Ethyl benzene

If this section is blank there are no hazardous components per OSHA guidelines.

4. FIRST AID MEASURES

Eye Contact:

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. If medical assistance is not immediately available, flush an additional 15 minutes. Get medical attention immediately.

Skin Contact:

Remove contaminated clothing and shoes. Wash off immediately with plenty of water for at least 15 minutes. Get medical attention, if symptoms develop or persist.

Ingestion:

Rinse mouth with water. Give one or two glasses of water. Only induce vomiting at the instruction of medical personnel. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. If vomiting occurs, keep head lower than hips to prevent aspiration. Get medical attention immediately.

Inhalation:

Move injured person into fresh air and keep person calm under observation. Get medical attention immediately. For breathing difficulties, oxygen may be necessary. If breathing stops, provide artificial respiration. Do not give direct mouth-to-mouth resuscitation if inhaled. To protect rescuer, use air-viva, oxy-viva or one-way mask. Resuscitate in a well-ventilated area.

Medical conditions aggravated by exposure:

Any respiratory or skin condition.

5. FIRE FIGHTING MEASURES

Flash point (Fahrenheit):	-31
Flash point (Celsius):	-35
Lower explosive limit (%):	1
Upper explosive limit (%):	16
Autoignition temperature:	not determined
Sensitivity to impact:	no
Sensitivity to static discharge:	Subject to static discharge hazards. Please see bonding and grounding information in Section 7.
Hazardous combustion products:	See Section 10.

Unusual fire and explosion hazards:

None known.

Extinguishing media:

Carbon dioxide, dry chemical, foam and/or water fog.

Fire fighting procedures:

Firefighters should be equipped with self-contained breathing apparatus and turn out gear. Keep containers and surroundings cool with water spray.

6. ACCIDENTAL RELEASE MEASURES

Action to be taken if material is released or spilled:

Ventilate the area. Avoid breathing dust or vapor. Use self-containing breathing apparatus or airmask for large spills in a confined area. Wipe, scrape or soak up in an inert material and put in a container for disposal. See section 7, "Handling and Storage", for proper container and storage procedures. Remove all sources of ignition. Soak up with inert absorbent material. Use only non-sparking tools. Avoid contact with eyes.

7. HANDLING AND STORAGE

7. HANDLING AND STORAGE

Precautions to be taken in handling and storage:

Keep away from heat, sparks and open flame. - No smoking. Keep container closed when not in use. Do not store above 120 degrees F. (49 degrees C). Based on flash point and vapor pressure, suitable storage should be provided in accordance with OSHA regulation 1910.106, Ontario OH&S regulation 851 section 22. Empty containers may contain product residue, including flammable or explosive vapors. Do not cut, puncture or weld on or near container. All label warnings must be observed until the container has been commercially cleaned or reconditioned. If the product is used near or above the flashpoint, an ignition hazard may be present. Activities, uses, or operations which liberate vapor (such as mixing or free fall of liquids) may also present an ignition hazard. Please ensure containers and other interconnected equipment are properly bonded and grounded at all times.

8. PERSONAL PROTECTIVE EQUIPMENT AND EXPOSURE CONTROLS

Personal Protective Equipment

Eye and face protection:

Wear chemical goggles with splash shields or face shield. Contact lenses should not be worn when working with chemicals because contact lenses may contribute to the severity of an eye injury in case of exposure.

Skin protection:

Appropriate chemical resistant gloves should be worn.

Other Personnel Protection Data:

To prevent skin contact wear protective clothing covering all exposed areas. Ensure that eyewash stations and safety showers are close to the workstation location.

Respiratory protection:

If exposure cannot be controlled below applicable limits, use the appropriate NIOSH approved respirator such as an air purifying respirator with organic vapor cartridge and dust/mist filter. Consult the respirator manufacturer's literature to ensure that the respirator will provide adequate protection. Read and follow all respirator manufacturer's instructions.

Ventilation

Use only in well-ventilated areas. Ensure adequate ventilation, especially in confined areas. Ovens used for curing should contain a fresh air purge to prevent vapours from accumulating and creating a possible explosive mixture. Where the product is used in a hazardous classified area, use explosion-proof electrical/ventilating/lighting/equipment.

Exposure Guidelines

OSHA Permissible Exposure Limits (PEL's)

Ingredient Name CAS-No.	Approx. Weight %	TWA (final)	Ceilings limits (final)	Skin designations
DIMETHYL KETONE- EXEMPT SOLVENT 67-64-1	35 - 40	1000 ppm TWA 2400 mg/m ³ TWA		
PROPANE 74-98-6	15 - 20	1000 ppm TWA 1800 mg/m ³ TWA		
BUTYL ACETATE 123-86-4	5 - 10	150 ppm TWA 710 mg/m ³ TWA		
XYLENE 1330-20-7	1 - 5	100 ppm TWA 435 mg/m ³ TWA		
ISOBUTYL ACETATE 110-19-0	1 - 5	150 ppm TWA 700 mg/m ³ TWA		
TITANIUM DIOXIDE 13463-67-7	1 - 5	15 mg/m ³ TWA dust total		
ETHYLBENZENE 100-41-4	.1 - 1	100 ppm TWA 435 mg/m ³ TWA		

ACGIH Threshold Limit Value (TLV's)

Ingredient Name CAS-No.	Approx. Weight %	TWA	STEL	Ceiling limits	Skin designations
DIMETHYL KETONE- EXEMPT SOLVENT 67-64-1	35 - 40	500 ppm TWA	750 ppm STEL		
PROPANE 74-98-6	15 - 20	1000 ppm TWA Aliphatic hydrocarbon gases: Alkane C1-C4			
BUTANE 106-97-8	5 - 10	1000 ppm TWA Aliphatic hydrocarbon gases: Alkane C1-C4			
BUTYL ACETATE 123-86-4	5 - 10	150 ppm TWA	200 ppm STEL		
XYLENE 1330-20-7	1 - 5	100 ppm TWA	150 ppm STEL		
ISOBUTYL ACETATE 110-19-0	1 - 5	150 ppm TWA			
TITANIUM DIOXIDE 13463-67-7	1 - 5	10 mg/m ³ TWA			
ETHYLBENZENE 100-41-4	.1 - 1	100 ppm TWA	125 ppm STEL		

9. PHYSICAL PROPERTIES

Odor:	Normal for this product type.
Physical State:	Aerosol
pH:	not determined
Vapor pressure:	NOT DETERMINED mmHg @ 68°F (20°C)
Vapor density (air = 1.0):	5.0
Boiling point:	-44°F (-42°C)
Solubility in water:	not determined
Coefficient of water/oil distribution:	not determined
Density (lbs per US gallon):	6.45
Specific Gravity:	.77
Evaporation rate (butyl acetate = 1.0):	5.6
Flash point (Fahrenheit):	-31
Flash point (Celsius):	-35
Lower explosive limit (%):	1
Upper explosive limit (%):	16
Autoignition temperature:	not determined

10. STABILITY AND REACTIVITY

Stability:	Stable under normal conditions.
Conditions to Avoid:	Heat.
Incompatibility:	Strong oxidizing agents
Hazardous Polymerization:	None anticipated.
Hazardous Decomposition Products:	Carbon monoxide and carbon dioxide.

Sensitivity to static discharge:	Subject to static discharge hazards. Please see bonding and grounding information in Section 7.
---	---

11. TOXICOLOGICAL INFORMATION

Ingredient Name CAS-No.	Approx. Weight %	NIOSH - Selected LD50s and LC50s
DIMETHYL KETONE- EXEMPT SOLVENT 67-64-1	35 - 40	= 5800 mg/kg Oral LD50 Rat
PROPANE 74-98-6	15 - 20	= 658 mg/L Inhalation LC50 Rat 4 h
BUTANE 106-97-8	5 - 10	= 658 mg/L Inhalation LC50 Rat 4 h
BUTYL ACETATE 123-86-4	5 - 10	= 10768 mg/kg Oral LD50 Rat = 390 ppm Inhalation LC50 Rat 4 h > 17600 mg/kg Dermal LD50 Rabbit
ETHYLENE GLYCOL MONOPROPYL ETHER 2807-30-9	1 - 5	= 3089 mg/kg Oral LD50 Rat = 960 µL/kg Dermal LD50 Rabbit
ETHYL 3- ETHOXYPROPIONATE 763-69-9	1 - 5	= 10 mL/kg Dermal LD50 Rabbit = 3200 mg/kg Oral LD50 Rat
XYLENE 1330-20-7	1 - 5	= 4300 mg/kg Oral LD50 Rat = 47635 mg/L Inhalation LC50 Rat 4 h = 5000 ppm Inhalation LC50 Rat 4 h > 1700 mg/kg Dermal LD50 Rabbit
ISOBUTYL ACETATE 110-19-0	1 - 5	= 13400 mg/kg Oral LD50 Rat > 5000 mg/kg Dermal LD50 Rabbit
TITANIUM DIOXIDE 13463-67-7	1 - 5	> 10000 mg/kg Oral LD50 Rat
ETHYLBENZENE 100-41-4	.1 - 1	= 15354 mg/kg Dermal LD50 Rabbit = 17.2 mg/L Inhalation LC50 Rat 4 h = 3500 mg/kg Oral LD50 Rat

Mutagens/Teratogens/Carcinogens:

Possible cancer hazard. Contains material which may cause cancer based on animal data.

Contains ethylbenzene, which has been determined by NTP to be an animal carcinogen with no known relevance to humans. IARC has classified ethylbenzene as possibly carcinogenic to humans (2b) on the basis of sufficient evidence of carcinogenicity in laboratory animals but inadequate evidence of cancer in humans. Contains TIO2 which is listed by IARC as a possible human carcinogen (Group 2B) based on animal data. Neither long term animal studies, nor human epidemiology studies of workers exposed to TIO2 provide an adequate basis to conclude TIO2 is carcinogenic. TIO2 is not classified as a carcinogen by NTP, U.S. OSHA, or the U.S. EPA.

Ingredient Name CAS-No.	Approx. Weight %	California Prop 65 - Reproductive (Female)	California Prop 65 - Carcinogen
ETHYLBENZENE 100-41-4	.1 - 1		Listed. initial date 6/11/04 - carcinogen

Ingredient Name CAS-No.	Approx. Weight %	IARC Group 1 - Human Evidence	IARC Group 2A - Limited Human Data	IARC Group 2B - Sufficient Animal Data
TITANIUM DIOXIDE 13463-67-7	1 - 5			Monograph 47 [1989]
ETHYLBENZENE 100-41-4	.1 - 1			Monograph 77 [2000]

Ingredient Name CAS-No.	Approx. Weight %	OSHA - Hazard Communication Carcinogens	OSHA - Specifically Regulated Carcinogens	ACGIH Carcinogens
TITANIUM DIOXIDE 13463-67-7	1 - 5	Present		
ETHYLBENZENE 100-41-4	.1 - 1	Present		A3 Confirmed Animal Carcinogen with Unknown Relevance to Humans

12. ECOLOGICAL DATA

No information on ecology is available.

13. DISPOSAL CONSIDERATIONS

Disposal should be made in accordance with federal, state and local regulations.

14. TRANSPORTATION INFORMATION

U.S. Department of Transportation

UN ID Number (msds):

Proper Shipping Name:

CONCOM

CONSUMER COMMODITY ORM-D [Paint]

U.S Hazmat and/or International DG shipment exceptions

The supplier may apply one of the following exceptions: Combustible Liquid, Consumer Commodity, Limited Quantity, Viscous Liquid, Does Not Sustain Combustion, or others, as allowed under 49CFR Hazmat Regulations. Please consult 49CFR Subchapter C to ensure that subsequent shipments comply with these exceptions.

Reportable Quantity Description:

International Air Transport Association (IATA):

UN/ID No:

Proper shipping name:

Hazard Class:

UN1950

AEROSOLS, FLAMMABLE

2.1

International Maritime Organization (IMO):

UN/ID No:

Proper shipping name:

Hazard Class:

Marine Pollutant

UN1950

AEROSOLS, FLAMMABLE

2.1

No

15. REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS:

Ingredient Name CAS-No.	Approx. Weight %	SARA 302	SARA 313	CERCLA RQ in lbs.
DIMETHYL KETONE- EXEMPT SOLVENT 67-64-1	35 - 40			5000
BUTYL ACETATE 123-86-4	5 - 10			5000
ETHYLENE GLYCOL MONOPROPYL ETHER 2807-30-9	1 - 5		YES	

15. REGULATORY INFORMATION

XYLENE 1330-20-7	1 - 5		form R reporting required for 1.0% de minimis concentration	100
ISOBUTYL ACETATE 110-19-0	1 - 5			5000
ETHYLBENZENE 100-41-4	.1 - 1		form R reporting required for 1.0% de minimis concentration	1000

SARA 311/312 Hazard Class:

Acute: yes
Chronic: yes
Flammability: yes
Reactivity: no
Sudden Pressure: yes

U.S. STATE REGULATIONS:

Right to Know:

The specific chemical identity of a component may be withheld as a trade secret under 34 Pennsylvania Code, Chapter 317.

Pennsylvania Right To Know:

PROPANE	74-98-6
BUTANE	106-97-8
XYLENE	1330-20-7
ETHYL 3-ETHOXYPROPIONATE	763-69-9
BUTYL ACETATE	123-86-4
TITANIUM DIOXIDE	13463-67-7
ISOBUTYL ACETATE	110-19-0
DIMETHYL KETONE- EXEMPT SOLVENT	67-64-1
ETHYLENE GLYCOL MONOPROPYL ETHER	2807-30-9

Additional Non-Hazardous Materials

PROPRIETARY RESIN	Trade Secret
PROPRIETARY RESIN	Trade Secret

California Proposition 65:

WARNING! This product contains a chemical known in the State of California to cause cancer.

Rule 66 status of product

Not photochemically reactive.

INTERNATIONAL REGULATIONS - Chemical Inventories

US TSCA Inventory:

All components of this product are in compliance with U.S. TSCA Chemical Substance Inventory Requirements.

Canada Domestic Substances List:

All components of this product are listed on the Domestic Substances List.

16. OTHER INFORMATION

HMIS Codes

Health:	2*
Flammability:	4
Reactivity:	1

16. OTHER INFORMATION

PPE:

X - See Section 8 for Personal Protective Equipment (PPE).

Abbreviations:

OSHA - Occupational Safety and Health Administration, IARC - International Agency for Research on Cancer, NIOSH - National Institute of Occupational Safety and Health, NTP - National Toxicology Program, ACGIH - American Conference of Governmental Industrial Hygienists, SCAQMD - South Coast Air Quality Management District, TSCA - Toxic Substances Control Act, IATA - International Air Transport Association, IMO - International Maritime Organization, DOT - Department of Transportation, NA - Not applicable, NOT ESTAB - Not established, N.A.V. - Not available, RQ - Reportable quantity, WT - Weight, MG/CU M - Milligrams per cubic meter, G/L - Grams per liter, MM - Millimeters, MPPCF - Millions of particles per cubic foot, PPM - parts per million, PPT - parts per thousand, TCC/PM - Tag closed cup / Pensky-Martens, PB - Lead, PEL - Permissible exposure level, TWA - Time Weighted Average, STEL - Short term exposure limit, C - Celsius, F - Fahrenheit.

Disclaimer:

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Preparation Information:

Prepared By:	Regulatory Affairs Department
Print date:	05/Jun/2014
Revision Date:	05/Jun/2014



Material Safety Data Sheet

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identification

Product ID: 410.0085018.076
Product Name: VAL85018 PREM GLOSS ISLAND ORANGE 6UC
Product Use: Paint product.
Print date: 06/Jun/2014
Revision Date: 06/Jun/2014

Company Identification

The Valspar Corporation
1000 Lake Road
Medina, OH 44256

Manufacturer's Phone: 1-330-725-4511

24-Hour Medical Emergency Phone: 1-888-345-5732

2. HAZARDS IDENTIFICATION

Primary Routes of Exposure:

Inhalation
Ingestion
Skin absorption

Eye Contact:

- Severe eye irritation
- Risk of serious damage to eyes.

Skin Contact:

- Causes skin irritation.
- May cause defatting of the skin.
- Harmful if absorbed through skin.
- Can be absorbed through skin.

Ingestion:

- Irritation of the mouth, throat, and stomach.

- Harmful if swallowed.
- Aspiration hazard if swallowed - can enter lungs and cause damage.

Inhalation:

- Causes respiratory tract irritation.
- Harmful by inhalation.
- Asphyxia

Acute Other Health Effects:

- May cause frostbite
- Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

Target Organ and Other Health Effects:

- Causes headache, drowsiness or other effects to the central nervous system.
- Cardiac arrhythmias
- Kidney injury may occur.
- Blood disorders
- Contains glycol ether which has been shown to cause blood effects damage in laboratory animals.
- Liver injury may occur.

This product contains ingredients that may contribute to the following potential chronic health effects:

- Notice: Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

Carcinogens:

- Possible cancer hazard. Contains material which may cause cancer based on animal data.

3. COMPOSITION / INFORMATION ON HAZARDOUS INGREDIENTS

Ingredient Name CAS-No.	Approx. Weight %	Chemical Name
DIMETHYL KETONE- EXEMPT SOLVENT 67-64-1	30 - 35	Acetone
PROPANE 74-98-6	15 - 20	Propane
BUTANE 106-97-8	5 - 10	Butane
BUTYL ACETATE 123-86-4	5 - 10	n-Butyl acetate
ETHYLENE GLYCOL MONOPROPYL ETHER 2807-30-9	1 - 5	Ethylene glycol monopropyl ether
ETHYL 3- ETHOXYPROPIONATE 763-69-9	1 - 5	Ethyl 3-ethoxypropionate
XYLENE 1330-20-7	1 - 5	Xylenes (o-, m-, p- isomers)
ISOBUTYL ACETATE 110-19-0	1 - 5	Isobutyl acetate
TITANIUM DIOXIDE 13463-67-7	.1 - 1	Titanium dioxide
ETHYLBENZENE 100-41-4	.1 - 1	Ethyl benzene

If this section is blank there are no hazardous components per OSHA guidelines.

4. FIRST AID MEASURES

Eye Contact:

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. If medical assistance is not immediately available, flush an additional 15 minutes. Get medical attention immediately.

Skin Contact:

Remove contaminated clothing and shoes. Wash off immediately with plenty of water for at least 15 minutes. Get medical attention, if symptoms develop or persist.

Ingestion:

Rinse mouth with water. Give one or two glasses of water. Only induce vomiting at the instruction of medical personnel. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. If vomiting occurs, keep head lower than hips to prevent aspiration. Get medical attention immediately.

Inhalation:

Move injured person into fresh air and keep person calm under observation. Get medical attention immediately. For breathing difficulties, oxygen may be necessary. If breathing stops, provide artificial respiration. Do not give direct mouth-to-mouth resuscitation if inhaled. To protect rescuer, use air-viva, oxy-viva or one-way mask. Resuscitate in a well-ventilated area.

Medical conditions aggravated by exposure:

Any respiratory or skin condition.

5. FIRE FIGHTING MEASURES

Flash point (Fahrenheit):	-31
Flash point (Celsius):	-35
Lower explosive limit (%):	1
Upper explosive limit (%):	16
Autoignition temperature:	not determined
Sensitivity to impact:	no
Sensitivity to static discharge:	Subject to static discharge hazards. Please see bonding and grounding information in Section 7.
Hazardous combustion products:	See Section 10.

Unusual fire and explosion hazards:

None known.

Extinguishing media:

Carbon dioxide, dry chemical, foam and/or water fog.

Fire fighting procedures:

Firefighters should be equipped with self-contained breathing apparatus and turn out gear. Keep containers and surroundings cool with water spray.

6. ACCIDENTAL RELEASE MEASURES

Action to be taken if material is released or spilled:

Ventilate the area. Avoid breathing dust or vapor. Use self-containing breathing apparatus or airmask for large spills in a confined area. Wipe, scrape or soak up in an inert material and put in a container for disposal. See section 7, "Handling and Storage", for proper container and storage procedures. Remove all sources of ignition. Soak up with inert absorbent material. Use only non-sparking tools. Avoid contact with eyes.

7. HANDLING AND STORAGE

7. HANDLING AND STORAGE

Precautions to be taken in handling and storage:

Keep away from heat, sparks and open flame. - No smoking. Keep container closed when not in use. Do not store above 120 degrees F. (49 degrees C). Based on flash point and vapor pressure, suitable storage should be provided in accordance with OSHA regulation 1910.106, Ontario OH&S regulation 851 section 22. Empty containers may contain product residue, including flammable or explosive vapors. Do not cut, puncture or weld on or near container. All label warnings must be observed until the container has been commercially cleaned or reconditioned. If the product is used near or above the flashpoint, an ignition hazard may be present. Activities, uses, or operations which liberate vapor (such as mixing or free fall of liquids) may also present an ignition hazard. Please ensure containers and other interconnected equipment are properly bonded and grounded at all times.

8. PERSONAL PROTECTIVE EQUIPMENT AND EXPOSURE CONTROLS

Personal Protective Equipment

Eye and face protection:

Wear chemical goggles with splash shields or face shield. Contact lenses should not be worn when working with chemicals because contact lenses may contribute to the severity of an eye injury in case of exposure.

Skin protection:

Appropriate chemical resistant gloves should be worn.

Other Personnel Protection Data:

To prevent skin contact wear protective clothing covering all exposed areas. Ensure that eyewash stations and safety showers are close to the workstation location.

Respiratory protection:

If exposure cannot be controlled below applicable limits, use the appropriate NIOSH approved respirator such as an air purifying respirator with organic vapor cartridge and dust/mist filter. Consult the respirator manufacturer's literature to ensure that the respirator will provide adequate protection. Read and follow all respirator manufacturer's instructions.

Ventilation

Use only in well-ventilated areas. Ensure adequate ventilation, especially in confined areas. Ovens used for curing should contain a fresh air purge to prevent vapours from accumulating and creating a possible explosive mixture. Where the product is used in a hazardous classified area, use explosion-proof electrical/ventilating/lighting/equipment.

Exposure Guidelines

OSHA Permissible Exposure Limits (PEL's)

Ingredient Name CAS-No.	Approx. Weight %	TWA (final)	Ceilings limits (final)	Skin designations
DIMETHYL KETONE- EXEMPT SOLVENT 67-64-1	30 - 35	1000 ppm TWA 2400 mg/m ³ TWA		
PROPANE 74-98-6	15 - 20	1000 ppm TWA 1800 mg/m ³ TWA		
BUTYL ACETATE 123-86-4	5 - 10	150 ppm TWA 710 mg/m ³ TWA		
XYLENE 1330-20-7	1 - 5	100 ppm TWA 435 mg/m ³ TWA		
ISOBUTYL ACETATE 110-19-0	1 - 5	150 ppm TWA 700 mg/m ³ TWA		
TITANIUM DIOXIDE 13463-67-7	.1 - 1	15 mg/m ³ TWA dust total		
ETHYLBENZENE 100-41-4	.1 - 1	100 ppm TWA 435 mg/m ³ TWA		

ACGIH Threshold Limit Value (TLV's)

Ingredient Name CAS-No.	Approx. Weight %	TWA	STEL	Ceiling limits	Skin designations
DIMETHYL KETONE- EXEMPT SOLVENT 67-64-1	30 - 35	500 ppm TWA	750 ppm STEL		
PROPANE 74-98-6	15 - 20	1000 ppm TWA Aliphatic hydrocarbon gases: Alkane C1-C4			
BUTANE 106-97-8	5 - 10	1000 ppm TWA Aliphatic hydrocarbon gases: Alkane C1-C4			
BUTYL ACETATE 123-86-4	5 - 10	150 ppm TWA	200 ppm STEL		
XYLENE 1330-20-7	1 - 5	100 ppm TWA	150 ppm STEL		
ISOBUTYL ACETATE 110-19-0	1 - 5	150 ppm TWA			
TITANIUM DIOXIDE 13463-67-7	.1 - 1	10 mg/m ³ TWA			
ETHYLBENZENE 100-41-4	.1 - 1	100 ppm TWA	125 ppm STEL		

9. PHYSICAL PROPERTIES

Odor:	Normal for this product type.
Physical State:	Aerosol
pH:	not determined
Vapor pressure:	NOT DETERMINED mmHg @ 68°F (20°C)
Vapor density (air = 1.0):	5.0
Boiling point:	-44°F (-42°C)
Solubility in water:	not determined
Coefficient of water/oil distribution:	not determined
Density (lbs per US gallon):	6.47
Specific Gravity:	.78
Evaporation rate (butyl acetate = 1.0):	5.6
Flash point (Fahrenheit):	-31
Flash point (Celsius):	-35
Lower explosive limit (%):	1
Upper explosive limit (%):	16
Autoignition temperature:	not determined

10. STABILITY AND REACTIVITY

Stability:	Stable under normal conditions.
Conditions to Avoid:	Heat.
Incompatibility:	Strong oxidizing agents
Hazardous Polymerization:	None anticipated.
Hazardous Decomposition Products:	Carbon monoxide and carbon dioxide.

Sensitivity to static discharge:	Subject to static discharge hazards. Please see bonding and grounding information in Section 7.
---	---

11. TOXICOLOGICAL INFORMATION

Ingredient Name CAS-No.	Approx. Weight %	NIOSH - Selected LD50s and LC50s
DIMETHYL KETONE- EXEMPT SOLVENT 67-64-1	30 - 35	= 5800 mg/kg Oral LD50 Rat
PROPANE 74-98-6	15 - 20	= 658 mg/L Inhalation LC50 Rat 4 h
BUTANE 106-97-8	5 - 10	= 658 mg/L Inhalation LC50 Rat 4 h
BUTYL ACETATE 123-86-4	5 - 10	= 10768 mg/kg Oral LD50 Rat = 390 ppm Inhalation LC50 Rat 4 h > 17600 mg/kg Dermal LD50 Rabbit
ETHYLENE GLYCOL MONOPROPYL ETHER 2807-30-9	1 - 5	= 3089 mg/kg Oral LD50 Rat = 960 µL/kg Dermal LD50 Rabbit
ETHYL 3- ETHOXYPROPIONATE 763-69-9	1 - 5	= 10 mL/kg Dermal LD50 Rabbit = 3200 mg/kg Oral LD50 Rat
XYLENE 1330-20-7	1 - 5	= 4300 mg/kg Oral LD50 Rat = 47635 mg/L Inhalation LC50 Rat 4 h = 5000 ppm Inhalation LC50 Rat 4 h > 1700 mg/kg Dermal LD50 Rabbit
ISOBUTYL ACETATE 110-19-0	1 - 5	= 13400 mg/kg Oral LD50 Rat > 5000 mg/kg Dermal LD50 Rabbit
TITANIUM DIOXIDE 13463-67-7	.1 - 1	> 10000 mg/kg Oral LD50 Rat
ETHYLBENZENE 100-41-4	.1 - 1	= 15354 mg/kg Dermal LD50 Rabbit = 17.2 mg/L Inhalation LC50 Rat 4 h = 3500 mg/kg Oral LD50 Rat

Mutagens/Teratogens/Carcinogens:

Possible cancer hazard. Contains material which may cause cancer based on animal data.

Contains ethylbenzene, which has been determined by NTP to be an animal carcinogen with no known relevance to humans. IARC has classified ethylbenzene as possibly carcinogenic to humans (2b) on the basis of sufficient evidence of carcinogenicity in laboratory animals but inadequate evidence of cancer in humans. Contains TIO2 which is listed by IARC as a possible human carcinogen (Group 2B) based on animal data. Neither long term animal studies, nor human epidemiology studies of workers exposed to TIO2 provide an adequate basis to conclude TIO2 is carcinogenic. TIO2 is not classified as a carcinogen by NTP, U.S. OSHA, or the U.S. EPA.

Ingredient Name CAS-No.	Approx. Weight %	California Prop 65 - Reproductive (Female)	California Prop 65 - Carcinogen
ETHYLBENZENE 100-41-4	.1 - 1		Listed. initial date 6/11/04 - carcinogen

Ingredient Name CAS-No.	Approx. Weight %	IARC Group 1 - Human Evidence	IARC Group 2A - Limited Human Data	IARC Group 2B - Sufficient Animal Data
TITANIUM DIOXIDE 13463-67-7	.1 - 1			Monograph 47 [1989]
ETHYLBENZENE 100-41-4	.1 - 1			Monograph 77 [2000]

Ingredient Name CAS-No.	Approx. Weight %	OSHA - Hazard Communication Carcinogens	OSHA - Specifically Regulated Carcinogens	ACGIH Carcinogens
TITANIUM DIOXIDE 13463-67-7	.1 - 1	Present		
ETHYLBENZENE 100-41-4	.1 - 1	Present		A3 Confirmed Animal Carcinogen with Unknown Relevance to Humans

12. ECOLOGICAL DATA

No information on ecology is available.

13. DISPOSAL CONSIDERATIONS

Disposal should be made in accordance with federal, state and local regulations.

14. TRANSPORTATION INFORMATION

U.S. Department of Transportation

UN ID Number (msds):

Proper Shipping Name:

CONCOM

CONSUMER COMMODITY ORM-D [Paint]

U.S Hazmat and/or International DG shipment exceptions

The supplier may apply one of the following exceptions: Combustible Liquid, Consumer Commodity, Limited Quantity, Viscous Liquid, Does Not Sustain Combustion, or others, as allowed under 49CFR Hazmat Regulations. Please consult 49CFR Subchapter C to ensure that subsequent shipments comply with these exceptions.

Reportable Quantity Description:

International Air Transport Association (IATA):

UN/ID No:

Proper shipping name:

Hazard Class:

UN1950

AEROSOLS, FLAMMABLE

2.1

International Maritime Organization (IMO):

UN/ID No:

Proper shipping name:

Hazard Class:

Marine Pollutant

UN1950

AEROSOLS, FLAMMABLE

2.1

No

15. REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS:

Ingredient Name CAS-No.	Approx. Weight %	SARA 302	SARA 313	CERCLA RQ in lbs.
DIMETHYL KETONE- EXEMPT SOLVENT 67-64-1	30 - 35			5000
BUTYL ACETATE 123-86-4	5 - 10			5000
ETHYLENE GLYCOL MONOPROPYL ETHER 2807-30-9	1 - 5		YES	

15. REGULATORY INFORMATION

XYLENE 1330-20-7	1 - 5		form R reporting required for 1.0% de minimis concentration	100
ISOBUTYL ACETATE 110-19-0	1 - 5			5000
ETHYLBENZENE 100-41-4	.1 - 1		form R reporting required for 1.0% de minimis concentration	1000

SARA 311/312 Hazard Class:

Acute: yes
Chronic: yes
Flammability: yes
Reactivity: no
Sudden Pressure: yes

U.S. STATE REGULATIONS:

Right to Know:

The specific chemical identity of a component may be withheld as a trade secret under 34 Pennsylvania Code, Chapter 317.

Pennsylvania Right To Know:

PROPANE	74-98-6
BUTANE	106-97-8
BUTYL ACETATE	123-86-4
XYLENE	1330-20-7
ISOBUTYL ACETATE	110-19-0
ETHYLENE GLYCOL MONOPROPYL ETHER	2807-30-9
DIMETHYL KETONE- EXEMPT SOLVENT	67-64-1
ETHYL 3-ETHOXYPROPIONATE	763-69-9

Additional Non-Hazardous Materials

PROPRIETARY RESIN	Trade Secret
PROPRIETARY RESIN	Trade Secret

California Proposition 65:

WARNING! This product contains a chemical known in the State of California to cause cancer.

Rule 66 status of product

Not photochemically reactive.

INTERNATIONAL REGULATIONS - Chemical Inventories

US TSCA Inventory:

All components of this product are in compliance with U.S. TSCA Chemical Substance Inventory Requirements.

Canada Domestic Substances List:

All components of this product are listed on the Domestic Substances List.

16. OTHER INFORMATION

HMIS Codes

Health:	2*
Flammability:	4
Reactivity:	1
PPE:	X - See Section 8 for Personal Protective Equipment (PPE).

Abbreviations:

OSHA - Occupational Safety and Health Administration, IARC - International Agency for Research on Cancer, NIOSH - National Institute of Occupational Safety and Health, NTP - National Toxicology Program, ACGIH - American Conference of Governmental Industrial Hygienists, SCAQMD - South Coast Air Quality Management District, TSCA - Toxic Substances Control Act, IATA - International Air Transport Association, IMO - International Maritime Organization, DOT - Department of Transportation, NA - Not applicable, NOT ESTAB - Not established, N.A.V. - Not available, RQ - Reportable quantity, WT - Weight, MG/CU M - Milligrams per cubic meter, G/L - Grams per liter, MM - Millimeters, MPPCF - Millions of particles per cubic foot, PPM - parts per million, PPT - parts per thousand, TCC/PM - Tag closed cup / Pensky-Martens, PB - Lead, PEL - Permissible exposure level, TWA - Time Weighted Average, STEL - Short term exposure limit, C - Celsius, F - Fahrenheit.

Disclaimer:

The data on this sheet represent typical values. Since application variables are a major factor in product performance, this information should serve only as a general guide. Valspar assumes no obligation or liability for use of this information. UNLESS VALSPAR AGREES OTHERWISE IN WRITING, VALSPAR MAKES NO WARRANTIES, EXPRESS OR IMPLIED, AND DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR FREEDOM FROM PATENT INFRINGEMENT. VALSPAR WILL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES. Your only remedy for any defect in this product is the replacement of the defective product, or a refund of its purchase price, at our option. This MSDS contains additional information required by the state of Pennsylvania.

Preparation Information:

Prepared By:	Regulatory Affairs Department
Print date:	06/Jun/2014
Revision Date:	06/Jun/2014



Material Safety Data Sheet

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identification

Product ID: 410.0085022.076
Product Name: VAL85022 PREM GLOSS FROSTY BERRY 6UC
Product Use: Paint product.
Print date: 19/Feb/2014
Revision Date: 19/Feb/2014

Company Identification

The Valspar Corporation
1000 Lake Road
Medina, OH 44256

Manufacturer's Phone: 1-330-725-4511

24-Hour Medical Emergency Phone: 1-888-345-5732

2. HAZARDS IDENTIFICATION

Primary Routes of Exposure:

Inhalation
Ingestion
Skin absorption

Eye Contact:

- Severe eye irritation
- Risk of serious damage to eyes.

Skin Contact:

- Causes skin irritation.
- May cause defatting of the skin.
- Dermatitis
- Harmful if absorbed through skin.

Ingestion:

- Irritation of the mouth, throat, and stomach.

- Harmful if swallowed.
- Aspiration hazard if swallowed - can enter lungs and cause damage.

Inhalation:

- Causes respiratory tract irritation.
- Harmful by inhalation.
- Asphyxia

Acute Other Health Effects:

- May cause frostbite
- Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

Target Organ and Other Health Effects:

- Causes headache, drowsiness or other effects to the central nervous system.
- Cardiac arrhythmias
- Kidney injury may occur.
- Blood disorders
- Contains glycol ether which has been shown to cause blood effects damage in laboratory animals.
- Liver injury may occur.

This product contains ingredients that may contribute to the following potential chronic health effects:

- Notice: Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

Carcinogens:

- Possible cancer hazard. Contains material which may cause cancer based on animal data.

3. COMPOSITION / INFORMATION ON HAZARDOUS INGREDIENTS

Ingredient Name CAS-No.	Approx. Weight %	Chemical Name
DIMETHYL KETONE- EXEMPT SOLVENT 67-64-1	35 - 40	Acetone
PROPANE 74-98-6	15 - 20	Propane
BUTANE 106-97-8	5 - 10	Butane
BUTYL ACETATE 123-86-4	5 - 10	n-Butyl acetate
TITANIUM DIOXIDE 13463-67-7	1 - 5	Titanium dioxide
ETHYLENE GLYCOL MONOPROPYL ETHER 2807-30-9	1 - 5	Ethylene glycol monopropyl ether
ISOBUTYL ACETATE 110-19-0	1 - 5	Isobutyl acetate
METHYL ISOBUTYL KETONE 108-10-1	.1 - 1	Methylisobutyl ketone

If this section is blank there are no hazardous components per OSHA guidelines.

4. FIRST AID MEASURES

Eye Contact:

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. If medical assistance is not immediately available, flush an additional 15 minutes. Get medical attention immediately.

Skin Contact:

Remove contaminated clothing and shoes. Wash off immediately with plenty of water for at least 15 minutes. Get medical attention, if symptoms develop or persist.

Ingestion:

Rinse mouth with water. Give one or two glasses of water. Only induce vomiting at the instruction of medical personnel. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. If vomiting occurs, keep head lower than hips to prevent aspiration. Get medical attention immediately.

Inhalation:

Move injured person into fresh air and keep person calm under observation. Get medical attention immediately. For breathing difficulties, oxygen may be necessary. If breathing stops, provide artificial respiration. Do not give direct mouth-to-mouth resuscitation if inhaled. To protect rescuer, use air-viva, oxy-viva or one-way mask. Resuscitate in a well-ventilated area.

Medical conditions aggravated by exposure:

Any respiratory or skin condition.

5. FIRE FIGHTING MEASURES

Flash point (Fahrenheit):	-31
Flash point (Celsius):	-35
Lower explosive limit (%):	1
Upper explosive limit (%):	16
Autoignition temperature:	not determined
Sensitivity to impact:	no
Sensitivity to static discharge:	Subject to static discharge hazards. Please see bonding and grounding information in Section 7.
Hazardous combustion products:	See Section 10.

Unusual fire and explosion hazards:

None known.

Extinguishing media:

Carbon dioxide, dry chemical, foam and/or water fog.

Fire fighting procedures:

Firefighters should be equipped with self-contained breathing apparatus and turn out gear. Keep containers and surroundings cool with water spray.

6. ACCIDENTAL RELEASE MEASURES

Action to be taken if material is released or spilled:

Ventilate the area. Avoid breathing dust or vapor. Use self-containing breathing apparatus or airmask for large spills in a confined area. Wipe, scrape or soak up in an inert material and put in a container for disposal. See section 7, "Handling and Storage", for proper container and storage procedures. Remove all sources of ignition. Soak up with inert absorbent material. Use only non-sparking tools. Avoid contact with eyes.

7. HANDLING AND STORAGE

7. HANDLING AND STORAGE

Precautions to be taken in handling and storage:

Keep away from heat, sparks and open flame. - No smoking. Keep container closed when not in use. Do not store above 120 degrees F. (49 degrees C). Based on flash point and vapor pressure, suitable storage should be provided in accordance with OSHA regulation 1910.106, Ontario OH&S regulation 851 section 22. Empty containers may contain product residue, including flammable or explosive vapors. Do not cut, puncture or weld on or near container. All label warnings must be observed until the container has been commercially cleaned or reconditioned. If the product is used near or above the flashpoint, an ignition hazard may be present. Activities, uses, or operations which liberate vapor (such as mixing or free fall of liquids) may also present an ignition hazard. Please ensure containers and other interconnected equipment are properly bonded and grounded at all times.

8. PERSONAL PROTECTIVE EQUIPMENT AND EXPOSURE CONTROLS

Personal Protective Equipment

Eye and face protection:

Wear chemical goggles with splash shields or face shield. Contact lenses should not be worn when working with chemicals because contact lenses may contribute to the severity of an eye injury in case of exposure.

Skin protection:

Appropriate chemical resistant gloves should be worn.

Other Personnel Protection Data:

Ensure that eyewash stations and safety showers are close to the workstation location. To prevent skin contact wear protective clothing covering all exposed areas.

Respiratory protection:

If exposure cannot be controlled below applicable limits, use the appropriate NIOSH approved respirator such as an air purifying respirator with organic vapor cartridge and dust/mist filter. Consult the respirator manufacturer's literature to ensure that the respirator will provide adequate protection. Read and follow all respirator manufacturer's instructions.

Ventilation

Use only in well-ventilated areas. Ensure adequate ventilation, especially in confined areas. Ovens used for curing should contain a fresh air purge to prevent vapours from accumulating and creating a possible explosive mixture. Where the product is used in a hazardous classified area, use explosion-proof electrical/ventilating/lighting/equipment.

Exposure Guidelines

OSHA Permissible Exposure Limits (PEL's)

Ingredient Name CAS-No.	Approx. Weight %	TWA (final)	Ceilings limits (final)	Skin designations
DIMETHYL KETONE- EXEMPT SOLVENT 67-64-1	35 - 40	1000 ppm TWA 2400 mg/m ³ TWA		
PROPANE 74-98-6	15 - 20	1000 ppm TWA 1800 mg/m ³ TWA		
BUTYL ACETATE 123-86-4	5 - 10	150 ppm TWA 710 mg/m ³ TWA		
TITANIUM DIOXIDE 13463-67-7	1 - 5	15 mg/m ³ TWA dust total		
ISOBUTYL ACETATE 110-19-0	1 - 5	150 ppm TWA 700 mg/m ³ TWA		
METHYL ISOBUTYL KETONE 108-10-1	.1 - 1	100 ppm TWA 410 mg/m ³ TWA		

ACGIH Threshold Limit Value (TLV's)

Ingredient Name CAS-No.	Approx. Weight %	TWA	STEL	Ceiling limits	Skin designations
DIMETHYL KETONE- EXEMPT SOLVENT 67-64-1	35 - 40	500 ppm TWA	750 ppm STEL		
PROPANE 74-98-6	15 - 20	1000 ppm TWA Aliphatic hydrocarbon gases: Alkane C1-C4			
BUTANE 106-97-8	5 - 10	1000 ppm TWA Aliphatic hydrocarbon gases: Alkane C1-C4			
BUTYL ACETATE 123-86-4	5 - 10	150 ppm TWA	200 ppm STEL		
TITANIUM DIOXIDE 13463-67-7	1 - 5	10 mg/m ³ TWA			
ISOBUTYL ACETATE 110-19-0	1 - 5	150 ppm TWA			
METHYL ISOBUTYL KETONE 108-10-1	.1 - 1	20 ppm TWA	75 ppm STEL		

9. PHYSICAL PROPERTIES

Odor:	Normal for this product type.
Physical State:	Aerosol
pH:	not determined
Vapor pressure:	NOT DETERMINED mmHg @ 68°F (20°C)
Vapor density (air = 1.0):	4
Boiling point:	-44°F (-42°C)
Solubility in water:	not determined
Coefficient of water/oil distribution:	not determined
Density (lbs per US gallon):	6.53
Specific Gravity:	.78
Evaporation rate (butyl acetate = 1.0):	5.6
Flash point (Fahrenheit):	-31
Flash point (Celsius):	-35
Lower explosive limit (%):	1
Upper explosive limit (%):	16
Autoignition temperature:	not determined

10. STABILITY AND REACTIVITY

Stability:	Stable under normal conditions.
Conditions to Avoid:	Heat.
Incompatibility:	Strong oxidizing agents
Hazardous Polymerization:	None anticipated.
Hazardous Decomposition Products:	Carbon monoxide and carbon dioxide. Metal oxide fumes.

Sensitivity to static discharge:	Subject to static discharge hazards. Please see bonding and grounding information in Section 7.
---	---

11. TOXICOLOGICAL INFORMATION

Ingredient Name CAS-No.	Approx. Weight %	NIOSH - Selected LD50s and LC50s
DIMETHYL KETONE- EXEMPT SOLVENT 67-64-1	35 - 40	= 5800 mg/kg Oral LD50 Rat
PROPANE 74-98-6	15 - 20	= 658 mg/L Inhalation LC50 Rat 4 h
BUTANE 106-97-8	5 - 10	= 658 mg/L Inhalation LC50 Rat 4 h
BUTYL ACETATE 123-86-4	5 - 10	= 10768 mg/kg Oral LD50 Rat = 390 ppm Inhalation LC50 Rat 4 h > 17600 mg/kg Dermal LD50 Rabbit
TITANIUM DIOXIDE 13463-67-7	1 - 5	> 10000 mg/kg Oral LD50 Rat
ETHYLENE GLYCOL MONOPROPYL ETHER 2807-30-9	1 - 5	= 3089 mg/kg Oral LD50 Rat = 960 µL/kg Dermal LD50 Rabbit
ISOBUTYL ACETATE 110-19-0	1 - 5	= 13400 mg/kg Oral LD50 Rat > 5000 mg/kg Dermal LD50 Rabbit
METHYL ISOBUTYL KETONE 108-10-1	.1 - 1	= 2080 mg/kg Oral LD50 Rat = 8.2 mg/L Inhalation LC50 Rat 4 h > 16000 mg/kg Dermal LD50 Rabbit

Mutagens/Teratogens/Carcinogens:

Possible cancer hazard. Contains material which may cause cancer based on animal data.

Contains TIO2 which is listed by IARC as a possible human carcinogen (Group 2B) based on animal data. Neither long term animal studies, nor human epidemiology studies of workers exposed to TIO2 provide an adequate basis to conclude TIO2 is carcinogenic. TIO2 is not classified as a carcinogen by NTP, U.S. OSHA, or the U.S. EPA.

Ingredient Name CAS-No.	Approx. Weight %	California Prop 65 - Reproductive (Female)	California Prop 65 - Carcinogen
METHYL ISOBUTYL KETONE 108-10-1	.1 - 1		carcinogen, initial date 11/04/11

Ingredient Name CAS-No.	Approx. Weight %	IARC Group 1 - Human Evidence	IARC Group 2A - Limited Human Data	IARC Group 2B - Sufficient Animal Data
TITANIUM DIOXIDE 13463-67-7	1 - 5			Monograph 47 [1989]
METHYL ISOBUTYL KETONE 108-10-1	.1 - 1			Monograph 101 [in preparation]

Ingredient Name CAS-No.	Approx. Weight %	OSHA - Hazard Communication Carcinogens	OSHA - Specifically Regulated Carcinogens	ACGIH Carcinogens
TITANIUM DIOXIDE 13463-67-7	1 - 5	Present		
METHYL ISOBUTYL KETONE 108-10-1	.1 - 1			A3 Confirmed Animal Carcinogen with Unknown Relevance to Humans

12. ECOLOGICAL DATA

No information on ecology is available.

13. DISPOSAL CONSIDERATIONS

Disposal should be made in accordance with federal, state and local regulations.

14. TRANSPORTATION INFORMATION

U.S. Department of Transportation

UN ID Number (msds):

CONCOM

Proper Shipping Name:

CONSUMER COMMODITY ORM-D [Paint]

U.S Hazmat and/or International DG shipment exceptions

The supplier may apply one of the following exceptions: Combustible Liquid, Consumer Commodity, Limited Quantity, Viscous Liquid, Does Not Sustain Combustion, or others, as allowed under 49CFR Hazmat Regulations. Please consult 49CFR Subchapter C to ensure that subsequent shipments comply with these exceptions.

Reportable Quantity Description:

International Air Transport Association (IATA):

UN/ID No:

UN1950

Proper shipping name:

AEROSOLS, FLAMMABLE

Hazard Class:

2.1

International Maritime Organization (IMO):

UN/ID No:

UN1950

Proper shipping name:

AEROSOLS, FLAMMABLE

Hazard Class:

2.1

Marine Pollutant

No

15. REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS:

Ingredient Name CAS-No.	Approx. Weight %	SARA 302	SARA 313	CERCLA RQ in lbs.
DIMETHYL KETONE- EXEMPT SOLVENT 67-64-1	35 - 40			5000
BUTYL ACETATE 123-86-4	5 - 10			5000
ETHYLENE GLYCOL MONOPROPYL ETHER 2807-30-9	1 - 5		YES	
ISOBUTYL ACETATE 110-19-0	1 - 5			5000
METHYL ISOBUTYL KETONE 108-10-1	.1 - 1		form R reporting required for 1.0% de minimis concentration	5000

SARA 311/312 Hazard Class:

Acute: yes
Chronic: yes
Flammability: yes
Reactivity: no
Sudden Pressure: yes

U.S. STATE REGULATIONS:

Right to Know:

The specific chemical identity of a component may be withheld as a trade secret under 34 Pennsylvania Code, Chapter 317.

Pennsylvania Right To Know:

TITANIUM DIOXIDE	13463-67-7	
ETHYLENE GLYCOL MONOPROPYL ETHER		2807-30-9
DIMETHYL KETONE- EXEMPT SOLVENT		67-64-1
PROPANE	74-98-6	
BUTANE	106-97-8	
BUTYL ACETATE	123-86-4	
ISOBUTYL ACETATE	110-19-0	

Additional Non-Hazardous Materials

PROPRIETARY RESIN	Trade Secret
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California Proposition 65:

WARNING! This product contains a chemical known in the State of California to cause cancer.

Rule 66 status of product

Not photochemically reactive.

INTERNATIONAL REGULATIONS - Chemical Inventories

US TSCA Inventory:

All components of this product are in compliance with U.S. TSCA Chemical Substance Inventory Requirements.

Canada Domestic Substances List:

All components of this product are listed on the Domestic Substances List.

16. OTHER INFORMATION

HMIS Codes

Health:	2*
Flammability:	4
Reactivity:	1
PPE:	X - See Section 8 for Personal Protective Equipment (PPE).

Abbreviations:

OSHA - Occupational Safety and Health Administration, IARC - International Agency for Research on Cancer, NIOSH - National Institute of Occupational Safety and Health, NTP - National Toxicology Program, ACGIH - American Conference of Governmental Industrial Hygienists, SCAQMD - South Coast Air Quality Management District, TSCA - Toxic Substances Control Act, IATA - International Air Transport Association, IMO - International Maritime Organization, DOT - Department of Transportation, NA - Not applicable, NOT ESTAB - Not established, N.A.V. - Not available, RQ - Reportable quantity, WT - Weight, MG/CU M - Milligrams per cubic meter, G/L - Grams per liter, MM - Millimeters, MPPCF - Millions of particles per cubic foot, PPM - parts per million, PPT - parts per thousand, TCC/PM - Tag closed cup / Pensky-Martens, PB - Lead, PEL - Permissible exposure level, TWA - Time Weighted Average, STEL - Short term exposure limit, C - Celsius, F - Fahrenheit.

Disclaimer:

The data on this sheet represent typical values. Since application variables are a major factor in product performance, this information should serve only as a general guide. Valspar assumes no obligation or liability for use of this information. UNLESS VALSPAR AGREES OTHERWISE IN WRITING, VALSPAR MAKES NO WARRANTIES, EXPRESS OR IMPLIED, AND DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR FREEDOM FROM PATENT INFRINGEMENT. VALSPAR WILL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES. Your only remedy for any defect in this product is the replacement of the defective product, or a refund of its purchase price, at our option. This MSDS contains additional information required by the state of Pennsylvania.

Preparation Information:

Prepared By:	Regulatory Affairs Department
Print date:	19/Feb/2014
Revision Date:	19/Feb/2014



Material Safety Data Sheet

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identification

Product ID: 410.0085050.076
Product Name: VAL85050 PREM FLAT BLACK 6UC
Product Use: Paint product.
Print date: 02/Feb/2014
Revision Date: 02/Feb/2014

Company Identification

The Valspar Corporation
1000 Lake Road
Medina, OH 44256

Manufacturer's Phone: 1-330-725-4511

24-Hour Medical Emergency Phone: 1-888-345-5732

2. HAZARDS IDENTIFICATION

Primary Routes of Exposure:

Inhalation
Ingestion
Skin absorption

Eye Contact:

- Severe eye irritation
- Risk of serious damage to eyes.

Skin Contact:

- May cause defatting of the skin.
- Causes skin irritation.
- Harmful if absorbed through skin.

Ingestion:

- Irritation of the mouth, throat, and stomach.
- Harmful if swallowed.

- Aspiration hazard if swallowed - can enter lungs and cause damage.

Inhalation:

- Causes respiratory tract irritation.
- Harmful by inhalation.
- Asphyxia

Acute Other Health Effects:

- May cause frostbite
- Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

Target Organ and Other Health Effects:

- Causes headache, drowsiness or other effects to the central nervous system.
- Blood disorders
- Cardiac arrhythmias
- Kidney injury may occur.
- Contains glycol ether which has been shown to cause blood effects damage in laboratory animals.

This product contains ingredients that may contribute to the following potential chronic health effects:

- Notice: Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

Carcinogens:

- Possible cancer hazard. Contains material which may cause cancer based on animal data.

3. COMPOSITION / INFORMATION ON HAZARDOUS INGREDIENTS

Ingredient Name CAS-No.	Approx. Weight %	Chemical Name
DIMETHYL KETONE- EXEMPT SOLVENT 67-64-1	40 - 45	Acetone
PROPANE 74-98-6	15 - 20	Propane
BUTANE 106-97-8	5 - 10	Butane
BUTYL ACETATE 123-86-4	5 - 10	n-Butyl acetate
ETHYLENE GLYCOL MONOPROPYL ETHER 2807-30-9	1 - 5	Ethylene glycol monopropyl ether
PROPRIETARY INERT	1 - 5	PROPRIETARY INERT
ISOBUTYL ACETATE 110-19-0	1 - 5	Isobutyl acetate
C.I. PIGMENT BLACK 7 1333-86-4	.1 - 1	Carbon black

If this section is blank there are no hazardous components per OSHA guidelines.

4. FIRST AID MEASURES

4. FIRST AID MEASURES

Eye Contact:

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. If medical assistance is not immediately available, flush an additional 15 minutes. Get medical attention immediately.

Skin Contact:

Remove contaminated clothing and shoes. Wash off immediately with plenty of water for at least 15 minutes. Get medical attention, if symptoms develop or persist.

Ingestion:

Rinse mouth with water. Give one or two glasses of water. Only induce vomiting at the instruction of medical personnel. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. If vomiting occurs, keep head lower than hips to prevent aspiration. Get medical attention immediately.

Inhalation:

Move injured person into fresh air and keep person calm under observation. Get medical attention immediately. For breathing difficulties, oxygen may be necessary. If breathing stops, provide artificial respiration. Do not give direct mouth-to-mouth resuscitation if inhaled. To protect rescuer, use air-viva, oxy-viva or one-way mask. Resuscitate in a well-ventilated area.

Medical conditions aggravated by exposure:

Any respiratory or skin condition.

5. FIRE FIGHTING MEASURES

Flash point (Fahrenheit):	-31
Flash point (Celsius):	-35
Lower explosive limit (%):	1
Upper explosive limit (%):	16
Autoignition temperature:	not determined
Sensitivity to impact:	no
Sensitivity to static discharge:	Subject to static discharge hazards. Please see bonding and grounding information in Section 7. See Section 10.
Hazardous combustion products:	

Unusual fire and explosion hazards:

None known.

Extinguishing media:

Carbon dioxide, dry chemical, foam and/or water fog.

Fire fighting procedures:

Firefighters should be equipped with self-contained breathing apparatus and turn out gear. Keep containers and surroundings cool with water spray.

6. ACCIDENTAL RELEASE MEASURES

Action to be taken if material is released or spilled:

Ventilate the area. Avoid breathing dust or vapor. Use self-containing breathing apparatus or airmask for large spills in a confined area. Wipe, scrape or soak up in an inert material and put in a container for disposal. See section 7, "Handling and Storage", for proper container and storage procedures. Remove all sources of ignition. Soak up with inert absorbent material. Use only non-sparking tools. Avoid contact with eyes.

7. HANDLING AND STORAGE

7. HANDLING AND STORAGE

Precautions to be taken in handling and storage:

Keep away from heat, sparks and open flame. - No smoking. Keep container closed when not in use. Do not store above 120 degrees F. (49 degrees C). Based on flash point and vapor pressure, suitable storage should be provided in accordance with OSHA regulation 1910.106, Ontario OH&S regulation 851 section 22. Empty containers may contain product residue, including flammable or explosive vapors. Do not cut, puncture or weld on or near container. All label warnings must be observed until the container has been commercially cleaned or reconditioned. If the product is used near or above the flashpoint, an ignition hazard may be present. Activities, uses, or operations which liberate vapor (such as mixing or free fall of liquids) may also present an ignition hazard. Please ensure containers and other interconnected equipment are properly bonded and grounded at all times.

8. PERSONAL PROTECTIVE EQUIPMENT AND EXPOSURE CONTROLS

Personal Protective Equipment

Eye and face protection:

Wear chemical goggles with splash shields or face shield. Contact lenses should not be worn when working with chemicals because contact lenses may contribute to the severity of an eye injury in case of exposure.

Skin protection:

Appropriate chemical resistant gloves should be worn.

Other Personnel Protection Data:

Ensure that eyewash stations and safety showers are close to the workstation location. To prevent skin contact wear protective clothing covering all exposed areas.

Respiratory protection:

If exposure cannot be controlled below applicable limits, use the appropriate NIOSH approved respirator such as an air purifying respirator with organic vapor cartridge and dust/mist filter. Consult the respirator manufacturer's literature to ensure that the respirator will provide adequate protection. Read and follow all respirator manufacturer's instructions.

Ventilation

Use only in well-ventilated areas. Ensure adequate ventilation, especially in confined areas. Ovens used for curing should contain a fresh air purge to prevent vapours from accumulating and creating a possible explosive mixture. Where the product is used in a hazardous classified area, use explosion-proof electrical/ventilating/lighting/equipment.

Exposure Guidelines

OSHA Permissible Exposure Limits (PEL's)

Ingredient Name CAS-No.	Approx. Weight %	TWA (final)	Ceilings limits (final)	Skin designations
DIMETHYL KETONE- EXEMPT SOLVENT 67-64-1	40 - 45	1000 ppm TWA 2400 mg/m ³ TWA		
PROPANE 74-98-6	15 - 20	1000 ppm TWA 1800 mg/m ³ TWA		
BUTYL ACETATE 123-86-4	5 - 10	150 ppm TWA 710 mg/m ³ TWA		
PROPRIETARY INERT	1 - 5	20 mppcf or 80 mg/m ³ / %SiO ₂		
ISOBUTYL ACETATE 110-19-0	1 - 5	150 ppm TWA 700 mg/m ³ TWA		
C.I. PIGMENT BLACK 7 1333-86-4	.1 - 1	3.5 mg/m ³ TWA		

ACGIH Threshold Limit Value (TLV's)

Ingredient Name CAS-No.	Approx. Weight %	TWA	STEL	Ceiling limits	Skin designations
DIMETHYL KETONE- EXEMPT SOLVENT 67-64-1	40 - 45	500 ppm TWA	750 ppm STEL		
PROPANE 74-98-6	15 - 20	1000 ppm TWA Aliphatic hydrocarbon gases: Alkane C1-C4			
BUTANE 106-97-8	5 - 10	1000 ppm TWA Aliphatic hydrocarbon gases: Alkane C1-C4			
BUTYL ACETATE 123-86-4	5 - 10	150 ppm TWA	200 ppm STEL		
ISOBUTYL ACETATE 110-19-0	1 - 5	150 ppm TWA			
C.I. PIGMENT BLACK 7 1333-86-4	.1 - 1	3.5 mg/m ³ TWA			

9. PHYSICAL PROPERTIES

Odor:	Normal for this product type.
Physical State:	Aerosol
pH:	not determined
Vapor pressure:	NOT DETERMINED mmHg @ 68°F (20°C)
Vapor density (air = 1.0):	4
Boiling point:	-44°F (-42°C)
Solubility in water:	not determined
Coefficient of water/oil distribution:	not determined
Density (lbs per US gallon):	6.34
Specific Gravity:	.76
Evaporation rate (butyl acetate = 1.0):	5.6
Flash point (Fahrenheit):	-31
Flash point (Celsius):	-35
Lower explosive limit (%):	1
Upper explosive limit (%):	16
Autoignition temperature:	not determined

10. STABILITY AND REACTIVITY

Stability:	Stable under normal conditions.
Conditions to Avoid:	Heat.
Incompatibility:	Strong oxidizing agents
Hazardous Polymerization:	None anticipated.
Hazardous Decomposition Products:	Carbon monoxide and carbon dioxide.

Sensitivity to static discharge:	Subject to static discharge hazards. Please see bonding and grounding information in Section 7.
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11. TOXICOLOGICAL INFORMATION

Ingredient Name CAS-No.	Approx. Weight %	NIOSH - Selected LD50s and LC50s
----------------------------	---------------------	----------------------------------

11. TOXICOLOGICAL INFORMATION

DIMETHYL KETONE- EXEMPT SOLVENT 67-64-1	40 - 45	= 5800 mg/kg Oral LD50 Rat
PROPANE 74-98-6	15 - 20	= 658 mg/L Inhalation LC50 Rat 4 h
BUTANE 106-97-8	5 - 10	= 658 mg/L Inhalation LC50 Rat 4 h
BUTYL ACETATE 123-86-4	5 - 10	= 10768 mg/kg Oral LD50 Rat = 390 ppm Inhalation LC50 Rat 4 h > 17600 mg/kg Dermal LD50 Rabbit
ETHYLENE GLYCOL MONOPROPYL ETHER 2807-30-9	1 - 5	= 3089 mg/kg Oral LD50 Rat = 960 µL/kg Dermal LD50 Rabbit
ISOBUTYL ACETATE 110-19-0	1 - 5	= 13400 mg/kg Oral LD50 Rat > 5000 mg/kg Dermal LD50 Rabbit
C.I. PIGMENT BLACK 7 1333-86-4	.1 - 1	> 15400 mg/kg Oral LD50 Rat > 3 g/kg Dermal LD50 Rabbit

Mutagens/Teratogens/Carcinogens:

Possible cancer hazard. Contains material which may cause cancer based on animal data.

IARC has classified carbon black as possibly carcinogenic to humans (Group 2B).

Ingredient Name CAS-No.	Approx. Weight %	IARC Group 1 - Human Evidence	IARC Group 2A - Limited Human Data	IARC Group 2B - Sufficient Animal Data
C.I. PIGMENT BLACK 7 1333-86-4	.1 - 1			Monograph 65 [1996]

Ingredient Name CAS-No.	Approx. Weight %	OSHA - Hazard Communication Carcinogens	OSHA - Specifically Regulated Carcinogens	ACGIH Carcinogens
C.I. PIGMENT BLACK 7 1333-86-4	.1 - 1	Present		

12. ECOLOGICAL DATA

No information on ecology is available.

13. DISPOSAL CONSIDERATIONS

Disposal should be made in accordance with federal, state and local regulations.

14. TRANSPORTATION INFORMATION

U.S. Department of Transportation

UN ID Number (msds):

CONCOM

Proper Shipping Name:

CONSUMER COMMODITY ORM-D [Paint]

U.S Hazmat and/or International DG shipment exceptions

The supplier may apply one of the following exceptions: Combustible Liquid, Consumer Commodity, Limited Quantity, Viscous Liquid, Does Not Sustain Combustion, or others, as allowed under 49CFR Hazmat Regulations. Please consult 49CFR Subchapter C to ensure that subsequent shipments comply with these exceptions.

Reportable Quantity Description:

International Air Transport Association (IATA):

UN/ID No:	UN1950
Proper shipping name:	AEROSOLS, FLAMMABLE
Hazard Class:	2.1

International Maritime Organization (IMO):

UN/ID No:	UN1950
Proper shipping name:	AEROSOLS, FLAMMABLE
Hazard Class:	2.1
Marine Pollutant	No

15. REGULATORY INFORMATION**U.S. FEDERAL REGULATIONS:**

Ingredient Name CAS-No.	Approx. Weight %	SARA 302	SARA 313	CERCLA RQ in lbs.
DIMETHYL KETONE- EXEMPT SOLVENT 67-64-1	40 - 45			5000
BUTYL ACETATE 123-86-4	5 - 10			5000
ETHYLENE GLYCOL MONOPROPYL ETHER 2807-30-9	1 - 5		YES	
ISOBUTYL ACETATE 110-19-0	1 - 5			5000

SARA 311/312 Hazard Class:

Acute:	yes
Chronic:	yes
Flammability:	yes
Reactivity:	no
Sudden Pressure:	yes

U.S. STATE REGULATIONS:**Right to Know:**

The specific chemical identity of a component may be withheld as a trade secret under 34 Pennsylvania Code, Chapter 317.

Pennsylvania Right To Know:

PROPANE	74-98-6
BUTANE	106-97-8
ISOBUTYL ACETATE	110-19-0
ETHYLENE GLYCOL MONOPROPYL ETHER	2807-30-9
DIMETHYL KETONE- EXEMPT SOLVENT	67-64-1
BUTYL ACETATE	123-86-4
PROPRIETARY INERT	Trade Secret

Additional Non-Hazardous Materials

PROPRIETARY RESIN	Trade Secret
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Rule 66 status of product

Not photochemically reactive.

INTERNATIONAL REGULATIONS - Chemical Inventories

US TSCA Inventory:

All components of this product are in compliance with U.S. TSCA Chemical Substance Inventory Requirements.

Canada Domestic Substances List:

All components of this product are listed on the Domestic Substances List.

16. OTHER INFORMATION**HMIS Codes**

Health:	2*
Flammability:	4
Reactivity:	1
PPE:	X - See Section 8 for Personal Protective Equipment (PPE).

Abbreviations:

OSHA - Occupational Safety and Health Administration, IARC - International Agency for Research on Cancer, NIOSH - National Institute of Occupational Safety and Health, NTP - National Toxicology Program, ACGIH - American Conference of Governmental Industrial Hygienists, SCAQMD - South Coast Air Quality Management District, TSCA - Toxic Substances Control Act, IATA - International Air Transport Association, IMO - International Maritime Organization, DOT - Department of Transportation, NA - Not applicable, NOT ESTAB - Not established, N.A.V. - Not available, RQ - Reportable quantity, WT - Weight, MG/CU M - Milligrams per cubic meter, G/L - Grams per liter, MM - Millimeters, MPPCF - Millions of particles per cubic foot, PPM - parts per million, PPT - parts per thousand, TCC/PM - Tag closed cup / Pensky-Martens, PB - Lead, PEL - Permissible exposure level, TWA - Time Weighted Average, STEL - Short term exposure limit, C - Celsius, F - Fahrenheit.

Disclaimer:

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Preparation Information:

Prepared By:	Regulatory Affairs Department
Print date:	02/Feb/2014
Revision Date:	02/Feb/2014



SAFETY DATA SHEET

Revision date 14-May-2015

Version 3

Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Code 410.0085058.076

Product Name VAL85058 PREM GLOSS CLEAR 6UC

Other means of identification

No information available

Recommended use of the chemical and restrictions on use

Aerosol, Paint

Details of the supplier of the safety data sheet

See section 16 for more information

The Valspar Corporation
PO Box 1461
Minneapolis, MN 55440

E-mail address msds@valspar.com

Emergency telephone number

United States of America 1-888-345-5732

American Samoa, Guam, Northern Mariana Islands, Puerto Rico, U.S. Virgin Islands 1-800-255-3924

Section 2: HAZARDS IDENTIFICATION

Classification

Serious eye damage/eye irritation	Category 2
Specific target organ toxicity (single exposure)	Category 3
Flammable aerosols	Category 2
Gases under pressure	Liquefied gas

Label elements

Product Code 410.0085058.076

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Signal word

WARNING

HAZARD STATEMENTS

Flammable aerosol
Contains gas under pressure; may explode if heated
Causes serious eye irritation
May cause drowsiness or dizziness

PREVENTION

Wash face, hands and any exposed skin thoroughly after handling. Wear eye/face protection. Avoid breathing dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use.

RESPONSE

Get medical advice/attention if you feel unwell.

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Skin

Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention.

Inhalation

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

Ingestion

Do NOT induce vomiting. IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

STORAGE

Store locked up. Store in a well-ventilated place. Keep container tightly closed. Protect from sunlight. Store in a well-ventilated place. Do not expose to temperatures exceeding 122 °F (50 °C).

DISPOSAL

Dispose of contents/containers in accordance with local regulations.

HAZARDS NOT OTHERWISE CLASSIFIED (HNOC)

Propellant is classified as a simple asphyxiant if released in large quantities: May displace oxygen and cause rapid suffocation.

OTHER HAZARDS

Not applicable.

UNKNOWN ACUTE TOXICITY

0% of the mixture consists of ingredient(s) of unknown toxicity.

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	weight-%
Acetone	67-64-1	25 - 50

*The exact percentage (concentration) of composition has been withheld as a trade secret.

Section 4: FIRST AID MEASURES

First Aid Measures

General advice

Product Code 410.0085058.076

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AGHS - USA OSHA SDS

Get medical advice/attention if you feel unwell.

Eye contact

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Skin Contact

Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention.

Inhalation

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

Ingestion

Do NOT induce vomiting. IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

Most important symptoms and effects, both acute and delayed

Symptoms No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

Section 5: FIRE FIGHTING MEASURES

Suitable extinguishing media

Dry chemical, CO₂, water spray or alcohol-resistant foam.

Not to be used for safety reasons: Strong water jet

Specific hazards arising from the chemical

Burning produces heavy smoke. Fire may produce irritating and/or toxic gases. In the event of fire and/or explosion do not breathe fumes.

Special protective equipment for fire-fighters

Wear self-contained breathing apparatus and protective suit. Cool containers with flooding quantities of water until well after fire is out. Do not allow run-off from fire-fighting to enter drains or water courses.

Section 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions

Avoid breathing vapors or mists. Remove all sources of ignition. Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Keep people away from and upwind of spill/leak.

For emergency responders

Use personal protection recommended in Section 8.

Environmental precautions

Do not allow into any sewer, on the ground or into any body of water. If the product contaminates lakes, rivers or sewage, inform appropriate authorities in accordance with local regulations.

Methods and material for containment and cleaning up

Methods for containment

Prevent further leakage or spillage if safe to do so.

Methods for cleaning up

Dispose of waste product or used containers according to local regulations. Clean with detergents. Avoid solvent cleaners. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Pick up and transfer to properly labeled containers.

Section 7: HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling

Prevent the creation of flammable or explosive concentrations of vapor in air and avoid vapor concentration higher than the occupational exposure limits. Use personal protection recommended in Section 8. Never use pressure to empty container. Comply with the health and safety at work laws. Prevent product from entering drains. Vapors are heavier than air and may spread along floors. Vapors may form explosive mixtures with air. Do not breathe dust/fume/gas/mist/vapors/spray. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use.

General Hygiene Considerations

Avoid contact with skin, eyes or clothing. When using do not eat, drink or smoke. Wash contaminated clothing before reuse.

Conditions for safe storage, including any incompatibilities

Storage Conditions

Keep/store only in original container. Store in accordance with local regulations. Keep unauthorized personnel away. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Protect from sunlight. Store in a well-ventilated place.

Incompatible materials

Strong bases. Strong oxidizing agents. Strong acids.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits

If S* appears in the OEL table, it indicates this chemical contains a skin notation.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Acetone 67-64-1	STEL: 750 ppm TWA: 500 ppm	TWA: 1000 ppm TWA: 2400 mg/m ³	IDLH: 2500 ppm TWA: 250 ppm TWA: 590 mg/m ³

Appropriate engineering controls

Engineering Controls

Ensure adequate ventilation, especially in confined areas. Provide local exhaust ventilation. In case of insufficient ventilation, wear suitable respiratory equipment.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear safety glasses with side shields (or goggles).

Skin and body protection

Wear anti-static clothing made of natural fiber or of high temperature resistant synthetic fiber.

Hand Protection

There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals. Ensure that the breakthrough time of the glove material is not exceeded. Refer to glove supplier for information on breakthrough time for specific gloves. The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed. Gloves should be replaced regularly and if there is any sign of damage to the glove material. Always ensure that gloves are free from defects and that they are stored and used correctly. The performance or effectiveness of the glove may be reduced by physical / chemical damage and poor maintenance. Wear protective gloves.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Thermal Protection

No information available

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Aerosol
Appearance	No information available
Odor	Solvent
Color	clear
Odor Threshold	No information available
pH value	No information available
Melting point/freezing point	No information available
Boiling point / boiling range	No information available °C / °F
flash point	-35 °C / -31 °F
evaporation rate	No information available
Flammability (solid, gas)	No information available
Flammability Limit in Air	
Upper flammability limit:	No information available
Lower flammability limit:	No information available
Vapor Pressure	No information available
vapor density	No information available
Density (lbs per US gallon)	6.38
specific gravity	.76
Solubility(ies)	Not Determined
Partition coefficient	No information available
Autoignition temperature	No information available
Decomposition temperature	No information available
Kinematic viscosity	No information available
Dynamic viscosity	No information available

Other information

Section 10: STABILITY AND REACTIVITY

Reactivity	No information available.
Chemical stability	Stable under normal conditions.
Possibility of Hazardous Reactions	None under normal processing.
Hazardous polymerization	None under normal processing.
Conditions to avoid	Heat, flames and sparks.
Incompatible materials	Strong bases. Strong oxidizing agents. Strong acids.
Hazardous Decomposition Products	Carbon monoxide. Carbon dioxide (CO2).

Section 11: TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Eye contact	
Causes serious eye irritation	
Skin Contact	
Not applicable	
Ingestion	
Not applicable	
Inhalation	
May cause drowsiness or dizziness	

Numerical measures of toxicity - Component Information

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Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Acetone 67-64-1	-	-	= 50100 mg/m ³ (Rat) 8 h

Numerical measures of toxicity - Product Information

UNKNOWN ACUTE TOXICITY 0% of the mixture consists of ingredient(s) of unknown toxicity.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation	Not applicable
Serious eye damage/eye irritation	Causes serious eye irritation
Skin sensitization	Not applicable
Respiratory sensitization	Not applicable
Germ cell mutagenicity	Not applicable
Carcinogenicity	Not applicable
Reproductive Toxicity	Not applicable
Specific target organ toxicity (single exposure)	May cause drowsiness or dizziness
Specific target organ toxicity (repeated exposure)	Not applicable
Aspiration hazard	Not applicable

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity

Environmental precautions Prevent product from entering drains.

Persistence and degradability

No information available

Bioaccumulation

No information available

Mobility

No information available

Other adverse effects

No information available

Section 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging Improper disposal or reuse of this container may be dangerous and illegal. Empty containers must be scrapped or reconditioned.

Section 14: TRANSPORT INFORMATION

14.1 UN/ID no	DOT	IMDG	IATA
14.2 Proper shipping name	ORM-D CONSUMER COMMODITY	UN1950 Aerosols	UN1950 Aerosols
14.3 Hazard Class		2.1	2.1
14.4 Packing Group			
14.5 Environmental hazard	Not applicable		

Product Code 410.0085058.076

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14.6 Special Provisions**Emergency Response Guide
Number**
126**EmS-No**
F-D, S-U**14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

No information available

Section 15: REGULATORY INFORMATION**International Inventories****TSCA** - United States Toxic Substances Control Act Section 8(b) InventoryAll components are listed or exempt
from listing**DSL** - Canadian Domestic Substances ListAll components are listed or exempt
from listing**US Federal Regulations****SARA 311/312 Hazard Categories**

Acute health hazard	Yes
Chronic Health Hazard	No
Fire hazard	Yes
Sudden release of pressure hazard	Yes
Reactive Hazard	No

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Acetone 67-64-1	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ

US State Regulations**Rule 66 status of product**

Not photochemically reactive.

U.S. EPA Label information**EPA Pesticide registration number** Not applicable**U.S. State Right-to-Know Regulations**

Chemical Name
Acetone 67-64-1
Isobutyl acetate 110-19-0
Propane 74-98-6
Proprietary Non-Hazardous Ingredient - Proprietary CAS
Butane 106-97-8
Proprietary Non-Hazardous Ingredient - Proprietary CAS

Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal
Repeated or prolonged overexposure to solvents may cause permanent damage to the nervous system

Section 16: OTHER INFORMATION**HMIS**

Health hazards	2
Flammability	4

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Physical hazards 0
Personal Protection X

Supplier Address

Valspar Consumer Headquarters 8725 W. Higgins Rd. Suite 1000 Chicago, IL 60631 773-628-5500	The Valspar Corporation 4999 36th St. Grand Rapids, MI 49512 800-253-3957	Valspar Plasti-Kote 7655 Tranmere Dr. Mississauga, Ontario L5S 1L4 905-671-8333
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Prepared By Product Stewardship

Revision date 14-May-2015

Revision Note No information available

Disclaimer

The information on this Safety Data Sheet (SDS) is based on the present state of our knowledge, current national legislation and guidelines. As the specific conditions of use of the product are outside the supplier's knowledge and control the user is responsible for ensuring that the requirements of relevant legislation are complied with. This SDS should not be construed as any guarantee of the technical performance or suitability for particular applications. UNLESS SUPPLIER AGREES OTHERWISE IN WRITING, SUPPLIER MAKES NO WARRANTIES, EXPRESS OR IMPLIED, AND DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR FREEDOM FROM PATENT INFRINGEMENT. SUPPLIER WILL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES.

End of Safety Data Sheet



SAFETY DATA SHEET

Revision date 22-Jan-2016

Version 3

Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Code 410.0085205.076

Product Name VAL85205 CLSIC RYL BLUE GLS 6UC

Other means of identification

No information available

Recommended use of the chemical and restrictions on use

Aerosol, Paint

Details of the supplier of the safety data sheet

See section 16 for more information

The Valspar Corporation
PO Box 1461
Minneapolis, MN 55440

E-mail address msds@valspar.com

Emergency telephone number

United States of America 1-888-345-5732

American Samoa, Guam, Northern Mariana Islands, Puerto Rico, U.S. Virgin Islands 1-800-255-3924

Section 2: HAZARDS IDENTIFICATION

Classification

Serious eye damage/eye irritation	Category 2
Skin sensitization	Category 1
Reproductive toxicity	Category 2
Specific target organ toxicity (single exposure)	Category 3
Flammable aerosols	Category 2
Gases under pressure	Liquefied gas

Label elements

Product Code 410.0085205.076

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Signal word

WARNING

HAZARD STATEMENTS

Flammable aerosol
Contains gas under pressure; may explode if heated
Causes serious eye irritation
May cause an allergic skin reaction
Suspected of damaging fertility or the unborn child
May cause drowsiness or dizziness

PREVENTION

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection. Wash face, hands and any exposed skin thoroughly after handling. Avoid breathing dust/fume/gas/mist/vapors/spray. Contaminated work clothing should not be allowed out of the workplace. Use only outdoors or in a well-ventilated area. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use.

RESPONSE

IF exposed or concerned: Get medical advice/attention.

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Skin

IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

Inhalation

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Ingestion

Do NOT induce vomiting. IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

STORAGE

Store locked up. Store in a well-ventilated place. Keep container tightly closed. Protect from sunlight. Store in a well-ventilated place. Do not expose to temperatures exceeding 122 °F (50 °C).

DISPOSAL

Dispose of contents/containers in accordance with local regulations.

HAZARDS NOT OTHERWISE CLASSIFIED (HNOC)

Propellant is classified as a simple asphyxiant if released in large quantities: May displace oxygen and cause rapid suffocation.

OTHER HAZARDS

Harmful to aquatic life with long lasting effects. Harmful to aquatic life.

UNKNOWN ACUTE TOXICITY

0% of the mixture consists of ingredient(s) of unknown toxicity.

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	weight-%
Acetone	67-64-1	25 - 50
n-Butyl acetate	123-86-4	5 - 10
Ethylene glycol monopropyl ether	2807-30-9	3 - 5
Titanium dioxide	13463-67-7	1 - 3
Isobutyl acetate	110-19-0	1 - 3
Hexanoic acid, 2-ethyl-, zinc salt (2:1)	136-53-8	0.1 - 0.3

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Zirconium ethyl hexoate	22464-99-9	0.1 - 0.3
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*The exact percentage (concentration) of composition has been withheld as a trade secret.

Section 4: FIRST AID MEASURES

First Aid Measures

General advice

IF exposed or concerned: Get medical advice/attention.

Eye contact

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Skin Contact

IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

Inhalation

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Ingestion

Do NOT induce vomiting. IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

Most important symptoms and effects, both acute and delayed

Symptoms

No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians

Treat symptomatically.

Section 5: FIRE FIGHTING MEASURES

Suitable extinguishing media

Dry chemical, CO2, water spray or alcohol-resistant foam.

Not to be used for safety reasons: Strong water jet

Specific hazards arising from the chemical

Burning produces heavy smoke. Fire may produce irritating and/or toxic gases. In the event of fire and/or explosion do not breathe fumes. May cause sensitization by skin contact.

Special protective equipment for fire-fighters

Wear self-contained breathing apparatus and protective suit. Cool containers with flooding quantities of water until well after fire is out. Do not allow run-off from fire-fighting to enter drains or water courses.

Section 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions

Avoid breathing vapors or mists. Remove all sources of ignition. Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Keep people away from and upwind of spill/leak.

For emergency responders

Use personal protection recommended in Section 8.

Environmental precautions

Do not allow into any sewer, on the ground or into any body of water. If the product contaminates lakes, rivers or sewage, inform appropriate authorities in accordance with local regulations. Prevent further leakage or spillage if safe to do so. Local authorities should be advised if significant spillages cannot be contained.

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Methods and material for containment and cleaning up

Methods for containment

Prevent further leakage or spillage if safe to do so.

Methods for cleaning up

Dispose of waste product or used containers according to local regulations. Clean with detergents. Avoid solvent cleaners. Dam up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly. Take up mechanically, placing in appropriate containers for disposal.

Section 7: HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling

Prevent the creation of flammable or explosive concentrations of vapor in air and avoid vapor concentration higher than the occupational exposure limits. Use personal protection recommended in Section 8. Never use pressure to empty container. Comply with the health and safety at work laws. Prevent product from entering drains. Vapors are heavier than air and may spread along floors. Vapors may form explosive mixtures with air. Use only with adequate ventilation. Do not breathe dust/fume/gas/mist/vapors/spray. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use.

General Hygiene Considerations

When using do not eat, drink or smoke. Wash contaminated clothing before reuse. Avoid contact with skin, eyes or clothing.

Conditions for safe storage, including any incompatibilities

Storage Conditions

Keep/store only in original container. Store in accordance with local regulations. Keep unauthorized personnel away. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Keep container tightly closed in a dry and well-ventilated place. Protect from sunlight. Store in a well-ventilated place.

Incompatible materials

Strong oxidizing agents.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits

If S* appears in the OEL table, it indicates this chemical contains a skin notation.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Acetone 67-64-1	STEL: 750 ppm TWA: 500 ppm	TWA: 1000 ppm TWA: 2400 mg/m ³	IDLH: 2500 ppm TWA: 250 ppm TWA: 590 mg/m ³
n-Butyl acetate 123-86-4	STEL: 200 ppm TWA: 150 ppm	TWA: 150 ppm TWA: 710 mg/m ³	IDLH: 1700 ppm TWA: 150 ppm TWA: 710 mg/m ³ STEL: 200 ppm STEL: 950 mg/m ³
Titanium dioxide 13463-67-7	TWA: 10 mg/m ³	TWA: 15 mg/m ³ total dust	IDLH: 5000 mg/m ³
Isobutyl acetate 110-19-0	TWA: 150 ppm	TWA: 150 ppm TWA: 700 mg/m ³	IDLH: 1300 ppm TWA: 150 ppm TWA: 700 mg/m ³
Zirconium ethyl hexoate 22464-99-9	STEL: 10 mg/m ³ Zr TWA: 5 mg/m ³ Zr	TWA: 5 mg/m ³ Zr	IDLH: 25 mg/m ³ Zr TWA: 5 mg/m ³ except Zirconium tetrachloride Zr STEL: 10 mg/m ³ Zr

Appropriate engineering controls

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Engineering Controls

Ensure adequate ventilation, especially in confined areas. Provide local exhaust ventilation. In case of insufficient ventilation, wear suitable respiratory equipment.

Individual protection measures, such as personal protective equipment

Eye/face protection

Tight sealing safety goggles.

Skin and body protection

Wear anti-static clothing made of natural fiber or of high temperature resistant synthetic fiber. Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact. Wear suitable protective clothing.

Hand Protection

There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals. Ensure that the breakthrough time of the glove material is not exceeded. Refer to glove supplier for information on breakthrough time for specific gloves. The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed. Gloves should be replaced regularly and if there is any sign of damage to the glove material. Always ensure that gloves are free from defects and that they are stored and used correctly. The performance or effectiveness of the glove may be reduced by physical / chemical damage and poor maintenance. Wear protective gloves.

Respiratory protection

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Thermal Protection

No information available

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Aerosol
Appearance	No information available
Odor	Solvent
Color	blue
Odor Threshold	No information available
pH value	No information available
Melting point/freezing point	No information available
Boiling point / boiling range	No information available °C / °F
flash point	-35 °C / -31 °F
evaporation rate	No information available
Flammability (solid, gas)	No information available
Flammability Limit in Air	
Upper flammability limit:	No information available
Lower flammability limit:	No information available
Vapor Pressure	No information available
vapor density	No information available
Density (lbs per US gallon)	6.4
specific gravity	.77
Solubility(ies)	Not Determined
Partition coefficient	No information available
Autoignition temperature	No information available
Decomposition temperature	No information available
Kinematic viscosity	No information available
Dynamic viscosity	No information available

Other information

Section 10: STABILITY AND REACTIVITY

Reactivity No information available.

Chemical stability Stable under normal conditions.

Possibility of Hazardous Reactions None under normal processing.

Hazardous polymerization None under normal processing.

Conditions to avoid Heat, flames and sparks.

Incompatible materials Strong oxidizing agents.

Hazardous Decomposition Products Carbon monoxide. Carbon dioxide (CO₂).

Section 11: TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Eye contact

Causes serious eye irritation

Skin Contact

May cause an allergic skin reaction

Ingestion

Not applicable

Inhalation

May cause drowsiness or dizziness

Numerical measures of toxicity - Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Acetone 67-64-1	-	-	= 50100 mg/m ³ (Rat) 8 h
n-Butyl acetate 123-86-4	= 14.13 mg/kg (Rat)	> 17600 mg/kg (Rabbit)	= 390 ppm (Rat) 4 h
Ethylene glycol monopropyl ether 2807-30-9	-	= 870 mg/kg (Rabbit)	= 1530 ppm (Rat) 7 h
Titanium dioxide 13463-67-7	> 10000 mg/kg (Rat)	-	-
Isobutyl acetate 110-19-0	= 15400 mg/kg (Rat)	> 17400 mg/kg (Rabbit)	-
Hexanoic acid, 2-ethyl-, zinc salt (2:1) 136-53-8	-	-	-
Zirconium ethyl hexoate 22464-99-9	-	-	-

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (dermal) 29349 Mg/kg

UNKNOWN ACUTE TOXICITY 0% of the mixture consists of ingredient(s) of unknown toxicity.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity

According to IARC, Volume 93, no significant exposure to primary particles of titanium dioxide is thought to occur from use in paints since the pigment is bound to other materials.

Chemical Name	ACGIH	IARC	NTP	OSHA
Titanium dioxide 13463-67-7		Group 2B		X

IARC (International Agency for Research on Cancer)

Group 2B - Possibly Carcinogenic to Humans.

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present.

Skin corrosion/irritation Not applicable

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Serious eye damage/eye irritation	Causes serious eye irritation
Skin sensitization	May cause an allergic skin reaction
Respiratory sensitization	Not applicable
Germ cell mutagenicity	Not applicable
Carcinogenicity	Not applicable
Reproductive Toxicity	Suspected of damaging fertility or the unborn child
Specific target organ toxicity (single exposure)	May cause drowsiness or dizziness
Specific target organ toxicity (repeated exposure)	Not applicable
Aspiration hazard	Not applicable

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity

Harmful to aquatic life with long lasting effects.

Environmental precautions Prevent product from entering drains.

Persistence and degradability

No information available

Bioaccumulation

No information available

Mobility

No information available

Other adverse effects

No information available

Section 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging Improper disposal or reuse of this container may be dangerous and illegal. Empty containers must be scrapped or reconditioned.

Section 14: TRANSPORT INFORMATION

14.1 UN/ID no	DOT ORM-D	IMDG UN1950	IATA UN1950
14.2 Proper shipping name	CONSUMER COMMODITY	Aerosols, flammable	Aerosols, flammable
14.3 Hazard Class		2.1	2.1
14.4 Packing Group			
14.5 Environmental hazard	Not applicable		
14.6 Special Provisions	Emergency Response Guide Number 126	EmS-No F-D, S-U	
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	No information available		

Section 15: REGULATORY INFORMATION

International Inventories

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

All components are listed or exempt from listing.

DSL - Canadian Domestic Substances List

All components are listed or exempt from listing

US Federal Regulations

Product Code 410.0085205.076

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Chemical Name	SARA 313 - Threshold Values %	Hazardous air pollutants (HAPs) content
Ethylene glycol monopropyl ether 2807-30-9 3 - 5	1	Present

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	Yes
Fire hazard	Yes
Sudden release of pressure hazard	Yes
Reactive Hazard	No

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
n-Butyl acetate 123-86-4	5000 lb			X
Isobutyl acetate 110-19-0				X
Hexanoic acid, 2-ethyl-, zinc salt (2:1) 136-53-8		X		

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Acetone 67-64-1	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ
n-Butyl acetate 123-86-4	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ
Isobutyl acetate 110-19-0	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ

US State Regulations

Rule 66 status of product

Not photochemically reactive.

California Proposition 65

WARNING! This product contains chemical(s) known to the State of California to cause cancer and/or to cause birth defects or other reproductive harm.

U.S. EPA Label information

EPA Pesticide registration number Not applicable

U.S. State Right-to-Know Regulations

Chemical Name
Acetone 67-64-1
Propane 74-98-6
Proprietary Non-Hazardous Ingredient - Proprietary CAS
Butane 106-97-8
n-Butyl acetate 123-86-4
Ethylene glycol monopropyl ether 2807-30-9
Titanium dioxide 13463-67-7
Isobutyl acetate 110-19-0

Product Code 410.0085205.076

Zirconium ethyl hexoate
22464-99-9

Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal
Repeated or prolonged overexposure to solvents may cause permanent damage to the nervous system

Section 16: OTHER INFORMATION

HMIS

Health hazards 2*

* = Chronic Health Hazard

Flammability 4

Physical hazards 0

Personal Protection X

Supplier Address

Valspar Consumer	The Valspar Corporation	Valspar Plasti-Kote
Headquarters	4999 36th St.	1636 Shawsone Dr.
8725 W. Higgins Rd. Suite	Grand Rapids, MI 49512	Mississauga, Ontario L4W 1N7
1000	800-253-3957	905-671-8333
Chicago, IL 60631		
773-628-5500		

Prepared By Product Stewardship

Revision date 22-Jan-2016

Revision Note No information available

Disclaimer

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End of Safety Data Sheet

Material Safety Data Sheet

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identification

Product ID: 044.0000655.008
Product Name: PQ LX FIELD MARK WHT
Product Use: Paint product.
Print date: 17/Apr/2014
Revision Date: 24/Mar/2014

Company Identification

The Valspar Corporation - Architectural Coatings Division
1191 Wheeling Road
Wheeling, IL 60090

Manufacturer's Phone: 1-847-520-8580

24-Hour Medical Emergency Phone: 1-888-345-5732

2. HAZARDS IDENTIFICATION

Primary Routes of Exposure:

Inhalation
Ingestion
Skin absorption

Eye Contact:

- May cause eye irritation.

Skin Contact:

- Causes mild skin irritation.

Ingestion:

None known.

Inhalation:

- May cause irritation of respiratory tract.

This product contains ingredients that may contribute to the following potential chronic health effects:

- Prolonged exposure over TLV may produce pneumoconiosis.

Carcinogens:

- Possible cancer hazard. Contains material which may cause cancer based on animal data.

3. COMPOSITION / INFORMATION ON HAZARDOUS INGREDIENTS

3. COMPOSITION / INFORMATION ON HAZARDOUS INGREDIENTS

Ingredient Name CAS-No.	Approx. Weight %	Chemical Name
CLAY 66402-68-4	20 - 25	Ceramic materials and wares, chemicals
TITANIUM DIOXIDE 13463-67-7	1 - 5	Titanium dioxide

If this section is blank there are no hazardous components per OSHA guidelines.

4. FIRST AID MEASURES

Eye Contact:

Get medical attention, if symptoms develop or persist. Immediately flush eye(s) with plenty of water.

Skin Contact:

Wash off with plenty of water.

Ingestion:

Get medical attention if symptoms occur

Inhalation:

Move to fresh air. Get medical attention, if symptoms develop or persist.

Medical conditions aggravated by exposure:

Any respiratory or skin condition.

5. FIRE FIGHTING MEASURES

Flash point (Fahrenheit):	205
Flash point (Celsius):	96
Lower explosive limit (%):	not determined
Upper explosive limit (%):	not determined
Autoignition temperature:	not determined
Sensitivity to impact:	no
Sensitivity to static discharge:	Sensitivity to static discharge is not expected.
Hazardous combustion products:	See Section 10.

Unusual fire and explosion hazards:

None known.

Extinguishing media:

Carbon dioxide, dry chemical, foam and/or water fog.

Fire fighting procedures:

Firefighters should be equipped with self-contained breathing apparatus and turn out gear. Keep containers and surroundings cool with water spray.

6. ACCIDENTAL RELEASE MEASURES

Action to be taken if material is released or spilled:

Ventilate the area. Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13). Avoid contact with eyes.

7. HANDLING AND STORAGE

7. HANDLING AND STORAGE

Precautions to be taken in handling and storage:

Keep container closed when not in use. Do not freeze. Since emptied containers may contain product residue, follow all label warnings, even after container is emptied. Do not cut, drill, grind, or weld on or near this container.

8. PERSONAL PROTECTIVE EQUIPMENT AND EXPOSURE CONTROLS

Personal Protective Equipment

Eye and face protection:

Wear safety glasses or goggles to protect against exposure.

Skin protection:

Appropriate chemical resistant gloves should be worn.

Respiratory protection:

If exposure cannot be controlled below applicable limits, use the appropriate NIOSH approved respirator such as an air purifying respirator with organic vapor cartridge and dust/mist filter. Consult the respirator manufacturer's literature to ensure that the respirator will provide adequate protection. Read and follow all respirator manufacturer's instructions.

Ventilation

Use only in well-ventilated areas. Ensure adequate ventilation, especially in confined areas.

Exposure Guidelines

OSHA Permissible Exposure Limits (PEL's)

Ingredient Name CAS-No.	Approx. Weight %	TWA (final)	Ceilings limits (final)	Skin designations
CLAY 66402-68-4	20 - 25	5 mg/m ³ TWA Zr		
TITANIUM DIOXIDE 13463-67-7	1 - 5	15 mg/m ³ TWA dust total		

ACGIH Threshold Limit Value (TLV's)

Ingredient Name CAS-No.	Approx. Weight %	TWA	STEL	Ceiling limits	Skin designations
CLAY 66402-68-4	20 - 25	0.2 mg/m ³ TWA Mn 5 mg/m ³ TWA Zr	10 mg/m ³ STEL Zr		
TITANIUM DIOXIDE 13463-67-7	1 - 5	10 mg/m ³ TWA			

9. PHYSICAL PROPERTIES

Odor:

Normal for this product type.

Physical State:

liquid

pH:

not determined

Vapor pressure:

24 mmHg @ 77°F (25°C)

Vapor density (air = 1.0):

0.6

Boiling point:

212°F (100°C)

Solubility in water:

not determined

Coefficient of water/oil distribution:

not determined

Density (lbs per US gallon):

9.96

Specific Gravity:

1.19

9. PHYSICAL PROPERTIES

Evaporation rate (butyl acetate = 1.0):	0.1
Flash point (Fahrenheit):	205
Flash point (Celsius):	96
Lower explosive limit (%):	not determined
Upper explosive limit (%):	not determined
Autoignition temperature:	not determined

10. STABILITY AND REACTIVITY

Stability:	Stable under normal conditions.
Conditions to Avoid:	None known.
Incompatibility:	Avoid water-reactive materials, heat or contact with peroxides or other catalysts.
Hazardous Polymerization:	None anticipated.
Hazardous Decomposition Products:	Carbon monoxide and carbon dioxide. Metal oxide fumes.

Sensitivity to static discharge: Sensitivity to static discharge is not expected.

11. TOXICOLOGICAL INFORMATION

Ingredient Name CAS-No.	Approx. Weight %	NIOSH - Selected LD50s and LC50s
TITANIUM DIOXIDE 13463-67-7	1 - 5	> 10000 mg/kg Oral LD50 Rat

Mutagens/Teratogens/Carcinogens:

Possible cancer hazard. Contains material which may cause cancer based on animal data.

Contains TIO2 which is listed by IARC as a possible human carcinogen (Group 2B) based on animal data. Neither long term animal studies, nor human epidemiology studies of workers exposed to TIO2 provide an adequate basis to conclude TIO2 is carcinogenic. TIO2 is not classified as a carcinogen by NTP, U.S. OSHA, or the U.S. EPA.

Ingredient Name CAS-No.	Approx. Weight %	IARC Group 1 - Human Evidence	IARC Group 2A - Limited Human Data	IARC Group 2B - Sufficient Animal Data
CLAY 66402-68-4	20 - 25			Monograph 43 [1988]
TITANIUM DIOXIDE 13463-67-7	1 - 5			Monograph 47 [1989]

Ingredient Name CAS-No.	Approx. Weight %	OSHA - Hazard Communication Carcinogens	OSHA - Specifically Regulated Carcinogens	ACGIH Carcinogens
CLAY 66402-68-4	20 - 25	Present		
TITANIUM DIOXIDE 13463-67-7	1 - 5	Present		

12. ECOLOGICAL DATA

No information on ecology is available.

13. DISPOSAL CONSIDERATIONS

Disposal should be made in accordance with federal, state and local regulations.

14. TRANSPORTATION INFORMATION

U.S. Department of Transportation

UN ID Number (msds):

NRPAIN

Proper Shipping Name:

PAINT, NOT REGULATED

U.S Hazmat and/or International DG shipment exceptions

The supplier may apply one of the following exceptions: Combustible Liquid, Consumer Commodity, Limited Quantity, Viscous Liquid, Does Not Sustain Combustion, or others, as allowed under 49CFR Hazmat Regulations. Please consult 49CFR Subchapter C to ensure that subsequent shipments comply with these exceptions.

Reportable Quantity Description:

International Air Transport Association (IATA):

Proper shipping name:

NOT REGULATED

International Maritime Organization (IMO):

Proper shipping name:

NOT REGULATED

Marine Pollutant

No

15. REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS:

SARA 311/312 Hazard Class:

Acute: yes

Chronic: yes

Flammability: no

Reactivity: no

Sudden Pressure: no

U.S. STATE REGULATIONS:

Right to Know:

The specific chemical identity of a component may be withheld as a trade secret under 34 Pennsylvania Code, Chapter 317.

Pennsylvania Right To Know:

TITANIUM DIOXIDE

13463-67-7

CLAY

66402-68-4

Additional Non-Hazardous Materials

WATER

7732-18-5

PROPRIETARY RESIN

Trade Secret

Rule 66 status of product

Not photochemically reactive.

INTERNATIONAL REGULATIONS - Chemical Inventories

US TSCA Inventory:

All components of this product are in compliance with U.S. TSCA Chemical Substance Inventory Requirements.

Canada Domestic Substances List:

All components of this product are listed on the Domestic Substances List.

16. OTHER INFORMATION

HMIS Codes

Health:	1*
Flammability:	0
Reactivity:	1
PPE:	X - See Section 8 for Personal Protective Equipment (PPE).

Abbreviations:

OSHA - Occupational Safety and Health Administration, IARC - International Agency for Research on Cancer, NIOSH - National Institute of Occupational Safety and Health, NTP - National Toxicology Program, ACGIH - American Conference of Governmental Industrial Hygienists, SCAQMD - South Coast Air Quality Management District, TSCA - Toxic Substances Control Act, IATA - International Air Transport Association, IMO - International Maritime Organization, DOT - Department of Transportation, NA - Not applicable, NOT ESTAB - Not established, N.A.V. - Not available, RQ - Reportable quantity, WT - Weight, MG/CU M - Milligrams per cubic meter, G/L - Grams per liter, MM - Millimeters, MPPCF - Millions of particles per cubic foot, PPM - parts per million, PPT - parts per thousand, TCC/PM - Tag closed cup / Pensky-Martens, PB - Lead, PEL - Permissible exposure level, TWA - Time Weighted Average, STEL - Short term exposure limit, C - Celsius, F - Fahrenheit.

Disclaimer:

The data on this sheet represent typical values. Since application variables are a major factor in product performance, this information should serve only as a general guide. Valspar assumes no obligation or liability for use of this information. UNLESS VALSPAR AGREES OTHERWISE IN WRITING, VALSPAR MAKES NO WARRANTIES, EXPRESS OR IMPLIED, AND DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR FREEDOM FROM PATENT INFRINGEMENT. VALSPAR WILL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES. Your only remedy for any defect in this product is the replacement of the defective product, or a refund of its purchase price, at our option. This MSDS contains additional information required by the state of Pennsylvania.

Preparation Information:

Prepared By:	Regulatory Affairs Department
Print date:	17/Apr/2014
Revision Date:	24/Mar/2014

SAFETY DATA SHEET

VALU+PLUS PINK POT AND PAN DETERGENT

Section 1. Chemical product and company identification

Product name : VALU+PLUS PINK POT AND PAN DETERGENT

Recommended use and restrictions : Manual Warewashing Detergent

Use only for the purpose on the product label.

Product dilution information : Up to 1 oz/3 gal in water

Supplier's information : US Foods, Inc.
9399 West Higgins Road Suite 500
Rosemont, IL 60018
1-847-720-8000
www.usfoods.com

Code : 916559

Date of issue : 18 Oct 2013

EMERGENCY HEALTH INFORMATION: 1-800-328-0026
Outside United States and Canada CALL 1-651-222-5352 (in USA)

Section 2. Hazards identification

Product AS SOLD
GHS Classification : Not classified.

GHS label elements

Signal word : No signal word.

Hazard statements : No known significant effects or critical hazards.

Precautionary statements

Prevention : Wash thoroughly after handling.
Response : Get medical attention if symptoms appear.
Storage : No other specific measures identified.
Disposal : See section 13 for waste disposal information.

Other hazards : None known.

Product AT USE DILUTION

Not classified.

No signal word.

No known significant effects or critical hazards.

Wash thoroughly after handling.
Get medical attention if symptoms appear.
No other specific measures identified.
See section 13 for waste disposal information.
None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Product AS SOLD

Hazardous ingredients	Concentration Range (%)	CAS number
SODIUM C14-16 OLEFIN SULFONATE	1 - 5	68439-57-6

Product AT USE DILUTION

Within the present knowledge of the supplier, this product does not contain any hazardous ingredients in quantities requiring reporting, in accordance with local regulations.

Section 4. First aid measures

	Product AS SOLD	Product AT USE DILUTION
Eye contact	: No known effect after eye contact. Rinse with water for a few minutes.	No known effect after eye contact. Rinse with water for a few minutes.
Skin contact	: No known effect after skin contact. Rinse with water for a few minutes.	No known effect after skin contact. Rinse with water for a few minutes.
Inhalation	: No special measures required. Treat symptomatically.	No special measures required. Treat symptomatically.
Ingestion	: Get medical attention if symptoms occur.	Get medical attention if symptoms occur.
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training.	
Notes to physician	: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.	

See toxicological information (section 11)

Section 5. Fire-fighting measures

Product AS SOLD	
Suitable fire extinguishing media	: Use water spray, fog or foam.
Specific hazards arising from the chemical	: In a fire or if heated, a pressure increase will occur and the container may burst.
Hazardous thermal decomposition products	: No specific data.
Specific fire-fighting methods	: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

	Product AS SOLD	Product AT USE DILUTION
Personal precautions	: Use personal protective equipment as required.	Use personal protective equipment as required.
Environmental precautions	: Avoid contact of large amounts of spilled material and runoff with soil and surface waterways.	Avoid contact of large amounts of spilled material and runoff with soil and surface waterways.
Methods for cleaning up	: Use a water rinse for final clean-up.	Use a water rinse for final clean-up.

Section 7. Handling and storage

	Product AS SOLD	Product AT USE DILUTION
Handling	: Wash thoroughly after handling.	Wash thoroughly after handling.
Storage	: Keep out of reach of children.	Keep out of reach of children.
	Store between the following temperatures: 0 and 50°C	

Section 8. Exposure controls/personal protection

Control parameters

Ingredient name	Exposure limits
None.	

	Product AS SOLD	Product AT USE DILUTION
Appropriate engineering controls	: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.	Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
Personal protection		
Eye protection	: No protective equipment is needed under normal use conditions.	No protective equipment is needed under normal use conditions.
Hand protection	: No protective equipment is needed under normal use conditions.	No protective equipment is needed under normal use conditions.
Skin protection	: No protective equipment is needed under normal use conditions.	No protective equipment is needed under normal use conditions.
Respiratory protection	: A respirator is not needed under normal and intended conditions of product use.	A respirator is not needed under normal and intended conditions of product use.
Hygiene measures	: Wash hands before eating, drinking or smoking.	

Section 9. Physical and chemical properties

	Product AS SOLD	Product AT USE DILUTION
Physical state	: Liquid.	Liquid.
Color	: pink	pink [Light]
Odor	: Fragrance-like	Fragrance-like
pH	: 7 to 9 (100%)	7.6
Flash point	: > 100°C Product does not support combustion.	> 100°C
Explosion limits	: Not available.	
Flammability (solid, gas)	: Not available.	
Melting point	: Not available.	
Boiling point	: >100°C (>212°F)	
Evaporation rate (butyl acetate = 1)	: Not available.	
Vapor pressure	: Not available.	
Vapor density	: Not available.	
Relative density	: 1 to 1.02 (Water = 1)	
Solubility	: Easily soluble in the following materials: cold water and hot water.	
Partition coefficient: n-octanol/water	: Not available.	
Auto-ignition temperature	: Not available.	
Decomposition temperature	: Not available.	
Odor threshold	: Not available.	
Viscosity	: Not available.	

Section 10. Stability and reactivity

Product AS SOLD

- Stability** : The product is stable.
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- Conditions to avoid** : No specific data.
- Materials to avoid** : Not available.
- Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Route of exposure : Skin contact, Eye contact, Inhalation, Ingestion

Product AS SOLD

Symptoms

- Eye contact** : No specific data.
- Skin contact** : No specific data.
- Inhalation** : No specific data.
- Ingestion** : No specific data.

Acute toxicity

- Eye contact** : No known significant effects or critical hazards.
- Skin contact** : No known significant effects or critical hazards.
- Inhalation** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.

Product AT USE DILUTION

- No specific data.
- No specific data.
- No specific data.
- No specific data.
- No known significant effects or critical hazards.
- No known significant effects or critical hazards.
- No known significant effects or critical hazards.
- No known significant effects or critical hazards.

Toxicity data

Product/ingredient name

sulfonic acids, c14-16-alkane hydroxy and c14-16-alkene, sodium salts	LD50 Dermal	Rabbit	6300 mg/kg
	LD50 Oral	Rat	3983 mg/kg

Chronic toxicity

- Carcinogenicity** : No known significant effects or critical hazards.
- Mutagenicity** : No known significant effects or critical hazards.
- Teratogenicity** : No known significant effects or critical hazards.
- Developmental effects** : No known significant effects or critical hazards.
- Fertility effects** : No known significant effects or critical hazards.

Section 12. Ecological information

Product AS SOLD

Ecotoxicity : No known significant effects or critical hazards.

Aquatic and terrestrial toxicity

Product/ingredient name	Result	Species	Exposure
sulfonic acids, c14-16-alkane hydroxy and c14-16-alkene, sodium salts	Acute LC50 4.2 mg/l	Fish	96 hours

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Product AS SOLD

Disposal methods : Diluted product can be flushed to sanitary sewer.
Discard empty container in trash.

Product AT USE DILUTION

Diluted product can be flushed to sanitary sewer. Discard empty container in trash.

Section 14. Transport information

Certain shipping modes or package sizes may have exceptions from the transport regulations. The classification provided may not reflect those exceptions and may not apply to all shipping modes or package sizes.

DOT

DOT Classification Not regulated.

IMO/IMDG

IMO/IMDG Classification Not regulated.

For transport in bulk, see shipping documents for specific transportation information.

Product AT USE DILUTION
Not intended for transport.

Section 15. Regulatory information

Product AS SOLD

U.S. Federal regulations

TSCA 8(b) inventory : All components are listed or exempted.

SARA 302/304/311/312 **extremely hazardous substances**: No listed substance

SARA 302/304 emergency planning and notification: No listed substance

SARA 313 **Product name** **CAS number** **Concentration**

Form R - Reporting requirements : No listed substance

California Prop. 65 : No listed substance

Section 16. Other information

Product AS SOLD

Hazardous Material :
Information System (U.S.A.)

Health	0
Flammability	0
Physical hazards	0

National Fire Protection :
Association (U.S.A.)



Product AT USE DILUTION

Health	0
Flammability	0
Physical hazards	0



Section 16. Other information

Date of issue : 18 Oct 2013
Prepared by : Regulatory Affairs
1-800-352-5326

Notice to reader

The above information is believed to be correct with respect to the formula used to manufacture the product in the country of origin. As data, standards, and regulations change, and conditions of use and handling are beyond our control, NO WARRANTY, EXPRESS OR IMPLIED, IS MADE AS TO THE COMPLETENESS OR CONTINUING ACCURACY OF THIS INFORMATION.

VALVOLINE® HP 80W-90 GEAR
OIL
VV831

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING
--

Ashland	Regulatory Information Number	1-800-325-3751
P.O. Box 2219	Telephone	614-790-3333
Columbus, OH 43216	Emergency telephone	1-800-ASHLAND (1-800-274-5263)

Product name	VALVOLINE® HP 80W-90 GEAR OIL
Product code	VV831
Product Use Description	No data

2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance: liquid, amber

CAUTION! PROLONGED OR REPEATED CONTACT MAY DRY SKIN AND CAUSE IRRITATION.

Potential Health Effects

Routes of exposure

Inhalation, Skin contact, Eye Contact, Ingestion

Eye contact

Unlikely to cause eye irritation or injury.

Skin contact

Unlikely to cause skin irritation or injury. Prolonged or repeated contact may dry and crack the skin.

Ingestion

Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful.

Inhalation

It is possible to breathe this material under certain conditions of handling and use (for example, during heating, spraying, or stirring). Breathing small amounts of this

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material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful. Symptoms are not expected at air concentrations below the recommended exposure limits, if applicable (see Section 8.).

Aggravated Medical Condition

Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: Skin, lung (for example, asthma-like conditions)

Symptoms

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways)

Target Organs

No data

Carcinogenicity

This material is not listed as a carcinogen by the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP), or the Occupational Safety and Health Administration (OSHA).

Reproductive hazard

There are no data available for assessing risk to the fetus from maternal exposure to this material.

3. COMPOSITION/INFORMATION ON INGREDIENTS
--

Components	CAS-No.	Concentration
DISTILLATES (PETROLEUM), HYDROTREATED HEAVY PARAF	64742-54-7	>=70-<80%

4. FIRST AID MEASURES

Eyes

If symptoms develop, move individual away from exposure and into fresh air. Flush eyes gently with water while holding eyelids apart. If symptoms persist or there is any visual difficulty, seek medical attention.

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Skin

Remove contaminated clothing. Wash exposed area with soap and water. If symptoms persist, seek medical attention. Launder clothing before reuse.

Ingestion

Do not induce vomiting. Give one glass of milk or water, and get medical attention immediately. If possible, do not leave victim unattended.

Inhalation

If symptoms develop, immediately move individual away from exposure and into fresh air. Seek immediate medical attention; keep person warm and quiet. If person is not breathing, begin artificial respiration. If breathing is difficult, administer oxygen.

Notes to physician

Hazards: Acute aspiration of large amounts of oil-laden material may produce a serious aspiration pneumonia. Patients who aspirate these oils should be followed for the development of long-term sequelae. Repeated aspiration of small quantities of mineral oil can produce chronic inflammation of the lungs (i.e. lipoid pneumonia) that may progress to pulmonary fibrosis. Symptoms are often subtle and radiological changes appear worse than clinical abnormalities. Occasionally, persistent cough, irritation of the upper respiratory tract, shortness of breath with exertion, fever, and bloody sputum occur. Inhalation exposure to oil mists below current workplace exposure limits is unlikely to cause pulmonary abnormalities.

Treatment: No information available.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Dry chemical, Carbon dioxide (CO₂), Foam, Water spray

Hazardous combustion products

carbon dioxide and carbon monoxide, oxides of sulfur, nitrogen and phosphorus, Hydrocarbons

Precautions for fire-fighting

Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively. Wear full firefighting turn-out gear (full Bunker gear), and respiratory protection (SCBA). DO NOT direct a solid stream of

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water or foam into hot, burning pools of liquid since this may cause frothing and increase fire intensity. Frothing can be violent and possibly endanger any firefighter standing too close to the burning liquid.

Flammability Class for Flammable Liquids
Combustible Liquid Class IIIB

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

For personal protection see section 8. Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.

Environmental precautions

Prevent run-off to sewers, streams or other bodies of water. If run-off occurs, notify proper authorities as required, that a spill has occurred.

Methods for cleaning up

Absorb liquid on vermiculite, floor absorbent or other absorbent material.

7. HANDLING AND STORAGE

Handling

Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed.

Storage

Store in a cool, dry, ventilated area.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

General advice

These recommendations provide general guidance for handling this product. Personal protective equipment should be selected for individual applications and should consider factors which affect exposure potential, such as handling practices, chemical

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concentrations and ventilation. It is ultimately the responsibility of the employer to follow regulatory guidelines established by local authorities.

Exposure controls

General room ventilation should be adequate for normal conditions of use. However, if unusual operating conditions exist, provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

Eye protection

Not required under normal conditions of use. Wear splash-proof safety goggles if material could be misted or splashed into eyes.

Skin and body protection

Wear resistant gloves (consult your safety equipment supplier).
Wear normal work clothing including long pants, long-sleeved shirts and foot covering to prevent direct contact of the product with the skin. Launder clothing before reuse. If skin irritation develops, contact your facility health and safety professional or your local safety equipment supplier to determine the proper personal protective equipment for your use.

Respiratory protection

Respiratory protection is not required under normal conditions of use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	liquid
Form	No data
Colour	amber
Odour	No data
Boiling point/boiling range	218.30 °C / 424.9 °F @ 760.00 mmHg
pH	No data
Flash point	(>) 432 °F / 222 °C, Cleveland open cup
Evaporation rate	> 1 (Ethyl Ether)
Explosion limits	No data
Vapour pressure	0.10 mmHg
Vapour density	(>) 1 (AIR=1)
Density	0.8916 g/cm3 @ 60.01 °F / 15.56 °C

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Solubility	7.28 lb/gal @ 60.1 °F / 15.6 °C
Partition coefficient: n-octanol/water	No data
log Pow	No data
Autoignition temperature	no data available
	No data

10. STABILITY AND REACTIVITY

Stability
Stable

Conditions to avoid
None known.

Incompatible products
Strong oxidizing agents

Hazardous decomposition products
carbon dioxide and carbon monoxide, oxides of sulfur, nitrogen and phosphorus,
Hydrocarbons

Hazardous reactions
Product will not undergo hazardous polymerization.

Thermal decomposition
No data

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity

DISTILLATES (PETROLEUM), HYDROTREATED HEAVY PARAF	LD 50 Rat: > 15 g/kg
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Acute inhalation toxicity

DISTILLATES (PETROLEUM), HYDROTREATED HEAVY PARAF	no data available
--	-------------------

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Acute dermal toxicity

DISTILLATES (PETROLEUM), HYDROTREATED HEAVY PARAF	LD 50 Rabbit: > 5 g/kg
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12. ECOLOGICAL INFORMATION

Aquatic toxicity

Acute and Prolonged Toxicity to Fish

No data

Acute Toxicity to Aquatic Invertebrates

No data

Environmental fate and pathways

No data

13. DISPOSAL CONSIDERATIONS

Waste disposal methods

Dispose of in accordance with all applicable local, state and federal regulations. For assistance with your waste management needs - including disposal, recycling and waste stream reduction, contact Ashland Distribution's Environmental Services Group at 800-637-7922.

14. TRANSPORT INFORMATION

Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

15. REGULATORY INFORMATION

California Prop. 65

This product does not contain any chemicals known to State of California to cause cancer, birth, or any other reproductive defects.

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SARA Hazard Classification No SARA Hazards

SARA 313 Component(s)

Reportable quantity - Components

DISTILLATES (PETROLEUM), 64742-54-7 none
HYDROTREATED HEAVY PARAF

	Health	Flammability	Reactivity	Other
HMIS	1	1	0	
NFPA	1	1	0	

16. OTHER INFORMATION

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This MSDS has been prepared by Ashland's Environmental Health and Safety Department (1-800-325-3751).

VALVOLINE® HP 80W-90 GEAR
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1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING
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P.O. Box 2219	Telephone	614-790-3333
Columbus, OH 43216	Emergency telephone	1-800-ASHLAND (1-800-274-5263)

Product name	VALVOLINE® HP 80W-90 GEAR OIL
Product code	VV831
Product Use Description	No data

2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance: liquid, amber

CAUTION! PROLONGED OR REPEATED CONTACT MAY DRY SKIN AND CAUSE IRRITATION.

Potential Health Effects

Routes of exposure

Inhalation, Skin contact, Eye Contact, Ingestion

Eye contact

Unlikely to cause eye irritation or injury.

Skin contact

Unlikely to cause skin irritation or injury. Prolonged or repeated contact may dry and crack the skin.

Ingestion

Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful.

Inhalation

It is possible to breathe this material under certain conditions of handling and use (for example, during heating, spraying, or stirring). Breathing small amounts of this

VALVOLINE® HP 80W-90 GEAR
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VV831

material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful. Symptoms are not expected at air concentrations below the recommended exposure limits, if applicable (see Section 8.).

Aggravated Medical Condition

Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: Skin, lung (for example, asthma-like conditions)

Symptoms

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways)

Target Organs

No data

Carcinogenicity

This material is not listed as a carcinogen by the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP), or the Occupational Safety and Health Administration (OSHA).

Reproductive hazard

There are no data available for assessing risk to the fetus from maternal exposure to this material.

3. COMPOSITION/INFORMATION ON INGREDIENTS
--

Components	CAS-No.	Concentration
DISTILLATES (PETROLEUM), HYDROTREATED HEAVY PARAF	64742-54-7	>=70-<80%

4. FIRST AID MEASURES

Eyes

If symptoms develop, move individual away from exposure and into fresh air. Flush eyes gently with water while holding eyelids apart. If symptoms persist or there is any visual difficulty, seek medical attention.

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Skin

Remove contaminated clothing. Wash exposed area with soap and water. If symptoms persist, seek medical attention. Launder clothing before reuse.

Ingestion

Do not induce vomiting. Give one glass of milk or water, and get medical attention immediately. If possible, do not leave victim unattended.

Inhalation

If symptoms develop, immediately move individual away from exposure and into fresh air. Seek immediate medical attention; keep person warm and quiet. If person is not breathing, begin artificial respiration. If breathing is difficult, administer oxygen.

Notes to physician

Hazards: Acute aspiration of large amounts of oil-laden material may produce a serious aspiration pneumonia. Patients who aspirate these oils should be followed for the development of long-term sequelae. Repeated aspiration of small quantities of mineral oil can produce chronic inflammation of the lungs (i.e. lipoid pneumonia) that may progress to pulmonary fibrosis. Symptoms are often subtle and radiological changes appear worse than clinical abnormalities. Occasionally, persistent cough, irritation of the upper respiratory tract, shortness of breath with exertion, fever, and bloody sputum occur. Inhalation exposure to oil mists below current workplace exposure limits is unlikely to cause pulmonary abnormalities.

Treatment: No information available.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Dry chemical, Carbon dioxide (CO₂), Foam, Water spray

Hazardous combustion products

carbon dioxide and carbon monoxide, oxides of sulfur, nitrogen and phosphorus, Hydrocarbons

Precautions for fire-fighting

Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively. Wear full firefighting turn-out gear (full Bunker gear), and respiratory protection (SCBA). DO NOT direct a solid stream of

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water or foam into hot, burning pools of liquid since this may cause frothing and increase fire intensity. Frothing can be violent and possibly endanger any firefighter standing too close to the burning liquid.

Flammability Class for Flammable Liquids
Combustible Liquid Class IIIB

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

For personal protection see section 8. Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.

Environmental precautions

Prevent run-off to sewers, streams or other bodies of water. If run-off occurs, notify proper authorities as required, that a spill has occurred.

Methods for cleaning up

Absorb liquid on vermiculite, floor absorbent or other absorbent material.

7. HANDLING AND STORAGE

Handling

Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed.

Storage

Store in a cool, dry, ventilated area.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

General advice

These recommendations provide general guidance for handling this product. Personal protective equipment should be selected for individual applications and should consider factors which affect exposure potential, such as handling practices, chemical

VALVOLINE® HP 80W-90 GEAR
OIL
VV831

concentrations and ventilation. It is ultimately the responsibility of the employer to follow regulatory guidelines established by local authorities.

Exposure controls

General room ventilation should be adequate for normal conditions of use. However, if unusual operating conditions exist, provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

Eye protection

Not required under normal conditions of use. Wear splash-proof safety goggles if material could be misted or splashed into eyes.

Skin and body protection

Wear resistant gloves (consult your safety equipment supplier).
Wear normal work clothing including long pants, long-sleeved shirts and foot covering to prevent direct contact of the product with the skin. Launder clothing before reuse. If skin irritation develops, contact your facility health and safety professional or your local safety equipment supplier to determine the proper personal protective equipment for your use.

Respiratory protection

Respiratory protection is not required under normal conditions of use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	liquid
Form	No data
Colour	amber
Odour	No data
Boiling point/boiling range	218.30 °C / 424.9 °F @ 760.00 mmHg
pH	No data
Flash point	(>) 432 °F / 222 °C, Cleveland open cup
Evaporation rate	> 1 (Ethyl Ether)
Explosion limits	No data
Vapour pressure	0.10 mmHg
Vapour density	(>) 1 (AIR=1)
Density	0.8916 g/cm ³ @ 60.01 °F / 15.56 °C

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Solubility	7.28 lb/gal @ 60.1 °F / 15.6 °C
Partition coefficient: n-octanol/water	No data
log Pow	No data
Autoignition temperature	no data available
	No data

10. STABILITY AND REACTIVITY

Stability
Stable

Conditions to avoid
None known.

Incompatible products
Strong oxidizing agents

Hazardous decomposition products
carbon dioxide and carbon monoxide, oxides of sulfur, nitrogen and phosphorus,
Hydrocarbons

Hazardous reactions
Product will not undergo hazardous polymerization.

Thermal decomposition
No data

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity

DISTILLATES (PETROLEUM), HYDROTREATED HEAVY PARAF	LD 50 Rat: > 15 g/kg
--	----------------------

Acute inhalation toxicity

DISTILLATES (PETROLEUM), HYDROTREATED HEAVY PARAF	no data available
--	-------------------

VALVOLINE® HP 80W-90 GEAR
OIL
VV831

Acute dermal toxicity

DISTILLATES (PETROLEUM), HYDROTREATED HEAVY PARAF	LD 50 Rabbit: > 5 g/kg
--	------------------------

12. ECOLOGICAL INFORMATION

Aquatic toxicity

Acute and Prolonged Toxicity to Fish

No data

Acute Toxicity to Aquatic Invertebrates

No data

Environmental fate and pathways

No data

13. DISPOSAL CONSIDERATIONS

Waste disposal methods

Dispose of in accordance with all applicable local, state and federal regulations. For assistance with your waste management needs - including disposal, recycling and waste stream reduction, contact Ashland Distribution's Environmental Services Group at 800-637-7922.

14. TRANSPORT INFORMATION

Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

15. REGULATORY INFORMATION

California Prop. 65

This product does not contain any chemicals known to State of California to cause cancer, birth, or any other reproductive defects.

ASHLAND
SAFETY DATA SHEET

Page: 8
Revision Date: 10/09/2008
Print Date: 3/3/2009
MSDS Number: R0091437
Version: 3.0

VALVOLINE® HP 80W-90 GEAR
OIL
VV831

SARA Hazard Classification No SARA Hazards

SARA 313 Component(s)

Reportable quantity - Components

DISTILLATES (PETROLEUM), 64742-54-7 none
HYDROTREATED HEAVY PARAF

	Health	Flammability	Reactivity	Other
HMIS	1	1	0	
NFPA	1	1	0	

16. OTHER INFORMATION

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This MSDS has been prepared by Ashland's Environmental Health and Safety Department (1-800-325-3751).

VALVOLINE® MP 2-CYCLE TC-W3 MOTOR
OIL
VV461

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Ashland	Regulatory Information Number	1-800-325-3751
P.O. Box 2219	Telephone	614-790-3333
Columbus, OH 43216	Emergency telephone	1-800-ASHLAND (1-800-274-5263)

Product name VALVOLINE® MP 2-CYCLE TC-W3 MOTOR OIL

Product code VV461
Product Use Description No data

2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance: liquid,

CAUTION! COMBUSTIBLE LIQUID AND VAPOR. MAY AFFECT THE CENTRAL NERVOUS SYSTEM CAUSING DIZZINESS, HEADACHE OR NAUSEA. MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION. PROLONGED OR REPEATED CONTACT MAY DRY SKIN, CAUSE IRRITATION AND BURNS.

Potential Health Effects

Exposure routes

Inhalation, Skin absorption, Skin contact, Eye Contact, Ingestion

Eye contact

Can cause eye irritation. Symptoms include stinging, tearing, redness, and swelling of eyes.

Skin contact

Can cause skin irritation. Symptoms may include redness and burning of skin, and other skin damage. Prolonged or repeated contact may dry the skin. Symptoms may include redness, burning, and drying and cracking of skin, skin burns, and other skin damage.

Ingestion

VALVOLINE® MP 2-CYCLE TC-W3 MOTOR
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VV461

Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful. This material can get into the lungs during swallowing or vomiting. This results in lung inflammation and other lung injury.

Inhalation

Breathing of vapor or mist is possible. Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful. Symptoms are not expected at air concentrations below the recommended exposure limits, if applicable (see Section 8.).

Aggravated Medical Condition

Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: lung (for example, asthma-like conditions), skin

Symptoms

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness) and other central nervous system effects

Target Organs

Exposure to this material (or a component) has been found to cause kidney damage in male rats. The mechanism by which this toxicity occurs is specific to the male rat and the kidney effects are not expected to occur in humans.

Carcinogenicity

This material is not listed as a carcinogen by the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP), or the Occupational Safety and Health Administration (OSHA).

Reproductive hazard

There are no data available for assessing risk to the fetus from maternal exposure to this material.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Components	CAS-No.	Concentration
DISTILLATES, SOLVENT-REFINED HEAVY	64741-88-4	>=30-<40%

VALVOLINE® MP 2-CYCLE TC-W3 MOTOR
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PARAFFINIC		
DISTILLATES, SWEETENED MIDDLE	64741-86-2	>=15-<20%
ALIPHATIC PETROLEUM DISTILLATES	8052-41-3	>=5-<10%

4. FIRST AID MEASURES

Eyes

If symptoms develop, immediately move individual away from exposure and into fresh air. Flush eyes gently with water for at least 15 minutes while holding eyelids apart; seek immediate medical attention.

Skin

Remove contaminated clothing. Flush exposed area with large amounts of water. If skin is damaged, seek immediate medical attention. If skin is not damaged and symptoms persist, seek medical attention. Launder clothing before reuse.

Ingestion

Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting. If possible, do not leave individual unattended.

Inhalation

If symptoms develop, move individual away from exposure and into fresh air. If symptoms persist, seek medical attention. If breathing is difficult, administer oxygen. Keep person warm and quiet; seek immediate medical attention.

Notes to physician

Hazards: Acute aspiration of large amounts of oil-laden material may produce a serious aspiration pneumonia. Patients who aspirate these oils should be followed for the development of long-term sequelae. Repeated aspiration of small quantities of mineral oil can produce chronic inflammation of the lungs (i.e. lipoid pneumonia) that may progress to pulmonary fibrosis. Symptoms are often subtle and radiological changes appear worse than clinical abnormalities. Occasionally, persistent cough, irritation of the upper respiratory tract, shortness of breath with exertion, fever, and bloody sputum occur. Inhalation exposure to oil mists below current workplace exposure limits is unlikely to cause pulmonary abnormalities.

Treatment: No information available.

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OIL
VV461

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Dry chemical, Carbon dioxide (CO₂), Water spray

Hazardous combustion products

carbon dioxide and carbon monoxide, Hydrocarbons, Sulphur oxides, Aldehydes, various hydrocarbons

Precautions for fire-fighting

If product is heated above its flash point it will produce vapors sufficient to support combustion. Vapors are heavier than air and may travel along the ground and be ignited by heat, pilot lights, other flames and ignition sources at locations near the point of release. Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively. Wear full firefighting turn-out gear (full Bunker gear), and respiratory protection (SCBA). Use water spray to cool fire exposed containers and structures until fire is out if it can be done with minimal risk. Avoid spreading burning material with water used for cooling purposes.

NFPA Flammable and Combustible Liquids Classification

Combustible Liquid Class IIIA

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

For personal protection see section 8. Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Ensure adequate ventilation. Eliminate all ignition sources (flares, flames including pilot lights, electrical sparks). Pay attention to the spreading of gases especially at ground level (heavier than air) and to the direction of the wind.

Environmental precautions

Prevent spreading over a wide area (e.g. by containment or oil barriers). Do not let product enter drains. Do not flush into surface water or sanitary sewer system. Local authorities should be advised if significant spillages cannot be contained.

Methods for cleaning up

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

VALVOLINE® MP 2-CYCLE TC-W3 MOTOR
OIL
VV461**Other information**

Comply with all applicable federal, state, and local regulations. Suppress (knock down) gases/vapours/mists with a water spray jet.

7. HANDLING AND STORAGE**Handling**

Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed. Static ignition hazard can result from handling and use. Electrically bond and ground all containers, personnel and equipment before transfer or use of material. Special precautions may be necessary to dissipate static electricity for non-conductive containers. Use proper bonding and grounding during product transfer as described in National Fire Protection Association document NFPA 77.

Storage

Store in a cool, dry, ventilated area.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Exposure Guidelines**DISTILLATES, SOLVENT-REFINED HEAVY
PARAFFINIC 64741-88-4

OSHA Z1	Permissible exposure limit	500 ppm	
OSHA Z1	Permissible exposure limit	2,000 mg/m3	
OSHA Z1A	time weighted average	400 ppm	
OSHA Z1A	time weighted average	1,600 mg/m3	
US CA OEL	Time Weighted Average (TWA) Permissible Exposure Limit (PEL):	400 ppm	
US CA OEL	Time Weighted Average (TWA) Permissible Exposure Limit (PEL):	1,600 mg/m3	
ACGIH	time weighted average	5 mg/m3	Mist.
ACGIH	Short term exposure limit	10 mg/m3	Mist.
ACGIH NIC	time weighted average	0.2 mg/m3	Inhalable fraction.

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ALIPHATIC PETROLEUM DISTILLATES		8052-41-3
ACGIH	time weighted average	100 ppm
NIOSH	Recommended exposure limit (REL):	350 mg/m3
NIOSH	Ceiling Limit Value and Time Period (if specified):	1,800 mg/m3
OSHA Z1	Permissible exposure limit	500 ppm
OSHA Z1	Permissible exposure limit	2,900 mg/m3
OSHA Z1A	time weighted average	100 ppm
OSHA Z1A	time weighted average	525 mg/m3
US CA OEL	Time Weighted Average (TWA) Permissible Exposure Limit (PEL):	100 ppm
US CA OEL	Time Weighted Average (TWA) Permissible Exposure Limit (PEL):	525 mg/m3

General advice

These recommendations provide general guidance for handling this product. Personal protective equipment should be selected for individual applications and should consider factors which affect exposure potential, such as handling practices, chemical concentrations and ventilation. It is ultimately the responsibility of the employer to follow regulatory guidelines established by local authorities.

Exposure controls

Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

Eye protection

Wear chemical splash goggles when there is the potential for exposure of the eyes to liquid, vapor or mist.

Skin and body protection

Wear resistant gloves such as:

Neoprene

Nitrile rubber

Wear normal work clothing including long pants, long-sleeved shirts and foot covering to prevent direct contact of the product with the skin. Launder clothing before reuse. If skin irritation develops, contact

VALVOLINE® MP 2-CYCLE TC-W3 MOTOR
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VV461

your facility health and safety professional or your local safety equipment supplier to determine the proper personal protective equipment for your use.

Wear resistant gloves (consult your safety equipment supplier).

Discard gloves that show tears, pinholes, or signs of wear.

Respiratory protection

A NIOSH-approved air-purifying respirator with an appropriate cartridge and/or filter may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits (if applicable) or if overexposure has otherwise been determined. Protection provided by air-purifying respirators is limited. Use a positive pressure, air-supplied respirator if there is any potential for uncontrolled release, exposure levels are not known or any other circumstances where an air-purifying respirator may not provide adequate protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	liquid
Form	no data available
Colour	no data available
Odour	hydrocarbon-like
Boiling point/boiling range	(>)356 °F / 180 °C @ 760.00 mmHg
Melting point/range	(<)-38 °F / -39 °C
Sublimation point	no data available
pH	no data available
Flash point	(>)66.00 °C Cleveland open cup
Ignition temperature	no data available
Evaporation rate	0.1 butyl acetate=1
Lower explosion limit/Upper explosion limit	1.0 %(V) / 6.0 %(V)
Particle size	no data available
Vapour pressure	0.200 mmHg @ 68 °F / 20 °C
Relative vapour density	no data available
Density	(Average) 0.8550 g/cm3 @ 68 °F / 20 °C
Bulk density	No data
Water solubility	insoluble
Solubility	no data available
Partition coefficient: n-octanol/water	no data available
log Pow	no data available
Autoignition temperature	no data available
Viscosity, dynamic	no data available

VALVOLINE® MP 2-CYCLE TC-W3 MOTOR
OIL
VV461

Viscosity, kinematic	6.9 mm ² /s
Solids in Solution	no data available
Decomposition temperature	no data available
Burning number	no data available
Dust explosion constant	no data available
Minimum ignition energy	no data available

10. STABILITY AND REACTIVITY

Stability

Stable.

Conditions to avoid

Heat, flames and sparks.

Incompatible products

Strong oxidizing agents

Hazardous decomposition products

carbon dioxide and carbon monoxide, Sulphur oxides, Hydrocarbons, Aldehydes, various hydrocarbons

Hazardous reactions

Product will not undergo hazardous polymerization.

Thermal decomposition

No data

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity

DISTILLATES, SOLVENT-REFINED HEAVY PARAFFINIC	: LD 50 Rat: > 5,000 mg/kg
DISTILLATES, SWEETENED MIDDLE	: LD 50 Rat: > 5,000 mg/kg
ALIPHATIC PETROLEUM DISTILLATES	: LD 50 Rat: > 5 g/kg

VALVOLINE® MP 2-CYCLE TC-W3 MOTOR
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Acute inhalation toxicity

DISTILLATES, SOLVENT-REFINED HEAVY
PARAFFINIC : LD 50 Rat: > 3.9 mg/L; 4 h

DISTILLATES, SWEETENED MIDDLE : no data available

ALIPHATIC PETROLEUM DISTILLATES : no data available

Acute dermal toxicity

DISTILLATES, SOLVENT-REFINED HEAVY
PARAFFINIC : LD 50
Rabbit:
> 2,000 mg/kg

DISTILLATES, SWEETENED MIDDLE : no data available

ALIPHATIC PETROLEUM DISTILLATES : LD 50
Rabbit:
(>) 3 g/kg

12. ECOLOGICAL INFORMATION

Biodegradability

DISTILLATES, SOLVENT-REFINED HEAVY
PARAFFINIC : no data available

DISTILLATES, SWEETENED MIDDLE : no data available

ALIPHATIC PETROLEUM DISTILLATES : no data available

Bioaccumulation

DISTILLATES, SOLVENT-REFINED HEAVY
PARAFFINIC : no data available

DISTILLATES, SWEETENED MIDDLE : no data available

ALIPHATIC PETROLEUM DISTILLATES : no data available

Ecotoxicity effects

Toxicity to fish

DISTILLATES, SOLVENT-REFINED HEAVY : no data available

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PARAFFINIC
DISTILLATES, SWEETENED MIDDLE : no data available

ALIPHATIC PETROLEUM DISTILLATES : no data available

Toxicity to daphnia and other aquatic invertebrates.

DISTILLATES, SOLVENT-REFINED HEAVY : no data available

PARAFFINIC

DISTILLATES, SWEETENED MIDDLE : no data available

ALIPHATIC PETROLEUM DISTILLATES : no data available

Toxicity to algae

DISTILLATES, SOLVENT-REFINED HEAVY : no data available

PARAFFINIC

DISTILLATES, SWEETENED MIDDLE : no data available

ALIPHATIC PETROLEUM DISTILLATES : no data available

Toxicity to bacteria

DISTILLATES, SOLVENT-REFINED HEAVY : no data available

PARAFFINIC

DISTILLATES, SWEETENED MIDDLE : no data available

ALIPHATIC PETROLEUM DISTILLATES : no data available

Biochemical Oxygen Demand (BOD)

DISTILLATES, SOLVENT-REFINED HEAVY : no data available

PARAFFINIC

DISTILLATES, SWEETENED MIDDLE : no data available

ALIPHATIC PETROLEUM DISTILLATES : no data available

Chemical Oxygen Demand (COD)

DISTILLATES, SOLVENT-REFINED HEAVY : no data available

PARAFFINIC

DISTILLATES, SWEETENED MIDDLE : no data available

ALIPHATIC PETROLEUM DISTILLATES : no data available

Additional ecological information

DISTILLATES, SOLVENT-REFINED HEAVY : no data available

VALVOLINE® MP 2-CYCLE TC-W3 MOTOR
OIL
VV461PARAFFINIC
DISTILLATES, SWEETENED MIDDLE : no data available

ALIPHATIC PETROLEUM DISTILLATES : no data available**13. DISPOSAL CONSIDERATIONS****Waste disposal methods**

Dispose of in accordance with all applicable local, state and federal regulations. For assistance with your waste management needs - including disposal, recycling and waste stream reduction, contact Ashland Distribution's Environmental Services Group at 800-637-7922.

14. TRANSPORT INFORMATION**REGULATION**

ID NUMBER	PROPER SHIPPING NAME	*HAZARD CLASS	SUBSIDIARY HAZARDS	PACKING GROUP	MARINE POLLUTANT / LTD. QTY.
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U.S. DOT - ROAD

Not dangerous goods

U.S. DOT - RAIL

Not dangerous goods

U.S. DOT - INLAND WATERWAYS

Not dangerous goods

TRANSPORT CANADA - ROAD

Not dangerous goods

TRANSPORT CANADA - RAIL

Not dangerous goods

TRANSPORT CANADA - INLAND WATERWAYS

Not dangerous goods

INTERNATIONAL MARITIME DANGEROUS GOODS

VALVOLINE® MP 2-CYCLE TC-W3 MOTOR
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Not dangerous goods

INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO

Not dangerous goods

INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER

Not dangerous goods

MEXICAN REGULATION FOR THE LAND TRANSPORT OF HAZARDOUS MATERIALS AND WASTES

Not dangerous goods

***ORM = ORM-D, CBL = COMBUSTIBLE LIQUID**

Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

15. REGULATORY INFORMATION**California Prop. 65**

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

SARA Hazard Classification

Fire Hazard

Acute Health Hazard

New Jersey RTK Label Information

DISTILLATES, SOLVENT-REFINED HEAVY PARAFFINIC	64741-88-4
DISTILLATES, SWEETENED MIDDLE	64741-86-2
LUBRICANT ADDITIVE	
RESIDUAL OILS (PETROLEUM), SOLVENT-REFINED	64742-01-4
ALIPHATIC PETROLEUM DISTILLATES	8052-41-3

Pennsylvania RTK Label Information

DISTILLATES, SOLVENT-REFINED HEAVY PARAFFINIC	64741-88-4
DISTILLATES, SWEETENED MIDDLE	64741-86-2
LUBRICANT ADDITIVE	
RESIDUAL OILS (PETROLEUM), SOLVENT-REFINED	64742-01-4
ALIPHATIC PETROLEUM DISTILLATES	8052-41-3

VALVOLINE® MP 2-CYCLE TC-W3 MOTOR
OIL
VV461**Notification status**

Canada. Canadian Environmental Protection Act (CEPA).	y (positive listing)
Domestic Substances List (DSL). (Can. Gaz. Part II, Vol. 133)	
China. Inventory of Existing Chemical Substances	y (positive listing)
Australia. Industrial Chemical (Notification and Assessment) Act	y (positive listing)
US. Toxic Substances Control Act	y (positive listing)
Philippines. The Toxic Substances and Hazardous and Nuclear Waste Control Act	y (positive listing)
Japan. Kashin-Hou Law List	y (positive listing)
Korea. Toxic Chemical Control Law (TCCL) List	y (positive listing)

	HMIS	NFPA
Health	1	1
Flammability	2	2
Physical hazards	--	
Instability		0
Specific Hazard	--	--

16. OTHER INFORMATION

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This MSDS has been prepared by Ashland's Environmental Health and Safety Department (1-800-325-3751).

VALVOLINE® GM MULTIPURPOSE
GREASE
VV615

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING
--

Ashland	Regulatory Information Number	1-800-325-3751
P.O. Box 2219	Telephone	614-790-3333
Columbus, OH 43216	Emergency telephone	1-800-ASHLAND (1-800-274-5263)

Product name	VALVOLINE® GM MULTIPURPOSE GREASE
Product code	VV615
Product Use Description	No data

2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance: solid, amber

CAUTION! PROLONGED OR REPEATED CONTACT MAY DRY SKIN AND CAUSE IRRITATION.

Potential Health Effects

Routes of exposure

Skin contact

Eye contact

Unlikely to cause eye irritation or injury.

Skin contact

Unlikely to cause skin irritation or injury. Prolonged or repeated contact may dry and crack the skin.

Ingestion

Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful.

Inhalation

It is possible to breathe this material under certain conditions of handling and use (for example, during heating, spraying, or stirring). Breathing small amounts of this

VALVOLINE® GM MULTIPURPOSE
GREASE
VV615

material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful.

Aggravated Medical Condition

Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: Skin, lung (for example, asthma-like conditions)

Symptoms

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: stomach or intestinal upset (nausea, vomiting, diarrhea)

Target Organs

No data

Carcinogenicity

This material is not listed as a carcinogen by the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP), or the Occupational Safety and Health Administration (OSHA).

Reproductive hazard

Based on the available information, risk to the fetus from maternal exposure to this material cannot be assessed.

3. COMPOSITION/INFORMATION ON INGREDIENTS
--

Components	CAS-No.	Concentration
PETROLEUM BASED GREASE		<=100%

4. FIRST AID MEASURES

Eyes

If symptoms develop, move individual away from exposure and into fresh air. Flush eyes gently with water while holding eyelids apart. If symptoms persist or there is any visual difficulty, seek medical attention.

Skin

VALVOLINE® GM MULTIPURPOSE
GREASE
VV615

Remove contaminated clothing. Wash exposed area with soap and water. If symptoms persist, seek medical attention. Launder clothing before reuse.

Ingestion

Do not induce vomiting. Give one glass of milk or water, and get medical attention immediately. If possible, do not leave victim unattended.

Inhalation

If symptoms develop, move individual away from exposure and into fresh air. If symptoms persist, seek medical attention. If breathing is difficult, administer oxygen. Keep person warm and quiet; seek immediate medical attention.

Notes to physician

Hazards: No information available.

Treatment: No information available.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Carbon dioxide (CO2), Dry chemical, Foam

Hazardous combustion products

May form:, carbon dioxide and carbon monoxide, Hydrocarbons

Precautions for fire-fighting

Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively. Wear full firefighting turn-out gear (full Bunker gear), and respiratory protection (SCBA). DO NOT direct a solid stream of water or foam into hot, burning pools of liquid since this may cause frothing and increase fire intensity. Frothing can be violent and possibly endanger any firefighter standing too close to the burning liquid.

Flammability Class for Flammable Liquids

Combustible Liquid Class IIIB

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

VALVOLINE® GM MULTIPURPOSE
GREASE
VV615

No data

Environmental precautions

No data

Methods for cleaning up

Shovel material into containers. Thoroughly sweep area of spill to clean up any residual material.

7. HANDLING AND STORAGE

Handling

Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed.

Storage

No data

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

General advice

These recommendations provide general guidance for handling this product. Personal protective equipment should be selected for individual applications and should consider factors which affect exposure potential, such as handling practices, chemical concentrations and ventilation. It is ultimately the responsibility of the employer to follow regulatory guidelines established by local authorities.

Exposure controls

General room ventilation should be adequate for normal conditions of use. However, if unusual operating conditions exist, provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

Eye protection

Not required under normal conditions of use. Wear splash-proof safety goggles if material could be misted or splashed into eyes.

VALVOLINE® GM MULTIPURPOSE
GREASE
VV615

Skin and body protection

Wear normal work clothing covering arms and legs.
Wear resistant gloves such as:
Neoprene

Respiratory protection

Respiratory protection is not required under normal conditions of use.

9. PHYSICAL AND CHEMICAL PROPERTIES
--

Physical state	solid
Form	Semisolid, gel
Colour	amber
Odour	No data
Boiling point/boiling range	371.10 °C / 700.0 °F
pH	No data
Flash point	450 °F / 232 °C
Evaporation rate	No data
Explosion limits	No data
Vapour pressure	2.00 hPa
Vapour density	No data
Density	0.95 g/cm3 @ 60.1 °F / 15.6 °C
Solubility	No data
Partition coefficient: n-octanol/water	No data
log Pow	no data available
Autoignition temperature	No data

10. STABILITY AND REACTIVITY

Stability

Stable

Conditions to avoid

None known.

VALVOLINE® GM MULTIPURPOSE
GREASE
VV615

Incompatible products

Avoid contact with:, Strong oxidizing agents

Hazardous decomposition products

carbon dioxide and carbon monoxide, Hydrocarbons

Hazardous reactions

Product will not undergo hazardous polymerization.

Thermal decomposition

No data

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity

PETROLEUM BASED GREASE	no data available
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Acute inhalation toxicity

PETROLEUM BASED GREASE	no data available
------------------------	-------------------

Acute dermal toxicity

PETROLEUM BASED GREASE	no data available
------------------------	-------------------

12. ECOLOGICAL INFORMATION

Aquatic toxicity

Acute and Prolonged Toxicity to Fish

No data

Acute Toxicity to Aquatic Invertebrates

No data

Environmental fate and pathways

No data

13. DISPOSAL CONSIDERATIONS

Waste disposal methods

VALVOLINE® GM MULTIPURPOSE
GREASE
VV615

Dispose of in accordance with all applicable local, state and federal regulations. For assistance with your waste management needs - including disposal, recycling and waste stream reduction, contact Ashland Distribution's Environmental Services Group at 800-637-7922.

14. TRANSPORT INFORMATION

Dangerous goods descriptions (if indicated above) may not reflect package size, quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

15. REGULATORY INFORMATION

SARA Hazard Classification Acute Health Hazard

SARA 313 Component(s)

Reportable quantity - Components

PETROLEUM BASED GREASE none

	Health	Flammability	Reactivity	Other
HMIS	1	1	0	
NFPA	1	1	0	

16. OTHER INFORMATION

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This MSDS has been prepared by Ashland's Environmental Health and Safety Department (1-800-325-3751).

Non Detergent SAE 30 Motor Oil VV265

Common Name: VALVOLINE SAE 30 NON-DETERGENT MOTOR OIL
Manufacturer: ASHLAND CHEMICAL
MSDS Revision Date: 1/24/2008

Grainger Item Number(s): 1UBY5
Manufacturer Model Number(s):

MSDS Table of Contents

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 2. HAZARDS IDENTIFICATION
 3. COMPOSITION/INFORMATION ON INGREDIENTS
 4. FIRST AID MEASURES
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ASHLAND(R*)

SAFETY DATA SHEET

VALVOLINE(R*) SAE 30 NON-DETERGENT MOTOR OIL VV265

REVISION DATE: 01/24/2008

PRINT DATE: 3/6/2008

MSDS NUMBER: R0169702

VERSION: 1.4

Non Detergent SAE 30 Motor Oil VV265

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION

AND OF THE COMPANY/UNDERTAKING

ASHLAND
P.O. BOX 2219
COLUMBUS, OH 43216

REGULATORY INFORMATION NUMBER: 1-800-325-3751
TELEPHONE: 614-790-3333
EMERGENCY TELEPHONE: 1-800-ASHLAND (1-800-274-5263)

PRODUCT NAME: VALVOLINE(R*) SAE 30 NON-DETERGENT MOTOR OIL

PRODUCT CODE: VV265

PRODUCT USE DESCRIPTION: NO DATA

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

APPEARANCE: LIQUID, AMBER

CAUTION!
PROLONGED OR REPEATED CONTACT MAY DRY THE SKIN AND CAUSE IRRITATION AND BURNS.

POTENTIAL HEALTH EFFECTS:

ROUTES OF EXPOSURE: NO DATA

EYE CONTACT: UNLIKELY TO CAUSE EYE IRRITATION OR INJURY.

SKIN CONTACT:
MAY CAUSE MILD SKIN IRRITATION. PROLONGED OR REPEATED CONTACT MAY DRY THE SKIN. SYMPTOMS MAY INCLUDE REDNESS, BURNING, DRYING AND CRACKING OF SKIN, AND SKIN BURNS.

INGESTION:
SWALLOWING SMALL AMOUNTS OF THIS MATERIAL DURING NORMAL HANDLING IS NOT LIKELY TO CAUSE HARMFUL EFFECTS. SWALLOWING LARGE AMOUNTS MAY BE HARMFUL. THIS MATERIAL CAN GET INTO THE LUNGS DURING SWALLOWING OR VOMITING. THIS RESULTS IN LUNG INFLAMMATION AND OTHER LUNG INJURY.

Non Detergent SAE 30 Motor Oil VV265

INHALATION:

IT IS POSSIBLE TO BREATHE THIS MATERIAL UNDER CERTAIN CONDITIONS OF HANDLING AND USE (FOR EXAMPLE, DURING HEATING, SPRAYING, OR STIRRING). BREATHING SMALL AMOUNTS OF THIS MATERIAL DURING NORMAL HANDLING IS NOT LIKELY TO CAUSE HARMFUL EFFECTS. BREATHING LARGE AMOUNTS MAY BE HARMFUL. SYMPTOMS ARE NOT EXPECTED AT AIR CONCENTRATIONS BELOW THE RECOMMENDED EXPOSURE LIMITS, IF APPLICABLE (SEE SECTION 8.).

AGGRAVATED MEDICAL CONDITION:

PREEXISTING DISORDERS OF THE FOLLOWING ORGANS (OR ORGAN SYSTEMS) MAY BE AGGRAVATED BY EXPOSURE TO THIS MATERIAL:

SKIN, LUNG (FOR EXAMPLE, ASTHMA-LIKE CONDITIONS)

SYMPTOMS:

SIGNS AND SYMPTOMS OF EXPOSURE TO THIS MATERIAL THROUGH BREATHING, SWALLOWING, AND/OR PASSAGE OF THE MATERIAL THROUGH THE SKIN MAY INCLUDE: STOMACH OR INTESTINAL UPSET (NAUSEA, VOMITING, DIARRHEA), IRRITATION (NOSE, THROAT, AIRWAYS), ABDOMINAL PAIN

TARGET ORGANS: NO DATA

CARCINOGENICITY:

THIS MATERIAL IS NOT LISTED AS A CARCINOGEN BY THE INTERNATIONAL AGENCY FOR RESEARCH ON CANCER (IARC), THE NATIONAL TOXICOLOGY PROGRAM (NTP), OR THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA). USED MOTOR OIL HAS BEEN SHOWN TO CAUSE SKIN CANCER IN LABORATORY ANIMALS CONTINUALLY EXPOSED BY REPEATED APPLICATIONS. AVOID PROLONGED OR REPEATED SKIN CONTACT.

REPRODUCTIVE HAZARD:

THERE ARE NO DATA AVAILABLE FOR ASSESSING RISK TO THE FETUS FROM MATERNAL EXPOSURE TO THIS MATERIAL.

3. COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENTS	CAS-NO.	CONCENTRATION
DISTILLATES (PETROLEUM), HYDROTREATED HEAVY PARAFFINIC	64742-54-7	>/=60-<70%
HYDROTREATED LIGHT PARAFFINIC DISTILLATE	64742-55-8	>/=10-<15%
PETROLEUM DISTILLATE	NJTS# 800986-5245P	>/=10-<15%

4. FIRST AID MEASURES

Non Detergent SAE 30 Motor Oil VV265

EYES:

IF SYMPTOMS DEVELOP, MOVE INDIVIDUAL AWAY FROM EXPOSURE AND INTO FRESH AIR. FLUSH EYES GENTLY WITH WATER WHILE HOLDING EYELIDS APART. IF SYMPTOMS PERSIST OR THERE IS ANY VISUAL DIFFICULTY, SEEK MEDICAL ATTENTION.

SKIN:

REMOVE CONTAMINATED CLOTHING. WASH EXPOSED AREA WITH SOAP AND WATER. IF SYMPTOMS PERSIST, SEEK MEDICAL ATTENTION. LAUNDER CLOTHING BEFORE REUSE.

INGESTION:

SEEK MEDICAL ATTENTION. IF INDIVIDUAL IS DROWSY OR UNCONSCIOUS, DO NOT GIVE ANYTHING BY MOUTH; PLACE INDIVIDUAL ON THE LEFT SIDE WITH THE HEAD DOWN. CONTACT A PHYSICIAN, MEDICAL FACILITY, OR POISON CONTROL CENTER FOR ADVICE ABOUT WHETHER TO INDUCE VOMITING. IF POSSIBLE, DO NOT LEAVE INDIVIDUAL UNATTENDED.

INHALATION:

IF SYMPTOMS DEVELOP, MOVE INDIVIDUAL AWAY FROM EXPOSURE AND INTO FRESH AIR. IF SYMPTOMS PERSIST, SEEK MEDICAL ATTENTION. IF BREATHING IS DIFFICULT, ADMINISTER OXYGEN. KEEP PERSON WARM AND QUIET; SEEK IMMEDIATE MEDICAL ATTENTION.

NOTES TO PHYSICIAN:

HAZARDS:

ACUTE ASPIRATION OF LARGE AMOUNTS OF OIL-LADEN MATERIAL MAY PRODUCE A SERIOUS ASPIRATION PNEUMONIA. PATIENTS WHO ASPIRATE THESE OILS SHOULD BE FOLLOWED FOR THE DEVELOPMENT OF LONG-TERM SEQUELAE. REPEATED ASPIRATION OF SMALL QUANTITIES OF MINERAL OIL CAN PRODUCE CHRONIC INFLAMMATION OF THE LUNGS (I.E. LIPOID PNEUMONIA) THAT MAY PROGRESS TO PULMONARY FIBROSIS. SYMPTOMS ARE OFTEN SUBTLE AND RADIOLOGICAL CHANGES APPEAR WORSE THAN CLINICAL ABNORMALITIES. OCCASIONALLY, PERSISTENT COUGH, IRRITATION OF THE UPPER RESPIRATORY TRACT, SHORTNESS OF BREATH WITH EXERTION, FEVER, AND BLOODY SPUTUM OCCUR. INHALATION EXPOSURE TO OIL MISTS BELOW CURRENT WORKPLACE EXPOSURE LIMITS IS UNLIKELY TO CAUSE PULMONARY ABNORMALITIES.

TREATMENT: NO INFORMATION AVAILABLE.

5. FIRE-FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA:

WATER SPRAY, DRY POWDER, FOAM, CARBON DIOXIDE (CO₂)

HAZARDOUS COMBUSTION PRODUCTS:

Non Detergent SAE 30 Motor Oil VV265

MAY FORM:

CARBON DIOXIDE AND CARBON MONOXIDE, OXIDES OF SULFUR, NITROGEN AND PHOSPHORUS, HYDROCARBONS

PRECAUTIONS FOR FIRE-FIGHTING:

NEVER USE WELDING OR CUTTING TORCH ON OR NEAR DRUM (EVEN EMPTY) BECAUSE PRODUCT (EVEN JUST RESIDUE) CAN IGNITE EXPLOSIVELY. WEAR FULL FIREFIGHTING TURN-OUT GEAR (FULL BUNKER GEAR), AND RESPIRATORY PROTECTION (SCBA). DO NOT DIRECT A SOLID STREAM OF WATER OR FOAM INTO HOT, BURNING POOLS OF LIQUID SINCE THIS MAY CAUSE FROTHING AND INCREASE FIRE INTENSITY. FROTHING CAN BE VIOLENT AND POSSIBLY ENDANGER ANY FIREFIGHTER STANDING TOO CLOSE TO THE BURNING LIQUID.

FLAMMABILITY CLASS FOR FLAMMABLE LIQUIDS: COMBUSTIBLE LIQUID CLASS IIIB

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS:

FOR PERSONAL PROTECTION SEE SECTION 8. SPILLS OF THIS MATERIAL ARE VERY SLIPPERY.

ENVIRONMENTAL PRECAUTIONS:

PREVENT RUN-OFF TO SEWERS, STREAMS OR OTHER BODIES OF WATER. IF RUN-OFF OCCURS, NOTIFY PROPER AUTHORITIES AS REQUIRED, THAT A SPILL HAS OCCURRED.

METHODS FOR CLEANING UP:

PERSONS NOT WEARING PROTECTIVE EQUIPMENT SHOULD BE EXCLUDED FROM AREA OF SPILL UNTIL CLEAN-UP HAS BEEN COMPLETED. STOP SPILL AT SOURCE, DIKE AREA OF SPILL TO PREVENT SPREADING, PUMP LIQUID TO SALVAGE TANK. REMAINING LIQUID MAY BE TAKEN UP ON SAND, CLAY, EARTH, FLOOR ABSORBENT, OR OTHER ABSORBENT MATERIAL AND SHOVELED INTO CONTAINERS.

OTHER INFORMATION:

NOTIFY THE PROPER AUTHORITIES AS REQUIRED THAT A SPILL HAS OCCURRED. COMPLY WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS.

7. HANDLING AND STORAGE

HANDLING:

CONTAINERS OF THIS MATERIAL MAY BE HAZARDOUS WHEN EMPTIED. SINCE EMPTIED CONTAINERS RETAIN PRODUCT RESIDUES (VAPOR, LIQUID, AND/OR SOLID), ALL HAZARD PRECAUTIONS GIVEN IN THE DATA SHEET MUST BE OBSERVED.

Non Detergent SAE 30 Motor Oil VV265

STORAGE: NO DATA

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES:

HYDROTREATED LIGHT PARAFFINIC DISTILLATE 64742-55-8:

ACGIH:

TIME WEIGHTED AVERAGE: 5 MG/M3 MIST.

ACGIH:

SHORT TERM EXPOSURE LIMIT: 10 MG/M3 MIST.

ACGIH NIC:

TIME WEIGHTED AVERAGE: 0.2 MG/M3 INHALABLE FRACTION.

DISTILLATES (PETROLEUM), SOLVENT-DEWAXED HEAVY PARAFFINIC 64742-65-0:

OSHA Z1:

PERMISSIBLE EXPOSURE LIMIT: 500 PPM

OSHA Z1:

PERMISSIBLE EXPOSURE LIMIT: 2,000 MG/M3

OSHA Z1A:

TIME WEIGHTED AVERAGE: 400 PPM

OSHA Z1A:

TIME WEIGHTED AVERAGE: 1,600 MG/M3

US CA OEL:

TIME WEIGHTED AVERAGE (TWA): 400 PPM

PERMISSIBLE EXPOSURE LIMIT (PEL):

US CA OEL:

TIME WEIGHTED AVERAGE (TWA): 1,600 MG/M3

PERMISSIBLE EXPOSURE LIMIT (PEL):

ACGIH:

TIME WEIGHTED AVERAGE: 5 MG/M3 MIST.

ACGIH:

SHORT TERM EXPOSURE LIMIT: 10 MG/M3 MIST.

ACGIH NIC:

Non Detergent SAE 30 Motor Oil VV265
TIME WEIGHTED AVERAGE: 0.2 MG/M3 INHALABLE FRACTION.

GENERAL ADVICE:

THESE RECOMMENDATIONS PROVIDE GENERAL GUIDANCE FOR HANDLING THIS PRODUCT. PERSONAL PROTECTIVE EQUIPMENT SHOULD BE SELECTED FOR INDIVIDUAL APPLICATIONS AND SHOULD CONSIDER FACTORS WHICH AFFECT EXPOSURE POTENTIAL, SUCH AS HANDLING PRACTICES, CHEMICAL CONCENTRATIONS AND VENTILATION. IT IS ULTIMATELY THE RESPONSIBILITY OF THE EMPLOYER TO FOLLOW REGULATORY GUIDELINES ESTABLISHED BY LOCAL AUTHORITIES.

EXPOSURE CONTROLS:

GENERAL ROOM VENTILATION SHOULD BE ADEQUATE FOR NORMAL CONDITIONS OF USE. HOWEVER, IF UNUSUAL OPERATING CONDITIONS EXIST, PROVIDE SUFFICIENT MECHANICAL (GENERAL AND/OR LOCAL EXHAUST) VENTILATION TO MAINTAIN EXPOSURE BELOW EXPOSURE GUIDELINES (IF APPLICABLE) OR BELOW LEVELS THAT CAUSE KNOWN, SUSPECTED OR APPARENT ADVERSE EFFECTS.

EYE PROTECTION:

NOT REQUIRED UNDER NORMAL CONDITIONS OF USE. WEAR SPLASH-PROOF SAFETY GOGGLES IF MATERIAL COULD BE MISTED OR SPLASHED INTO EYES.

SKIN AND BODY PROTECTION:

WEAR RESISTANT GLOVES (CONSULT YOUR SAFETY EQUIPMENT SUPPLIER). WEAR NORMAL WORK CLOTHING INCLUDING LONG PANTS, LONG-SLEEVED SHIRTS AND FOOT COVERING TO PREVENT DIRECT CONTACT OF THE PRODUCT WITH THE SKIN. LAUNDER CLOTHING BEFORE REUSE. IF SKIN IRRITATION DEVELOPS, CONTACT YOUR FACILITY HEALTH AND SAFETY PROFESSIONAL OR YOUR LOCAL SAFETY EQUIPMENT SUPPLIER TO DETERMINE THE PROPER PERSONAL PROTECTIVE EQUIPMENT FOR YOUR USE.

RESPIRATORY PROTECTION:

RESPIRATORY PROTECTION IS NOT REQUIRED UNDER NORMAL CONDITIONS OF USE.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: LIQUID

FORM: NO DATA

COLOR: AMBER

ODOR: NO DATA

BOILING POINT/BOILING RANGE: 575.00 DEG. F / 575 DEG. F @ 760.00 MMHg

pH: NO DATA

Non Detergent SAE 30 Motor Oil VW265

FLASH POINT (>)430.00 DEG. F / 221.11 DEG. C

EVAPORATION RATE: NO DATA

EXPLOSION LIMITS: NO DATA

VAPOR PRESSURE: NO DATA

VAPOR DENSITY: (<)1 (AIR=1)

DENSITY:

0.8890 G/CM3 @ 60.01 DEG. F / 15.56 DEG. C

7.39 LB/GAL 7.39 LB/GAL @ 60.00 DEG. F / 15.56 DEG. C 60.1 DEG. F / 15.6 DEG. C

SOLUBILITY: NO DATA

PARTITION COEFFICIENT n-OCTANOL/WATER: NO DATA

AUTOIGNITION TEMPERATURE: NO DATA

10. STABILITY AND REACTIVITY

STABILITY: STABLE

CONDITIONS TO AVOID:

AVOID CONTACT WITH: EXCESSIVE HEAT

INCOMPATIBLE PRODUCTS:

AVOID CONTACT WITH: STRONG OXIDIZING AGENTS

HAZARDOUS DECOMPOSITION PRODUCTS:

MAY FORM:

CARBON DIOXIDE AND CARBON MONOXIDE, OXIDES OF SULFUR, NITROGEN AND PHOSPHORUS, HYDROCARBONS

HAZARDOUS REACTIONS: NO DATA

THERMAL DECOMPOSITION: NO DATA

11. TOXICOLOGICAL INFORMATION

Non Detergent SAE 30 Motor Oil WV265

ACUTE ORAL TOXICITY:

DISTILLATES (PETROLEUM), HYDROTREATED HEAVY PARAFFINIC:

LD50 RAT: >15 G/KG

PETROLEUM DISTILLATE:

LD50 RAT: >5,000 MG/KG

ACUTE INHALATION TOXICITY:

ACUTE DERMAL TOXICITY:

DISTILLATES (PETROLEUM), HYDROTREATED HEAVY PARAFFINIC:

LD50 RABBIT: >5 G/KG

PETROLEUM DISTILLATE:

LD50 RABBIT: >5,000 MG/KG

12. ECOLOGICAL INFORMATION

AQUATIC TOXICITY:

ACUTE AND PROLONGED TOXICITY TO FISH: NO DATA

ACUTE TOXICITY TO AQUATIC INVERTEBRATES: NO DATA

ENVIRONMENTAL FATE AND PATHWAYS: NO DATA

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHODS:

DISPOSE OF IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS. FOR ASSISTANCE WITH YOUR WASTE MANAGEMENT NEEDS - INCLUDING DISPOSAL, RECYCLING AND WASTE STREAM REDUCTION, CONTACT ASHLAND DISTRIBUTION'S ENVIRONMENTAL SERVICES GROUP AT 800-637-7922.

14. TRANSPORT INFORMATION

DANGEROUS GOODS DESCRIPTIONS (IF INDICATED ABOVE) MAY NOT REFLECT PACKAGE SIZE, QUANTITY, END-USE OR REGION-SPECIFIC EXCEPTIONS THAT CAN BE APPLIED. CONSULT SHIPPING DOCUMENTS FOR DESCRIPTIONS THAT ARE SPECIFIC TO THE SHIPMENT.

15. REGULATORY INFORMATION

CALIFORNIA PROP. 65:

PROPOSITION 65 WARNINGS ARE NOT REQUIRED FOR THIS PRODUCT BASED ON THE RESULTS OF A RISK ASSESSMENT.

SARA HAZARD CLASSIFICATION: ACUTE HEALTH HAZARD

CHRONIC HEALTH HAZARD:

SARA 313 COMPONENT(S):

	HMIS	NFPA
HEALTH	1	1
FLAMMABILITY	1	1
REACTIVITY	0	0
OTHER		

16. OTHER INFORMATION

THE INFORMATION ACCUMULATED HEREIN IS BELIEVED TO BE ACCURATE BUT IS NOT WARRANTED TO BE WHETHER ORIGINATING WITH THE COMPANY OR NOT. RECIPIENTS ARE ADVISED TO CONFIRM IN ADVANCE OF NEED THAT THE INFORMATION IS CURRENT, APPLICABLE, AND SUITABLE TO THEIR CIRCUMSTANCES. THIS MSDS HAS BEEN PREPARED BY ASHLAND'S ENVIRONMENTAL HEALTH AND SAFETY DEPARTMENT (1-800-325-3751).

Zerex Dex-Cool Antifreeze Coolant

Common Name: ZEREX DEX COOL RTU ANTIFREEZE COOLANT
Manufacturer: ASHLAND CHEMICAL
MSDS Revision Date: 3/3/2008

Grainger Item Number(s): 1PKU5, 1UCC3
Manufacturer Model Number(s):

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ASHLAND(R*)

SAFETY DATA SHEET

ZEREX(R*) DEX COOL(TM) RTU ANTIFREEZE COOLANT ZXELRU1

REVISION DATE: 03/03/2008

PRINT DATE: 3/6/2008

MSDS NUMBER: R0382102

VERSION: 1.4

Zerex Dex-Cool Antifreeze Coolant

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION

AND OF THE COMPANY/UNDERTAKING

ASHLAND
P.O. BOX 2219
COLUMBUS, OH 43216

REGULATORY INFORMATION NUMBER: 1-800-325-3751

TELEPHONE: 614-790-3333

EMERGENCY TELEPHONE: 1-800-ASHLAND (1-800-274-5263)

PRODUCT NAME: ZEREX(R*) DEX COOL(TM) RTU ANTIFREEZE COOLANT

PRODUCT CODE: ZXELRU1

PRODUCT USE DESCRIPTION: NO DATA

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

APPEARANCE: LIQUID, ORANGE

WARNING!

MAY AFFECT THE CENTRAL NERVOUS SYSTEM CAUSING DIZZINESS, HEADACHE OR NAUSEA. MAY BE HARMFUL. MAY CAUSE SEVERE BURNS OF RESPIRATORY AND DIGESTIVE TRACTS. HARMFUL IF ABSORBED THROUGH THE SKIN. MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION.

POTENTIAL HEALTH EFFECTS:

ROUTES OF EXPOSURE:

INHALATION, SKIN ABSORPTION, SKIN CONTACT, EYE CONTACT, INGESTION

EYE CONTACT:

CAN CAUSE EYE IRRITATION. SYMPTOMS INCLUDE STINGING, TEARING, REDNESS, AND SWELLING OF EYES.

SKIN CONTACT:

CAN CAUSE SKIN IRRITATION. SYMPTOMS MAY INCLUDE REDNESS AND BURNING OF SKIN, AND OTHER SKIN DAMAGE. ALTHOUGH RARE, SKIN CONTACT WITH ETHYLENE GLYCOL MAY CAUSE ALLERGIC SKIN REACTION (DELAYED SKIN RASH WHICH MAY BE

Zerex Dex-Cool Antifreeze Coolant

FOLLOWED BY BLISTERING, SCALING AND OTHER SKIN EFFECTS). PASSAGE OF THIS MATERIAL INTO THE BODY THROUGH THE SKIN IS POSSIBLE, AND SKIN CONTACT MAY BE HARMFUL.

INGESTION:

SWALLOWING SMALL AMOUNTS OF THIS MATERIAL DURING NORMAL HANDLING IS NOT LIKELY TO CAUSE HARMFUL EFFECTS. SWALLOWING LARGE AMOUNTS MAY BE HARMFUL. LIVER, KIDNEY AND BRAIN DAMAGE IN HUMANS HAS RESULTED FROM SWALLOWING LETHAL OR NEAR-LETHAL AMOUNTS OF ETHYLENE GLYCOL.

INHALATION:

IT IS POSSIBLE TO BREATHE THIS MATERIAL UNDER CERTAIN CONDITIONS OF HANDLING AND USE (FOR EXAMPLE, DURING HEATING, SPRAYING, OR STIRRING). BREATHING SMALL AMOUNTS OF THIS MATERIAL DURING NORMAL HANDLING IS NOT LIKELY TO CAUSE HARMFUL EFFECTS. BREATHING LARGE AMOUNTS MAY BE HARMFUL. SYMPTOMS ARE NOT EXPECTED AT AIR CONCENTRATIONS BELOW THE RECOMMENDED EXPOSURE LIMITS, IF APPLICABLE (SEE SECTION 8.).

AGGRAVATED MEDICAL CONDITION:

PREEXISTING DISORDERS OF THE FOLLOWING ORGANS (OR ORGAN SYSTEMS) MAY BE AGGRAVATED BY EXPOSURE TO THIS MATERIAL:
SKIN, LUNG (FOR EXAMPLE, ASTHMA-LIKE CONDITIONS), LIVER, KIDNEY, CENTRAL NERVOUS SYSTEM, EXPOSURE TO THIS MATERIAL MAY AGGRAVATE ANY PREEXISTING CONDITION SENSITIVE TO A DECREASE IN AVAILABLE OXYGEN, SUCH AS CHRONIC LUNG DISEASE, CORONARY ARTERY DISEASE OR ANEMIAS.

SYMPTOMS:

SIGNS AND SYMPTOMS OF EXPOSURE TO THIS MATERIAL THROUGH BREATHING, SWALLOWING, AND/OR PASSAGE OF THE MATERIAL THROUGH THE SKIN MAY INCLUDE: STOMACH OR INTESTINAL UPSET (NAUSEA, VOMITING, DIARRHEA), IRRITATION (NOSE, THROAT, AIRWAYS), COUGH, CENTRAL NERVOUS SYSTEM DEPRESSION (DIZZINESS, DROWSINESS, WEAKNESS, FATIGUE, NAUSEA, HEADACHE, UNCONSCIOUSNESS), CENTRAL NERVOUS SYSTEM EXCITATION (GIDDINESS, LIVELINESS, LIGHT-HEADED FEELING) FOLLOWED BY CENTRAL NERVOUS SYSTEM DEPRESSION (DIZZINESS, DROWSINESS, WEAKNESS, FATIGUE, NAUSEA, HEADACHE, UNCONSCIOUSNESS) AND OTHER CENTRAL NERVOUS SYSTEM EFFECTS, INVOLUNTARY EYE MOVEMENT, PAIN IN THE ABDOMEN AND LOWER BACK, CYANOSIS (CAUSES BLUE COLORING OF THE SKIN AND NAILS FROM LACK OF OXYGEN), LUNG EDEMA (FLUID BUILDUP IN THE LUNG TISSUE), ACUTE KIDNEY FAILURE (SUDDEN SLOWING OR STOPPING OF URINE PRODUCTION), KIDNEY DAMAGE, LIVER DAMAGE, LUNG DAMAGE, CONVULSIONS, COMA, AND DEATH

TARGET ORGANS:

OVEREXPOSURE TO THIS MATERIAL (OR ITS COMPONENTS) HAS BEEN SUGGESTED AS A CAUSE OF THE FOLLOWING EFFECTS IN LABORATORY ANIMALS:
REPRODUCTIVE EFFECTS, KIDNEY DAMAGE, LIVER DAMAGE, CENTRAL NERVOUS SYSTEM DAMAGE, OVEREXPOSURE TO THIS MATERIAL (OR ITS COMPONENTS) HAS BEEN SUGGESTED AS A CAUSE OF THE FOLLOWING EFFECTS IN HUMANS:
KIDNEY DAMAGE, LIVER DAMAGE

Zerex Dex-Cool Antifreeze Coolant

CARCINOGENICITY:

THIS MATERIAL IS NOT LISTED AS A CARCINOGEN BY THE INTERNATIONAL AGENCY FOR RESEARCH ON CANCER (IARC), THE NATIONAL TOXICOLOGY PROGRAM (NTP), OR THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA).

REPRODUCTIVE HAZARD:

ETHYLENE GLYCOL HAS CAUSED BIRTH DEFECTS IN ANIMAL STUDIES AT HIGH ORAL DOSES. HOWEVER, IT DID NOT CAUSE HARM TO THE PREGNANT ANIMAL OR TO THE FETUS WHEN APPLIED TO THE SKIN OF THE PREGNANT ANIMAL., 2-ETHYLHEXANOIC ACID HAS BEEN SHOWN TO CAUSE BIRTH DEFECTS IN LABORATORY ANIMAL STUDIES. THE RELEVANCE OF THESE FINDINGS TO HUMANS IS UNCERTAIN.

3. COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENTS	CAS-NO.	CONCENTRATION
ETHYLENE GLYCOL	107-21-1	>/=60-<70%
2-ETHYLHEXANOIC ACID	149-57-5	>/=1.5-<5%
POTASSIUM HYDROXIDE	1310-58-3	>/=1.5-<5%

4. FIRST AID MEASURES

EYES:

IF SYMPTOMS DEVELOP, IMMEDIATELY MOVE INDIVIDUAL AWAY FROM EXPOSURE AND INTO FRESH AIR. FLUSH EYES GENTLY WITH WATER FOR AT LEAST 15 MINUTES WHILE HOLDING EYELIDS APART; SEEK IMMEDIATE MEDICAL ATTENTION.

SKIN:

REMOVE CONTAMINATED CLOTHING. FLUSH EXPOSED AREA WITH LARGE AMOUNTS OF WATER. IF SKIN IS DAMAGED, SEEK IMMEDIATE MEDICAL ATTENTION. IF SKIN IS NOT DAMAGED AND SYMPTOMS PERSIST, SEEK MEDICAL ATTENTION. LAUNDER CLOTHING BEFORE REUSE.

INGESTION:

SEEK MEDICAL ATTENTION. IF INDIVIDUAL IS DROWSY OR UNCONSCIOUS, DO NOT GIVE ANYTHING BY MOUTH; PLACE INDIVIDUAL ON THE LEFT SIDE WITH THE HEAD DOWN. CONTACT A PHYSICIAN, MEDICAL FACILITY, OR POISON CONTROL CENTER FOR ADVICE ABOUT WHETHER TO INDUCE VOMITING. IF POSSIBLE, DO NOT LEAVE INDIVIDUAL UNATTENDED.

INHALATION:

Zerex Dex-Cool Antifreeze Coolant

IF SYMPTOMS DEVELOP, MOVE INDIVIDUAL AWAY FROM EXPOSURE AND INTO FRESH AIR. IF SYMPTOMS PERSIST, SEEK MEDICAL ATTENTION. IF BREATHING IS DIFFICULT, ADMINISTER OXYGEN. KEEP PERSON WARM AND QUIET; SEEK IMMEDIATE MEDICAL ATTENTION.

NOTES TO PHYSICIAN:

HAZARDS:

EFFECTS OF ACUTE ETHYLENE GLYCOL POISONING APPEAR IN THREE FAIRLY DISTINCT STAGES. THE INITIAL STAGE OCCURS SHORTLY AFTER EXPOSURE, LASTS 6-12 HOURS, AND IS CHARACTERIZED BY CENTRAL NERVOUS SYSTEM EFFECTS (TRANSIENT EXHILARATION, NAUSEA, VOMITING, AND IN SEVERE CASES, COMA, CONVULSIONS, AND POSSIBLE DEATH). THE SECOND STAGE LASTS FROM 12-36 HOURS AFTER EXPOSURE AND IS INITIATED BY THE ONSET OF COMA. THIS PHASE IS CHARACTERIZED BY TACHYPNIA, TACHYCARDIA, MILD HYPOTENSION, CYANOSIS, AND IN SEVERE CASES, PULMONARY EDEMA, BRONCHOPNEUMONIA, CARDIAC ENLARGEMENT, AND CONGESTIVE FAILURE. THE FINAL STAGE OCCURS 24-72 POST-EXPOSURE AND IS CHARACTERIZED BY RENAL FAILURE, RANGING FROM A MILD INCREASE IN BLOOD UREA NITROGEN AND CREATININE FOLLOWED BY RECOVERY, TO COMPLETE ANURIA WITH ACUTE TUBULAR NECROSIS THAT CAN LEAD TO DEATH. OXALURIA IS FOUND IN MOST CASES. THE MOST SIGNIFICANT LABORATORY FINDING IN ETHYLENE GLYCOL INTOXICATION IS SEVERE METABOLIC ACIDOSIS.

TREATMENT:

THIS PRODUCT CONTAINS ETHYLENE GLYCOL. ETHANOL DECREASES THE METABOLISM OF ETHYLENE GLYCOL TO TOXIC METABOLITES. ETHANOL SHOULD BE ADMINISTERED AS SOON AS POSSIBLE IN CASES OF SEVERE POISONING SINCE THE ELIMINATION HALF-LIFE OF ETHYLENE GLYCOL IS 3 HOURS. IF MEDICAL CARE WILL BE DELAYED SEVERAL HOURS, GIVE THE PATIENT THREE TO FOUR 1-OUNCE ORAL "SHOTS" OF 86-PROOF OR HIGHER WHISKEY BEFORE OR DURING TRANSPORT TO THE HOSPITAL. FOMEPIZOLE (4-METHYLPYRAZOLE) IS AN EFFECTIVE ANTAGONIST OF ALCOHOL DEHYDROGENASE, AND AS SUCH, MAY BE USED AS AN ANTIDOTE IN THE TREATMENT OF ETHYLENE GLYCOL POISONING. HEMODIALYSIS EFFECTIVELY REMOVES ETHYLENE GLYCOL AND ITS METABOLITES FROM THE BODY.

5. FIRE-FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA:

WATER MIST, CARBON DIOXIDE (CO₂), DRY CHEMICAL

HAZARDOUS COMBUSTION PRODUCTS:

MAY FORM: CARBON DIOXIDE AND CARBON MONOXIDE

PRECAUTIONS FOR FIRE-FIGHTING:

NEVER USE WELDING OR CUTTING TORCH ON OR NEAR DRUM (EVEN EMPTY) BECAUSE PRODUCT (EVEN JUST RESIDUE) CAN IGNITE EXPLOSIVELY. PRODUCT IS NOT

Zerex Dex-Cool Antifreeze Coolant

FLAMMABLE OR COMBUSTIBLE AS SUPPLIED; HOWEVER, UNDER CERTAIN FIRE CONDITIONS THE PRODUCT MAY CONTRIBUTE TO THE FIRE WHEN ADEQUATELY HEATED. WATER SPRAY CAN BE USED TO REDUCE INTENSITY OF FLAMES AND TO DILUTE SPILLS TO NONFLAMMABLE MIXTURE. NO SPECIAL PRECAUTIONS NECESSARY WHEN FIGHTING FIRES INVOLVING THIS PRODUCT.

FLAMMABILITY CLASS FOR FLAMMABLE LIQUIDS: COMBUSTIBLE LIQUID CLASS IIIB

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS:

FOR PERSONAL PROTECTION SEE SECTION 8. PERSONS NOT WEARING PROTECTIVE EQUIPMENT SHOULD BE EXCLUDED FROM AREA OF SPILL UNTIL CLEAN-UP HAS BEEN COMPLETED.

ENVIRONMENTAL PRECAUTIONS:

PREVENT RUN-OFF TO SEWERS, STREAMS OR OTHER BODIES OF WATER. IF RUN-OFF OCCURS, NOTIFY PROPER AUTHORITIES AS REQUIRED, THAT A SPILL HAS OCCURRED.

METHODS FOR CLEANING UP:

ABSORB LIQUID ON VERMICULITE, FLOOR ABSORBENT OR OTHER ABSORBENT MATERIAL.

7. HANDLING AND STORAGE

HANDLING:

CONTAINERS OF THIS MATERIAL MAY BE HAZARDOUS WHEN EMPTIED. SINCE EMPTIED CONTAINERS RETAIN PRODUCT RESIDUES (VAPOR, LIQUID, AND/OR SOLID), ALL HAZARD PRECAUTIONS GIVEN IN THE DATA SHEET MUST BE OBSERVED.

STORAGE: KEEP CONTAINERS CLOSED WHEN NOT IN USE.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES:

ETHYLENE GLYCOL 107-21-1:

ACGIH:

CEILING LIMIT VALUE: 100 MG/M3 AEROSOL.

2-ETHYLHEXANOIC ACID 149-57-5:

Zerex Dex-Cool Antifreeze Coolant

ACGIH:

TIME WEIGHTED AVERAGE: 5 MG/M3 INHALABLE FRACTION AND VAPOR

POTASSIUM HYDROXIDE 1310-58-3:

ACGIH:

CEILING LIMIT VALUE: 2 MG/M3

NIOSH:

RECOMMENDED EXPOSURE LIMIT (REL): 2 MG/M3

GENERAL ADVICE:

THESE RECOMMENDATIONS PROVIDE GENERAL GUIDANCE FOR HANDLING THIS PRODUCT. PERSONAL PROTECTIVE EQUIPMENT SHOULD BE SELECTED FOR INDIVIDUAL APPLICATIONS AND SHOULD CONSIDER FACTORS WHICH AFFECT EXPOSURE POTENTIAL, SUCH AS HANDLING PRACTICES, CHEMICAL CONCENTRATIONS AND VENTILATION. IT IS ULTIMATELY THE RESPONSIBILITY OF THE EMPLOYER TO FOLLOW REGULATORY GUIDELINES ESTABLISHED BY LOCAL AUTHORITIES.

EXPOSURE CONTROLS:

GENERAL ROOM VENTILATION SHOULD BE ADEQUATE FOR NORMAL CONDITIONS OF USE. HOWEVER, IF UNUSUAL OPERATING CONDITIONS EXIST, PROVIDE SUFFICIENT MECHANICAL (GENERAL AND/OR LOCAL EXHAUST) VENTILATION TO MAINTAIN EXPOSURE BELOW EXPOSURE GUIDELINES (IF APPLICABLE) OR BELOW LEVELS THAT CAUSE KNOWN, SUSPECTED OR APPARENT ADVERSE EFFECTS.

EYE PROTECTION:

NOT REQUIRED UNDER NORMAL CONDITIONS OF USE. WEAR SPLASH-PROOF SAFETY GOGGLES IF MATERIAL COULD BE MISTED OR SPLASHED INTO EYES.

SKIN AND BODY PROTECTION:

WEAR RESISTANT GLOVES (CONSULT YOUR SAFETY EQUIPMENT SUPPLIER).

DISCARD GLOVES THAT SHOW TEARS, PINHOLES, OR SIGNS OF WEAR.

WEAR NORMAL WORK CLOTHING INCLUDING LONG PANTS, LONG-SLEEVED SHIRTS AND FOOT COVERING TO PREVENT DIRECT CONTACT OF THE PRODUCT WITH THE SKIN. LAUNDER CLOTHING BEFORE REUSE. IF SKIN IRRITATION DEVELOPS, CONTACT YOUR FACILITY HEALTH AND SAFETY PROFESSIONAL OR YOUR LOCAL SAFETY EQUIPMENT SUPPLIER TO DETERMINE THE PROPER PERSONAL PROTECTIVE EQUIPMENT FOR YOUR USE.

RESPIRATORY PROTECTION:

RESPIRATORY PROTECTION IS NOT REQUIRED UNDER NORMAL CONDITIONS OF USE.

9. PHYSICAL AND CHEMICAL PROPERTIES

Zerex Dex-Cool Antifreeze Coolant

PHYSICAL STATE: LIQUID

FORM: LIQUID

COLOR: ORANGE

ODOR: NO DATA

BOILING POINT/BOILING RANGE: 226.00 DEG. F / 226 DEG. F @ 760.00 MMHg

MELTING POINT/RANGE: -34 DEG. F / -37 DEG. C

pH: (AVERAGE) 10.5

FLASH POINT: (>)250.00 DEG. F / 121.11 DEG. C

EVAPORATION RATE: NO DATA

EXPLOSION LIMITS: NO DATA

VAPOR PRESSURE: NO DATA

VAPOR DENSITY: NO DATA

DENSITY:

(AVERAGE) 1.0755 G/CM3 @ 60.01 DEG. F / 15.56 DEG. C

8.91 LB/GAL @ 60.00 DEG. F / 15.56 DEG. C

SOLUBILITY: NO DATA

PARTITION COEFFICIENT n-OCTANOL/WATER: NO DATA

AUTOIGNITION TEMPERATURE: NO DATA

10. STABILITY AND REACTIVITY

STABILITY: STABLE.

CONDITIONS TO AVOID: NONE KNOWN.

INCOMPATIBLE PRODUCTS:

AVOID CONTACT WITH: STRONG ACIDS, STRONG ALKALIS, STRONG OXIDIZING AGENTS

HAZARDOUS DECOMPOSITION PRODUCTS:

MAY FORM: CARBON DIOXIDE AND CARBON MONOXIDE

Zerex Dex-Cool Antifreeze Coolant

HAZARDOUS REACTIONS: PRODUCT WILL NOT UNDERGO HAZARDOUS POLYMERIZATION.

THERMAL DECOMPOSITION: NO DATA

11. TOXICOLOGICAL INFORMATION

ACUTE ORAL TOXICITY:

ETHYLENE GLYCOL:

LD50 RAT: 6,140 MG/KG

LD50 MOUSE: 14,600 MG/KG

2-ETHYLHEXANOIC ACID:

LD50 RAT: 3 G/KG

POTASSIUM HYDROXIDE: NO DATA AVAILABLE

ACUTE INHALATION TOXICITY:

ETHYLENE GLYCOL: NO DATA AVAILABLE

2-ETHYLHEXANOIC ACID:

LC50 RAT: >600 PPM, 4 H

POTASSIUM HYDROXIDE: NO DATA AVAILABLE

ACUTE DERMAL TOXICITY:

ETHYLENE GLYCOL:

LD50 RABBIT: 10,611 MG/KG

2-ETHYLHEXANOIC ACID:

LD50 RABBIT: 1,138 MG/KG

POTASSIUM HYDROXIDE:

LD50 RABBIT: 1,260 MG/KG

12. ECOLOGICAL INFORMATION

AQUATIC TOXICITY:

ACUTE AND PROLONGED TOXICITY TO FISH: NO DATA

ACUTE TOXICITY TO AQUATIC INVERTEBRATES: NO DATA

Zerex Dex-Cool Antifreeze Coolant

ENVIRONMENTAL FATE AND PATHWAYS: NO DATA

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHODS:

DISPOSE OF IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS. FOR ASSISTANCE WITH YOUR WASTE MANAGEMENT NEEDS - INCLUDING DISPOSAL, RECYCLING AND WASTE STREAM REDUCTION, CONTACT ASHLAND DISTRIBUTION'S ENVIRONMENTAL SERVICES GROUP AT 800-637-7922.

14. TRANSPORT INFORMATION

DANGEROUS GOODS DESCRIPTIONS (IF INDICATED ABOVE) MAY NOT REFLECT PACKAGE SIZE, QUANTITY, END-USE OR REGION-SPECIFIC EXCEPTIONS THAT CAN BE APPLIED. CONSULT SHIPPING DOCUMENTS FOR DESCRIPTIONS THAT ARE SPECIFIC TO THE SHIPMENT.

15. REGULATORY INFORMATION

CALIFORNIA PROP. 65:

PROPOSITION 65 WARNINGS ARE NOT REQUIRED FOR THIS PRODUCT BASED ON THE RESULTS OF A RISK ASSESSMENT.

SARA HAZARD CLASSIFICATION: ACUTE HEALTH HAZARD

SARA 313 COMPONENT(S):

ETHYLENE GLYCOL	107-21-1	66.0762%
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REPORTABLE QUANTITY - PRODUCT:

US. EPA CERCLA HAZARDOUS SUBSTANCES (40 CFR 302): 7567 LBS

REPORTABLE QUANTITY - COMPONENTS:

ETHYLENE GLYCOL	107-21-1	5000 LBS
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2-ETHYLHEXANOIC ACID	149-57-5	NONE
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POTASSIUM HYDROXIDE	1310-58-3	1000 LBS
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HEALTH	HMIS	NFPA
	2*	2

Zerex Dex-Cool Antifreeze Coolant

FLAMMABILITY 1 1
REACTIVITY 0 0
OTHER

16. OTHER INFORMATION

THE INFORMATION ACCUMULATED HEREIN IS BELIEVED TO BE ACCURATE BUT IS NOT WARRANTED TO BE WHETHER ORIGINATING WITH THE COMPANY OR NOT. RECIPIENTS ARE ADVISED TO CONFIRM IN ADVANCE OF NEED THAT THE INFORMATION IS CURRENT, APPLICABLE, AND SUITABLE TO THEIR CIRCUMSTANCES. THIS MSDS HAS BEEN PREPARED BY ASHLAND'S ENVIRONMENTAL HEALTH AND SAFETY DEPARTMENT (1-800-325-3751).



MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product number 870
Product name Vandalism Mark & Stain Remover
Effective date 13-Nov-2007
Company information Claire Manufacturing
500 Vista Ave.
Addison, IL 60101 United States
Company phone General Assistance 630-543-7600
Emergency telephone US 800-424-9300
Emergency telephone outside US 703-527-3887
Supersedes date 02-May-2007

2. Hazards Identification

Emergency overview VAPOR HARMFUL.
FLAMMABLE
CONTENTS UNDER PRESSURE.
Aerosol. Pressurized container may explode when exposed to heat or flame.

OSHA regulatory status Harmful in contact with eyes. Cancer hazard. Irritating to skin. Irritating to respiratory system. Prolonged exposure may cause chronic effects.
This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication).

Potential health effects
Routes of exposure Ingestion. Inhalation. Skin contact.
Eyes Contact may irritate or burn eyes. Eye contact may result in corneal injury.
Skin Irritating to skin. Prolonged or repeated contact can result in defatting and drying of the skin which may result in skin irritation and dermatitis (rash).
Inhalation Intentional misuse by concentrating and inhaling the product can be harmful or fatal. Irritating to respiratory system. Prolonged inhalation may be harmful.
Ingestion Exposure by ingestion of an aerosol is unlikely. Harmful if swallowed. May cause delayed lung damage.

Target organs Kidney. Central nervous system. Liver. Lungs. Respiratory system.

Chronic effects Conjunctiva. Liver injury may occur. Kidney injury may occur. May cause central nervous system disorder (e.g., narcosis involving a loss of coordination, weakness, fatigue, mental confusion, and blurred vision) and/or damage. May cause delayed lung damage.

Signs and symptoms Discomfort in the chest. Corneal damage. Narcosis. Liver enlargement. Jaundice. Conjunctivitis. Defatting of the skin. Irritation.

Potential environmental effects Components of this product are hazardous to aquatic life.

3. Composition / Information on Ingredients

Components	CAS #	Percent
Methylene Chloride	75-09-2	40 - 50
n-Butane	106-97-8	20 - 30
Toluene	108-88-3	10 - 15
Perchloroethylene	127-18-4	8 - 10
Propane	74-98-6	8 - 10
Propylene Oxide	75-56-9	0.1 - 0.5
Non-hazardous and other components below reportable levels		1 - 2.5

4. First Aid Measures

First aid procedures

Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Get medical attention immediately.
Skin contact	Remove and isolate contaminated clothing and shoes. Wash off with warm water and soap. Get medical attention if irritation develops or persists. For minor skin contact, avoid spreading material on unaffected skin.
Inhalation	Move to fresh air. Oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Call a physician if symptoms develop or persist.
Ingestion	Rinse mouth. Never give anything by mouth to a victim who is unconscious or is having convulsions. Do not induce vomiting without medical advice. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.
Notes to physician	In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Symptoms may be delayed.
General advice	If exposed or concerned: get medical attention/advice. In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation.

5. Fire Fighting Measures

Flammable properties	Containers may explode when heated. Vapor or gas may spread to distant ignition sources and flash back.
Extinguishing media	
Suitable extinguishing media	Foam. Dry chemical. Carbon dioxide (CO ₂).
Unsuitable extinguishing media	Do not use a solid water stream as it may scatter and spread fire.
Protection of firefighters	
Specific hazards arising from the chemical	Fire may produce irritating, corrosive and/or toxic gases.
Protective equipment and precautions for firefighters	In the event of fire and/or explosion do not breathe fumes. Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask. Containers should be cooled with water to prevent vapor pressure build up. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.
Specific hazards	Fire may produce irritating, corrosive and/or toxic gases.

6. Accidental Release Measures

Personal precautions	Ensure adequate ventilation. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering. Keep unnecessary personnel away.
Methods for containment	Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable.
Methods for cleaning up	Should not be released into the environment. Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean contaminated surface thoroughly.

7. Handling and Storage

Handling	Pressurized container: Do not pierce or burn, even after use. Do not handle or store near an open flame, heat or other sources of ignition. Do not use if spray button is missing or defective. Use only with adequate ventilation. Do not get this material in contact with eyes. Do not get this material in contact with skin. Wear personal protective equipment. Avoid prolonged exposure.
Storage	Level 1 Aerosol. Contents under pressure. Do not puncture, incinerate or crush. The pressure in sealed containers can increase under the influence of heat. Avoid exposure to long periods of sunlight. Keep in an area equipped with sprinklers. Keep out of the reach of children. Use care in handling/storage.

8. Exposure Controls / Personal Protection

Exposure limits

ACGIH

Components	CAS #	TWA	STEL	Ceiling
Methylene Chloride	75-09-2	50 ppm	Not established	Not established
n-Butane	106-97-8	1000 ppm	Not established	Not established
Toluene	108-88-3	50 ppm	Not established	Not established
Perchloroethylene	127-18-4	25 ppm	100 ppm	Not established
Propane	74-98-6	1000 ppm	Not established	Not established
Propylene Oxide	75-56-9	2 ppm	Not established	Not established

OSHA

Components	CAS #	TWA	STEL	Ceiling
Methylene Chloride	75-09-2	25 ppm	125 ppm	Not established
Toluene	108-88-3	200 ppm	Not established	300 ppm
Perchloroethylene	127-18-4	100 ppm	Not established	200 ppm
Propane	74-98-6	1000 ppm	Not established	Not established
Propylene Oxide	75-56-9	100 ppm	Not established	Not established

Personal protective equipment

Eye / face protection	Wear chemical goggles.
Skin protection	Wear appropriate chemical resistant clothing. Protective gloves.
Respiratory protection	Wear positive pressure self-contained breathing apparatus (SCBA).
General hygiene considerations	Do not get this material in contact with skin. Avoid contact with eyes. Wash hands after handling and before eating. Handle in accordance with good industrial hygiene and safety practice.

9. Physical & Chemical Properties

Appearance	Not available
Color	Pale yellow
Odor	Solvent.
Physical state	Liquid.
Form	Aerosol.
Flammability (HOC)	18.21 kJ/g estimated
Flash back	Yes
Pressure	25 - 35 psig @ 70F
Solubility	Negligible
Flash point	-156 °F (-104.4 °C) estimated
Boiling point	77 °F (25 °C) estimated
Specific gravity	0.8934 estimated
pH	Not applicable

10. Chemical Stability & Reactivity Information

Chemical stability	Risk of ignition. Stable at normal conditions.
Conditions to avoid	Heat, flames and sparks.
Hazardous decomposition products	Hydrogen chloride. Irritants. Toxic gas. May include oxides of carbon.

11. Toxicological Information

Acute effects	Acute LD50: 1715 mg/kg estimated, Rat, Oral Acute LC50: 85 mg/l/4h estimated, Rat, Inhalation Acute LD50: 55930 mg/kg estimated, Rat, Dermal
Sensitization	Not expected to be hazardous by OSHA criteria.
Local effects	Contact may irritate or burn eyes. Liver toxicity. Irritating to skin. Irritating to respiratory system. Components of the product may be absorbed into the body through the skin.

Chronic effects	Hazardous by OSHA criteria. Repeated absorption may cause disorder of central nervous system, liver, kidneys and blood. Prolonged or repeated exposure may cause lung injury. Prolonged exposure may cause chronic effects.
Subchronic effects	Kidney injury may occur.
Carcinogenicity	Hazardous by OSHA criteria.
Neurological effects	Hazardous by OSHA criteria.
Mutagenicity	Not expected to be hazardous by OSHA criteria.
Reproductive effects	Not expected to be hazardous by OSHA criteria.
Teratogenicity	Not expected to be hazardous by OSHA criteria.
Epidemiology	Hazardous by OSHA criteria.
Further information	Symptoms may be delayed.

12. Ecological Information

Ecotoxicity	LC50 31.52 mg/L estimated, Fish, 96.00 Hours, EC50 35.73 mg/L estimated, Daphnia, 48.00 Hours, IC50 2641 mg/L estimated, Algae, 72.00 Hours,
Environmental effects	Harmful to aquatic life.

13. Disposal Considerations

Waste codes	D001: Waste Flammable material with a flash point <140 F D018: Waste Benzene D039: Waste Tetrachloroethylene
Disposal instructions	Contents under pressure. Dispose of this material and its container at hazardous or special waste collection point. Incinerate the material under controlled conditions in an approved incinerator. Do not allow this material to drain into sewers/water supplies. If discarded, this product is considered a RCRA ignitable waste, D001. Dispose in accordance with all applicable regulations.

14. Transport Information

Department of Transportation (DOT) Requirements

Basic shipping requirements:

Proper shipping name	Consumer commodity
Hazard class	ORM-D
Subsidiary hazard class	None

Additional information:

Packaging exceptions	156, 306
Packaging non bulk	156, 306
Packaging bulk	None

IMDG

Not regulated as hazardous goods.

IATA

Not regulated as hazardous goods.

15. Regulatory Information

US federal regulations	This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. All components are on the U.S. EPA TSCA Inventory List.
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Occupational Safety and Health Administration (OSHA)

29 CFR 1910.1200 hazardous chemical	Yes
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CERCLA (Superfund) reportable quantity

Methylene Chloride: 1000.0000
Toluene: 1000.0000
Perchloroethylene: 100.0000
Propylene Oxide: 100.0000

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
Immediate Hazard - Yes
Delayed Hazard - Yes
Fire Hazard - Yes
Pressure Hazard - Yes
Reactivity Hazard - No

Section 302 extremely hazardous substance No
Section 311 hazardous chemical Yes

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of New and Existing Chemicals (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

State regulations WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

U.S. - Pennsylvania - RTK (Right to Know) List

Methylene Chloride	75-09-2	Environmental hazard; Special hazardous substance
n-Butane	106-97-8	Present
Perchloroethylene	127-18-4	Environmental hazard; Special hazardous substance
Propane	74-98-6	Present
Propylene Oxide	75-56-9	Environmental hazard; Special hazardous substance
Toluene	108-88-3	Environmental hazard

16. Other Information**HMIS® ratings**

Health: 2*
Flammability: 2
Physical hazard: 0

Prepared by

Regulatory Compliance

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Issue date

13-Nov-2007

- Nancy Mathus

Material Safety Data Sheet

Rcvd APR 18 '00

SAX ARTS & CRAFTS
VERSATEMP (ALL COLORS)

CHROMA ACRYLICS, INC.

Manufacturer

205 BUCKY DRIVE

Address

LITITZ, PA 17543

(717) 626-8866

Phone Number (For Information)

(717) 626-8866

Emergency Phone Number

Telex*

Identity (Trade Name As Used On Label)

164-201-7213

MSDS Number*

439481, 484, 487

CAS Number*

3/98, 439490, 493, 496

Date Prepared

439499, 502, 505, 508

Prepared By*

439611, 514, 517

Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.

SECTION 1 - MATERIAL IDENTIFICATION AND INFORMATION

COMPONENTS — Chemical Name & Common Names (Hazardous Components 1% or greater; Carcinogens 0.1% or greater)	%	OSHA PEL	ACGIH TLV	OTHER LIMITS RECOMMENDED
PRODUCT IS WATER BASED, NON-TOXIC, NON-HAZARDOUS				
TEMPERA COLORS IN LIQUID FORM, CERTIFIED NON TOXIC				
BY THE ART & CRAFT MATERIALS INSTITUTE.				
1. WATER	50-75%			
2. VARIOUS, ASSORTED COLOR & REFLECTIVE PIGMENTS				
3. CALCIUM CARBONATE				
4. ACRYLIC THICKENERS				
5. DISPERSANT				
6. PRESERVATIVE-NON-HAZARDOUS AT LEVEL USED (.4%)				
*ALL INFORMATION THE SAME FOR ALL SIZES & COLORS				
Non-Hazardous Ingredients				
TOTAL	100			

SECTION 2 - PHYSICAL / CHEMICAL CHARACTERISTICS

Boiling Point 215-275°F	Specific Gravity (H ₂ O = 1) NOT KNOWN
Vapor Pressure (mm Hg and Temperature) NOT KNOWN	Melting Point NOT KNOWN
Vapor Density (Air = 1) LIGHTER THAN AIR	Evaporation Rate () = 1 SLOWER THAN ETHER
Solubility in Water TOTALLY SOLUBLE	Water Reactive NOT KNOWN

Appearance and Odor LIQUID WATER BASED TEMPERA PAINTS IN ASSORTED COLORS. POSSIBLE SLIGHT AMMONIA S

SECTION 3 - FIRE AND EXPLOSION HAZARD DATA

Flash Point and Method Used N/A	Auto-Ignition Temperature N/A	Flammability Limits in Air % by Volume N/A	LEL UNKNOWN	UEL UNKNOWN
Extinguisher Media NOT APPLICABLE				
Special Fire Fighting Procedures NOT APPLICABLE				

Unusual Fire and Explosion Hazards NOT APPLICABLE

*Optional

SECTION 4 - REACTIVITY HAZARD DATA

STABILITY

☒ Stable
☐ Unstable

Conditions
To Avoid

NOT APPLICABLE

Incompatibility

(Materials to Avoid) NONE

Hazardous

Decomposition Products NONE

HAZARDOUS POLYMERIZATION

☐ May Occur
☒ Will Not Occur

Conditions
To Avoid

NOT APPLICABLE

SECTION 5 - HEALTH HAZARD DATA

PRIMARY ROUTES OF ENTRY

☐ Inhalation
☐ Skin Absorption
☒ Not Hazardous

CARCINOGEN LISTED IN

☐ NTP
☐ IARC Monograph
☒ OSHA
☒ Not Listed

HEALTH HAZARDS

Acute NONE
Chronic NONE

Signs and Symptoms of Exposure

NONE

Medical Conditions

Generally Aggravated by Exposure NONE

EMERGENCY FIRST AID PROCEDURES - Seek medical assistance for further treatment, observation and support if necessary.

Eye Contact

NONE

Skin Contact

NONE

Inhalation

NONE

Ingestion

NONE

SECTION 6 - CONTROL AND PROTECTIVE MEASURES

Respiratory Protection (Specify Type)

NONE NEEDED UNDER NORMAL CONDITIONS

Protective Gloves

NOT REQUIRED

Eye Protection

NOT REQUIRED

VENTILATION TO BE USED

☐ Local Exhaust N/A
☐ Mechanical (general) N/A
☐ Special N/A
☐ Other (specify) N/A

Other Protective

Clothing and Equipment NOT REQUIRED

Hygienic Work Practices

AS WITH ANY WATER BASED PRODUCT

SECTION 7 - PRECAUTIONS FOR SAFE HANDLING AND USE / LEAK PROCEDURES

Steps to be Taken if Material Is Spilled Or Released

DIKE AND CONTAIN SPILL WITH INERT MATERIALS (SAND, SANDUST, ETC.)

AND TRANSFER CONTENTS TO CONTAINERS FOR DISPOSAL.

Waste Disposal Methods

NORMAL DISPOSAL

Precautions to be Taken in Handling and Storage

NO PARTICULAR PRECAUTIONS

Other Precautions and/or Special Hazards

NONE

NFPA

Rating* Health Flammability Reactivity Special

HMIS

Rating* Health Flammability Reactivity Personal Protection

MATERIAL SAFETY DATA SHEET

SP127
05 00

DATE OF PREPARATION
Feb 20, 2014

SECTION 1 — PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER

SP127

PRODUCT NAME

VHT® Hi-Temp Engine Enamel 550°F (288°C), Universal Aluminum

MANUFACTURER'S NAME

VHT PRODUCTS CO.
101 Prospect Ave.
Cleveland, OH 44115

Telephone Numbers and Websites

Product Information	(800) 247-3270
Regulatory Information	(216) 566-2902 www.paintdocs.com
Medical Emergency	(216) 566-2917
Transportation Emergency*	(800) 424-9300
*for Chemical Emergency ONLY (spill, leak, fire, exposure, or accident)	

SECTION 2 — COMPOSITION/INFORMATION ON INGREDIENTS

% by Weight	CAS Number	Ingredient	Units	Vapor Pressure
10	74-98-6	Propane		
		ACGIH TLV	1000 PPM	760 mm
		OSHA PEL	1000 PPM	
10	106-97-8	Butane		
		ACGIH TLV	1000 PPM	760 mm
		OSHA PEL	800 PPM	
2	64-17-5	Ethanol		
		ACGIH TLV	1000 PPM	44 mm
		OSHA PEL	1000 PPM	
1	67-63-0	2-Propanol		
		ACGIH TLV	200 PPM	33 mm
		ACGIH TLV	400 PPM STEL	
		OSHA PEL	400 PPM	
41	67-64-1	Acetone		
		ACGIH TLV	500 PPM	180 mm
		ACGIH TLV	750 PPM STEL	
		OSHA PEL	1000 PPM	
16	78-93-3	Methyl Ethyl Ketone		
		ACGIH TLV	200 PPM	90.6 mm
		ACGIH TLV	300 PPM STEL	
		OSHA PEL	200 PPM	
		OSHA PEL	300 PPM STEL	
8	763-69-9	Ethyl 3-Ethoxypropionate		
		ACGIH TLV	Not Available	1.11 mm
		OSHA PEL	Not Available	

SECTION 3 — HAZARDS IDENTIFICATION

ROUTES OF EXPOSURE

INHALATION of vapor or spray mist.
EYE or SKIN contact with the product, vapor or spray mist.

EFFECTS OF OVEREXPOSURE

EYES: Irritation.
SKIN: Prolonged or repeated exposure may cause irritation.
INHALATION: Irritation of the upper respiratory system.

HMIS Codes

Health	2
Flammability	3
Reactivity	1

May cause nervous system depression. Extreme overexposure may result in unconsciousness and possibly death.

Prolonged overexposure to hazardous ingredients in Section 2 may cause adverse chronic effects to the following organs or systems:

- the liver
- the reproductive system

SIGNS AND SYMPTOMS OF OVEREXPOSURE

Headache, dizziness, nausea, and loss of coordination are indications of excessive exposure to vapors or spray mists.

Redness and itching or burning sensation may indicate eye or excessive skin exposure.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

None generally recognized.

CANCER INFORMATION

For complete discussion of toxicology data refer to Section 11.

SECTION 4 — FIRST AID MEASURES

EYES: Flush eyes with large amounts of water for 15 minutes. Get medical attention.

SKIN: Wash affected area thoroughly with soap and water.

Remove contaminated clothing and laundry before re-use.

INHALATION: If affected, remove from exposure. Restore breathing. Keep warm and quiet.

INGESTION: Do not induce vomiting. Get medical attention immediately.

SECTION 5 — FIRE FIGHTING MEASURES

FLASH POINT

Propellant < 0 °F

LEL

1.0

UEL

19.0

EXTINGUISHING MEDIA

Carbon Dioxide, Dry Chemical, Foam

UNUSUAL FIRE AND EXPLOSION HAZARDS

Containers may explode when exposed to extreme heat.

Application to hot surfaces requires special precautions.

During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

SPECIAL FIRE FIGHTING PROCEDURES

Full protective equipment including self-contained breathing apparatus should be used.

Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Remove all sources of ignition. Ventilate the area.

Remove with inert absorbent.

SECTION 7 — HANDLING AND STORAGE

STORAGE CATEGORY

Not Available

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE

Keep away from heat, sparks, and open flame. Vapors will accumulate readily and may ignite explosively.

During use and until all vapors are gone: Keep area ventilated - Do not smoke - Extinguish all flames, pilot lights, and heaters - Turn off stoves, electric tools and appliances, and any other sources of ignition.

Consult NFPA Code. Use approved Bonding and Grounding procedures.

Contents under pressure. Do not puncture, incinerate, or expose to temperature above 120F. Heat from sunlight, radiators, stoves, hot water, and other heat sources could cause container to burst. Do not take internally. Keep out of the reach of children.

SECTION 8 — EXPOSURE CONTROLS/PERSONAL PROTECTION

PRECAUTIONS TO BE TAKEN IN USE

Use only with adequate ventilation.

Avoid contact with skin and eyes. Avoid breathing vapor and spray mist.

Wash hands after using.

This coating may contain materials classified as nuisance particulates (listed "as Dust" in Section 2) which may be present at hazardous levels only during sanding or abrading of the dried film. If no specific dusts are listed in Section 2, the applicable limits for nuisance dusts are ACGIH TLV 10 mg/m3 (total dust), 3 mg/m3 (respirable fraction), OSHA PEL 15 mg/m3 (total dust), 5 mg/m3 (respirable fraction).

VENTILATION

Local exhaust preferable. General exhaust acceptable if the exposure to materials in Section 2 is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, 1910.108.

RESPIRATORY PROTECTION

If personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section 2.

When sanding or abrading the dried film, wear a dust/mist respirator approved by NIOSH/MSHA for dust which may be generated from this product, underlying paint, or the abrasive.

PROTECTIVE GLOVES

None required for normal application of aerosol products where minimal skin contact is expected. For long or repeated contact, wear chemical resistant gloves.

EYE PROTECTION

Wear safety spectacles with unperforated sideshields.

OTHER PRECAUTIONS

Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

PRODUCT WEIGHT	6.34 lb/gal	759 g/l
SPECIFIC GRAVITY	0.76	
BOILING POINT	<0 - 342 °F	<-18 - 172 °C
MELTING POINT	Not Available	
VOLATILE VOLUME	95%	
EVAPORATION RATE	Faster than ether	
VAPOR DENSITY	Heavier than air	
SOLUBILITY IN WATER	Not Available	
pH	7.0	
VOLATILE ORGANIC COMPOUNDS (VOC Theoretical - As Packaged)		
	Volatile Weight 50.71%	Less Water and Federally Exempt Solvents

SECTION 10 — STABILITY AND REACTIVITY

STABILITY — Stable**CONDITIONS TO AVOID**

None known.

INCOMPATIBILITY

None known.

HAZARDOUS DECOMPOSITION PRODUCTS

By fire: Carbon Dioxide, Carbon Monoxide

HAZARDOUS POLYMERIZATION

Will not occur

SECTION 11 — TOXICOLOGICAL INFORMATION

CHRONIC HEALTH HAZARDS

No ingredient in this product is an IARC, NTP or OSHA listed carcinogen.

Methyl Ethyl Ketone may increase the nervous system effects of other solvents.

Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

TOXICOLOGY DATA

CAS No.	Ingredient Name			
74-98-6	Propane	LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
106-97-8	Butane	LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
64-17-5	Ethanol	LC50 RAT	4HR	Not Available
		LD50 RAT		7060 mg/kg
67-63-0	2-Propanol	LC50 RAT	4HR	Not Available
		LD50 RAT		5045 mg/kg
67-64-1	Acetone	LC50 RAT	4HR	Not Available
		LD50 RAT		5800 mg/kg
78-93-3	Methyl Ethyl Ketone	LC50 RAT	4HR	Not Available
		LD50 RAT		2740 mg/kg
763-69-9	Ethyl 3-Ethoxypropionate	LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available

SECTION 12 — ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

No data available.

SECTION 13 — DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD

Waste from this product may be hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261.

Waste must be tested for ignitability to determine the applicable EPA hazardous waste numbers.

Do not incinerate. Depressurize container. Dispose of in accordance with Federal, State/Provincial, and Local regulations regarding pollution.

SECTION 14 — TRANSPORT INFORMATION

Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (ocean, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport.

US Ground (DOT)

May be classed as LTD. QTY. OR ORM-D

UN1950, AEROSOLS, 2.1, LIMITED QUANTITY, (ERG#126)

Canada (TDG)

May be classed as LTD. QTY. OR ORM-D

UN1950, AEROSOLS, CLASS 2.1, LIMITED QUANTITY, (ERG#126)

IMO

May be shipped as Limited Quantity

UN1950, AEROSOLS, CLASS 2.1, LIMITED QUANTITY, EmS F-D, S-U

IATA/ICAO

UN1950, AEROSOLS, FLAMMABLE, 2.1, LIMITED QUANTITY

SECTION 15 — REGULATORY INFORMATION

SARA 313 (40 CFR 372.65C) SUPPLIER NOTIFICATION

CAS No.	CHEMICAL/COMPOUND	% by WT	% Element
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No ingredients in this product are subject to SARA 313 (40 CFR 372.65C) Supplier Notification.

CALIFORNIA PROPOSITION 65

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

TSCA CERTIFICATION

All chemicals in this product are listed, or are exempt from listing, on the TSCA Inventory.

SECTION 16 — OTHER INFORMATION

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.

Victaulic® Lubricant SDS

(Safety Data Sheet)



SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product Identifier

Product name : Victaulic Lubricant

1.2. Intended Use Of The Product

Use of the substance/preparation : A Pipe Joint Lubricant. For professional use only.

1.3. Name, Address, And Telephone Of The Responsible Party

Company

Victaulic Company
4901 Kesslersville Road
Easton, PA 18045
610-559-3300
web: www.victaulic.com

Manufacturer

JTM Products, Inc.
31025 Carter Street
Solon, OH 44139
440-287-2302

1.4. Emergency telephone number

Emergency number : 610-559-3300 Hours 9am-5pm EST M-F

SECTION 2: Hazards identification

2.1. Classification of the Substance or Mixture

Classification (GHS-US)

This material is not classified as hazardous in accordance with OSHA 29 CFR 1910.1200.

2.2. Label Elements

GHS-US labeling

Not applicable

2.3. Other Hazards

No additional information available

2.4. Unknown acute toxicity (GHS US)

70 – 80% of the mixture consists of ingredient(s) of unknown acute toxicity.

Job/Owner

System No.	
Location	

Contractor

Submitted By	
Date	

Engineer

Spec Section	
Paragraph	
Approved	
Date	



SECTION 3: Composition/information on ingredients**3.1. Substances**

Not applicable

3.2. Mixtures

Name	Product Identifier	%	Classification (GHS-US)
Fatty acids, tall-oil, potassium salts	(CAS No) 61790-44-1	70–80	Not classified
1,2-Propylene glycol	(CAS No) 57-55-6	10–20	Not classified
Mica	(CAS No) 12001-26-2	5–10	Not classified

SECTION 4: Description of first aid measures**4.1. Description of first aid measures**

First-aid measures general	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	: If symptoms occur: go into open air and ventilate suspected area. Keep at rest and in a position comfortable for breathing.
First-aid measures after skin contact	: Remove contaminated clothing. Gently wash with plenty of soap and water. Wash contaminated clothing before reuse.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries	: Not expected to present a significant health hazard under normal conditions of use.
Symptoms/injuries after inhalation	: Not expected to present a significant inhalation hazard.
Symptoms/injuries after skin contact	: May cause irritation from prolonged/repeated periods of use.
Symptoms/injuries after eye contact	: May cause eye irritation.
Symptoms/injuries after ingestion	: May cause gastrointestinal irritation.

4.3 Indication of any immediate medical attention and special treatment needed

If you feel unwell, get medical advice and attention.

SECTION 5: Firefighting measures**5.1. Extinguishing media**

Suitable extinguishing media	: Use extinguishing media appropriate for surrounding fire.
Unsuitable extinguishing media	: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

5.2. Special hazards arising from the substance or mixture

Fire hazard	: Not considered flammable but may burn at high temperatures.
Explosion hazard	: Product is not explosive.
Reactivity	: Hazardous reactions will not occur.

5.3. Advice for firefighters

Precautionary measures fire	: Exercise caution when fighting any chemical fire.
Firefighting instructions	: Use water spray or fog for cooling exposed containers.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Avoid all contact with eyes, skin, or clothing.

6.1.1. For non-emergency personnel

Protective equipment : Use appropriate personal protection equipment (PPE).

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

For containment : Absorb and/or contain spill with inert material, then place in suitable container.

Methods for cleaning up : Clear up spills immediately and dispose of waste safely.

6.4. Reference to other sections

See heading 8, exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Avoid all contact with eyes, skin, or clothing.

Hygiene measures : Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Comply with applicable regulations.

Storage conditions : Store in a dry, cool and well-ventilated place.

Incompatible products : Strong acids. Strong bases. Strong oxidizers.

7.3. Specific end use(s)

A Pipe Joint Lubricant. For professional use only.

8.1. Control parameters

Mica (12001-26-2)		
USA ACGIH	ACGIH TWA (mg/m ³)	3 mg/m ³
USA NIOSH	NIOSH REL (TWA) (mg/m ³)	3 mg/m ³ (containing <1% Quartz)
USA IDLH	US IDLH (mg/m ³)	1500 mg/m ³ (containing <1% Quartz)

8.2. Exposure controls

Appropriate engineering controls	: Ensure adequate ventilation, especially in confined areas. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure all national/local regulations are observed.
Personal protective equipment	: Not generally required but may be necessary as conditions warrant.
Materials for protective clothing	: Chemically resistant materials and fabrics.
Hand protection	: Protective gloves.
Eye protection	: Safety glasses
Skin and body protection	: Wear suitable protective clothing.
Respiratory protection	: Use NIOSH-approved air-purifying or supplied-air respirator where airborne concentrations of vapor or mist are expected to exceed exposure limits.
Other information	: When using, do not eat, drink or smoke.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Amber viscous paste
Odor	: Mild
Odor threshold	: No data available
pH	: 11
Relative evaporation rate (butyl acetate=1)	: No data available
Melting point	: < 0°C (32°F)
Freezing point	: No data available
Boiling point	: > 104°C (220°F)
Flash Point	: > 104°C (220°F)
Auto-ignition temperature	: No data available
Decomposition Temperature	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: No data available
Relative vapor density at 20°C	: No data available
Relative density	: 1.08 (water = 1)
Density	: 9.01 lbs/gal
Solubility	: Soluble in water
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Explosive limits	: Not applicable

9.2. Other information

VOC content	: 146 g/L
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SECTION 10: Stability and reactivity

10.1. Reactivity

Hazardous reactions will not occur.

10.2. Chemical stability

Stable at standard temperature and pressure.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases. Strong oxidizers.

10.6. Hazardous decomposition products

Carbon oxides (CO, CO₂). Silicon oxides.

SECTION 11: Toxicological information**11.1. Information on toxicological effects**

Acute toxicity : Not classified

1,2-Propylene glycol (57-55-6)	
LD50 oral rat	20000 mg/kg
LD50 dermal rabbit	20800 mg/kg

Skin corrosion/irritation : Not classified (pH: 11).

Serious eye damage/irritation : Not classified (pH: 11).

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : Not classified

Potential Adverse human health effects and symptoms : Not expected to present a significant hazard under normal conditions of use.

Symptoms/injuries after inhalation : Not expected to present a significant inhalation hazard.

Symptoms/injuries after skin contact : May cause skin irritation through repeated/prolonged periods of use.

Symptoms/injuries after eye contact : May cause eye irritation.

Symptoms/injuries after ingestion : May cause gastrointestinal irritation.

SECTION 12: Ecological information**12.1. Toxicity**

1,2-Propylene glycol (57-55-6)	
LC50 fishes 1	51600 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
EC50 Daphnia 1	10000 mg/l (Exposure time: 24 h - Species: Daphnia magna)
EC50 other aquatic organisms 1	19000 mg/l (Exposure time: 96 h - Species: Pseudokirchneriella subcapitata)
LC50 fish 2	41 (41 - 47) mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
EC50 Daphnia 2	1000 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])

12.2. Persistence and degradability

Victaulic Lubricant	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

Victaulic Lubricant	
Bioaccumulative potential	Not established.
1,2-Propylene glycol (57-55-6)	
BCF fish 1	< 1

12.4. Mobility in soil

No additional information available

12.4. Other adverse effects

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Dispose of waste material in accordance with all local, regional, national, and international regulations.

SECTION 14: Transport information

In accordance with ICAO/IATA/DOT/TDG

14.1. UN number

Not regulated for transport.

14.2. UN proper shipping name

Not regulated for transport.

14.3. Additional information

Overland transport

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

1,2-Propylene glycol (57-55-6)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
EPA TSCA Regulatory Flag	Y2 - Y2 - indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.
Fatty acids, tall-oil, potassium salts (61790-44-1)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

15.3. US State regulations

Mica (12001-26-2)
U.S. - Connecticut - Hazardous Air Pollutants - HLVs (30 min)
U.S. - Connecticut - Hazardous Air Pollutants - HLVs (8 hr)
U.S. - Hawaii - Occupational Exposure Limits - TWAs
U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations
U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Emission Levels (ELs)
U.S. - Idaho - Occupational Exposure Limits - Mineral Dusts
U.S. - Massachusetts - Right To Know List
U.S. - Michigan - Occupational Exposure Limits - TWAs
U.S. - Minnesota - Hazardous Substance List
U.S. - Minnesota - Permissible Exposure Limits - TWAs
U.S. - New Hampshire - Regulated Toxic Air Pollutants - Ambient Air Levels (AALs) - 24-Hour
U.S. - New Hampshire - Regulated Toxic Air Pollutants - Ambient Air Levels (AALs) - Annual
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - New York - Occupational Exposure Limits - Mineral Dusts
U.S. - North Dakota - Air Pollutants - Guideline Concentrations - 8-Hour
U.S. - Oregon - Permissible Exposure Limits - Mineral Dusts
U.S. - Pennsylvania - RTK (Right to Know) List
U.S. - Tennessee - Occupational Exposure Limits - TWAs
U.S. - Texas - Effects Screening Levels - Long Term
U.S. - Texas - Effects Screening Levels - Short Term
U.S. - Vermont - Permissible Exposure Limits - TWAs
U.S. - Washington - Permissible Exposure Limits - STELs
U.S. - Washington - Permissible Exposure Limits - TWAs
1,2-Propylene glycol (57-55-6)
U.S. - Minnesota - Hazardous Substance List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List
U.S. - Texas - Effects Screening Levels - Long Term
U.S. - Texas - Effects Screening Levels - Short Term

SECTION 16: Other information

Other information : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

SDS US (GHS HazCom)

Installation

Reference should always be made to the I-100 Victaulic Field Installation Handbook for the product you are installing. Handbooks are included with each shipment of Victaulic products for complete installation and assembly data, and are available in PDF format on our website at www.victaulic.com.

Warranty

Refer to the Warranty section of the current Price List or contact Victaulic for details.

Note

This product shall be manufactured by Victaulic or to Victaulic specifications. All products to be installed in accordance with current Victaulic installation/assembly instructions. Victaulic reserves the right to change product specifications, designs and standard equipment without notice and without incurring obligations.

Trademarks

Victaulic is a registered trademarks of Victaulic Company.



SAFETY DATA SHEET TKO ACID TEST KIT

According to Regulation (EU) No 453/2010

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name TKO ACID TEST KIT
Product No. TKO
Container size 59.15 millilitres.(0.059 Ltr)

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses Refrigeration Oil Acid Test Kit.
Uses advised against No uses advised against are identified.

1.3. Details of the supplier of the safety data sheet

Supplier Parker Hannifin Ltd
Cortonwood Drive
Brampton
Barnsley
South Yorkshire
S73 0UF
Tel:+44 1226 273400
email:europcold@parker.com

1.4. Emergency telephone number

+1-703-527-3887

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical and Chemical Hazards Flam. Liq. 2 - H225
Human health Skin Irrit. 2 - H315;Repr. 2 - H361d;STOT SE 3 - H336;STOT RE 2 - H373;Asp. Tox. 1 - H304
Environment Not classified.

Classification (1999/45/EEC)

Xn;R48/20, R65. Repr. Cat. 3;R63. Xi;R38. F;R11. R67.

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

Human health

Inhalation of vapour or mist may cause lung oedema. Contains a substance/a group of substances which may cause harm to the unborn child.

Physical and Chemical Hazards

The product is highly flammable, and explosive vapours/air mixtures may be formed even at normal room temperatures.

2.2. Label elements

Contains TOLUENE

Label In Accordance With (EC) No. 1272/2008



Signal Word Danger

Hazard Statements

H225 Highly flammable liquid and vapour.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.

TKO ACID TEST KIT

H336	May cause drowsiness or dizziness.
H361d	Suspected of damaging the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.

Precautionary Statements

P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P271	Use only outdoors or in a well-ventilated area.
P281	Use personal protective equipment as required.
P304+340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P308+313	IF exposed or concerned: Get medical advice/attention.
P332+313	If skin irritation occurs: Get medical advice/attention.

Supplementary Precautionary Statements

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P233	Keep container tightly closed.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P260	Do not breathe vapour/spray.
P261	Avoid breathing vapour/spray.
P264	Wash contaminated skin thoroughly after handling.
P321	Specific treatment (see medical advice on this label).
P370+378	In case of fire: Use foam, carbon dioxide, dry powder or water fog for extinction.
P301+310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P302+352	IF ON SKIN: Wash with plenty of soap and water.
P303+361+353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P314	Get medical advice/attention if you feel unwell.
P331	Do NOT induce vomiting.
P362	Take off contaminated clothing and wash before reuse.
P403+233	Store in a well-ventilated place. Keep container tightly closed.
P403+235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/container to ...

2.3. Other hazards

This product does not contain any PBT or vPvB substances.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

ETHANOL		30-60%
CAS-No.: 64-17-5 EC No.: 200-578-6		
Classification (EC 1272/2008) Flam. Liq. 2 - H225	Classification (67/548/EEC) F;R11	
TOLUENE		30-60%
CAS-No.: 108-88-3 EC No.: 203-625-9		
Classification (EC 1272/2008) Flam. Liq. 2 - H225 Skin Irrit. 2 - H315 Repr. 2 - H361d STOT SE 3 - H336 STOT RE 2 - H373 Asp. Tox. 1 - H304	Classification (67/548/EEC) F;R11 Repr. Cat. 3;R63 Xn;R48/20,R65 Xi;R38 R67	

TKO ACID TEST KIT

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General information

CAUTION! First aid personnel must be aware of own risk during rescue! NOTE! Keep affected person away from heat, sparks and flames!

Inhalation

Remove victim immediately from source of exposure. Provide fresh air, warmth and rest, preferably in a comfortable upright sitting position. Get medical attention.

Ingestion

NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Rinse mouth thoroughly. Get medical attention.

Skin contact

Remove contaminated clothing immediately and wash skin with soap and water. Continue to rinse for at least 15 minutes. Contact physician if irritation continues.

Eye contact

Make sure to remove any contact lenses from the eyes before rinsing. Immediately rinse with water. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

4.2. Most important symptoms and effects, both acute and delayed

General information

The severity of the symptoms described will vary dependant of the concentration and the length of exposure.

Inhalation.

In high concentrations, vapours are anaesthetic and may cause headache, fatigue, dizziness and central nervous system effects.

Ingestion

May cause nausea, headache, dizziness and intoxication.

Skin contact

Prolonged contact may cause redness, irritation and dry skin.

Eye contact

Prolonged contact may cause redness and/or tearing.

4.3. Indication of any immediate medical attention and special treatment needed

No specific treatment is required. Symptomatic treatment is advised.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.

Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products

In case of fire, toxic gases (CO, CO₂, NO_x) may be formed.

Unusual Fire & Explosion Hazards

Heat may cause the containers to explode. Solvent vapours may form explosive mixtures with air. May travel considerable distance to source of ignition and flash back.

Specific hazards

In case of fire, toxic gases may be formed.

5.3. Advice for firefighters

Special Fire Fighting Procedures

Keep up-wind to avoid fumes. Avoid breathing fire vapours. Move container from fire area if it can be done without risk. Use water to keep fire exposed containers cool and disperse vapours.

Protective equipment for fire-fighters

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Avoid inhalation of vapours and contact with skin and eyes. Do not smoke, use open fire or other sources of ignition.

6.2. Environmental precautions

TKO ACID TEST KIT

The product should not be dumped in nature but collected and delivered according to agreement with the local authorities.

6.3. Methods and material for containment and cleaning up

Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Stop leak if possible without risk. DO NOT touch spilled material! Ventilate well. Absorb in vermiculite, dry sand or earth and place into containers. Collect spillage in containers, seal securely and deliver for disposal according to local regulations. Clean contaminated area with oil-removing material.

6.4. Reference to other sections

Wear protective clothing as described in Section 8 of this safety data sheet. For waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Keep away from heat, sparks and open flame. Eliminate all sources of ignition. Provide good ventilation. Avoid inhalation of vapours/spray and contact with skin and eyes. Static electricity and formation of sparks must be prevented. Use explosion proof electric equipment. Risk of vapour concentration on the floor and in low-lying areas. Pregnant women should not work with the product, if there is the least risk of exposure.

7.2. Conditions for safe storage, including any incompatibilities

Keep away from heat, sparks and open flame. Store in tightly closed original container in a dry, cool and well-ventilated place. Ground container and transfer equipment to eliminate static electric sparks.

Storage Class

Flammable liquid storage.

7.3. Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Name	STD	TWA - 8 Hrs		STEL - 15 Min		Notes
ETHANOL	WEL	1000 ppm	1920 mg/m3			
TOLUENE	WEL	50 ppm	191 mg/m3	100 ppm	384 mg/m3	Sk

WEL = Workplace Exposure Limit.

Sk = Can be absorbed through skin.

8.2. Exposure controls

Protective equipment



Engineering measures

Provide adequate general and local exhaust ventilation. Provide explosion proof ventilation for high concentrations.

Respiratory equipment

No specific recommendation made, but respiratory protection must be used if the general level exceeds the recommended occupational exposure limit. Chemical respirator with organic vapour cartridge.

Hand protection

Wear protective gloves. Use protective gloves made of: Viton rubber (fluor rubber).

Eye protection

Wear splash-proof eye goggles to prevent any possibility of eye contact.

Other Protection

Provide eyewash station.

Hygiene measures

No specific hygiene procedures noted, but good personal hygiene practices are always advisable, especially when working with chemicals. When using do not eat, drink or smoke.

Skin protection

Wear apron or protective clothing in case of contact.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance

Clear liquid.

TKO ACID TEST KIT

Colour	Colourless.
Odour	Solvent.
Solubility	Slightly soluble in water.
Initial boiling point and boiling range	77.8°C
Melting point (°C)	Not available.
Relative density	0.86
Bulk Density	Not available.
Vapour density (air=1)	1.6
Vapour pressure	19 mm Hg
Evaporation rate	<1 (ButAc=1)
Evaporation Factor	Not available.
pH-Value, Conc. Solution	Not determined.
pH-Value, Diluted Solution	Not determined.
Viscosity	Not available.
Solubility Value (G/100G H₂O@20°C)	Not available.
Decomposition temperature (°C)	Not available.
Odour Threshold, Lower	Not available.
Odour Threshold, Upper	Not available.
Flash point	4.4°C Cd OC (Cleveland open cup).
Auto Ignition Temperature (°C)	Not available.
Flammability Limit - Lower(%)	1.4
Flammability Limit - Upper(%)	7.0
Partition Coefficient (N-Octanol/Water)	Not available.

9.2. Other information

Volatile Organic Compound (VOC) 860 g/litre

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No specific reactivity hazards associated with this product.

10.2. Chemical stability

Stable under normal temperature conditions and recommended use.

10.3. Possibility of hazardous reactions

Not available.

Hazardous Polymerisation

Will not polymerise.

10.4. Conditions to avoid

Avoid heat, flames and other sources of ignition.

10.5. Incompatible materials

Materials To Avoid

Strong oxidising substances.

10.6. Hazardous decomposition products

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

TKO ACID TEST KIT

Other Health Effects

Toxic to Reproductive Health Category 3.

General information

Prolonged and repeated contact with solvents over a long period may lead to permanent health problems.

Inhalation

Harmful by inhalation. Harmful: danger of serious damage to health by prolonged exposure through inhalation. Vapours may cause drowsiness and dizziness.

Ingestion

Harmful: may cause lung damage if swallowed. May cause nausea, headache, dizziness and intoxication.

Skin contact

Irritating to skin. Prolonged and frequent contact may cause redness and irritation.

Eye contact

Spray and vapour in the eyes may cause irritation and smarting.

Health Warnings

Solvent vapours are hazardous and may cause nausea, sickness and headaches.

Route of entry

Inhalation. Skin and/or eye contact. Ingestion.

Target Organs

Skin Respiratory system, lungs

Medical Symptoms

Mild intoxication (incl. fatigue, lassitude, irritability, headache, nausea).

Medical Considerations

Avoid vomiting and normal rinse of stomach because of risk of aspiration. Risk of chemical pneumonia after aspiration.

Specific effects

Contains a substance/a group of substances which may cause harm to the unborn child.

Toxicological information on ingredients.

TKO ACID TEST KIT
TOLUENE (CAS: 108-88-3)

Acute toxicity:

Acute Toxicity (Oral LD50)

> 5000 mg/kg Rat

REACH dossier information

Based on available data the classification criteria are not met.

Acute Toxicity (Dermal LD50)

> 5000 mg/kg Rat

REACH dossier information

Based on available data the classification criteria are not met.

Acute Toxicity (Inhalation LC50)

> 20 mg/L air Rat 4 hours

REACH dossier information

Skin Corrosion/Irritation:

Erythema/scar score

Well defined erythema (2).

Oedema score

Very slight oedema -barely perceptible (1).

Estimated Value REACH dossier information

Irritating.

Serious eye damage/irritation:

Not Irritating.

Respiratory or skin sensitisation:

Respiratory sensitisation

Data lacking.

REACH dossier information

Conclusive data but not sufficient for classification.

Skin sensitisation

Guinea pig maximization test (GPMT): Guinea Pig

REACH dossier information

Not Sensitising.

Germ cell mutagenicity:

Genotoxicity - In Vitro

Gene Mutation:

REACH dossier information

Negative.

This substance has no evidence of mutagenic properties.

Genotoxicity - In Vivo

Chromosome aberration:

REACH dossier information

Negative.

Carcinogenicity:

Carcinogenicity

NOAEC 1200 ppm Inhalation. Rat

REACH dossier information

No evidence of carcinogenicity in animal studies

Reproductive Toxicity:

Reproductive Toxicity - Fertility

Two-generation study: NOAEC 500 ppm Inhalation. Rat F1

REACH dossier information

Reproductive Toxicity - Development

Developmental toxicity: NOAEC 600 ppm Inhalation. Rat

TKO ACID TEST KIT

REACH dossier information

Specific target organ toxicity - repeated exposure:

STOT - Repeated exposure

LOAEC 600 Inhalation. Rat

REACH dossier information

Aspiration hazard:

Viscosity

Kinematic viscosity ≤ 20.5 mm²/s.

REACH dossier information

TKO ACID TEST KIT

ETHANOL (CAS: 64-17-5)

Acute toxicity:

Acute Toxicity (Oral LD50)

10470 mg/kg Rat

REACH dossier information

Based on available data the classification criteria are not met.

Acute Toxicity (Dermal LD50)

> 15800 mg/kg Rabbit

REACH dossier information

Based on available data the classification criteria are not met.

Acute Toxicity (Inhalation LC50)

125 mg/l (vapours) Rat 4 hours

REACH dossier information

Based on available data the classification criteria are not met.

Skin Corrosion/Irritation:

Dose

0.2mL 24 hr Rat

Erythema/eschar score

No erythema (0).

Oedema score

No oedema (0).

REACH dossier information

Not irritating.

Serious eye damage/irritation:

Slightly Irritating.

Respiratory or skin sensitisation:

Respiratory sensitisation

Not available.

There is no evidence that the material can lead to respiratory hypersensitivity.

Skin sensitisation

Local Lymph Node Assay (LLNA) Mouse

REACH dossier information

Not Sensitising.

Germ cell mutagenicity:

Genotoxicity - In Vitro

Bacterial Reverse Mutation Test

REACH dossier information

Negative.

This substance has no evidence of mutagenic properties.

Genotoxicity - In Vivo

Chromosome aberration:

REACH dossier information

Negative.

This substance has no evidence of mutagenic properties.

Carcinogenicity:

Carcinogenicity

Not available.

Reproductive Toxicity:

Reproductive Toxicity - Fertility

Not available.

This substance has no evidence of toxicity to reproduction.

Reproductive Toxicity - Development

TKO ACID TEST KIT

Developmental toxicity: LOAEL 8200 mg/kg/day Oral Rat

REACH dossier information

Conclusive data but not sufficient for classification.

Specific target organ toxicity - single exposure:

STOT - Single exposure

Not available.

Not classified as a specific target organ toxicant after a single exposure.

Specific target organ toxicity - repeated exposure:

STOT - Repeated exposure

Not available.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

12.1. Toxicity

Ecological information on ingredients.

TOLUENE (CAS: 108-88-3)

Acute Toxicity - Fish

LC50 96 hours 5.5 mg/l Freshwater fish

REACH dossier information

Acute Toxicity - Aquatic Invertebrates

EC50 48 hours 3.78 mg/l Freshwater invertebrates

REACH dossier information

Acute Toxicity - Aquatic Plants

EC50 3 hours 134 mg/l Freshwater algae

REACH dossier information

ETHANOL (CAS: 64-17-5)

Acute Toxicity - Fish

LC50 96 hours 15.3 mg/l Pimephales promelas (Fat-head Minnow)

REACH dossier information

Acute Toxicity - Aquatic Invertebrates

EC50 48 hours 5012 mg/l Daphnia magna

REACH dossier information

Acute Toxicity - Aquatic Plants

Not available.

12.2. Persistence and degradability

Degradability

There are no data on the degradability of this product.

TKO ACID TEST KIT

Ecological information on ingredients.

TOLUENE (CAS: 108-88-3)

Phototransformation

Air. DT50 2.59 days

REACH dossier information

Stability (Hydrolysis)

Scientifically unjustified.

REACH dossier information

Biodegradation

Water (69%) ~ 5 days

Estimated Value REACH dossier information

ETHANOL (CAS: 64-17-5)

Phototransformation

Not available.

Stability (Hydrolysis)

Not available.

Biodegradation

Water Degradation ((74%)%) 5 days

REACH dossier information

12.3. Bioaccumulative potential

Bioaccumulative potential

Bioaccumulation is unlikely to be significant because of the low water solubility of this product.

Partition coefficient

Not available.

Ecological information on ingredients.

TOLUENE (CAS: 108-88-3)

Bioaccumulation factor

BCF 90 Freshwater fish

REACH dossier information

Partition coefficient

log Pow 2.73

REACH dossier information

ETHANOL (CAS: 64-17-5)

Bioaccumulation factor

Not available.

Partition coefficient

log Pow -0.35@24°C

REACH dossier information

12.4. Mobility in soil

Mobility:

The product is partly soluble in water. May spread in the aquatic environment.

Ecological information on ingredients.

TOLUENE (CAS: 108-88-3)

Adsorption/Desorption Coefficient

Soil Koc < 120

Estimated Value REACH dossier information

Surface tension

27.73 mN/m @25°C

Estimated Value REACH dossier information

ETHANOL (CAS: 64-17-5)

Adsorption/Desorption Coefficient

Not applicable.

Henry's Law Constant

Not available.

Surface tension

24.5 mN/m @20°C

REACH dossier information

12.5. Results of PBT and vPvB assessment

This product does not contain any PBT or vPvB substances.

Ecological information on ingredients.**TOLUENE (CAS: 108-88-3)**

Not Classified as PBT/vPvB by current EU criteria.

ETHANOL (CAS: 64-17-5)

Not Classified as PBT/vPvB by current EU criteria.

12.6. Other adverse effects

Not known.

Ecological information on ingredients.**TOLUENE (CAS: 108-88-3)**

Not known.

SECTION 13: DISPOSAL CONSIDERATIONS

General information

When handling waste, consideration should be made to the safety precautions applying to handling of the product.

13.1. Waste treatment methods

Absorb in vermiculite or dry sand and dispose of at a licenced hazardous waste collection point. Dispose of waste and residues in accordance with local authority requirements.

SECTION 14: TRANSPORT INFORMATION

14.1. UN number

UN No. (ADR/RID/ADN)	1993
UN No. (IMDG)	1993
UN No. (ICAO)	1993

14.2. UN proper shipping name

Proper Shipping Name	FLAMMABLE LIQUID, N.O.S.(TOLUENE, ETHANOL)
----------------------	--

14.3. Transport hazard class(es)

ADR/RID/ADN Class	3
ADR/RID/ADN Class	Class 3: Flammable liquids.
ADR Label No.	3
IMDG Class	3
ICAO Class/Division	3
Transport Labels	

**14.4. Packing group**

ADR/RID/ADN Packing group	II
IMDG Packing group	II
ICAO Packing group	II

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant
No.

TKO ACID TEST KIT

14.6. Special precautions for user

EMS	F-E, S-E
Emergency Action Code	•3YE
Hazard No. (ADR)	33
Tunnel Restriction Code	(D/E)

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

No information required.

SECTION 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU Legislation

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

National Regulations

Workplace Exposure Limits 2005 (EH40)

Authorisations (Title VII Regulation 1907/2006)

No specific authorisations are noted for this product.

Restrictions (Title VIII Regulation 1907/2006)

No specific restrictions of use are noted for this product.

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

Revision Comments

This is first issue.

Revision Date	05-2012
Revision	2/05-2012
Supersedes date	11-2010

Risk Phrases In Full

R48/20	Harmful: danger of serious damage to health by prolonged exposure through inhalation.
R65	Harmful: may cause lung damage if swallowed.
R11	Highly flammable
R38	Irritating to skin.
R63	Possible risk of harm to the unborn child.
R67	Vapours may cause drowsiness and dizziness.

Hazard Statements In Full

H315	Causes skin irritation.
H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H373	May cause damage to organs <<Organs>> through prolonged or repeated exposure.
H336	May cause drowsiness or dizziness.
H361d	Suspected of damaging the unborn child.

Disclaimer

This information is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of Parker Hannifin Ltd. The data on this sheet is related only to specific material designated herein. Parker Hannifin Ltd assumes no legal responsibility for use or reliance upon this data.

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3163 5293
3253 7003
3713 7013
4503 7023
4913 7053
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SAFETY DATA SHEET

1 - IDENTIFICATION OF PREPARATION AND COMPANY/BUSINESS

Preparation:

Name: VITREA 160 GLOSSY ALL COLORS.

Product code:

Company/business:

Registered company name: PEBEO INDUSTRIES.

Address: 305 AVENUE DU PIC DE BERTAGNE - BP106 - 13881.GEMENOS CEDEX.FRANCE.

Telephone: 33 (0) 4.42.32.08.08. Fax:33 (0) 4.42.32.01.70. Telex:.

Emergency telephone No.: 33 (0) 1.45.45.67.67.

Association/Organisation: INRS.

Normal use:

N/A1

2 - INFORMATION REGARDING CONSTITUENTS

Hazardous substances present on their own.

(present in the preparation at a sufficient concentration to give it the toxicological characteristics it would have in a 100% pure state)

This preparation contains no hazardous substance in this category.

Other substances representing a hazard:

No known substance in this category present.

Substances present at a concentration below the minimum danger threshold.

603-047-00-0 Cas 108-01-0 EEC 203-542-8 2-DIMETHYLAMINOETHANOL Concentration $\geq 0.00\%$ and $< 2.50\%$.

Symbol: C R: 10-20/21/22-34

606-021-00-7 Cas 872-50-4 EEC 212-828-1 N-METHYL-2-PYRROLIDONE Concentration $\geq 0.00\%$ and $< 2.50\%$.

Symbol: Xi R: 36/38

Other substances with occupational exposure limits.

No known substance in this category present.

3 - IDENTIFICATION OF HAZARDS

This preparation is not classed as hazardous to health by directive 88/379/EEC.

This product is not classed as flammable. Refer to the recommendations regarding the other products present on the site

Other data:

Packaging: < 125 ml.

4 - FIRST AID.

As a general rule, in case of doubt or if symptoms persist, always call a doctor.

NEVER induce swallowing in an unconscious person.

In the event of splashes or contact with eyes.

Remove contact lenses, irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart and seek medical advice.

In the event of splashes or contact with skin.

Wash skin thoroughly with soap and water.

In the event of swallowing.

If accidentally swallowed obtain immediate medical attention. Keep at rest. Do not induce vomiting.

5 - FIRE-FIGHTING MEASURES

Not relevant.

6 - MEASURES TO BE TAKEN IN THE EVENT OF ACCIDENTAL SPILLAGE

Safety precautions:

Consult the safety measures listed under headings 7 and 8.

Environmental safety precautions:

V3406

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Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, diatom earth in drums for waste disposal.

Prevent any material from entering drains or waterways.

Cleaning methods:

Clean preferably with a detergent, do not use solvents.

7 - HANDLING AND STORAGE

The regulations relating to storage premises apply to workshops where the product is handled.

Fire prevention:

Prevent access by unauthorised personnel.

Storage.

N/A !

8 - EXPOSURE CONTROL - PERSONAL SAFETY**Technical measures.**

Personnel shall wear regularly laundered overalls.

Exposure limits per INRS ND 2098-174-99 and ND 2114-176-99:

France	VME-ppm:	VME-mg/m3:	VLE-ppm:	VLE-mg/m3:	Notes:	TMP N°:
606-021-00-7	-	-	-	-	-	-
Germany	Class:	MAK-ppm:	MAK-mg/m3:	Notes:	Notes:	
606-021-00-7	II,2	19	80	C,*		
ACGIH(TLV)	TWA-ppm:	TWA-mg/m3:	STEL-ppm:	STEL-mg/m3:	Notes:	Notes:
606-021-00-7	-	-	-	-	-	-

Exposure limits per 2000/39/EC and 98/24/EC:

VME-ppm:	VME-mg/m3:	VLE-ppm:	VLE-mg/m3:	Notes:
----------	------------	----------	------------	--------

9 - PHYSICAL PROPERTIES

Density:	> 1
Acid/base character of preparation:	slightly basic.
Solubility of preparation in water:	Dilutable.
Vapour tension at 50°C of volatile constituents:	Below 110 kPa (1.10 bar).
Physical state:	fluid liquid
Flash point interval:	not relevant.
When a pH measure is possible, it has a value of:	8.50
Self-ignition temperature:	not relevant.
Decomposition temperature:	not specified.
Melting temperature interval:	not specified.
Average distillation temperature of solvents contained:	not relevant.

10 - STABILITY AND REACTIVITY

The preparation is stable at the handling and storage conditions recommended per § 7 of the safety data sheet.

11 - TOXICOLOGICAL INFORMATION

The preparation contains no substance classed as hazardous per directive 67/548/EEC.

12 - ECOLOGICAL INFORMATION

No ecological data on the product itself is available.

13 - DISPOSAL CONSIDERATIONS

Do not pour into drains or waterways.

14 - TRANSPORT INFORMATION

Exempt from transport classification and labelling.

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport

15 - STATUTORY INFORMATION

This preparation was classified in compliance with the directive known as <All preparations> 88/379/EEC and its adaptations

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In addition directive 2000/32/EC with the 26^e adaptation of directive 67/548/EC (Hazardous substances) have been taken into account.

Packaging < 125 ml.

16 - OTHER INFORMATION

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.

The product must not be used for any purposes other than those specified under heading 1 without first obtaining written handling instructions.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

The information given on this safety data sheet must be regarded as a description of the safety requirements relating to our product and not a guarantee of its properties

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SAFETY DATA SHEET

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1 - IDENTIFICATION OF PREPARATION AND COMPANY/BUSINESS

Preparation:

Name: VITREA 160 - RELIEF ALL COLORS.

Product code:

Company/business:

Registered company name: PEBEO INDUSTRIES.

Address: 305 AVENUE DU PIC DE BERTAGNE - BP105 - 13881 GEMENOS CEDEX, FRANCE.

Telephone: 33 (0) 4.42.32.08.08. Fax: 33 (0) 4.42.32.01.70. Telex:.

Emergency telephone No.: 33 (0) 1.45.45.67.67.

Association/Organisation: INRS.

Normal use:

N/A !

2 - INFORMATION REGARDING CONSTITUENTS

Hazardous substances present on their own.

(present in the preparation at a sufficient concentration to give it the toxicological characteristics it would have in a 100% pure state)

This preparation contains no hazardous substance in this category.

Other substances representing a hazard:

No known substance in this category present.

Substances present at a concentration below the minimum danger threshold.

603-047-00-0 Cas 108-01-0 EEC 203-542-8 2-DIMETHYLAMINOETHANOL Concentration $\geq 0.00\%$ and $< 2.50\%$.

Symbol: C R: 10-20/21/22-34

Other substances with occupational exposure limits.

No known substance in this category present.

3 - IDENTIFICATION OF HAZARDS

This preparation is not classed as hazardous to health by directive 88/379/EEC.

This product is not classed as flammable. Refer to the recommendations regarding the other products present on the site

Other data:

Packaging < 125 ml.

4 - FIRST AID

As a general rule, in case of doubt or if symptoms persist, always call a doctor.

NEVER induce swallowing in an unconscious person.

In the event of exposure by inhalation.

N/A !

In the event of splashes or contact with eyes.

Remove contact lenses, irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart and seek medical advice.

In the event of splashes or contact with skin.

Wash skin thoroughly with soap and water.

In the event of swallowing.

If accidentally swallowed obtain immediate medical attention. Keep at rest. Do not induce vomiting.

5 - FIRE-FIGHTING MEASURES

Not relevant.

6 - MEASURES TO BE TAKEN IN THE EVENT OF ACCIDENTAL SPILLAGE

Safety precautions:

Consult the safety measures listed under headings 7 and 8.

Environmental safety precautions:

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Prevent any material from entering drains or waterways.

Cleaning methods:

Clean preferably with a detergent, do not use solvents.

7 - HANDLING AND STORAGE

The regulations relating to storage premises apply to workshops where the product is handled.

Fire prevention:

Prevent access by unauthorised personnel.

Storage.

N/A

8 - EXPOSURE CONTROL - PERSONAL SAFETY

Technical measures.

Personnel shall wear regularly laundered overalls.

Exposure limits per INRS ND 2098-174-99 and ND 2114-176-99:

Substance in this category unknown.

Exposure limits per 2000/39/EC and 98/24/EC:

Substance in this category unknown.

9 - PHYSICAL PROPERTIES

Density:

> 1

Acid/base character of preparation:

slightly basic.

Solubility of preparation in water:

Dilutable.

Vapour tension at 50°C of volatile constituents:

not specified.

Physical state:

paste

Flash point interval:

not relevant.

When a pH measure is possible, it has a value of:

8.50

Self-ignition temperature:

not relevant.

Decomposition temperature:

not specified.

Melting temperature interval:

not specified.

Average distillation temperature of solvents contained:

not relevant.

10 - STABILITY AND REACTIVITY

The preparation is stable at the handling and storage conditions recommended per § 7 of the safety data sheet.

11 - TOXICOLOGICAL INFORMATION

The preparation contains no substance classed as hazardous per directive 67/548/EEC.

12 - ECOLOGICAL INFORMATION

No ecological data on the product itself is available.

13 - DISPOSAL CONSIDERATIONS

Do not pour into drains or waterways.

14 - TRANSPORT INFORMATION

Exempt from transport classification and labelling.

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport

15 - STATUTORY INFORMATION

This preparation was classified in compliance with the directive known as <All preparations> 88/379/EEC and its adaptations

In addition directive 2000/32/EC with the 26^e adaptation of directive 67/548/EC (Hazardous substances) have been taken into account.

Packaging < 125 ml.

16 - OTHER INFORMATION

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.

The product must not be used for any purposes other than those specified under heading 1 without first obtaining written handling instructions.

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It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

The information given on this safety data sheet must be regarded as a description of the safety requirements relating to our product and not a guarantee of its properties

MATERIAL SAFETY DATA SHEET

SECTION 1 – IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name	VY-CAL
Manufacturer's Product Code	0174
Other Names	Liquid mud and silt remover.
Major Recommended Uses	As a silt and mud remover in water tanks, cooling towers, and municipal applications.
Supplier's Details	Mantek 7 Ralph Street, Alexandria Sydney NSW 2015 Telephone Number (Office Hours): (02) 9669 0261 Fax Number: (02) 9693 1562 Emergency Telephone Number: (02) 9214 0755
Date of Issue	September 2007

SECTION 2 – HAZARDS IDENTIFICATION

Hazard Classification	Not classified as hazardous according to the criteria of NOHSC.
Dangerous Goods Class & Sub-risk	None allocated.
Poisons Schedule	None allocated.
Risk Phrases	None applicable.
Safety Phrases	None applicable.

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients		
Chemical Entity	CAS No	Proportion
'Ingredients determined not to be hazardous'		to 100%

SECTION 4 – FIRST AID MEASURES

Skin	Wash affected areas with soap and running water for several minutes. Seek medical attention if irritation develops.
Eye	Rinse the eyes with water for several minutes, including under the eyelids. Seek medical attention if irritation develops.
Inhalation	Remove victim to fresh air. Seek medical attention if respiratory irritation develops or if breathing becomes difficult.
Ingestion	If swallowed do not induce vomiting. Give water, and give water again if vomiting occurs. Seek medical attention if discomfort occurs.
First Aid Facilities	An safety shower and eye wash station should be available.
Advice to Doctor	There is no specific antidote. Treat the patient symptomatically.
Additional Information	There are no known medical conditions aggravated by exposure. Target organs: None known. There is no primary route of entry into the body. The primary routes of exposure are skin and eye contact.

SECTION 5 – FIRE FIGHTING MEASURES SECTION 5 – FIRE FIGHTING MEASURES

Product is non-flammable.	
Suitable Extinguishing Media	Use foam, dry chemical, CO2 or water spray to extinguish fire. Extinguishing media should be chosen based on the nature of the surrounding fire.
Special Protective Equipment and Precautions for Fire Fighters	Fire fighters should wear self-contained breathing apparatus and full protective gear.
Fire/Explosive Hazards	Use water spray to cool fire exposed containers to prevent bursting. Spills may be slippery.
Hazchem Code	None allocated.

MEGA DISTRIBUTORS

PO Box 10185 Phone: 09 473 6505
North Shore Mail Centre Fax: 09 473 6501
Auckland 0745 Email: sales@mantek.co.nz

www.megadistributors.co.nz

MATERIAL SAFETY DATA SHEET

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Methods and Materials for Containment and Clean Up	Shut off source of leak, and dyke and contain spill. Absorb spills with an inert material and dispose of waste in a labelled container in accordance with EPA, local, state and Commonwealth regulations. Flush area with water - product can be washed away with water into sewer as it is used as a mud and silt remover.
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SECTION 7 – HANDLING AND STORAGE

Precautions for Safe Handling	Observe precautions stated on product label, and follow industry safety regulations. Always wash thoroughly after contact with the product and before eating, drinking or using toilet facilities.
Conditions for Safe Storage	Store material indoors in its original, closed container when not in use. Keep product from freezing; slowly warm to room temperature and stir thoroughly before use.

SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Standards	There is no specific information on this product. There are no exposure limits on the component ingredients.
Engineering Controls	General ventilation is usually adequate.
Personal Protective Equipment	
Eye/Face Protection	None required under normal conditions of use. Safety glasses should be worn if the method of application presents the likelihood of eye contact. Eye protection should conform with Australian/New Zealand Standard AS/NZS 1337- Eye Protectors for Industrial Applications.
Skin Protection	None required under normal conditions of use. Rubber gloves should be worn if repeated or prolonged skin contact is likely. Reference should be made to AS/NZS 2161 Occupational protective gloves- Selection, use and maintenance. Wear general duty work clothing and shoes.
Respiratory Protection	None required under normal conditions of use.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Light blue, odourless, transparent to hazy slightly viscous liquid.
pH (100%)	7.9
Boiling Point	104°C
Vapour Pressure	17.3mm Hg
Vapour Density	0.6 (Air = 1)
Solubility in Water (g/L)	Complete.
Specific Gravity	1.00 – 1.01 (Water = 1)
Flashpoint	N/A
Flashpoint Method	P.M.C.C.
Flammability Limits (%)	LEL – Not applicable; UEL – Not applicable
% Volatile by volume	99
Evaporation Rate	0.6 (Butyl acetate = 1)
H2O Solubility	Complete

SECTION 10 – STABILITY AND REACTIVITY

Stability	Stable.
Hazardous Polymerisation	Will not occur.
Conditions/Materials to Avoid	Strong oxidising agents such as chlorine bleach and concentrated hydrogen peroxide.
Hazardous Decomposition Products	Oxides of carbon.

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MATERIAL SAFETY DATA SHEET

SECTION 11 – TOXICOLOGICAL INFORMATION

Health Effects	
Acute - Swallowed	None. Ingesting large amounts may result in diarrhoea.
Acute - Eye	Direct contact with eyes may cause irritation.
Acute - Skin	None.
Acute - Inhaled	None.
Chronic	No chronic effects known. There are no known medical conditions aggravated by exposure.
Target Organs	None known.
Product Contains Chemicals Listed as Carcinogens by	International Agency for the Research of Cancer (IARC): NO Other: NO

SECTION 12 – ECOLOGICAL INFORMATION

No specific toxicology data on this product is available. When used as indicated, no adverse environmental effects are foreseen. No biological limit allocated.	
Persistence/Degradability	This substance is biodegradable.
Mobility	Soluble in water.

SECTION 13 – DISPOSAL CONSIDERATIONS

Dispose of waste in a closed, labelled container in accordance with EPA, local, state and Commonwealth laws.

SECTION 14 – TRANSPORT INFORMATION

UN Number	None allocated.
UN Proper Shipping Name	None allocated.
Transport Hazard Class	Not classified as a Dangerous Good according to the Australian Code for the Transport of Dangerous Goods by Road and Rail.
Packaging Group	None allocated.
Hazchem Code	None allocated.

SECTION 15 - REGULATORY INFORMATION

Poisons Schedule	None allocated.
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SECTION 16 – OTHER INFORMATION

Initial copy of 16-header MSDS.

Since the user's working conditions are not known by the supplier, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations. The product must not be used for any purposes other than those specified in Section 1 without first obtaining written handling instructions. MANTEK assumes no responsibility for personal injury or property damage caused by the use, storage, or disposal of the product in a manner not recommended on the product label. Users assume all risks associated with such non-recommended use, storage or disposal of the product.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations. The information given on this safety data sheet must be regarded as a description of the safety requirements relating to our product and not a guarantee of its properties.

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Safety Data Sheet

1100 WALL BASE ADHESIVE

Safety Data Sheet dated: 7/16/2015 - version 3

Date of first edition: 5/13/2015

1. IDENTIFICATION

Product identifier

Mixture identification:

Trade name: 1100 WALL BASE ADHESIVE

Recommended use of the chemical and restrictions on use

Recommended use: Adhesive

Restrictions on use: N.A.

Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party

Company: Roppe Holding Company

1602 North Union St.

44830-1158 - Fostoria - OH - USA

Phone: 1-800-537-9527

Emergency 24 hour numbers:

(USA) CHEMTREC 1-800-424-9300

(Canada) CANUTEC 1-613-996-6666

2. HAZARD(S) IDENTIFICATION

Classification of the chemical

Classification of the chemical

No specific hazards are encountered under normal product use.

Label elements

Code	Description
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P405	Store locked up.
P501.A	Dispose of contents/container in accordance with applicable regulations.

Ingredient(s) with unknown acute toxicity:

None

Hazards not otherwise classified identified during the classification process:

None

This product contains crystalline silica (quartz sand). IARC has classified crystalline silica as a Group 1 carcinogen. Both IARC and NTP consider silica as a known human carcinogen. Evidence is based on the chronic and long-term exposure workers have had to respirable sized crystalline silica dust particles. Because this product is in liquid or paste form, it does not pose a dust hazard; therefore, this classification is not relevant. (Note: sanding of the hardened product may create a silica dust hazard)

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances

N.A.

Mixtures

Hazardous components within the meaning of 29 CFR 1910.1200 and related classification:

List of components

Quantity	Name	Ident. Numb.	Classification
0.1-1 %	Silica Sand	CAS:14808-60-7	Carc. 1A, H350.A; STOT RE 1, H372.A

4. FIRST AID MEASURES

Description of first aid measures

In case of skin contact:

Wash with plenty of water and soap.

In case of eyes contact:

Wash immediately with water.

In case of Ingestion:

Do not induce vomiting, get medical attention showing the SDS and the hazard label.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

Most important symptoms/effects, acute and delayed

N.A.

Indication of any immediate medical attention and special treatment needed

5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO₂).

Unsuitable extinguishing media:

None in particular.

Specific hazards arising from the chemical

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

Hazardous combustion products: N.A.

Explosive properties: N.A.

Oxidizing properties: N.A.

Special protective equipment and precautions for fire-fighters

Use suitable breathing apparatus.

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Remove persons to safety.

See protective measures under point 7 and 8.

Methods and material for containment and cleaning up

Suitable material for taking up: absorbing material, organic, sand

Wash with plenty of water.

7. HANDLING AND STORAGE

Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Exercise the greatest care when handling or opening the container.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

Conditions for safe storage, including any incompatibilities

Storage temperature: N.A.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

List of components with OEL value

Component	OEL Type	Country	Ceiling	Long Term mg/m ³	Long Term ppm	Short Term mg/m ³	Short Term ppm	Behaviour	Note
Silica Sand	ACGIH			0,025					A2 - Suspected Human Carcinogen;lung cancer;pulmonary fibrosis;

Appropriate engineering controls: N.A.

Individual protection measures

Eye protection:

Use close fitting safety goggles, don't use eye lens.

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.

Respiratory protection:

N.A.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state: Liquid

Appearance and colour: Paste beige

Odour: Slightly latex like

Odour threshold: N.A.

pH: 9.00

Melting point / freezing point: N.A.

Initial boiling point and boiling range: >100 °C (212 °F)

Flash point: >100 °C (212 °F)

Evaporation rate: same as water

Upper/lower flammability or explosive limits: N.A.

Vapour density: 1.15

Vapour pressure: 1.00 (kPa 50°C)

Relative density: N.A.

Solubility in water: Soluble

Solubility in oil: N.A.

Partition coefficient (n-octanol/water): N.A.

Auto-ignition temperature: N.A.

Decomposition temperature: N.A.

Viscosity: N.A.

Explosive properties: N.A.

Oxidizing properties: N.A.

Solid/gas flammability: N.A.

Other information

Substance Groups relevant properties N.A.

Miscibility: N.A.

Fat Solubility: N.A.

Conductivity: N.A.

10. STABILITY AND REACTIVITY

Reactivity

Stable under normal conditions

Chemical stability

Data not Available.

Possibility of hazardous reactions

None.

Conditions to avoid

Stable under normal conditions.

Incompatible materials

None in particular.

Hazardous decomposition products

None.

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Toxicological information of the mixture:

There is no toxicological data available on the mixture. Consider the individual concentration of each component to assess toxicological effects resulting from exposure to the mixture.

Toxicological information on main components of the mixture:

Silica Sand	a) acute toxicity	LD50 Oral Rat = 500mg/kg
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If not differently specified, the information required in the regulation and listed below must be considered as N.A.

- a) acute toxicity
- b) skin corrosion/irritation
- c) serious eye damage/irritation
- d) respiratory or skin sensitisation
- e) germ cell mutagenicity
- f) carcinogenicity
- g) reproductive toxicity
- h) STOT-single exposure
- i) STOT-repeated exposure
- j) aspiration hazard

Substance(s) listed on the IARC Monographs:

Silica Sand Group 1

Substance(s) listed as OSHA Carcinogen(s):

Silica Sand

Substance(s) listed as NIOSH Carcinogen(s):

Silica Sand

Substance(s) listed on the NTP report on Carcinogens:

Silica Sand

12. ECOLOGICAL INFORMATION

Toxicity

Adopt good working practices, so that the product is not released into the environment.

Eco-Toxicological Information:

List of components with eco-toxicological properties

Quantity	Component	Ident. Numb.	Ecotox Infos
0.1-1 %	Silica Sand	CAS: 14808-60-7	LC50 a) Aquatic acute toxicity carp> 10000,00000mg/L 72h

Persistence and degradability

N.A.

Bioaccumulative potential

N.A.

Mobility in soil

N.A.

Other adverse effects

N.A.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste must be handled in accordance with all federal, state, provincial, and local regulations. Consult authorities before disposal.

14. TRANSPORT INFORMATION

UN number

ADR-UN number: N/A

DOT-UN Number: N/A

IATA-Un number: N/A

IMDG-Un number: N/A

UN proper shipping name

ADR-Shipping Name: N/A

DOT-Proper Shipping Name: N/A

IATA-Technical name: N/A

IMDG-Technical name: N/A

Transport hazard class(es)

ADR-Class: N/A

DOT-Hazard Class: N/A

IATA-Class: N/A

IMDG-Class: N/A

Packing group

ADR-Packing Group: N/A

DOT-Packing group: N/A

IATA-Packing group: N/A

IMDG-Packing group: N/A

Environmental hazards

Marine pollutant: No

Environmental Pollutant: N.A.

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

N.A.

Special precautions

Department of Transportation (DOT):

DOT-Special Provision(s): N/A

DOT-Label(s): N/A

DOT-Symbol: N/A

DOT-Cargo Aircraft: N/A

DOT-Passenger Aircraft: N/A

DOT-Bulk: N/A

DOT-Non-Bulk: N/A

Road and Rail (ADR-RID):

ADR-Label: N/A

ADR-Hazard identification number: N/A

ADR-Tunnel Restriction Code: N/A

Air (IATA):

IATA-Passenger Aircraft: N/A

IATA-Cargo Aircraft: N/A

IATA-Label: N/A

IATA-Subrisk: N/A

IATA-Erg: N/A

IATA-Special Provisions: N/A

Sea (IMDG):

IMDG-Stowage Code: N/A

IMDG-Stowage Note: N/A

IMDG-Subrisk: N/A

IMDG-Special Provisions: N/A

IMDG-Page: N/A

IMDG-Label: N/A

IMDG-EMS: N/A

IMDG-MFAG: N/A

15. REGULATORY INFORMATION**USA - Federal regulations****TSCA - Toxic Substances Control Act****TSCA inventory:**

All the components are listed on the TSCA inventory

TSCA listed substances:

Silica Sand is listed in TSCA Section 8b

SARA - Superfund Amendments and Reauthorization Act**Section 302 - Extremely Hazardous Substances:**

no substances listed

Section 304 - Hazardous substances:

no substances listed

Section 313 - Toxic chemical list:

no substances listed

CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act**Substance(s) listed under CERCLA:**

no substances listed

CAA - Clean Air Act

CAA listed substances:

no substances listed

CWA - Clean Water Act

CWA listed substances:

no substances listed

USA - State specific regulations

California Proposition 65

Substance(s) listed under California Proposition 65:

Silica Sand

Listed as carcinogen

Massachusetts Right to know

Substance(s) listed under Massachusetts Right to know:

Silica Sand

Pennsylvania Right to know

Substance(s) listed under Pennsylvania Right to know:

Silica Sand

New Jersey Right to know

Substance(s) listed under New Jersey Right to know:

Silica Sand

16. OTHER INFORMATION

Code	Description
H350.A	May cause cancer if inhaled.
H372.A	Causes damage to organs through prolonged or repeated exposure if inhaled.

Safety Data Sheet dated: 7/16/2015 - version 3

Product code: 4110

Additional classification information



HMIS Health: 1 = Slight

HMIS Health - Is health hazard chronic?: Yes

HMIS Flammability: 1 = Combustible if heated

HMIS Reactivity: 0 = Minimal

HMIS P.P.E.: Safety glasses, gloves

NFPA Health: 1 = Slight

NFPA Flammability: 1 = Combustible if heated

NFPA Reactivity: 0 = Minimal

NFPA Special Risk: N.A.

Reasonable care has been taken in the preparation of this information, but the manufacturer makes no warranty of merchantability or any other warranty, expressed or implied, with respect to this information. The manufacturer makes no representations and assumes no liability for any direct, incidental or consequential damages resulting from its use. The information herein is presented in good faith and believed to be accurate as of the effective date given. It is the buyer's responsibility to ensure that its activities comply with Federal, State or provincial, and local laws.

This document was prepared by a competent person who has received appropriate training.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This SDS cancels and replaces any preceding release.

Legend to abbreviations and acronyms used in the safety data sheet:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.

IMDG: International Maritime Code for Dangerous Goods.

IATA: International Air Transport Association.
IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO: International Civil Aviation Organization.
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).
GHS: Globally Harmonized System of Classification and Labeling of Chemicals.
CLP: Classification, Labeling, Packaging.
EINECS: European Inventory of Existing Commercial Chemical Substances.
INCI: International Nomenclature of Cosmetic Ingredients.
CAS: Chemical Abstracts Service (division of the American Chemical Society).
GefStoffVO: Ordinance on Hazardous Substances, Germany.
LC50: Lethal concentration, for 50 percent of test population.
LD50: Lethal dose, for 50 percent of test population.
DNEL: Derived No Effect Level.
PNEC: Predicted No Effect Concentration.
TLV: Threshold Limiting Value.
TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).
STEL: Short Term Exposure limit.
STOT: Specific Target Organ Toxicity.
WGK: German Water Hazard Class.
KSt: Explosion coefficient.

Paragraphs modified from the previous revision:

- 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING
- 2. HAZARDS IDENTIFICATION
- 4. FIRST AID MEASURES

MATERIAL SAFETY DATA

PRODUCT NAME: Roberts 7200 Superior Wall Base Adhesive
PRODUCT CODE: 7200

HMIS CODES: H F R P
1 0 0 B

SECTION 1 - MANUFACTURER IDENTIFICATION

MANUFACTURER'S NAME: ROBERTS CONSOLIDATED INDUSTRIES, INC.
ADDRESS: 300 Cross Plains Blvd., Dalton, GA 30721
EMERGENCY PHONE: (800)424-9300 (Chemtrec)
DATE REVISED: 09/22/2010

INFORMATION PHONE: (706) 277-5294
NAME OF PREPARER: M. King

SECTION 11 - HAZARDOUS INGREDIENTS/SARA 111 INFORMATION

No reportable quantities of hazardous ingredients are present per OSHA regulations: 29 CFR 1910-1200.
No toxic chemical(s) subject to reporting requirements of Section 313 of Title 111 and of 40 CFR 372 are present.

SECTION 111 - PHYSICAL/CHEMICAL CHARACTERISTICS

BOILING POINT:	212° F	SPECIFIC GRAVITY (H2O=1): 1.14
VAPOR DENSITY:	Heavier than air	EVAPORATION RATE: Same as water
COATING V.O.C.:	0 grams/liter calculated	pH: 9.0 – 9.5
SOLUBILITY IN WATER:	Misable in water.	PERCENT VOLATILE: 43.5
APPEARANCE AND ODOR:	Off white heavy paste with a very mild odor.	

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: N/A METHOD USED: N/A
FLAMMABLE LIMITS IN AIR BY VOLUME - LOWER: N/A UPPER: N/A
EXTINGUISHING MEDIA: Foam, CO2, Dry Chemical, Water Spray
SPECIFIC FIREFIGHTING PROCEDURES: Wear self-contained breathing apparatus.
UNUSUAL FIRE AND EXPLOSION HAZARDS: None.

SECTION V - REACTIVITY DATA

STABILITY: Stable CONDITIONS TO AVOID: Excessive Heat
INCOMPATIBILITY: (Materials to avoid): Strong oxidizers and caustics.
HAZARDOUS DECOMPOSITION OR BYPRODUCTS: Combustion products: Oxides of carbon, water, and organic compounds of unknown structure.
HAZARDOUS POLYMERIZATION: Will not occur.

SECTION VI - HEALTH HAZARD DATA

INHALATION HEALTH RISKS AND SYMPTOMS OF EXPOSURE: Normally none; may cause slight irritation of respiratory track.
SKIN AND EYE CONTACT HEALTH RISKS AND SYMPTOMS OF EXPOSURE: Contact with eyes and skin may result in slight irritation.
SKIN ABSORPTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE: None known.
INGESTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE: Potential G.I. blockage. Not a likely route of entry under normal handling conditions.
HEALTH HAZARDS (Acute/Chronic): Acute: May cause mild skin irritation. Chronic: None known.
CARCINOGENICITY: NTP? No IARC MONOGRAPHS? No OSHA REGULATED? No

This product contains no carcinogens as listed by NTP, IARC and OSHA.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: Pre-existing skin disorders.

EMERGENCY AND FIRST AID PROCEDURES:

EYES: Flush with large amounts of water for 15 minutes. See physician if irritation develops.
SKIN: Wash with soap and water. Consult physician if irritation develops.
INGESTION: Do not induce vomiting. If victim is conscious, dilute with water. Contact physician immediately.

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Contain spill by diking to prevent spreading. Use absorbent material to collect and contain for salvage or disposal.

WASTE DISPOSAL METHOD: Discarded spill residue may be incinerated. Do not incinerate sealed containers. Dispose according to Federal, State and local regulations.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Keep containers from excessive heat and freezing. Keep containers tightly closed when not in use. **Keep out of reach of children. Protect against physical damage. Store in a cool, dry place (50F – 90F).**

OTHER PRECAUTIONS: None.

SECTION VIII - CONTROL MEASURES

RESPIRATORY PROTECTION: None should be required. Use in a well ventilated area. PROTECTIVE GLOVES: Rubber Gloves.
VENTILATION: Use local exhaust. Do not use closed air circulating system. Open window and doors if necessary. EYE PROTECTION: Goggles
OTHER PROTECTIVE CLOTHING OR EQUIPMENT: None.
WORK/HYGIENE PRACTICES: Standard hygiene and safe handling procedures are believed to be generally applicable.

SECTION IX REGULATORY INFORMATION

Hazardous Waste 40CFR261: No. Hazardous Waste Number:
Hazardous Substance Superfund: No. RQ (lbs):
All components are in TSCA inventory

SECTION X SHIPPING DATA

D.O.T. Proper shipping Name (49CFR172.101-102): Adhesive	Hazardous Substance (49CFR CERCLA List): No.	RQ: NA
D.O.T. Hazard Classification (49CFR172.101-102):	Primary: None. Secondary: None.	
D.O.T. Labels required (49CFR172.101-102): None.	D.O.T. Placards Required (49CFR172.504): None.	Bill of Lading Description: Adhesive, NOS
Bill of Lading Description: Adhesive, NOS	UN/NA Code: NA	

SECTION IX - DISCLAIMER

DISCLAIMER: The information accumulated herein is believed to be accurate, but is not warranted to be whether originating with the company or not. Each user should review and determine for themselves, the applicability of the information in the specific context of the intended use.

KEEP OUT OF REACH OF CHILDREN

Manufactured by: **ROBERTS CONSOLIDATED INDUSTRIES**

Material Safety Data Sheet

Document Code: 20000 Series
Version: 00

Date of Preparation
17-APR-2000

Section 1 - Product and Company Identification

PRODUCT NAME & NUMBERS
COLORPLACE® Spray Enamel

20000	Gloss White	20007	Sky Blue	20016	Almond
20001	Blue	20008	Gloss Black	20017	Orange
20002	Green	20009	Flat White	20018	Camouflage Green
20003	Yellow	20010	Gray Primer	20025	Banner Red
20004	Flat Black	20011	Rust Resist Primer	20028	Khaki
20005	Red	20014	Clear	20036	Gray
20006	Walnut	20015	Appliance White		

PRODUCT CLASS
Aerosol Paint

MANUFACTURER'S NAME
Distributed by
WAL-MART Stores Inc.
Bentoinville, AR 72716

EMERGENCY TELEPHONE NO.
(216) 566-2917
INFORMATION TELEPHONE NO.
(216) 566-2902

Section 2 - Composition/Information on Ingredients

% Wt.	CAS Number	Ingredient Name
15-18	74-98-6	Propane
		ACGIH TLV TWA 2500 PPM
		OSHA PEL TWA 1000 PPM
15-17	106-97-8	Butane
		ACGIH TLV TWA 800 PPM
		OSHA PEL TWA 800 PPM
2-7	64742-89-8	Light Aliphatic Hydrocarbon Solvent.
		ACGIH TLV TWA 100 PPM
		OSHA PEL TWA 100 PPM
5-8	64742-89-8	V. M. & P. Naphtha
		ACGIH TLV TWA 300 PPM
		OSHA PEL TWA 300 PPM
		OSHA PEL STEL 400 PPM
11-45	108-88-3	Toluene
		ACGIH TLV TWA 50 PPM (Skin)
		OSHA PEL TWA 100 PPM (Skin)
		OSHA PEL STEL 150 PPM (Skin)
0-1	108-67-8	1,3,5-Trimethylbenzene
		ACGIH TLV TWA 25 PPM
		OSHA PEL TWA 25 PPM
0-2	95-63-6	1,2,4-Trimethylbenzene
		ACGIH TLV TWA 25 PPM
		OSHA PEL TWA 25 PPM
0-3	111-76-2	2-Butoxyethanol
	ACGIH	TLV TWA 25PPM (Skin)
	OSHA	PEL TWA 25PPM (Skin)

- Continued -

6-24	67-64-1	Acetone	ACGIH TLV TWA 500 PPM
		ACGIH TLV STEL 750 PPM	
		OSHA PEL TWA 1000 PPM (Skin)	
0-14	14807-96-6	Talc	
		ACGIH TLV TWA 2 Mg/M3 as Resp. Dust	
		OSHA PEL TWA 2 Mg/M3 as Resp. Dust	
0-8	13463-67-7	Titanium Dioxide.	
		ACGIH TLV TWA 10 Mg/M3 as Dust	
		OSHA PEL TWA 10 Mg/M3 as Total Dust	
		OSHA PEL TWA 5 Mg/M3 as Respirable Fraction	
0-0.4	1333-86-4	Carbon Black.	
		ACGIH TLV TWA 3.5 Mg/M3	
		OSHA PEL TWA 3.5 Mg/M3	
2	5131-66-8	Butoxypropanol	
(in 20014 only)		ACGIH Not Established	
		OSHA Not Established	
2	112926-00-8	Amorphous Precipitated Silica	
(in 20018 only)		ACGIH TLV TWA 10 Mg/M3 as Dust	
		OSHA PEL TWA 6 Mg/M3 as Dust	
1	64742-88-7	Mineral Spirits.	
(in 20012 only)		ACGIH TLV TWA 100 PPM	
		OSHA PEL TWA 100 PPM	
5	Unknown	Bronze Pigment	
(in 20013 only)		ACGIH Not Established	
		OSHA Not Established	

Section 3 – Hazards Identification

ROUTES OF EXPOSURE

Exposure may be by INHALATION and/or SKIN or EYE contact, depending on conditions of use. To minimize exposure, follow recommendations for proper use, ventilation, and personal protective equipment.

EFFECTS OF OVEREXPOSURE

Irritation of eyes, skin and respiratory system. May cause nervous system depression. Extreme overexposure may result in unconsciousness and possibly death.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

Headache, dizziness, nausea, and loss of coordination are indications of excessive exposure to vapors or spray mists.

Redness and itching or burning sensation may indicate eye or excessive skin exposure.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

None generally recognized.

CANCER INFORMATION

FOR COMPLETE DISCUSSION OF TOXICOLOGY DATA REFER TO SECTION 11.

Section 4 – First Aid Measures

- If INHALED: If affected, remove from exposure. Restore breathing. Keep warm and quiet.
- If on SKIN: Wash affected area thoroughly with soap and water. Remove contaminated clothing and launder before re-use.
- If in EYES: Flush eyes with large amounts of water for 15 minutes. Get medical attention.
- If SWALLOWED: Never give anything by mouth to an unconscious person. DO NOT INDUCE VOMITING. Give conscious patient several glasses of water. Get medical attention.

- Continued -

Section 5 – Fire Fighting Measures

FLASH POINT	LEL	UEL
Propellant <0 °F PMCC	1.0	12.8

EXTINGUISHING MEDIA

Carbon Dioxide, Dry Chemical, Foam

UNUSUAL FIRE AND EXPLOSION HAZARDS

Isolate from heat, electrical equipment, sparks, and open flame. Closed containers may explode when exposed to extreme heat. Application to hot surfaces requires special precautions. During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

SPECIAL FIRE FIGHTING PROCEDURES

Full protective equipment including self-contained breathing apparatus should be used. Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

Section 6 – Accidental Release Measures**STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED**

Remove all sources of ignition. Ventilate and remove with inert absorbent.

Section 7 – Handling and Storage**DOL STORAGE CATEGORY**

1A

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE

Keep away from heat, sparks, and open flame. Vapors will accumulate readily and may ignite explosively.

During use and until all vapors are gone: Keep area ventilated – Do not smoke – Extinguish all flames, pilot lights, and heaters – Turn off stoves, electric tools and appliances, and any other sources of ignition.

Consult NFPA Code. Use approved Bonding and Grounding procedures.

Contents under pressure. Heat from sunlight, radiators, stoves, hot water, and other heat sources could cause container to burst. Do not take internally. Keep out of the reach of children.

Section 8 – Exposure Controls/Personal Protection**PRECAUTIONS TO BE TAKEN IN USE**

Use only with adequate ventilation. Avoid breathing vapor and spray mist. Avoid contact with skin and eyes. Wash hands after using.

These coatings may contain materials classified as nuisance particulates (listed "as Dust" in Section 2) which may be present at hazardous levels only during sanding or abrading of the dried film. If no specific dusts are listed in Section 2, the applicable limits for nuisance dusts are ACGIH TLV 10 mg./m³ (total dust), 3 mg./m³ (respirable fraction), OSHA PEL 15 mg./m³ (total dust), 5 mg./m³ (respirable fraction).

VENTILATION

Local exhaust preferable. General exhaust acceptable if the exposure to materials in Section 2 is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, 1910.108.

RESPIRATORY PROTECTION

If personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section 2.

When sanding or abrading the dried film, wear a dust/mist respirator approved by NIOSH/MSHA for dust which may be generated from this product, underlying paint, or the abrasive.

PROTECTIVE GLOVES

None required for normal application of aerosol products where minimal skin contact is expected. For long or repeated contact, wear chemical resistant gloves.

EYE PROTECTION

Wear safety spectacles with unperforated sideshields.

OTHER PRECAUTIONS

Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal.

Section 9 – Physical and Chemical Properties

PRODUCT WEIGHT	5.8-6.7 lb./gal.	EVAPORATION RATE	Faster than Ether
SPECIFIC GRAVITY	0.70-0.81	VAPOR DENSITY	Heavier than Air
BOILING POINT	<0-395 °F	MELTING POINT	N.A.
VOLATILE VOLUME	87-94 %	SOLUBILITY IN WATER	N.A.
HMIS RATINGS (Health - Flammability - Reactivity)	2 - 4 - 0		

Section 10 – Stability and Reactivity

STABILITY - Stable

CONDITIONS TO AVOID

None known.

INCOMPATIBILITY

None known.

HAZARDOUS DECOMPOSITION PRODUCTS

By fire: Carbon Dioxide, Carbon Monoxide

HAZARDOUS POLYMERIZATION

Will not occur

Section 11 – Toxicological Information**CHRONIC HEALTH HAZARDS**

Carbon Black is classified by IARC as possibly carcinogenic to humans (group 2B) based on experimental animal data, however, there is insufficient evidence in humans for its carcinogenicity.

Prolonged overexposure to solvent ingredients in Section 2 may cause adverse effects to the liver, urinary, blood forming, cardiovascular, reproductive systems.

Rats exposed to titanium dioxide dust at 250 mg./m3 developed lung cancer, however, such exposure levels are not attainable in the workplace.

Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

TOXICOLOGY DATA

CAS No.	Ingredient Name		
74-98-6	Propane		
	LC50	RAT	Not Available
	LD50	RAT	Not Available
106-97-8	Butane		
	LC50	RAT	>50000 PPM
	LD50	RAT	Not Available
64742-89-8	V. M. & P. Naphtha		
	LC50	RAT	3400 PPM
	LD50	RAT	Not Available
108-88-3	Toluene		
	LC50	RAT	4000 PPM
	LD50	RAT	636 PPM
108-67-8	1,3,5-Trimethylbenzene		
	LC50	RAT	Not Available
	LD50	RAT	Not Available
95-63-6	1,2,4-Trimethylbenzene		
	LC50	RAT	Not Available
	LD50	RAT	5000 MG/KG
111-76-2	2-Butoxyethanol		
	LC50	RAT	Not Available
	LD50	RAT	5660 MG/KG
5131-66-8	Butoxypropanol		
	LC50	RAT	Not Available
	LD50	RAT	Not Available
67-64-1	Acetone		
	LC50	RAT	16000 PPM
	LD50	RAT	5800 MG/KG
14807-96-6	Talc		
	LC50	RAT 4HR	Not Available
	LD50	RAT	Not Available
13463-67-7	Titanium Dioxide.		
	LC50	RAT 4HR	Not Available
	LD50	RAT	>7500 MG/KG
1333-86-4	Carbon Black.		
	LC50	RAT 4HR	Not Available
	LD50	RAT	>15400 MG/KG
112926-00-8	Amorphous Precipitated Silica		
	LC50	RAT 4HR	Not Available
	LD50	RAT	Not Available
6742-88-7	Mineral Spirits.		
	LC50	RAT 4HR	>700 PPM
	LD50	RAT	4700 MG/KG
Unknown	Bronze Pigment		
	LC50	RAT 4HR	Not Available
	LD50	RAT	Not Available

- Continued -

Section 12 – Ecological Information

ECOTOXICOLOGICAL INFORMATION

No Data Available.

Section 13 – Disposal Considerations

WASTE DISPOSAL METHOD

Waste from these products may be hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261. Waste must be tested for ignitability to determine the applicable EPA hazardous waste numbers.

Do not incinerate. Depressurize container. Dispose of in accordance with Federal, State, and Local regulations regarding pollution.

Section 14 – Transport Information

Ground (United States) CONSUMER COMMODITY, ORM-D

Air (United States) CONSUMER COMMODITY, 9, ID8000, MISCELLANEOUS LABEL

Air (International) AEROSOLS, FLAMMABLE, N.O.S., 2.1, UN1950, FLAMMABLE GAS LABEL

Section 15 – Regulatory Information

SARA 313 (40 CFR 372.65C) SUPPLIER NOTIFICATION

CAS No.	CHEMICAL/COMPOUND	% by WT	% Element
108-88-3	Toluene.	max 45	
95-63-6	1,2,4-Trimethylbenzene	max 2	
111-76-2	2-Butoxyethanol	max 3	

CALIFORNIA PROPOSITION 65

WARNING: These products contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

TSCA CERTIFICATION

All chemicals in these products are listed, or are exempt from listing, on the TSCA Inventory.

Section 16 – Other Information

CANADIAN DISTRIBUTOR: Wal-Mart Canada Inc.
Mississauga, ON

NOTE: These products have been classified in accordance with the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

The above information pertains to these products as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to these products may substantially alter the composition and hazards of the products. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.

UNITED COATINGS INC -- 5053 ACCENT BASE, WALMART COLORPLACE LATEX (S

MSDS Safety Information

FSC: 8010
 MSDS Date: 06/22/1993
 MSDS Num: CFRWR
 LIIN: 00N079554
 Product ID: 5053 ACCENT BASE, WALMART COLORPLACE LATEX (SUPDAT)
 MFN: 01
 Responsible Party
 Cage: UNITD
 Name: UNITED COATINGS INC
 Address: 2850 FESTIVAL DR
 City: KANKAKEE IL 60901
 Info Phone Number: 800-782-7889
 Emergency Phone Number: 800-621-1000
 Published: Y

Contractor Summary

Cage: UNITD
 Name: UNITED COATINGS INC
 Address: 2850 FESTIVAL DR
 City: KANKAKEE IL 60901
 Phone: 815-935-1200

Ingredients

Cas: 471-34-1
 RTECS #: FF9335000
 Name: CARBONIC ACID, CALCIUM SALT (1:1); (CALCIUM CARBONATE)
 % Wt: 20
 OSHA PEL: N/K (FP N)
 ACGIH TLV: N/K (FP N)

Cas: 25265-77-4
 RTECS #: UF6000000
 Name: PROPIONIC ACID, 2-METHYL-, MONOESTER W/2,2,4-TRIMETHYL-1,3-PENTANEDIOL
 % Wt: <5
 OSHA PEL: N/K (FP N)
 ACGIH TLV: N/K (FP N)

Cas: 107-21-1
 RTECS #: KW2975000
 Name: ETHYLENE GLYCOL (SARA 313) (CERCLA)
 % Wt: <5
 OSHA PEL: N/K (FP N)
 ACGIH TLV: 50 PPM, VAPOR, C
 EPA Rpt Qty: 1 LB
 DOT Rpt Qty: 1 LB

Cas: 1332-58-7
 RTECS #: GF1670500
 Name: CLAY (KAOLIN); (KAOLIN)
 % Wt: <5
 OSHA PEL: 15 MG/M3 TDUST
 ACGIH TLV: 2 MG/M3 TDUST

RTECS #: 9999999VO

Name: VOLATILE ORGANIC COMPOUNDS: UNKNOWN.

=====

Health Hazards Data

=====

LD50 LC50 Mixture: NONE SPECIFIED BY MANUFACTURER.

Route Of Entry Inds - Inhalation: NO

Skin: NO

Ingestion: NO

Carcinogenicity Inds - NTP: NO

IARC: NO

OSHA: NO

Effects of Exposure: SKIN:IRRITATION. ABSORBED THROUGH SKIN.

Explanation Of Carcinogenicity: NOT RELEVANT

First Aid: GET MEDICAL ATTENTION IMMEDIATELY IF NEEDED. INHAL:REMOVE PATIENT.

KEEP AN OPEN AIRWAY. MONITOR BREATHING. INGEST:DO NOT INDUCE VOMITING. DILUTE

W/WATER. CALL POISON CONTROL. EYES:DECONTAMINATE PATIENT . IRRIGATE FOR AT

LEAST 15 MINUTES. SKIN:DECONTAMINATE PATIENT. IRRIGATE.

=====

Handling and Disposal

=====

Spill Release Procedures: MOP OR SOAK UP SUBSTANCE. THIS PRODUCT DOES NOT
CONTAIN OR MANUFACTURED W/ANY OZONE DEPLETING CHEMICALS.

Neutralizing Agent: NONE SPECIFIED BY MANUFACTURER.

Waste Disposal Methods: DISPOSAL MUST BE I/A/W FEDERAL, STATE & LOCAL
REGULATIONS (FP N). DISPOSE OF IN AN ENVIRONMENTALLY SAFE METHOD.

Handling And Storage Precautions: KEEP AWAY FROM EXCESSIVE HEAT TO PREVENT
PRESSURE BUILD UP IN A CLOSED CONTAINER.

Other Precautions: KEEP AWAY FROM HEAT. AVOID CONTACT W/SKIN OR EYES.
VENTILATION REQUIRED.

=====

Fire and Explosion Hazard Information

=====

Extinguishing Media: MEDIA SUITABLE FOR SURROUNDING FIRE (FP N). NON-FLAMMABLE.

Fire Fighting Procedures: USE NIOSH APPROVED SCBA & FULL PROTECTIVE
EQUIPMENT (FP N).

Unusual Fire/Explosion Hazard: NONE.

=====

Control Measures

=====

Respiratory Protection: NIOSH APPROVED RESPIRATOR APPROPRIATE FOR EXPOSURE OF
CONCERN (FP N). NONE NORMALLY NECESSARY.

Ventilation: LOCAL EXHAUST:GOOD, ROOM, CROSS VENTILATION IS ADEQUATE.

Protective Gloves: PLASTIC GLOVES.

Eye Protection: ANSI APPROVED CHEM WORKERS GOGGS (FP N).

Other Protective Equipment: ANSI APPROVED EYE WASH FOUNTAIN & DELUGE SHOWER (FP
N). WEAR OLD CLOTHING THAT CAN BE DISCARDED IF CLTHG SHOULD (SUPDAT)

Work Hygienic Practices: WASH HANDS BEFORE EATING, DRINKING, SMOKING OR USING
TOILET FACILITIES. DO NOT EAT OR DRINK WHILE USING THIS PRODUCT.

Supplemental Safety and Health: MFR'S TRADE NAME/PART NO:INTERIOR FLAT PAINT.
OTHER PROT EQUIP:BECOME PAINT STAINED.

=====

Physical/Chemical Properties

=====

B.P. Text: 212F,100C

Vapor Density: HVR/AIR

Spec Gravity: 1

Evaporation Rate & Reference: SLOWER THAN BUTYL ACETATE

Solubility in Water: DILUTABLE

Appearance and Odor: LIQUID; SLIGHT ODOR.

=====

Reactivity Data

=====

Stability Indicator: YES
 Stability Condition To Avoid: WHILE PRODUCT IS IN A SEALED CONTAINER IT MAY
 GENERATE PRESSURE WHEN HEATED.
 Hazardous Polymerization Indicator: NO
 Conditions To Avoid Polymerization: NOT RELEVANT

=====

Toxicological Information

Ecological Information

MSDS Transport Information

Regulatory Information

Other Information

HAZCOM Label

=====

Product ID: 5053 ACCENT BASE, WALMART COLORPLACE LATEX (SUPDAT)
 Cage: UNITD
 Company Name: UNITED COATINGS INC
 Street: 2850 FESTIVAL DR
 City: KANKAKEE IL
 Zipcode: 60901
 Health Emergency Phone: 800-621-1000
 Label Required IND: Y
 Date Of Label Review: 12/01/1997
 Status Code: C
 Label Date: 12/01/1997
 Origination Code: G
 Eye Protection IND: YES
 Skin Protection IND: YES
 Signal Word: CAUTION
 Respiratory Protection IND: YES
 Health Hazard: None
 Contact Hazard: Slight
 Fire Hazard: None
 Reactivity Hazard: None
 Hazard And Precautions: ACUTE:SKIN:IRRITATION. ABSORBED THROUGH SKIN.
 CHRONIC:NONE LISTED BY MANUFACTURER.

=====

Disclaimer (provided with this information by the compiling agencies): This information is formulated for use by elements of the Department of Defense. The United States of America in no manner whatsoever expressly or implied warrants, states, or intends said information to have any application, use or viability by or to any person or persons outside the Department of Defense nor any person or persons contracting with any instrumentality of the United States of America and disclaims all liability for such use. Any person utilizing this instruction who is not a military or civilian employee of the United States of America should seek competent professional advice to verify and assume responsibility for the suitability of this information to their particular situation regardless of similarity to a corresponding Department of Defense or other government situation.

24 Hour Assistance:
1-847-367-7700

Product Name:	CP SPRAY GLOSS WHITE	Revision Date:	01/06/2011
Identification Number:	259862		
Product Use/Class:	Topcoat/ Aerosol		
Supplier:	ROC Sales Inc. 8105 95th St. Pleasant Prairie, WI 53158 USA	Manufacturer:	ROC Sales Inc. 8105 95th St. Pleasant Prairie, WI 53158 USA
Preparer:	Regulatory Department		

<u>Chemical Name</u>	<u>CAS Number</u>	<u>Weight % Less</u>			<u>OSHA PEL</u>	
		<u>Than</u>	<u>ACGIH TLV-TWA</u>	<u>ACGIH TLV-STEL</u>	<u>CEILING</u>	
Acetone	67-64-1	40.0	500 ppm	750 ppm	1000 ppm	N.E.
Liquefied Petroleum Gas	68476-86-8	35.0	N.E.	N.E.	N.E.	N.E.
Xylene	1330-20-7	10.0	100 ppm	150 ppm	100 ppm	N.E.
Naphtha	8032-32-4	10.0	N.E.	N.E.	N.E.	N.E.
Titanium Dioxide	13463-67-7	5.0	10 mg/m3	N.E.	15 mg/m3 (Total Dust)	N.E.
Aliphatic Hydrocarbon	64742-89-8	5.0	100 ppm	N.E.	100 ppm	N.E.
Ethylbenzene	100-41-4	5.0	100 ppm	125 ppm	100 ppm	N.E.

*** Emergency Overview ***: Contents Under Pressure. Harmful if inhaled. May affect the brain or nervous system causing dizziness, headache or nausea. Vapors may cause flash fire or explosion. Harmful if swallowed. Extremely flammable liquid and vapor.

Effects Of Overexposure - Eye Contact: Causes eye irritation.

Effects Of Overexposure - Skin Contact: Prolonged or repeated contact may cause skin irritation. Substance may cause slight skin irritation.

Effects Of Overexposure - Inhalation: High vapor concentrations are irritating to the eyes, nose, throat and lungs. Avoid breathing vapors or mists. High gas, vapor, mist or dust concentrations may be harmful if inhaled. Harmful if inhaled.

Effects Of Overexposure - Ingestion: Aspiration hazard if swallowed; can enter lungs and cause damage. Substance may be harmful if swallowed.

Effects Of Overexposure - Chronic Hazards: IARC lists Ethylbenzene as a possible human carcinogen (group 2B). Contains Titanium Dioxide. Titanium Dioxide is listed as a Group 2B-"Possibly carcinogenic to humans" by IARC. Significant exposure is not anticipated during brush application or drying. Risk of overexposure depends on

duration and level of exposure to dust from repeated sanding of surfaces or spray mist and the actual concentration of Titanium Dioxide in the formula.

May cause central nervous system disorder (e.g., narcosis involving a loss of coordination, weakness, fatigue, mental confusion, and blurred vision) and/or damage. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Overexposure to xylene in laboratory animals has been associated with liver abnormalities, kidney, lung, spleen, eye and blood damage as well as reproductive disorders. Effects in humans, due to chronic overexposure, have included liver, cardiac abnormalities and nervous system damage.

Primary Route(s) Of Entry: Skin Contact, Skin Absorption, Inhalation, Ingestion, Eye Contact

Section 4 - First Aid Measures

First Aid - Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes holding eyelids open. Get medical attention. Do NOT allow rubbing of eyes or keeping eyes closed.

First Aid - Skin Contact: Wash with soap and water. Get medical attention if irritation develops or persists.

First Aid - Inhalation: If you experience difficulty in breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical assistance immediately.

First Aid - Ingestion: Aspiration hazard: Do not induce vomiting or give anything by mouth because this material can enter the lungs and cause severe lung damage. Get immediate medical attention.

Section 5 - Fire Fighting Measures

Flash Point: -156 F (Setaflash)

Extinguishing Media: Film Forming Foam, Carbon Dioxide, Dry Chemical, Water Fog

Unusual Fire And Explosion Hazards: FLASH POINT IS LESS THAN 20 °. F. - EXTREMELY FLAMMABLE LIQUID AND VAPOR! Perforation of the pressurized container may cause bursting of the can. Isolate from heat, electrical equipment, sparks and open flame. Keep containers tightly closed. Water spray may be ineffective. Closed containers may explode when exposed to extreme heat. Vapors may form explosive mixtures with air. Vapors can travel to a source of ignition and flash back.

Special Firefighting Procedures: Evacuate area and fight fire from a safe distance.

Section 6 - Accidental Release Measures

Steps To Be Taken If Material Is Released Or Spilled: Contain spilled liquid with sand or earth. DO NOT use combustible materials such as sawdust. Remove all sources of ignition, ventilate area and remove with inert absorbent and non-sparking tools. Dispose of according to local, state (provincial) and federal regulations. Do not incinerate closed containers.

Section 7 - Handling And Storage

Handling: Follow all MSDS/label precautions even after container is emptied because it may retain product residues. Use only in a well-ventilated area. Avoid breathing vapor or mist. Wash thoroughly after handling. Wash hands before eating.

Storage: Do not store above 120 ° F. Store large quantities in buildings designed and protected for storage of NFPA Class I flammable liquids. Contents under pressure. Do not expose to heat or store above 120 ° F. Keep

containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame.

Section 8 - Exposure Controls / Personal Protection

Engineering Controls: Prevent build-up of vapors by opening all doors and windows to achieve cross-ventilation. Use explosion-proof ventilation equipment. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

Respiratory Protection: A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use. A NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits.

Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or in any other circumstances where air purifying respirators may not provide adequate protection.

Skin Protection: Nitrile or Neoprene gloves may afford adequate skin protection. Use impervious gloves to prevent skin contact and absorption of this material through the skin.

Eye Protection: Use safety eyewear designed to protect against splash of liquids.

Other protective equipment: Refer to safety supervisor or industrial hygienist for further information regarding personal protective equipment and its application.

Hygienic Practices: Wash thoroughly with soap and water before eating, drinking or smoking.

Section 9 - Physical And Chemical Properties

Vapor Density:	Heavier than Air	Odor:	Solvent Like
Appearance:	Aerosolized Mist	Evaporation Rate:	Faster than Ether
Solubility in H ₂ O:	Slight	Freeze Point:	N.D.
Specific Gravity:	0.732	pH:	N.A.
Physical State:	Liquid		

(See section 16 for abbreviation legend)

Section 10 - Stability And Reactivity

Conditions To Avoid: Avoid temperatures above 120 ° F. Avoid all possible sources of ignition.

Incompatibility: Incompatible with strong oxidizing agents, strong acids and strong alkalies.

Hazardous Decomposition: By open flame, carbon monoxide and carbon dioxide. When heated to decomposition, it emits acrid smoke and irritating fumes.

Hazardous Polymerization: Will not occur under normal conditions.

Stability: This product is stable under normal storage conditions.

Section 11 - Toxicological Information

Chemical Name

Acetone
Liquefied Petroleum Gas
Xylene
Naphtha
Titanium Dioxide
Aliphatic Hydrocarbon
Ethylbenzene

LD50

5800 mg/kg (Rat)
N.E.
4300 mg/kg (Rat, Oral)
>5000 mg/kg (Rat, Oral)
>7500 mg/kg (Rat, Oral)
>5000 mg/kg (Rat, Oral)
3500 mg/kg (Rat, Oral)

LC50

50100 mg/m3 (Rat, 8Hr)
N.E.
5000 ppm (Rat, Inhalation, 4Hr)
N.E.
N.E.
N.E.
N.E.

Section 12 - Ecological Information

Ecological Information: Product is a mixture of listed components.

Section 13 - Disposal Information

Disposal Information: Dispose of material in accordance to local, state and federal regulations and ordinances. Do not allow to enter storm drains or sewer systems.

Section 14 - Transportation Information

	Domestic (USDOT)	International (IMDG)	Air (IATA)
Proper Shipping Name:	Consumer Commodity	Aerosols	Aerosols
Hazard Class:	ORM-D	2.1	2.1
UN Number:	N.A.	UN1950	UN1950
Packing Group:	N.A.	N.A.	N.A.
Limited Quantity:	No	Yes	Yes

Section 15 - Regulatory Information**CERCLA - SARA Hazard Category**

This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

IMMEDIATE HEALTH HAZARD, CHRONIC HEALTH HAZARD, FIRE HAZARD, PRESSURIZED GAS HAZARD

SARA Section 313:

Listed below are the substances (if any) contained in this product that are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

Chemical Name

Xylene
Ethylbenzene

CAS Number

1330-20-7
100-41-4

Toxic Substances Control Act:

Listed below are the substances (if any) contained in this product that are subject to the reporting requirements of TSCA 12(B) if exported from the United States:

U.S. State Regulations: As follows -**New Jersey Right-to-Know:**

The following materials are non-hazardous, but are among the top five components in this product.

Chemical Name

Modified Alkyd

CAS Number

PROPRIETARY

Pennsylvania Right-to-Know:

The following non-hazardous ingredients are present in the product at greater than 3%.

Chemical Name

Modified Alkyd

CAS Number

PROPRIETARY

International Regulations: As follows -**CANADIAN WHMIS:**

This MSDS has been prepared in compliance with Controlled Product Regulations except for the use of the 16 headings.

CANADIAN WHMIS CLASS: AB5 D2A D2B

Section 16 - Other Information

NFPA Ratings:

Health: 2

Flammability: 4

Instability: 0

VOLATILE ORGANIC COMPOUNDS, g/L: 513

REASON FOR REVISION: Regulatory Update

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

The information contained on this MSDS has been checked and should be accurate. However, it is the responsibility of the user to comply with all Federal, State, and Local laws and regulations.

MATERIAL SAFETY DATA SHEET

(SIMILAR TO OSHA FORM 174)

N.A. = Not Applicable
Not Est. = Not Established
Prop. = Proprietary

SECTION 1 - MANUFACTURER / DISTRIBUTOR INFORMATION

Product Name: WASH-BRITE Super Concentrated Liquid Laundry Detergent
Supplier's Name: National Chemical Laboratories of PA, Inc.
Supplier's Address: 401 N. 10th Street · Philadelphia PA 19123
HMIS Hazard Code: **Health:** 1 **Flammability:** 0 **Reactivity:** 0 **Other:** 0
Chemical Family: Blended Detergent
D.O.T. Shipping Name: N/A

Product #: 1155
Emergency Phone #: CHEM-TEL (800) 255-3924
Chemical Name: N.A. Proprietary Blend
Formula: N.A. Blended Product
Hazard Class: N/A **D.O.T. ID#:** N/A

SECTION 2 - HAZARDOUS INGREDIENTS

CHEMICAL NAME	CAS NUMBER	% Concentration Range	Hazard Ratings (TLV/PEL)
Polyethylene Mono(Nonylphenyl) Ether Glycols	9016-45-9	PROP.	Not Est.
Dodecyl Benzenesulfonic Acid, Sodium Salt	25155-30-0	PROP.	Not Est.
2-Butoxyethanol	111-76-2	PROP.	25 ppm

SECTION 3 - PHYSICAL DATA

Boiling Point (°F): 212
Vapor Pressure: = To Water
Vapor Density: = To Water
Solubility in Water: Complete
Appearance: Clear Viscous Blue Liquid
Odor: Fougere

Specific Gravity: 1.041
Evaporation Rate: = To Water

SECTION 4 - FIRE AND EXPLOSION DATA

Flash Point (°F): None to boiling (TOC)
Flammable Limits: Not Est.
Unusual Fire & Explosion Hazards: Heated product may liberate toxic fumes. Wear self contained breathing apparatus.

SECTION 5 - HEALTH HAZARD DATA

Route(s) of Entry: **Inhalation:** No **Skin:** Yes **Ingestion:** Yes **Threshold Limit Value:** Not Est.
Effects of Overexposure: May cause skin and eye irritation. May be harmful if swallowed.
Emergency & First Aid Procedures: **For Eyes:** Flush eyes with water for at least fifteen minutes. Seek medical attention. **For Skin:** Flush skin thoroughly with water. If irritation persists seek medical attention. **If ingested:** Do not induce vomiting. Give milk, egg white, gelatin or if none of these are available give large quantities of water. Seek medical attention.
Conditions Aggravated by Exposure: None

Listed Carcinogen, Mutagen, Teratogen (Ingredient, Source, Amount): None

SECTION 6 - REACTIVITY DATA

Stability: Stable
Conditions to Avoid: None
Incompatibility: Avoid contact with strong acids and oxidizers
Hazardous Decomposition Products: Carbon Oxides
Hazardous Polymerization: Will not occur.

SECTION 7 - SPILL OR LEAK PROCEDURES

Steps to be taken if material is released or spilled: Recontainerize by mopping, wet vacuum, or using a suitable absorbent. Rinse remaining material to drains. Be cautious of slippery floors.
Waste disposal method: Follow local, state, and federal regulations.

SECTION 8 - SPECIAL PROTECTION INFORMATION

Respiratory Protection: Not required
Ventilation: Not required
Protective Gloves: Not required
Eye Protection: Not required
Other Protective Equipment: None

SECTION 9 - SPECIAL PRECAUTIONS

Precautions to be taken in handling and storage: Store between 40°F and 120°F
Other Precautions: Keep out of reach of children. For professional use only.

The information contained in this MSDS was obtained from current and reliable sources, however the data is provided without any warranty, expressed or implied, regarding its correctness or accuracy. Since the conditions of handling, storage and disposal of this product are beyond the control of this company, it is not responsible for loss, injury and expense arising out of the product's improper use. No warranty, expressed or inferred, regarding the product described in this MSDS shall be created or inferred by any statement in this MSDS. Various government agencies may have specific regulations regarding the transportation, handling, storage, use or disposal of this product which may be covered by this MSDS. The user is responsible for full compliance.

Date Prepared – 10/05/00 By: G.C.

23882-1014
-1015
-1016
-1019

**MATERIAL SAFETY DATA SHEET****PVA WASHABLE SCHOOL GLUE****SECTION I - IDENTIFICATION OF COMPANY/BUSINESS**

NAME
ADDRESS

USE : General purpose adhesive.

SECTION II - HAZARDOUS CONSTITUENTS OF MATERIAL

COMPONENT	CAS NUMBER	PERCENT	PERMISSIBLE EXPOSURE LIMIT [TWA]	SHORT TERM EXPOSURE LIMIT [STEL]
Vinyl acetate homopolymer	NH	21 ± 1 %	NH/NA	NH/NA
Residual Monomer	Not Req.	< 0.3 % Max	CI	CI

SECTION III - IDENTIFICATION OF HAZARDS**TOXIC EFFECTS OF EXPOSURE/ CONTACT :**

SKIN CONTACT : May irritate skin on prolonged or repeated contact.

EYE CONTACT : May cause slight irritation to eyes.

INHALATION : Vapours can cause irritation of mucous membrane, nausea, headache and drowsiness.

INGESTION : Moderately toxic.

DELAYED EFFECTS: Not reported.

SECTION IV - FIRST AID MEASURES

SKIN CONTACT : Flush skin with plenty of water while removing contaminated cloths. Wash contaminated cloths before reuse.

EYE CONTACT : Immediately flush eyes with plenty of water for at least 15 minutes. Consult Physician if irritation persist.

INHALATION : Move the subject to fresh air. If not breathing, give artificial respiration. If respiration is difficult, give Oxygen and seek help from Physician.

INGESTION : Immediately give two glasses of water to drink. Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a Physician.

NOTE TO PHYSICIAN: There is no specific antidote. Treatment should be given symptomatically on the clinical conditions.

SECTION V - FIRE AND EXPLOSION HAZARD OF MATERIAL

FLAMMABILITY : Non-combustible.

FLASH POINT : NA

EXPLOSIVE LIMITS (% by vol.) : LEL : NA UEL : NA

FIRE EXTINGUISHING MEDIA : Material will not burn. Use Water, Foam, Dry Chemical Powder, CO₂ to extinguish the fire.

THERMAL DECOMPOSITION PRODUCT : May yield acrid smoke and irritating gases with oxides of carbon and organic fragments.

SPECIAL FIRE FIGHTING PROCEDURE : Wear self contained breathing apparatus or equivalent [MSHA/NIOSH - approved].

UNUSUAL FIRE AND EXPOLSION HAZARDS : Emulsion will not burn. They may spatter if the temperature exceeds boiling point. Dried polymer films are capable of burning.

INITIALS :

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MSDS CODE : 013SD88884

REV. : 0.0

DATE : 21.03.2007

SECTION VII ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS : Use personal protective equipment & handling listed under sections VII & VIII

ENVIRONMENT PRECAUTIONS : Review fire and safety precautions before proceeding with clean up. Use appropriate personal protective equipment during clean up. Keep spectators away. Dike and contain spill with an inert [e.g. sand, earth, etc.] absorbent. Collect the absorbed material in plastic bag for final disposal. Transfer liquid to container for recovery or disposal. Emulsion can be coagulated by stepwise addition of lime and Ferric Chloride or Ferric Sulphate up to a water clear end point. Keep spill out of sewers and open bodies of water.

CLEANING METHODS : Wash floor with water. Contaminated diking material may be incinerated or land filled according to current local or central regulation.

SECTION VIII HANDLING AND STORAGE

HANDLING PROCEDURE: Use appropriate personal protective equipment [PPE] during handling. Protect against physical damage. Observe good hygiene practices.

STORAGE REQUIREMENTS : Store at ambient temperatures. Keep away from freezing. Keep container tightly closed when not in use. Maintain good housekeeping.

SECTION IX EXPOSURE CONTROL/PERSONAL PROTECTIVE EQUIPMENT

PERSONAL PROTECTIVE EQUIPMENT :

HYGIENE MEASURES : Do not eat, drink or smoke when working. Wash hands before breaks and after work.

EYE PROTECTION : Use chemical splash proof safety goggles or equivalent.

HAND PROTECTION : Impervious (rubber, neoprene, pvc, etc.) hand gloves, aprons.

RESPIRATION PROTECTION : None required if good ventilation in the area is maintained. Otherwise suggested to wear MSHA/NIOSH approved respirator where vapour concentrations is more.

OTHERS : Eye wash facility and emergency shower.

ENGINEERING CONTROLS : Not specific.

SECTION X PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE : Milky white emulsion.

ODOUR : Mild odour of free monomer.

BOILING POINT (°C) : 100 °C **pH :** 4.0 – 6.0

VISCOSITY @ 30 °C : 60 – 90 Ps

DENSITY/ SPECIFIC GRAVITY (WATER=1) : 1.03 – 1.07

SOLUBILITY 20 °C IN WATER : Miscible, makes emulsion

VAPOUR PRESSURE AT 25 °C : NA

SECTION XI STABILITY AND REACTIVITY DATA

CHEMICAL STABILITY : Stable under normal ambient conditions.

INCOMPATIBILITY : Mineral acids and high concentration salt solution.

HAZARDOUS POLYMERISATION : Will not occur.

CONDITIONS TO AVOID : Not specific.

SECTION XII TOXICOLOGICAL INFORMATION

Residual monomer content in the product is not a problem in normal handling and storage. However, monomer vapours may be released into workroom atmosphere when emulsion is heat cured or dried or spread.

INITIALS :

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REV. : 0.0

DATE : 21.03.2007

SECTION XII - ECOLOGICAL INFORMATION

Do not allow to enter soil, waterways and open bodies of water.

SECTION XIII - DISPOSAL INFORMATION

The contaminated/discarded material may be disposed off in accordance with current local or central regulation.

SECTION XIV - TRANSPORTATION INFORMATION

UN NO. : -

IMDG CODE PAGE NO. : -

HAZARD CLASS : -

PACKAGING GROUP : -

The material is not considered as dangerous goods.

SECTION XV - REGULATORY INFORMATION

Not applicable

SECTION XVI - MISCELLANEOUS INFORMATION

DISCLAIMER : The data presented here is based on information we believe to be reliable but unknown risks may be present. We disclaim liability for damage or injury which results from the use of the above data and nothing contained therein shall constitute a guarantee or a warranty (including warranty of Merchantability or fitness for a particular purpose) or representation (including freedom from Patentability) by us with respect to the accuracy or completeness of the data, the product described or their use for any specific purpose as known to us. The final determination of the suitability of information, the manner of use of information or product and potential infringement of patents is the sole responsibility of the user.

**ABBREVIATIONS USED : NA - NOT APPLICABLE, NH - NON HAZARDOUS,
CI - CONTENT INSIGNIFICANT.**

ISSUED BY SAFETY DEPARTMENT

R M RAJE

TEL. NO. 2836 7085 EXT. 7277

INITIALS :

PAGE : 3/3

MSDS CODE : 013SD88884

REV. : 0.0

DATE : 21.03.2007

Material Safety Data Sheet

May be used to comply with

OSHA's Hazard Communication Standard,
29 CFR 1910.1200. Standard must be
consulted for specific requirements.

U.S. Department of Labor

Occupational Safety and Health Administration

(Non-Mandatory Form)

Form Approved

OMB No. 1218-0072

IDENTITY (As Used on Label and List) SARGENT (WATER COLOR MAGIC) LIQUID WATERCOLOR	Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.
--	---

Section I

Manufacturer's Name Sargent Art, Inc.	Emergency Telephone Number 570-454-3596
Address (Number, Street, City, State, and ZIP Code) 100 E Diamond Avenue Hazleton PA 18201	Telephone Number for Information 570-454-3596 Date Prepared 7-26-2008 Signature of Preparer (optional)

Section II - Hazard Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s))

ALL CP/AP PRODUCTS ARE CERTIFIED	BY A NATIONAL RECOGNIZED AUTHOR-
ITY ON TOXICOLOGY ASSOCIATED WITH	A LEADING UNIVERSITY TO CONTAIN
NO KNOWN TOXIC MATERIALS IN SUFFI	CIENT QUANTITIES TO BE
INJURIOUS TO THE HUMAN BODY EVEN	IF INGESTED.

CONFORMS TO ASTM-D 4236.

Section III - Physical/Chemical Characteristics

Boiling Point NOT APPLICABLE	Specific Gravity (H ₂ O = 1) N/A
Vapor Pressure (mm Hg.) N/A	Me
Vapor Density (AIR = 1) N/A	lting Point N/A
	Evaporation Rate N/A (Butyl Acetate = 1)
Solubility in Water	Water Soluable - Water Dispersible
Appearance and Odor	Various Colors - Essentially Odorless

Section IV - Fire and Explosion Hazard Data

Flash Point (Method Used) N/A	Flammable Limits LEL UEL NONE NONE NONE
Extinguishing Media Special Fire Fighting Procedures	CARBON DIOXIDE, WATER, FOAM SELF-CONTAINED BREATHING APPARATUS
Unusual Fire and Explosion Hazards	NONE

Section V - Reactivity Data

Stability	Unstable	Conditions to Avoid
	Stable X	None Known
Incompatibility (Materials to Avoid)	Strong	Strong oxidizers and acids

Hazardous Decomposition or Byproducts

Hazardous	May Occur	Conditions to Avoid
Polymerization	Will Not Occur X	None Known

Section VI - Health Hazard Data

Route(s) of Entry: Inhalation? Possible	Skin? N/A	Ingestion? Possible
Health Hazards (Acute and Chronic)		
This product is certified to contain no toxic or injurious to humans or to cause		materials in sufficient quantities to be acute or chronic health problems.
Carcinogenicity: NTP? None	IARC Monographs? N/A	OSHA
	Regulated? No	
Signs and Symptoms of Exposure	None Known	
Medical Conditions		
Generally Aggravated by Exposure	None Known	
Emergency and First Aid Procedures	If ingested, do not induce vomiting, call physician.	

Section VII - Precautions for Safe Handling and Use

Steps to Be Taken in Case Material is Released or Spilled	Sweep into container and dispose of according to local regulations.
Waste Disposal Method	In accordance with local regulations.
Precautions to Be taken in Handling and Storing	Keep in cool, dry area.
Other Precautions	None Known

Section VIII - Control Measures

Respiratory Protection (Specify Type)	Not Required.		
Ventilation	Local Exhaust	Not Required	Special None
Mechanical (General)		Not Required	Other None
Protective Gloves		Not Required	Eye Protection Not Required
Other Protective Clothing or Equipment	Not Required		
Work/Hygienic Practices	Clean, safe work practices		

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40305-XXXX

40409-1001

Material Safety Data Sheet

May be used to comply with
OSHA's Hazard Communication Standards
29 CFR 1910.1200. Standard must be
consulted for specific requirements.

U.S. Department of Labor

Occupational Safety and Health Administration
(Non-Mandatory Form)

Form Approved

OMB No. 1218-0072



IDENTITY (As Used on Label and List) SPEEDBALL Water-Soluble Blockprinting Ink (3400 to 3417, 3448, 3449;
3500 to 3517, 3548, 3549; 3600 to 3617, 3648, 3649; 3700 to 3717, 3748, 3749)

Section I

Manufacturer's Name

SPEEDBALL ART PRODUCTS
2226 SPEEDBALL ROAD
STATESVILLE, NC 28677

Emergency Telephone Number

704-838-1475

Telephone Number for Information

704-838-1475

Date Prepared

4/12/98

Signature of Preparer (optional)

Section II — Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s))

OSHA PEL

ACGIH TLV

Other Limits
Recommended

% (optional)

Approved for the AP Seal (Non-toxic) by the Art & Creative Materials Institute, Inc. (ACMI).

Product labeling conforms to ASTM D4236.

Note: This product has been evaluated by a Toxicologist only as per intended usage.

Do not deviate from intended usage!

Section III — Physical/Chemical Characteristics

Boiling Point	212-369°F	Specific Gravity (H ₂ O = 1)	1.2 to 1.7
Vapor Pressure (mm Hg.)	Unknown	Melting Point	<32°F.
Vapor Density (AIR = 1)	Unknown	Evaporation Rate (Butyl Acetate = 1)	less than 1

Solubility in Water

Dilutable

Appearance and Odor

Thick paste with slight odor

Section IV — Fire and Explosion Hazard Data

Flash Point (Method Used)

Not applicable (N/A)

Flammable Limits

N/A

LEL

N/A

UEL

N/A

Extinguishing Media

N/A

Special Fire Fighting Procedures

wear self-contained breathing apparatus (pressure-demand, MSHA/NIOSH approved or
equivalent) and full protective gear.

Unusual Fire and Explosion Hazards

Material can spatter above 212°F. Film can burn.

Item Numbers: 40305-1003, 40305-1004, 40305-1005, 40305-1006, 40305-1007, 40305-2003, 40305-2004, 40305-2005, 40305-2006, 40305-2007, 40305-3003, 40305-3004, 40305-3005, 40305-3006, 40305-3007, 40305-3043, 40305-3044, 40305-3045, 40305-3046, 40305-3047, 40305-4003, 40305-4004, 40305-4005, 40305-4006, 40305-4007, 40305-4053, 40305-4054, 40305-4055, 40305-4056, 40305-4057, 40305-4503, 40305-4504,

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6506, 40305-6507, 40305-7003, 40305-7004, 40305-7005, 40305-7006, 40305-7007, 40305-8003, 40305-8004, 40305-8005, 40305-8006, 40305-8007, 40305-9303, 40305-9304, 40305-9305, 40305-9306, 40305-9507

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Section V — Reactivity Data

Summary	Unstable		Conditions to Avoid	Onset of decomposition is 350°F.
	Stable	X		

Incompatibility (Materials to Avoid) N/A

Hazardous Decomposition or Byproducts

Oxides of carbon and nitrogen.

Hazardous Polymerization	May Occur		Conditions to Avoid	N/A
	Will Not Occur	X		

Section VI — Health Hazard Data

Route(s) of Entry: N/A Inhalation? Skin? Ingestion?

Health Hazards (Acute and Chronic) N/A

Carcinogenicity: N/A NTP? IARC Monographs? OSHA Regulated?

Signs and Symptoms of Exposure N/A

Medical Conditions Generally Aggravated by Exposure N/A

Emergency and First Aid Procedures Contact with eyes may cause mild irritation: Flush with water.

Section VII — Precautions for Safe Handling and Use

Steps to Be Taken in Case Material is Released or Spilled

Floor may be slippery; use care to avoid falling. Transfer to containers for recovery or disposal. Keep out of municipal sewers and open bodies of water.

Waste Disposal Method

Incinerate at a permitted facility according to current local, state and federal regulations.

Precautions to Be Taken in Handling and Storing

Keep from freezing - product may coagulate.

Other Precautions N/A

Section VIII — Control Measures

Respiratory Protection (Specify Type)

None required with adequate ventilation & normal operating conditions.

Ventilation	Local Exhaust	Special
	Adequate	
	Mechanical (General)	Other

Protective Gloves Impervious Eye Protection Safety glasses

Other Protective Clothing or Equipment N/A

Work Hygienic Practices

Use protective cream where excessive skin contact is likely.

MATERIAL SAFETY DATA SHEET

CODE: M/L 136

This Material Safety Data Sheet complies with
the U.S. OSHA Hazard Communication
Standard, 29 CFR 1910.1200

**PRODUCT:
WORTHINGTON STERLING® WATER SOLUBLE FLUX**

NFPA/HMIS HAZARD CODES: HEALTH: 1/1 FIRE: 0/0 REACTIVITY: 0/0 SPECIAL: N/A

0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

SECTION I IDENTIFICATION

MANUFACTURER NAME: WORTHINGTON
1690 Lowery Street
Winston-Salem, NC 27101
336-777-8600

ISSUE DATE: January 23, 2013

SECTION II COMPOSITION INFORMATION

<u>INGREDIENT</u>	<u>CAS NO.</u>	<u>US OSHA PEL</u>	<u>%</u>
Hydrochloric Acid	7647-01-0	5PPM	3-6
Zinc Chloride	7646-85-7	1PPM	1-3

SECTION III HEALTH HAZARDS

EYES: Flush with water for 10 minutes. Obtain immediate medical attention.
SKIN: Wash thoroughly with water. If irritation develops, obtain medical attention.
ACUTE INHALATION: Remove to fresh air or administer oxygen. Obtain immediate medical attention.
INGESTION: Give water or milk. Obtain immediate medical attention.
PRIMARY ROUTES OF ENTRY: Fume inhalation, ingestion, skin and eyes.
SYMPTOMS OF OVEREXPOSURE: Salivation, coughing, choking, chills, may cause weight loss, brittle bones, anemia, and stiff joints.
MEDICAL CONDITIONS GENERALLY AGGRAVATED BY OVEREXPOSURE: Any weakness of the lungs, kidneys or liver will be aggravated.
CHEMICAL LISTED AS A CARCINOGEN OR POTENTIAL CARCINOGEN: None

SECTION IV FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: N/A
FLAMMABLE LIMITS: N/A
EXTINGUISHING MEDIA: Not needed
AUTO IGNITION TEMPERATURE: None
SPECIAL FIRE FIGHTING PROCEDURES: None
UNUSUAL FIRE & EXPLOSION HAZARDS: Fluoride fumes

SECTION V ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS SPILLED:
Clean up paste and dilute/flush remaining materials with excess of water.

SECTION VI HANDLING AND STORAGE

STORAGE REQUIREMENT: Store in plastic containers in cool area, away from heat. Do not store in metal container. Wash thoroughly after use.
HANDLING PRECAUTIONS: Safe precautionary practices - avoid spills and exposure to skin and fume.

SECTION VII CONTROL MEASURES

RESPIRATORY PROTECTION (TYPE):	NIOSH approved respirator
MECHANICAL (GENERAL):	Yes
EYE PROTECTION:	Safety glasses/goggles
PROTECTIVE GLOVES:	Recommended
OTHER PROTECTIVE CLOTHING OR EQUIPMENT:	Optional to user's preference.
VENTILATION:	Yes
LOCAL EXHAUST:	Yes

SECTION VIII PHYSICAL AND CHEMICAL CHARACTERISTICS

BOILING POINT:	104°C	SPECIFIC GRAVITY (WATER=1):	.97
VAPOR PRESSURE (mm Hg):	N/A	PERCENT VOLATILE BY VOLUME:	64%
VAPOR DENSITY (AIR=1):	N/A	EVAPORATION RATE (BUTYL ACETATE=1):	0.6
MELTING POINT:	0°C	SOLUBILITY IN WATER:	Moderate
REACTIVITY IN WATER:	None	APPEARANCE AND ODOR:	White, odorless paste

SECTION IX STABILITY AND REACTIVITY

STABILITY:	Product is stable
(CONDITIONS TO AVOID):	Metals
INCOMPATIBILITY:	Alkaline, strong oxidizing or reducing materials, cyanides or combustible materials.
HAZARDOUS DECOMPOSITION PRODUCTS:	HCl, zinc chloride, zinc oxide, ammonium fume
HAZARDOUS POLYMERIZATION:	Will not occur
(CONDITIONS TO AVOID):	Excessive heat or cold

SECTION X TRANSPORTATION AND DISPOSAL CONSIDERATIONS

D.O.T. PROPER SHIPPING NAME:	Non-hazardous
WASTE DISPOSAL METHOD:	Dispose of in accordance with EPA regulations

SECTION XI OTHER INFORMATION

VOC CONTENT: None

This Material Safety Data Sheet is offered solely for your information, consideration and investigation. WORTHINGTON provides no warranties, either express or implied, and assumes no responsibilities for the accuracy or completeness of the data contained in this document. The data in this Material Safety Data Sheet relates only to this product and does not relate to use in combination with any other material or in any process.



Safety Data Sheet

1 - Identification

Product Name: WD-40 Multi-Use Product Aerosol NOT FOR SALE IN CALIFORNIA	Manufacturer: WD-40 Company Address: 1061 Cudahy Place (92110) P.O. Box 80607 San Diego, California, USA 92138 -0607
Product Use: Lubricant, Penetrant, Drives Out Moisture, Removes and Protects Surfaces From Corrosion	Telephone: Emergency only: 1-888-324-7596 (PROSAR) Information: 1-888-324-7596 Chemical Spills: 1-800-424-9300 (Chemtrec) 1-703-527-3887 (International Calls)
Restrictions on Use: None identified	
SDS Date Of Preparation: 07/20/2014	

2 – Hazards Identification

Hazcom 2012/GHS Classification:

Flammable Aerosol Category 1

Gas Under Pressure: Compressed Gas

Aspiration Toxicity Category 1

Note: This product is a consumer product and is labeled in accordance with the US Consumer Product Safety Commission regulations which take precedence over OSHA Hazard Communication labeling. The actual container label will not include the label elements below. The labeling below applies to industrial/professional products.

Label Elements:



DANGER!

Extremely Flammable Aerosol.

Contains gas under pressure; may explode if heated.

May be fatal if swallowed and enters airways.

Prevention

Keep away from heat, sparks, open flames, hot surfaces – No smoking.

Do not spray on an open flame or other ignition source.

Pressurized container: Do not pierce or burn, even after use.

Response

IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting.

Storage

Store locked up.

Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. Store in a well-ventilated place.

Disposal

Dispose of contents and container in accordance with local and national regulations.

3 - Composition/Information on Ingredients

Ingredient	CAS #	Weight Percent	US Hazcom 2012/ GHS Classification
Aliphatic Hydrocarbon	64742-47-8	45-50	Flammable Liquid Category 3

			Aspiration Toxicity Category 1
Petroleum Base Oil	64742-56-9 64742-65-0 64742-53-6 64742-54-7 64742-71-8	<25	Not Hazardous
LVP Aliphatic Hydrocarbon	64742-47-8	12-18	Aspiration Toxicity Category 1
Carbon Dioxide	124-38-9	2-3	Simple Asphyxiant Gas Under Pressure, Compressed Gas
Non-Hazardous Ingredients	Mixture	<10	Not Hazardous

Note: The exact percentages are a trade secret.

4 – First Aid Measures

Ingestion (Swallowed): Aspiration Hazard. DO NOT induce vomiting. Call physician, poison control center or the WD-40 Safety Hotline at 1-888-324-7596 immediately.

Eye Contact: Flush thoroughly with water. Remove contact lenses if present after the first 5 minutes and continue flushing for several more minutes. Get medical attention if irritation persists.

Skin Contact: Wash with soap and water. If irritation develops and persists, get medical attention.

Inhalation (Breathing): If irritation is experienced, move to fresh air. Get medical attention if irritation or other symptoms develop and persist.

Signs and Symptoms of Exposure: May cause eye and respiratory irritation. Inhalation may cause coughing, headache and dizziness. Skin contact may cause drying of the skin.

Indication of Immediate Medical Attention/Special Treatment Needed: Immediate medical attention is needed for ingestion.

5 – Fire Fighting Measures

Suitable (and unsuitable) Extinguishing Media: Use water fog, dry chemical, carbon dioxide or foam. Do not use water jet or flooding amounts of water. Burning product will float on the surface and spread fire.

Specific Hazards Arising from the Chemical: Contents under pressure. Keep away from ignition sources and open flames. Exposure of containers to extreme heat and flames can cause them to rupture often with violent force. Vapors are heavier than air and may travel along surfaces to remote ignition sources and flash back. Combustion will produce oxides of carbon and hydrocarbons.

Special Protective Equipment and Precautions for Fire-Fighters: Firefighters should always wear positive pressure self-contained breathing apparatus and full protective clothing. Cool fire-exposed containers with water. Use shielding to protect against bursting containers.

6 – Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures: Wear appropriate protective clothing (see Section 8). Eliminate all sources of ignition and ventilate area.

Methods and Materials for Containment/Cleanup: Leaking cans should be placed in a plastic bag or open pail until the pressure has dissipated. Contain and collect liquid with an inert absorbent and place in a container for disposal. Clean spill area thoroughly. Report spills to authorities as required.

7 – Handling and Storage

Precautions for Safe Handling: Avoid contact with eyes. Avoid prolonged contact with skin. Avoid breathing vapors or aerosols. Use only with adequate ventilation. Keep away from heat, sparks, pilot lights, hot surfaces and open flames. Unplug electrical tools, motors and appliances before spraying or bringing the can near any source of electricity. Electricity can burn a hole in the can and cause contents to burst into flames. To avoid serious burn injury, do not let the can touch battery terminals, electrical connections on motors or appliances or any other source of electricity. Wash thoroughly with soap and water after handling. Keep containers closed when not in use. Keep out of the reach of children. Do not puncture, crush or incinerate containers, even when empty.

Conditions for Safe Storage: Store in a cool, well-ventilated area, away from incompatible materials Do not store above 120°F or in direct sunlight. U.F.C (NFPA 30B) Level 3 Aerosol. Store away from oxidizers.

8 – Exposure Controls/Personal Protection

Chemical	Occupational Exposure Limits
Aliphatic Hydrocarbon	1200 mg/m3 TWA (manufacturer recommended)
Petroleum Base Oil	5 mg/m3 TWA, 10 mg/m3 STEL ACGIH TLV 5 mg/m3 TWA OSHA PEL
LVP Aliphatic Hydrocarbon	1200 mg/m3 TWA (manufacturer recommended)
Carbon Dioxide	5000 ppm TWA (OSHA/ACGIH), 30,000 ppm STEL (ACGIH)
Non-Hazardous Ingredients	None Established

The Following Controls are Recommended for Normal Consumer Use of this Product

Appropriate Engineering Controls: Use in a well-ventilated area.

Personal Protection:

Eye Protection: Avoid eye contact. Always spray away from your face.

Skin Protection: Avoid prolonged skin contact. Chemical resistant gloves recommended for operations where skin contact is likely.

Respiratory Protection: None needed for normal use with adequate ventilation.

For Bulk Processing or Workplace Use the Following Controls are Recommended

Appropriate Engineering Controls: Use adequate general and local exhaust ventilation to maintain exposure levels below that occupational exposure limits.

Personal Protection:

Eye Protection: Safety goggles recommended where eye contact is possible.

Skin Protection: Wear chemical resistant gloves.

Respiratory Protection: None required if ventilation is adequate. If the occupational exposure limits are exceeded, wear a NIOSH approved respirator. Respirator selection and use should be based on contaminant type, form and concentration. Follow OSHA 1910.134, ANSI Z88.2 and good Industrial Hygiene practice.

Work/Hygiene Practices: Wash with soap and water after handling.

9 – Physical and Chemical Properties

Appearance:	Light amber liquid	Flammable Limits: (Solvent Portion)	LEL: 0.6% UEL: 8%
Odor:	Mild petroleum odor	Vapor Pressure:	95-115 PSI @ 70°F
Odor Threshold:	Not established	Vapor Density:	Greater than 1 (air=1)
pH:	Not Applicable	Relative Density:	0.8 – 0.82 @ 60°F
Melting/Freezing Point	Not established	Solubilities:	Insoluble in water
Boiling Point/Range:	361 - 369°F (183 - 187°C)	Partition Coefficient; n-octanol/water:	Not established
Flash Point:	122°F (49°C) Tag Closed Cup (concentrate)	Autoignition Temperature:	Not established
Evaporation Rate:	Not established	Decomposition Temperature:	Not established
Flammability (solid, gas)	Flammable Aerosol	Viscosity:	2.79-2.96 cSt @ 100°F
VOC:	412 grams/liter (49.5%)	Pour Point:	-63°C (-81.4°F) ASTM D-97

10 – Stability and Reactivity

Reactivity: Not reactive under normal conditions

Chemical Stability: Stable

Possibility of Hazardous Reactions: May react with strong oxidizers generating heat.

Conditions to Avoid: Avoid heat, sparks, flames and other sources of ignition. Do not puncture or incinerate containers.

Incompatible Materials: Strong oxidizing agents.

Hazardous Decomposition Products: Carbon monoxide and carbon dioxide.

11 – Toxicological Information

Symptoms of Overexposure:

Inhalation: High concentrations may cause nasal and respiratory irritation and central nervous system effects such as headache, dizziness and nausea. Intentional abuse may be harmful or fatal.

Skin Contact: Prolonged and/or repeated contact may produce mild irritation and defatting with possible dermatitis.

Eye Contact: Contact may be irritating to eyes. May cause redness and tearing.

Ingestion: This product has low oral toxicity. Swallowing may cause gastrointestinal irritation, nausea, vomiting and diarrhea. This product is an aspiration hazard. If swallowed, can enter the lungs and may cause chemical pneumonitis, severe lung damage and death.

Chronic Effects: None expected.

Carcinogen Status: None of the components are listed as a carcinogen or suspect carcinogen by IARC, NTP, ACGIH or OSHA.

Reproductive Toxicity: None of the components is considered a reproductive hazard.

Numerical Measures of Toxicity:

The oral toxicity of this product is estimated to be greater than 5,000 mg/kg and the dermal toxicity greater than 2,000 mg/kg based on an assessment of the ingredients. This product is not classified as toxic by established criteria. It is an aspiration hazard.

12 – Ecological Information

Ecotoxicity: No specific aquatic toxicity data is currently available, however components of this product are not expected to be harmful to aquatic organisms

Persistence and Degradability: Component are readily biodegradable.

Bioaccumulative Potential: Bioaccumulation is not expected based on an assessment of the ingredients.

Mobility in Soil: No data available

Other Adverse Effects: None known

13 - Disposal Considerations

If this product becomes a waste, it would be expected to meet the criteria of a RCRA ignitable hazardous waste (D001). However, it is the responsibility of the generator to determine at the time of disposal the proper classification and method of disposal. Do not puncture or incinerate containers, even empty. Dispose in accordance with federal, state, and local regulations.

14 – Transportation Information

DOT Surface Shipping Description:

UN1950, Aerosols, 2.1 Ltd. Qty (Note: Shipping Papers are not required for Limited Quantities unless transported by air or vessel – each package must be marked with the Limited Quantity Mark)

IMDG Shipping Description: Un1950, Aerosols, 2.1, LTD QTY

ICAO Shipping Description: UN1950, Aerosols, flammable, 2.1 NOTE: WD-40 does not test aerosol cans to assure that they meet the pressure and other requirements for transport by air. We do not recommend that our aerosol products be transported by air.

15 – Regulatory Information

U.S. Federal Regulations:

CERCLA 103 Reportable Quantity: This product is not subject to CERCLA reporting requirements, however, oil spills are reportable to the National Response Center under the Clean Water Act and many

states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

SARA TITLE III:

Hazard Category For Section 311/312: Acute Health, Fire Hazard, Sudden Release of Pressure

Section 313 Toxic Chemicals: This product contains the following chemicals subject to SARA Title III

Section 313 Reporting requirements: None

Section 302 Extremely Hazardous Substances (TPQ): None

EPA Toxic Substances Control Act (TSCA) Status: All of the components of this product are listed on the TSCA inventory.

VOC Regulations: This product complies with the consumer product VOC limits of the US EPA and states adopting the OTC VOC rules but does not comply with CARB.

California Safe Drinking Water and Toxic Enforcement Act (Proposition 65): This product does not contain chemicals regulated under California Proposition 65.

Canadian Environmental Protection Act: One of the components is listed on the NDSL. All of the other ingredients are listed on the Canadian Domestic Substances List or exempt from notification.

Canadian WHMIS Classification: Class A (Compressed gas), Class B-5 (Flammable Aerosol)

This MSDS has been prepared according to the criteria of the Controlled Products Regulation (CPR) and the MSDS contains all of the information required by the CPR.

16 – Other Information:

HMIS Hazard Rating:

Health – 1 (slight hazard), Fire Hazard – 4 (severe hazard), Reactivity – 0 (minimal hazard)

Revision Date: July 20, 2014

Supersedes: May 23, 2014

Revision Summary: Convert to Hazcom 2012. Changes in all sections.

Prepared by: Industrial Health & Safety Consultants, Inc. Shelton, CT, USA

APPROVED By: I. Kowalski

Regulatory Affairs Dept.



Safety Data Sheet

1 - Chemical Product and Company Identification

Trade Name: WD-40 Multi-Use Product Bulk Liquid
NOT FOR SALE IN CALIFORNIA

Product Use: Lubricant, Penetrant, Drives Out Moisture, Removes and Protects Surfaces From Corrosion

Restrictions on Use: None identified

MSDS Date Of Preparation: 8/25/15

Manufacturer: WD-40 Company
Address: 1061 Cudahy Place (92110)
P.O. Box 80607
San Diego, California, USA
92138 -0607

Telephone:
Emergency only: 1-888-324-7596 (PROSAR)
Information: 1-888-324-7596
Chemical Spills: 1-800-424-9300 (Chemtrec)
1-703-527-3887 (International Calls)

2 – Hazards Identification

Hazcom 2012/GHS Classification:

Flammable Liquid Category 3

Aspiration Toxicity Category 1

Note: The 1 gallon size product is a consumer product and is labeled in accordance with the US Consumer Product Safety Commission regulations which take precedence over OSHA Hazard Communication labeling. The actual container label will not include the label elements below. The labeling below applies to larger containers sold for industrial/professional use.

Label Elements:



DANGER!

Flammable liquid and vapor.

May be fatal if swallowed and enters airways.

Prevention

Keep away from heat, sparks, open flames, hot surfaces – No smoking.

Keep container tightly closed.

Ground and bond containers and receiving equipment.

Use explosion-proof electrical equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Wear eye protection.

Response

IF SWALLOWED: Immediately call a POISON CENTER or physician.

Do NOT induce vomiting.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.

In case of fire: Use water fog, dry chemical, carbon dioxide or foam to extinguish.

Storage

Store locked up.

Store in a well-ventilated place. Keep cool.

Disposal

Dispose of contents and container in accordance with local and national regulations.

3 - Composition/Information on Ingredients

Ingredient	CAS #	Weight Percent	GHS Classification
Aliphatic Hydrocarbon	64742-47-8	45-50	Flammable Liquid Category 3 Aspiration Toxicity Category 1
Petroleum Base Oil	64742-56-9 64742-65-0 64742-53-6 64742-54-7 64742-71-8	<35	Not Hazardous
LVP Aliphatic Hydrocarbon	64742-47-8	12-18	Aspiration Toxicity Category 1

Note: The specific chemical identity and exact percentages are a trade secret.

4 – First Aid Measures

Ingestion (Swallowed): Aspiration Hazard. DO NOT induce vomiting. Call physician, poison control center or the WD-40 Safety Hotline at 1-888-324-7596 immediately.

Eye Contact: Flush thoroughly with water. Remove contact lenses if present after the first 5 minutes and continue flushing for several more minutes. Get medical attention if irritation persists.

Skin Contact: Wash with soap and water. If irritation develops and persists, get medical attention.

Inhalation (Breathing): If irritation is experienced, move to fresh air. Get medical attention if irritation or other symptoms develop and persist.

Signs and Symptoms of Exposure: May cause eye and respiratory irritation. Inhalation may cause coughing, headache and dizziness. Skin contact may cause drying of the skin.

Indication of Immediate Medical Attention/Special Treatment Needed: Immediate medical attention is needed for ingestion.

5 – Fire Fighting Measures

Suitable (and unsuitable) Extinguishing Media: Use water fog, dry chemical, carbon dioxide or foam. Do not use water jet or flooding amounts of water. Burning product will float on the surface and spread fire.

Specific Hazards Arising from the Chemical: Combustible liquid and vapor. Vapors are heavier than air and may travel along surfaces to remote ignition sources and flash back. Combustion will produce oxides of carbon and hydrocarbons.

Special Protective Equipment and Precautions for Fire-Fighters: Firefighters should always wear positive pressure self-contained breathing apparatus and full protective clothing. Cool fire-exposed containers with water.

6 – Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures: Wear appropriate protective clothing (see Section 8). Eliminate all sources of ignition and ventilate area.

Methods and Materials for Containment/Cleanup: Contain and collect liquid with an inert absorbent and place in a container for disposal. Clean spill area thoroughly. Report spills to authorities as required.

7 – Handling and Storage

Precautions for Safe Handling: Avoid contact with eyes. Avoid prolonged contact with skin. Avoid breathing vapors or aerosols. Use with adequate ventilation. Keep away from heat, sparks, hot surfaces and open flames. Wash thoroughly with soap and water after handling. Keep containers closed when not in use. Keep out of the reach of children.

Conditions for Safe Storage: Store in a cool, well-ventilated area, away from incompatible materials. NFPA 30 Class II Liquid.

8 – Exposure Controls/Personal Protection

Chemical	Occupational Exposure Limits
Aliphatic Hydrocarbon	1200 mg/m ³ TWA (manufacturer recommended)
Petroleum Base Oil	5 mg/m ³ (inhalable) TWA ACGIH TLV

	5 mg/m3 TWA OSHA PEL
LVP Aliphatic Hydrocarbon	1200 mg/m3 TWA (manufacturer recommended)

The Following Controls are Recommended for Normal Consumer Use of this Product

Engineering Controls: Use in a well-ventilated area.

Personal Protection:

Eye Protection: Avoid eye contact. Safety glasses or goggles recommended.

Skin Protection: Avoid prolonged skin contact. Chemical resistant gloves recommended for operations where skin contact is likely.

Respiratory Protection: None needed for normal use with adequate ventilation.

For Bulk Processing or Workplace Use the Following Controls are Recommended

Engineering Controls: Use adequate general and local exhaust ventilation to maintain exposure levels below that occupational exposure limits.

Personal Protection:

Eye Protection: Safety goggles recommended where eye contact is possible.

Skin Protection: Wear chemical resistant gloves.

Respiratory Protection: None required if ventilation is adequate. If the occupational exposure limits are exceeded, wear a NIOSH approved respirator. Respirator selection and use should be based on contaminant type, form and concentration. Follow OSHA 1910.134, ANSI Z88.2 and good Industrial Hygiene practice.

Work/Hygiene Practices: Wash with soap and water after handling.

9 – Physical and Chemical Properties

Appearance:	Light amber liquid	Flammable Limits: (Solvent Portion)	LEL: 0.6% UEL: 8.0%
Odor:	Mild petroleum odor	Vapor Pressure:	1 psi @38°C (100°F) ASTM D323
Odor Threshold:	Not established	Vapor Density:	Greater than 1 (air=1)
pH:	Not Applicable	Relative Density:	0.8 – 0.82 @ 60°F
Melting/Freezing Point	Not established	Solubilities:	Insoluble in water
Boiling Point/Range:	361 - 369°F (183 - 187°C)	Partition Coefficient; n- octanol/water:	Not established
Flash Point:	122°F (49°C) Tag Open Cup	Autoignition Temperature:	Not established
Evaporation Rate:	Not established	Decomposition Temperature:	Not established
Flammability (solid, gas)	Not Applicable	Viscosity:	2.79-2.96 cSt @ 100°F
VOC:	412 grams/liter (49.5%)	Pour Point:	-63°C (-81.4°F) ASTM D-97

10 – Stability and Reactivity

Stability: Stable

Hazardous Polymerization: Will not occur.

Conditions to Avoid: Avoid heat, sparks, flames and other sources of ignition.

Incompatibilities: Strong oxidizing agents.

Hazardous Decomposition Products: Carbon monoxide and carbon dioxide.

11 – Toxicological Information

Symptoms of Overexposure:

Inhalation: High concentrations may cause nasal and respiratory irritation and central nervous system effects such as headache, dizziness and nausea. Intentional abuse may be harmful or fatal.

Skin Contact: Prolonged and/or repeated contact may produce mild irritation and defatting with possible dermatitis.

Eye Contact: Contact may be irritating to eyes. May cause redness and tearing.

Ingestion: This product has low oral toxicity. Swallowing may cause gastrointestinal irritation, nausea, vomiting and diarrhea. This product is an aspiration hazard. If swallowed, can enter the lungs and may cause chemical pneumonitis, severe lung damage and death.

Chronic Effects: None expected.

Carcinogen Status: None of the components are listed as a carcinogen or suspect carcinogen by IARC, NTP, ACGIH or OSHA.

Reproductive Toxicity: None of the components is considered a reproductive hazard.

Numerical Measures of Toxicity:

Acute Toxicity Estimates: Oral > 5,000 mg/kg; Dermal >2,000 mg/kg based on an assessment of the ingredients. This product is not classified as toxic by established criteria. It is an aspiration hazard.

12 – Ecological Information

Ecotoxicity: No specific aquatic toxicity data is currently available, however components of this product are not expected to be harmful to aquatic organisms

Persistence and Degradability: Component are readily biodegradable.

Bioaccumulative Potential: Bioaccumulation is not expected based on an assessment of the ingredients.

Mobility in Soil: No data available

Other Adverse Effects: None known

13 - Disposal Considerations

If this product becomes a waste, it would be expected to meet the criteria of a RCRA ignitable hazardous waste (D001). However, it is the responsibility of the generator to determine at the time of disposal the proper classification and method of disposal. Dispose in accordance with federal, state, and local regulations.

14 – Transportation Information

DOT Surface Shipping Description: Excepted from Hazmat (49CFR 173.150 (F)) in non-bulk packagings. Bulk Packagings: UN1268, Petroleum Distillates, n.o.s., Combustible Liquid, PG III

IMDG Shipping Description: UN1268, Petroleum Distillates, n.o.s. 3, PG III

ICAO Shipping Description: UN1268, Petroleum Distillates, n.o.s. 3, PG III NOTE: WD-40 does not test containers to assure that they meet the pressure differential and other requirements for transport by air. We do not recommend that our products be transported by air.

15 – Regulatory Information

U.S. Federal Regulations:

CERCLA 103 Reportable Quantity: This product is not subject to CERCLA reporting requirements, however, oil spills are reportable to the National Response Center under the Clean Water Act and many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

SARA TITLE III:

Hazard Category For Section 311/312: Acute Health, Fire Hazard

Section 313 Toxic Chemicals: This product contains the following chemicals subject to SARA Title III

Section 313 Reporting requirements: None

Section 302 Extremely Hazardous Substances (TPQ): None

EPA Toxic Substances Control Act (TSCA) Status: All of the components of this product are listed on the TSCA inventory

California Safe Drinking Water and Toxic Enforcement Act (Proposition 65): This product does not contain chemicals regulated under California Proposition 65.

VOC Regulations: This product complies with the consumer product VOC limits of CARB, the US EPA and states adopting the OTC VOC rules.

Canadian Environmental Protection Act: One of the components is listed on the NDSL. All of the other ingredients are listed on the Canadian Domestic Substances List or exempt from notification.

Canadian WHMIS Classification: Class B-3 (Combustible Liquid)

This MSDS has been prepared according to the criteria of the Controlled Products Regulation (CPR) and the MSDS contains all of the information required by the CPR.

16 – Other Information:

HMIS Hazard Rating:

Health – 1 (slight hazard), Fire Hazard – 2 (moderate hazard), Reactivity – 0 (minimal hazard)

Revision Date: August 2015

Supersedes: July 2014

Prepared by: Industrial Health & Safety Consultants, Inc. Shelton, CT, USA

Reviewed by: I. Kowalski

Regulatory Affairs Department

3069000/No.0015106

IPS WELD-ON		MATERIAL SAFETY DATA SHEET		Date Revised: MAR 2008 Supersedes: JUN 2007																									
Information on this form is furnished solely for the purpose of compliance with the Occupational Safety and Health Act and shall not be used for any other purpose. IPS Corporation urges the customers receiving this Material Safety Data Sheet to study it carefully to become aware of the hazards, if any, of the product involved. In the interest of safety, you should notify your employees, agents and contractors of the information on this sheet.																													
SECTION I																													
MANUFACTURER'S NAME IPS Corporation ADDRESS 17109 S. Main St., P.O. Box 379, Gardena, CA. 90248			Transportation Emergencies: CHEMTREC: (800) 424-9300 Medical Emergencies: 3 E COMPANY (24 Hour No.) (800) 451-8346 Business: (310) 898-3300																										
CHEMICAL NAME and FAMILY Mixture of Organic Solvents Adhesive Primer for Plastic			TRADE NAME: WELD-ON P-68 Low VOC Primer for PVC/CPVC Plastic Pipe FORMULA: Proprietary																										
SECTION II - HAZARDOUS INGREDIENTS																													
None of the ingredients below are listed as carcinogens by IARC, NTP or OSHA																													
	CAS#	APPROX %	ACGIH-TLV	ACGIH-STEL	OSHA-PEL	OSHA-STEL																							
Methyl Ethyl Ketone (MEK)	78-93-3	15 - 25*	200 PPM	300 PPM	200 PPM	300 PPM																							
Tetrahydrofuran (THF)**	109-99-9	15 - 25	50 PPM# Skin	100 PPM	200 PPM	250 PPM																							
Acetone	67-64-1	25 - 40	500 PPM	750 PPM	750 PPM	1000 PPM																							
Cyclohexanone	108-94-1	10 - 30	20 PPM Skin		50 PPM																								
All of the constituents of Weld-On adhesive products are listed on the TSCA inventory of chemical substances maintained by the US EPA, or are exempt from that listing.																													
* Title III Section 313 Supplier Notification: This product contains toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 and of 40CFR372. This information must be included in all MSDS's that are copied and distributed for this material.																													
# Invista and BASF Acceptable Exposure Limit (AEL) guidelines for 8 hour and 12 hour TWA, Invista/BASF recommended STEL for 15 minute TWA: 75 PPM.																													
**Information found in a report from the National Toxicology Program (NTP) on an inhalation study in rats and mice suggests that Tetrahydrofuran (THF) can cause tumors in animals. In the study the rats and mice were exposed to THF vapor levels up to 1800 PPM for two years (their lifetime), 6 hours/day, 5 days/week. Test results showed evidence of liver tumors in female mice and kidney tumors in male rats. No evidence of tumors was seen in female rats and male mice. There is no data linking Tetrahydrofuran exposure with cancer in humans.																													
BULK SHIPPING INFORMATION / CONTAINERS LARGER THAN ONE LITER			SPECIAL HAZARD DESIGNATIONS																										
DOT Shipping Name: Flammable Liquid N.O.S. (Methyl Ethyl Ketone, Acetone) DOT Hazard Class: 3 Identification Number: UN 1993 Packaging Group: II Label Required: Flammable Liquid			<table border="1"> <thead> <tr> <th></th> <th>HMIS</th> <th>NFPA</th> <th>HAZARD RATING</th> </tr> </thead> <tbody> <tr> <td>HEALTH:</td> <td>2</td> <td>2</td> <td>0 - MINIMAL</td> </tr> <tr> <td>FLAMMABILITY:</td> <td>3</td> <td>3</td> <td>1 - SLIGHT</td> </tr> <tr> <td>REACTIVITY:</td> <td>0</td> <td>1</td> <td>2 - MODERATE</td> </tr> <tr> <td>PROTECTIVE</td> <td></td> <td></td> <td>3 - SERIOUS</td> </tr> <tr> <td>EQUIPMENT:</td> <td>B - H</td> <td></td> <td>4 - SEVERE</td> </tr> </tbody> </table>				HMIS	NFPA	HAZARD RATING	HEALTH:	2	2	0 - MINIMAL	FLAMMABILITY:	3	3	1 - SLIGHT	REACTIVITY:	0	1	2 - MODERATE	PROTECTIVE			3 - SERIOUS	EQUIPMENT:	B - H		4 - SEVERE
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PROTECTIVE			3 - SERIOUS																										
EQUIPMENT:	B - H		4 - SEVERE																										
SHIPPING INFORMATION FOR CONTAINERS LESS THAN ONE LITER			B = Eye, Hand/Skin (for normal solvent-welding, small spill, clean-up activities) H = Eye, Hand/Skin, Respiratory Protection and Impermeable Apron (splash/immersion risks)																										
DOT Shipping Name: Consumer Commodity DOT Hazard Class: ORM-D																													
SECTION III - PHYSICAL DATA																													
APPEARANCE Clear or Purple, thin liquid		ODOR Ethereal		BOILING POINT (°F/°C) 133°F (57°C) Based on first boiling component: Acetone																									
SPECIFIC GRAVITY @ 73°F ± 3.6° (23°C ± 2°) Typical 0.845 ± 0.040		VAPOR PRESSURE (mm Hg.) 190 mm Hg. based on first boiling component, Acetone @ 68°F (20°C)		PERCENT VOLATILE BY VOLUME (%) 100%																									
VAPOR DENSITY (Air = 1) 2.0		EVAPORATION RATE (BUAC = 1) 6-11		SOLUBILITY IN WATER Completely soluble in water.																									
VOC STATEMENT: Maximum VOC emissions when applied and tested per SCAQMD Rule 1168, Test method 316A: 550 Grams/Liter (g/l).																													
SECTION IV - FIRE AND EXPLOSION HAZARD DATA																													
FLASH POINT -6°F (-21°C) T.C.C. Based on Acetone		FLAMMABLE LIMITS (PERCENT BY VOLUME)		LEL 2.1	UEL 13.0																								
FIRE EXTINGUISHING MEDIA Ansul "Purple K" potassium bicarbonate dry chemical, any appropriately sized ABC dry chemical, carbon dioxide or foam extinguisher can be used for small fires. Use of a water fog by trained personnel can extinguish small/large fires.																													
SPECIAL FIRE FIGHTING PROCEDURES Evacuate enclosed areas. Stay upwind. Close quarters or confined spaces require self-contained breathing apparatus, positive pressure mask or airline mask. Use of a water fog by trained personnel can extinguish small/large fires and avoid water flow or water streams/spray distributing burning material or contaminated water over a large area or into sewers or storm drains. Use water spray to cool containers, to flush spills from source of ignition and to disperse vapors.																													
UNUSUAL FIRE AND EXPLOSION HAZARDS Fire hazard because of low flash point and high volatility. Vapors are heavier than air and may travel to source(s) of ignition at or near ground or lower level(s) and flash back.																													

SECTION V - HEALTH HAZARD DATA

PRIMARY ROUTES

OF ENTRY: X Inhalation X Skin Contact Eye Contact Ingestion

EFFECT OF OVEREXPOSURE

ACUTE:

Inhalation: Severe overexposure may result in nausea, dizziness, headache. Can cause drowsiness, irritation of eyes and nasal passages.
Skin Contact: Skin irritant. Liquid contact may remove natural skin oils resulting in skin irritation. Dermatitis may occur with prolonged contact.
Skin Absorption: Prolonged or widespread exposure may result in the absorption of harmful amounts of material.
Eye Contact: Overexposure may result in severe eye injury with corneal or conjunctival inflammation on contact with the liquid. Vapors slightly uncomfortable.
Ingestion: Moderately toxic. May cause nausea, vomiting, diarrhea. May cause mental sluggishness.

CHRONIC:

Symptoms of respiratory tract irritation and damage to respiratory epithelium were reported in rats exposed to 5000 ppm THF for 90 days. Elevation of SGPT suggests a disturbance in liver function. The NOEL was reported to be 200 ppm.

REPRODUCTIVE EFFECTS	TERATOGENICITY	MUTAGENICITY	EMBRYOTOXICITY	SENSITIZATION TO PRODUCT	SYNERGISTIC PRODUCTS
N. AP.	N. AP.	N. AP.	N. AP.	N. AP.	N. AV.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Individuals with pre-existing diseases of the eyes, skin or respiratory system may have increased susceptibility to the toxicity of excessive exposures.

EMERGENCY AND FIRST AID PROCEDURES

Inhalation: If overcome by vapors, remove to fresh air and if breathing stopped, give artificial respiration. If breathing is difficult, give oxygen. Call physician.
Eye Contact: Flush eyes with plenty of water for 15 minutes and call a physician.
Skin Contact: Remove contaminated clothing and shoes. Wash skin with plenty of soap and water for at least 15 minutes. If irritation develops, get medical attention.
Ingestion: Give 1 or 2 glasses of water or milk. Do not induce vomiting. Call physician or poison control center immediately.

SECTION VI - REACTIVITY

STABILITY	UNSTABLE		CONDITIONS TO AVOID
	STABLE	X	Keep away from heat, sparks, open flame and other sources of ignition.

INCOMPATIBILITY

(MATERIALS TO AVOID) Caustics, ammonia, inorganic acids, chlorinated compounds, strong oxidizers and isocyanates.

HAZARDOUS DECOMPOSITION PRODUCTS

When forced to burn, this product gives out carbon monoxide, carbon dioxide, hydrogen chloride and smoke.

HAZARDOUS	MAY OCCUR		CONDITIONS TO AVOID
POLYMERIZATION	WILL NOT OCCUR	X	Keep away from heat, sparks, open flame and other sources of ignition.

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Eliminate all ignition sources. Avoid breathing of vapors. Keep liquid out of eyes. Flush with large amount of water. Contain liquid with sand or earth. Absorb with sand or nonflammable absorbent material and transfer into steel drums for recovery or disposal. Prevent liquid from entering drains.

WASTE DISPOSAL METHOD

Follow local, State and Federal regulations. Consult disposal expert. Can be disposed of by incineration. Excessive quantities should not be permitted to enter drains. Empty containers should be air dried before disposing. Hazardous Waste Code (CA): 214.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (Specify type)

Atmospheric levels should be maintained below established exposure limits contained in Section II. If airborne concentrations exceed those limits, use of a NIOSH approved organic vapor cartridge respirator with full face-piece is recommended. The effectiveness of an air purifying respirator is limited. Use it only for a single short-term exposure. For emergency and other conditions where short-term exposure guidelines may be exceeded, use an approved positive pressure self-contained breathing apparatus.

VENTILATION

Use only with adequate ventilation. Provide sufficient ventilation in volume and pattern to keep contaminants below applicable exposure limits set forth in Section II. Use only explosion proof ventilation equipment.

PROTECTIVE GLOVES PVA coated rubber gloves for frequent dipping/immersion. Use of latex/nitrile surgical gloves or solvent resistant barrier creme should provide adequate protection when normal solvent-cement welding practices and procedures are used for solvent welding of plastic sheet/pipe joints.

EYE PROTECTION Splashproof chemical goggles, face shield, safety glasses (spectacles) with brow guards and side shields, etc. as appropriate for exposure.

OTHER PROTECTIVE EQUIPMENT AND HYGIENIC PRACTICES

Impervious apron and a source of running water to flush or wash the eyes and skin in case of contact.

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

Store in the shade between 40°F - 110°F (5°C - 43.7°C). Keep away from heat, sparks, open flame and other sources of ignition. Avoid prolonged breathing of vapor. Use with adequate ventilation. Avoid contact with eyes, skin and clothing. Train employees on all special handling procedures before they work with this product.

OTHER PRECAUTIONS

Follow all precautionary information given on container label, product bulletins and our solvent cementing literature. All material handling equipment should be electrically grounded.

The information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof.

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MATERIAL SAFETY DATA SHEET / FICHE SIGNALÉTIQUE**SECTION I — MATERIAL IDENTIFICATION AND USE / IDENTIFICATION DE LA MATIÈRE ET USAGE****MATERIAL NAME / IDENTIFIER — NOM / IDENTIFICATION DE LA MATIÈRE**

(5850-xx)

WELDBOND UNIVERSAL ADHESIVE

23819-0080
-1003
-1004
-1005
-1105

Rec'd 05-03-03

MANUFACTURER'S NAME/NOM DU FABRICANT Frank T. Ross & Sons Limited		SUPPLIER'S NAME/NOM DU FOURNISSEUR Same	
STREET ADDRESS/ADRESSE 6550 Lawrence Avenue East		STREET ADDRESS/ADRESSE	
CITY/VILLE Scarborough, Ontario		CITY/VILLE	
PROVINCE		PROVINCE	
POSTAL CODE/COE POSTAL M1C 4A7		POSTAL CODE/COE POSTAL	
EMERGENCY PHONE NO./N° DE TELEPHONE D'URGENCE (416) 282-1107		EMERGENCY PHONE NO./N° DE TELEPHONE D'URGENCE	
CHEMICAL NAME/DENOMINATION CHIMIQUE COMPOUNDED POLYVINYL ACETATE EMULSION		CHEMICAL FAMILY/FAMILLE CHIMIQUE ORGANIC POLYMER	
TRADE NAME AND SYNONYMS/APPELATION COMMERCIALE ET SYNONYMES Weldbond		CHEMICAL FORMULA/FORMULE CHIMIQUE N/AP	
		MOLECULAR WEIGHT/POIDS MOLECULAIRE N/AV	
		MATERIAL USE/UTILISATION DE LA MATIÈRE ADHESIVE	

SECTION II — HAZARDOUS INGREDIENTS OF MATERIAL / INGRÉDIENTS DANGEREUX DE LA MATIÈRE

HAZARDOUS INGREDIENTS/INGRÉDIENTS DANGEREUX	APPROXIMATE CONCENTRATION % CONCENTRATION APPROXIMATIVE (%)	C.A.S. N.A. OR U.N. NUMBERS NUMÉRO CAS NA OU ONU	L.D. (SPECIFY SPECIES & ROUTE) C.L. (PRÉCISER L'ESPECE ET LA VOIE D'ADMINISTRATION)	L.C. (SPECIFY SPECIES AND ROUTE) C.L. (PRÉCISER L'ESPECE ET LA VOIE D'ADMINISTRATION)
---	--	---	--	--

NONE - NOT A W.H.M.I.S. CONTROLLED PRODUCT
CLASSIFIED AS A NON HAZARDOUS PRODUCT

LD50 AND LC50 DATA ARE EXPRESSED IN MG/KG AND PPM RESPECTIVELY FOR RATS VIA THE ORAL ROUTE AND INHALATION FOR 4 HOURS, UNLESS OTHERWISE SPECIFIED.

LES DONNÉES DL50 ET CL50 SONT EXPRIMÉES EN MG/KG ET PPM RESPECTIVEMENT VIA VOIE ORALE ET INHALATION POUR 4 HEURES POUR RATS SAUF SI SPÉCIFIÉES AILLEURS.

SECTION III — PHYSICAL DATA FOR MATERIAL / CARACTÉRISTIQUES PHYSIQUES DE LA MATIÈRE

PHYSICAL STATE/ÉTAT PHYSIQUE <input type="checkbox"/> GAS/GAZ <input checked="" type="checkbox"/> LIQUID/LIQUIDE <input type="checkbox"/> SOLID/SOLIDE		ODOUR AND APPEARANCE/ODEUR ET APPARENCE MILKY WHITE LIQUID WITH MILD ODOUR	
ODOUR THRESHOLD (P.P.M.) SEUIL DE L'ODEUR (P.P.M.) N/AP	SPECIFIC GRAVITY/ DENSITÉ RELATIVE 1.095	VAPOR PRESSURE (MM) TENSION DE VAPEUR (MM) N/AV	VAPOR DENSITY (AIR = 1) DENSITÉ DE VAPEUR (AIR = 1) LESS THAN 1, WATER
EVAPORATION RATE/ TAUX D'ÉVAPORATION SLOW	BOILING POINT (°C)/ POINT D'ÉBULLITION (°C) ABOUT 100	FREEZING POINT (°C)/ POINT DE CONGÉLATION (°C) N/AV	SOLUBILITY IN WATER (RT/C) SOLUBILITÉ DANS L'EAU (RT/C) DILUTABLE
% VOLATILE (BY VOLUME) % VOLATILITÉ (PAR VOLUME) Item Numbers: 23819-0080, 23819-0003, 23819-0004, 23819-1005, 23819-1105	5.0		COEFFICIENT OF WATER/OIL DISTRIBUTION/ COEFFICIENT DE RÉPARTITION SAU/OLE N/AV

V-4050

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SECTION IV — FIRE AND EXPLOSION HAZARD OF MATERIAL / RISQUES D'INCENDIE ET D'EXPLOSION DU MATÉRIELFLAMMABILITY/INFLAMMABILITE ☐ YES/OUI ☒ NO/NON

IF YES, UNDER WHICH CONDITIONS?/SI OUI, DANS QUELLES CONDITIONS?

MEANS OF EXTINCTION/MOYENS D'EXTINCTION

N/AP

SPECIAL PROCEDURES/MARCHE À SUIVRE SPÉCIALE

KEEP CONTAINERS COOL WITH WATER SPRAY. WEAR SELF-CONTAINED BREATHING APPARATUS AND
FULL PROTECTIVE GEAR.

MATERIAL CAN SPLATTER ABOVE 100 DEG. C. POLYMER FILM CAN BURN.

FLASHPOINT (°C) AND METHOD/POINT D'ÉCLAIR (°C) ET MÉTHODE DE DÉTERMINATION
N/APUPPER EXPLOSION LIMIT (% BY VOLUME)/
SEUIL MAXIMAL D'INFLAMMABILITÉ (% PAR VOLUME)
N/APLOWER EXPLOSION LIMIT (% BY VOLUME)/
SEUIL MINIMAL D'INFLAMMABILITÉ (% PAR VOLUME)
N/APAUTOIGNITION TEMPERATURE (°C)/TEMPÉRATURE D'AUTO-INFLAMMATION (°C)
N/APHAZARDOUS COMBUSTION PRODUCTS/
PRODUITS DE COMBUSTION DANGEREUX
CO, CO₂**EXPLOSION DATA/DONNÉES SUR L'EXPLOSIBILITÉ**SENSITIVITY TO MECHANICAL IMPACT/SENSIBILITÉ AUX CHOCs
NOSENSITIVITY TO STATIC DISCHARGE/SENSIBILITÉ AUX DÉCHARGES ÉLECTROSTATIQUES
NO**SECTION V — REACTIVITY DATA / DONNÉES SUR LA RÉACTIVITÉ**CHEMICAL STABILITY/STABILITÉ CHIMIQUE ☒ YES/OUI ☐ NO/NON

IF NO, UNDER WHICH CONDITIONS?/SI NON, DANS QUELLES CONDITIONS?

INCOMPATIBILITY TO OTHER SUBSTANCES/
INCOMPATIBILITÉ AVEC D'AUTRES SUBSTANCES ☐ YES/OUI ☒ NO/NON

IF SO, WHICH ONES?/SI OUI, AVEC LESQUELLES?

REACTIVITY AND UNDER WHAT CONDITIONS/RÉACTIVITÉ — DANS QUELLES CONDITIONS?

N/AP

HAZARDOUS DECOMPOSITION PRODUCTS/PRODUITS DE DÉCOMPOSITION DANGEREUX

N/AP

SECTION VI — TOXICOLOGICAL PROPERTIES OF MATERIAL / PROPRIÉTÉS TOXICOLOGIQUES DE LA MATIÈRE

ROUTE OF ENTRY/VOIE D'ADMINISTRATION

☐ SKIN CONTACT/CONTACT AVEC LA PEAU☐ SKIN ABSORPTION/ABSORPTION PAR LA PEAU☐ EYE CONTACT/CONTACT OCULAIRE☐ INHALATION ACUTE/INHALATION AIGUË☐ INHALATION CHRONIC/INHALATION CHRONIQUE☐ INGESTION

EFFECTS OF ACUTE EXPOSURE TO MATERIAL/EFFETS DE L'EXPOSITION AIGUË À LA MATIÈRE

EFFECTS OF CHRONIC EXPOSURE TO MATERIAL/EFFETS DE L'EXPOSITION CHRONIQUE À LA MATIÈRE

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MATERIAL NAME/IDENTIFIER

NOM/IDENTIFICATION DE LA MATIÈRE

WELDBOND UNIVERSAL ADHESIVE

LC₅₀ OF MATERIAL (SPECIFY SPECIES & ROUTE)
LC₅₀ DE LA MATIÈRE (PRÉCISER L'ESPECE ET LA VOIE D'ADMINISTRATION)LC₅₀ OF MATERIAL (SPECIFY SPECIES & ROUTE)
LC₅₀ DE LA MATIÈRE (PRÉCISER L'ESPECE ET LA VOIE D'ADMINISTRATION)

N/AV

N/AV

EXPOSURE LIMITS/LIMITES D'EXPOSITION

IRRITANCY OF MATERIAL/PROPRIÉTÉ IRRITANTE DE LA MATIÈRE

N/AV

N/AV

SENSITIZATION OF MATERIAL/SENSIBILISATION À LA MATIÈRE

SYNERGISTIC MATERIALS/MATIÈRES SYNERGIQUES

N/AV

N/AP

CARCINOGENICITY, REPRODUCTIVE EFFECTS, TERATOGENICITY, MUTAGENICITY/CANCÉROGÉNÉCITÉ, EFFETS NOCIFS SUR LA REPRODUCTION, TERATOGENÉCITÉ, MUTAGÉNÉCITÉ

BASED ON AVAILABLE DATA, NONE EXPECTED

SECTION VII — PREVENTIVE MEASURES / MESURES PRÉVENTIVES

PERSONAL PROTECTIVE EQUIPMENT/MATÉRIEL PERSONNEL DE PROTECTION

GLOVES (SPECIFY)/GANTS (PRÉCISER)

WEAR VINYL OR BUTYL GLOVES

EYE (SPECIFY)/YEUX (PRÉCISER)

WEAR GOGGLES

RESPIRATORY (SPECIFY)/APPAREIL RESPIRATOIRE (PRÉCISER)

N/AP

OTHER (SPECIFY)/AUTRES (PRÉCISER)

N/AP

ENGINEERING CONTROLS (E.G. VENTILATION, ENCLOSED PROCESS, SPECIFY)/MÉCANISMES TECHNIQUES (EX. VENTILATION, OPÉRATION EN MILIEU FERMÉ, PRÉCISER)

PROVIDE ADEQUATE VENTILATION.

LEAK AND SPILL PROCEDURE/MESURES EN CAS DE FUITE OU DE DÉVERSEMENT

KEEP SPECTATORS AWAY. VENTILATE SPILL AREA. DIKE & SOAK UP SPILL WITH

ABSORBENT, INERT MATERIAL. FLOORS MAY BE SLIPPERY.

WASTE DISPOSAL/ÉLIMINATION DES DÉCHETS

SCOOP UP INTO CONTAINERS.

USE GOVERNMENT APPROVED WASTE DISPOSAL COMPANY FOR REMOVAL.

HANDLING PROCEDURES AND EQUIPMENTS/MÉTHODES ET ÉQUIPEMENT POUR LA MANUTENTION

AVOID CONTACT WITH SKIN & EYES. AVOID SPILLAGE.

STORAGE REQUIREMENTS/EXIGENCES D'ENTREPOSAGE

MAX. 49 DEG. C./120 DEG. F.

MIN. 5 DEG. C./41 DEG. F.

STORE IN COOL PLACE. KEEP FROM FREEZING.

SPECIAL SHIPPING INFORMATION/RENSEIGNEMENTS SPÉCIAUX POUR L'EXPÉDITION

KEEP FROM FREEZING.

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EYES: FLUSH WITH RUNNING WATER FOR AT LEAST 15 MINUTES. GET MEDICAL ATTENTION.

SKIN: REMOVE CONTAMINATED CLOTHING. "WASH SKIN WITH SOAP & WATER".

INGESTION: DO NOT INDUCE VOMITING. GET MEDICAL ATTENTION.

ADDITIONAL INFORMATION/RENSEIGNEMENTS SUPPLEMENTAIRES

W.H.M.I.S. NOT CONTROLLED.

SECTION IX — PREPARATION DATE OF M.S.D.S. / FICHE SIGNALÉTIQUE

PREPARED BY (GROUP, DEPARTMENT, ETC.) / PRÉPARÉ PAR (GROUPE, DÉPARTEMENT, ETC.)

TELEPHONE NUMBER/NO DE TÉLÉPHONE
(416) 282-1107

DATE

SEP 25 2002

ADDITIONAL NOTES OR REFERENCES/NOTES ADDITIONNELLES OU RÉFÉRENCES:

MOST PHYSICAL DATA HAVE BEEN OBTAINED FROM THE FOLLOWING REFERENCE SOURCES:

1. CANADIAN CENTRE FOR OCCUPATIONAL HEALTH & SAFETY (C.C.O.H.S.)
2. SAX, IRVING, DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS.
3. RAW MATERIAL SUPPLIERS M.S.D.S.

N/AV = NOT AVAILABLE

N/AP = NOT APPLICABLE

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Frank T. Ross & Sons Limited
6550 Lawrence Avenue East
Toronto, Ontario, Canada
M1C 4A7
Tel. (416) 282-1107
Fax (416) 282-8150
email: info@franktross.com
www.franktross.com

No. Pages 1 + 4

Dear Sir or Madam,

We wish to advise that our product **WELDBOND UNIVERSAL ADHESIVE** is a non-controlled product. It is not hazardous, is non-toxic and non-flammable. It is not controlled under WHMIS in Canada and not controlled under OSHA in the United States. **Weldbond** falls under the classification as non-toxic as defined in the Federal Hazardous Substances Act U.S.A. It also falls under the classification listed under the Food & Drug Act #1212520. **Weldbond** also meets FDA approval for indirect food contact under Section 212CFR175.105.

We trust this is the information you require. If you need further information, please contact us again. We thank you for your interest in **Weldbond**.

Sincerely,

B. E. Ross
C.E.O.

BER/md



GHS SAFETY DATA SHEET

WELD-ON® 737™ TURF 'N AG™ Low VOC PVC Cement

Date Revised: APR 2015
Supersedes: NOV 2014

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: WELD-ON® 737™ TURF 'N AG™ Low VOC PVC Cement
PRODUCT USE: Low VOC Solvent Cement for PVC Plastic Pipe
SUPPLIER:
MANUFACTURER: IPS Corporation
17109 South Main Street, Gardena, CA 90248-3127
P.O. Box 379, Gardena, CA 90247-0379
Tel. 1-310-898-3300
EMERGENCY: Transportation: CHEMTEL Tel. 800.255-3924, +1 813-248-0585 (International) **Medical:** CHEMTEL Tel. 800.255-3924, +1 813-248-0585 (International)

SECTION 2 - HAZARDS IDENTIFICATION

GHS CLASSIFICATION:

Health	Environmental	Physical
Acute Toxicity: Category 4 Skin Irritation: Category 3 Skin Sensitization: NO Eye: Category 2	Acute Toxicity: None Known Chronic Toxicity: None Known	Flammable Liquid Category 2

GHS LABEL:



Signal Word:
Danger

WHMIS CLASSIFICATION:
CLASS B, DIVISION 2
CLASS D, DIVISION 1B

Hazard Statements	Precautionary Statements
H225: Highly flammable liquid and vapor H319: Causes serious eye irritation H335: May cause respiratory irritation H336: May cause drowsiness or dizziness H351: Suspected of causing cancer EUH019: May form explosive peroxides	P210: Keep away from heat/sparks/open flames/hot surfaces – No smoking P261: Avoid breathing dust/fume/gas/mist/vapors/spray P280: Wear protective gloves/protective clothing/eye protection/face protection P337+P313: Get medical advice/attention P403+P233: Store in a well ventilated place. Keep container tightly closed P501: Dispose of contents/container in accordance with local regulation

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

	CAS#	EINECS #	REACH Pre-registration Number	CONCENTRATION % by Weight
Tetrahydrofuran (THF)	109-99-9	203-726-8	05-2116297729-22-0000	48 - 60
Methyl Ethyl Ketone (MEK)	78-93-3	201-159-0	05-2116297728-24-0000	5 - 15
Acetone	67-64-1	200-662-2	05-2116297713-35-0000	10 - 20

All of the constituents of this adhesive product are listed on the TSCA inventory of chemical substances maintained by the US EPA, or are exempt from that listing.

* Indicates this chemical is subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (40CFR372).

indicates that this chemical is found on Proposition 65's List of chemicals known to the State of California to cause cancer or reproductive toxicity.

SECTION 4 - FIRST AID MEASURES

Contact with eyes: Flush eyes immediately with plenty of water for 15 minutes and seek medical advice immediately.
Skin contact: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water. If irritation develops, seek medical advice.
Inhalation: Remove to fresh air. If breathing is stopped, give artificial respiration. If breathing is difficult, give oxygen. Seek medical advice.
Ingestion: Rinse mouth with water. Give 1 or 2 glasses of water or milk to dilute. Do not induce vomiting. Seek medical advice immediately.
Likely Routes of Exposure: Inhalation, Eye and Skin Contact
Acute symptoms and effects:
Inhalation: Severe overexposure may result in nausea, dizziness, headache. Can cause drowsiness, irritation of eyes and nasal passages.
Eye Contact: Vapors slightly uncomfortable. Overexposure may result in severe eye injury with corneal or conjunctival inflammation on contact with the liquid.
Skin Contact: Liquid contact may remove natural skin oils resulting in skin irritation. Dermatitis may occur with prolonged contact.
Ingestion: May cause nausea, vomiting, diarrhea and mental sluggishness.
Chronic (long-term) effects: Category 2 Carcinogen

SECTION 5 - FIREFIGHTING MEASURES

Suitable Extinguishing Media: Dry chemical powder, carbon dioxide gas, foam, Halon, water fog.
Unsuitable Extinguishing Media: Water spray or stream.
Exposure Hazards: Inhalation and dermal contact
Combustion Products: Oxides of carbon, hydrogen chloride and smoke
Protection for Firefighters: Self-contained breathing apparatus or full-face positive pressure airline masks.

Health	2	2	1-Slight
Flammability	3	3	2-Moderate
Reactivity	0	0	3-Serious
PPE	B		4-Severe

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personal precautions: Keep away from heat, sparks and open flame.
Provide sufficient ventilation, use explosion-proof exhaust ventilation equipment or wear suitable respiratory protective equipment.
Prevent contact with skin or eyes (see section 8).
Environmental Precautions: Prevent product or liquids contaminated with product from entering sewers, drains, soil or open water course.
Methods for Cleaning up: Clean up with sand or other inert absorbent material. Transfer to a closable steel vessel.
Materials not to be used for clean up: Aluminum or plastic containers

SECTION 7 - HANDLING AND STORAGE

Handling: Avoid breathing of vapor, avoid contact with eyes, skin and clothing.
Keep away from ignition sources, use only electrically grounded handling equipment and ensure adequate ventilation/fume exhaust hoods.
Do not eat, drink or smoke while handling.
Storage: Store in ventilated room or shade below 44°C (110°F) and away from direct sunlight.
Keep away from ignition sources and incompatible materials: caustics, ammonia, inorganic acids, chlorinated compounds, strong oxidizers and isocyanates.
Follow all precautionary information on container label, product bulletins and solvent cementing literature.

SECTION 8 - PRECAUTIONS TO CONTROL EXPOSURE / PERSONAL PROTECTION

EXPOSURE LIMITS:	Component	ACGIH TLV	ACGIH STEL	OSHA PEL	OSHA STEL	OSHA PEL-Ceiling	CAL/OSHA PEL	CAL/OSHA Ceiling	CAL/OSHA STEL
	Tetrahydrofuran (THF)	50 ppm	100 ppm	200 ppm	N/E	N/E	200 ppm	N/E	250 ppm
	Methyl Ethyl Ketone (MEK)	200 ppm	300 ppm	200 ppm	N/E	N/E	200 ppm	N/E	300 ppm
	Acetone	500 ppm	750 ppm	1000 ppm	N/E	N/E	500 ppm	3000 ppm	750 ppm

Engineering Controls: Use local exhaust as needed.
Monitoring: Maintain breathing zone airborne concentrations below exposure limits.
Personal Protective Equipment (PPE):
Eye Protection: Avoid contact with eyes, wear splash-proof chemical goggles, face shield, safety glasses (spectacles) with brow guards and side shields, etc. as may be appropriate for the exposure.
Skin Protection: Prevent contact with the skin as much as possible. Butyl rubber gloves should be used for frequent immersion.
Use of solvent-resistant gloves or solvent-resistant barrier cream should provide adequate protection when normal adhesive application practices and procedures are used for making structural bonds.
Respiratory Protection: Prevent inhalation of the solvents. Use in a well-ventilated room. Open doors and/or windows to ensure airflow and air changes. Use local exhaust ventilation to remove airborne contaminants from employee breathing zone and to keep contaminants below levels listed above.
With normal use, the Exposure Limit Value will not usually be reached. When limits approached, use respiratory protection equipment.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Blue (fades to clear), medium syrupy liquid	Odor Threshold:	1 ppm (Acetone)
Odor:	Ketone	Boiling Range:	56°C (133°F) to 80°C (176°F)
pH:	Not Applicable	Evaporation Rate:	> 1.0 (BUAC = 1)
Melting/Freezing Point:	-108.5°C (-163.3°F) Based on first melting component: THF	Flammability:	Category 2
Boiling Point:	56°C (133°F) Based on first boiling component: Acetone	Flammability Limits:	LEL: 1.4% based on MEK
Flash Point:	-20°C (-4°F) TCC based on Acetone		UEL: 12.8% based on Acetone
Specific Gravity:	0.924 @23°C (73°F)	Vapor Pressure:	190 mm Hg @ 20°C (68°F) Acetone
Solubility:	Solvent portion soluble in water. Resin portion separates out.	Vapor Density:	>2.0 (Air = 1)
Partition Coefficient n-octanol/water:	Not Available	Other Data: Viscosity:	Medium bodied
Auto-ignition Temperature:	321°C (610°F) based on THF		
Decomposition Temperature:	Not Applicable		
VOC Content:	When applied as directed, per SCAQMD Rule 1168, Test Method 316A, VOC content is: ≤ 510g/l.		

SECTION 10 - STABILITY AND REACTIVITY

Stability:	Stable
Hazardous decomposition products:	None in normal use. When forced to burn, this product gives off oxides of carbon, hydrogen chloride and smoke.
Conditions to avoid:	Keep away from heat, sparks, open flame and other ignition sources.
Incompatible Materials:	Oxidizers, strong acids and bases, amines, ammonia

SECTION 11 - TOXICOLOGICAL INFORMATION

Toxicity:	LD ₅₀	LC ₅₀	Target Organs
Tetrahydrofuran (THF)	Oral: 2842 mg/kg (rat)	Inhalation 3 hrs. 21,000 mg/m ³ (rat)	STOT SE3
Methyl Ethyl Ketone (MEK)	Oral: 2737 mg/kg (rat), Dermal: 6480 mg/kg (rabbit)	Inhalation 8 hrs. 23,500 mg/m ³ (rat)	STOT SE3
Acetone	Oral: 5800 mg/kg (rat)	Inhalation 50,100 mg/m ³ (rat)	STOT SE3

Reproductive Effects	Teratogenicity	Mutagenicity	Embryotoxicity	Sensitization to Product	Synergistic Products
Not Established	Not Established	Not Established	Not Established	Not Established	Not Established

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity:	None Known
Mobility:	In normal use, emission of volatile organic compounds (VOC's) to the air takes place, typically at a rate of ≤ 510g/l.
Degradability:	Not readily biodegradable
Bioaccumulation:	Minimal to none.

SECTION 13 - WASTE DISPOSAL CONSIDERATIONS

Follow local and national regulations. Consult disposal expert.

SECTION 14 - TRANSPORT INFORMATION

Proper Shipping Name:	Adhesives
Hazard Class:	3
Secondary Risk:	None
Identification Number:	UN 1133
Packing Group:	PG II
Label Required:	Class 3 Flammable Liquid
Marine Pollutant:	NO

EXCEPTION for Ground Shipping

DOT Limited Quantity: Up to 5L per inner packaging, 30 kg gross weight per package.

Consumer Commodity: Depending on packaging, these quantities may qualify under DOT as "ORM-D" .

TDG INFORMATION

TDG CLASS:	FLAMMABLE LIQUID 3
SHIPPING NAME:	ADHESIVES
UN NUMBER/PACKING GROUP:	UN 1133, PG II

SECTION 15 - REGULATORY INFORMATION

Precautionary Label Information:	Highly Flammable, Irritant, Carc. Cat. 2	Ingredient Listings:	USA TSCA, Europe EINECS, Canada DSL, Australia
Symbols:	F, Xi		AICS, Korea ECL/TCCL, Japan MITI (ENCS)
Risk Phrases:	R11: Highly flammable. R36/37: Irritating to eyes and respiratory system.	R66:	Repeated exposure may cause skin dryness or cracking
		R67:	Vapors may cause drowsiness and dizziness
Safety Phrases:	S2: Keep out of the reach of children S9: Keep container in a well-ventilated place. S16: Keep away from sources of ignition - No smoking.	S25:	Avoid contact with eyes.
		S26:	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
		S33:	Take precautionary measures against static discharges.

SECTION 16 - OTHER INFORMATION

Specification Information:		
Department issuing data sheet:	IPS, Safety Health & Environmental Affairs	All ingredients are compliant with the requirements of the European
E-mail address:	<EHSinfo@ipscorp.com>	Directive on RoHS (Restriction of Hazardous Substances).
Training necessary:	Yes, training in practices and procedures contained in product literature.	
Reissue date / reason for reissue:	4/21/2015 / Updated GHS Standard Format	
Intended Use of Product:	Solvent Cement for PVC Plastic Pipe	

This product is intended for use by skilled individuals at their own risk. The information contained herein is based on data considered accurate based on current state of knowledge and experience. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof.



GHS SAFETY DATA SHEET

Date Revised: **APR 2012**

Weld-On® 781™ Plumbing Clear Low VOC Cement for PVC Plastic Pipe

Supersedes:

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Weld-On® 781™ Plumbing Clear Low VOC Cement for PVC Plastic Pipe**PRODUCT USE:** Low VOC Solvent Cement for PVC Plastic Pipe**SUPPLIER:****MANUFACTURER:** IPS Corporation

17109 South Main Street, Gardena, CA 90248-3127

P.O. Box 379, Gardena, CA 90247-0379

Tel. 1-310-898-3300

EMERGENCY: Transportation: CHEMTEL Tel. 800.255-3924, 813-248-0585 (International)**Medical:** Tel. 800.451.8346, 760.602.8703 3E Company (International)

SECTION 2 - HAZARDS IDENTIFICATION

GHS CLASSIFICATION:

Health		Environmental		Physical	
Acute Toxicity:	Category 4	Acute Toxicity:	None Known	Flammable Liquid	Category 2
Skin Irritation:	Category 3	Chronic Toxicity:	None Known		
Skin Sensitization:	NO				
Eye:	Category 2B				

GHS LABEL:

OR

**Signal Word:**
Danger**WHMIS CLASSIFICATION:** CLASS B, DIVISION 2

Hazard Statements

H225: Highly flammable liquid and vapor

H319: Causes serious eye irritation

H332: Harmful if inhaled

H335: May cause respiratory irritation

H336: May cause drowsiness or dizziness

EUH019: May form explosive peroxides

Precautionary Statements

P210: Keep away from heat/sparks/open flames/hot surfaces – No smoking

P261: Avoid breathing dust/fume/gas/mist/vapors/spray

P280: Wear protective gloves/protective clothing/eye protection/face protection

P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

P403+P233: Store in a well ventilated place. Keep container tightly closed

P501: Dispose of contents/container in accordance with local regulation

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

	CAS#	EINECS #	REACH	CONCENTRATION
			Pre-registration Number	% by Weight
Tetrahydrofuran (THF)	109-99-9	203-726-8	05-2116297729-22-0000	10 - 30
Methyl Ethyl Ketone (MEK)	78-93-3	201-159-0	05-2116297728-24-0000	20 - 40
Cyclohexanone	108-94-1	203-631-1	05-2116297718-25-0000	15 - 35
Acetone	67-64-1	200-662-2	05-2116297713-35-0000	5 - 15

All of the constituents of this adhesive product are listed on the TSCA inventory of chemical substances maintained by the US EPA, or are exempt from that listing.

* Indicates this chemical is subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (40CFR372).

indicates that this chemical is found on Proposition 65's List of chemicals known to the State of California to cause cancer or reproductive toxicity.

SECTION 4 - FIRST AID MEASURES

- Contact with eyes:** Flush eyes immediately with plenty of water for 15 minutes and seek medical advice immediately.
- Skin contact:** Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water. If irritation develops, seek medical advice.
- Inhalation:** Remove to fresh air. If breathing is stopped, give artificial respiration. If breathing is difficult, give oxygen. Seek medical advice.
- Ingestion:** Rinse mouth with water. Give 1 or 2 glasses of water or milk to dilute. Do not induce vomiting. Seek medical advice immediately.

SECTION 5 - FIREFIGHTING MEASURES

- Suitable Extinguishing Media:** Dry chemical powder, carbon dioxide gas, foam, Halon, water fog.
- Unsuitable Extinguishing Media:** Water spray or stream.
- Exposure Hazards:** Inhalation and dermal contact
- Combustion Products:** Oxides of carbon, hydrogen chloride and smoke
- | | HMIS | NFPA | |
|--------------|------|------|------------|
| Health | 2 | 2 | 1-Slight |
| Flammability | 3 | 3 | 2-Moderate |
| Reactivity | 0 | 0 | 3-Serious |
| PPE | B | | 4-Severe |
- Protection for Firefighters:** Self-contained breathing apparatus or full-face positive pressure airline masks.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

- Personal precautions:** Keep away from heat, sparks and open flame.
Provide sufficient ventilation, use explosion-proof exhaust ventilation equipment or wear suitable respiratory protective equipment.
Prevent contact with skin or eyes (see section 8).
- Environmental Precautions:** Prevent product or liquids contaminated with product from entering sewers, drains, soil or open water course.
- Methods for Cleaning up:** Clean up with sand or other inert absorbent material. Transfer to a closable steel vessel.
- Materials not to be used for clean up:** Aluminum or plastic containers

SECTION 7 - HANDLING AND STORAGE

- Handling:** Avoid breathing of vapor, avoid contact with eyes, skin and clothing.
Keep away from ignition sources, use only electrically grounded handling equipment and ensure adequate ventilation/fume exhaust hoods.
Do not eat, drink or smoke while handling.
- Storage:** Store in ventilated room or shade below 44°C (110°F) and away from direct sunlight.
Keep away from ignition sources and incompatible materials: caustics, ammonia, inorganic acids, chlorinated compounds, strong oxidizers and isocyanates.
Follow all precautionary information on container label, product bulletins and solvent cementing literature.

SECTION 8 - PRECAUTIONS TO CONTROL EXPOSURE / PERSONAL PROTECTION

EXPOSURE LIMITS:	Component	ACGIH TLV	ACGIH STEL	OSHA PEL	OSHA STEL:
	Tetrahydrofuran (THF)	50 ppm	100 ppm	200 ppm	
	Methyl Ethyl Ketone (MEK)	200 ppm	300 ppm	200 ppm	
	Cyclohexanone	20 ppm	50 ppm	50 ppm	
	Acetone	500 ppm	750 ppm	1000 ppm	

- Engineering Controls:** Use local exhaust as needed.
- Monitoring:** Maintain breathing zone airborne concentrations below exposure limits.
- Personal Protective Equipment (PPE):**
- Eye Protection:** Avoid contact with eyes, wear splash-proof chemical goggles, face shield, safety glasses (spectacles) with brow guards and side shields, etc. as may be appropriate for the exposure.
- Skin Protection:** Prevent contact with the skin as much as possible. Butyl rubber gloves should be used for frequent immersion.
Use of solvent-resistant gloves or solvent-resistant barrier cream should provide adequate protection when normal adhesive application practices and procedures are used for making structural bonds.
- Respiratory Protection:** Prevent inhalation of the solvents. Use in a well-ventilated room. Open doors and/or windows to ensure airflow and air changes. Use local exhaust ventilation to remove airborne contaminants from employee breathing zone and to keep contaminants below levels listed above.
With normal use, the Exposure Limit Value will not usually be reached. When limits approached, use respiratory protection equipment.



GHS SAFETY DATA SHEET

Weld-On® 781™ Plumbing Clear Low VOC Cement for PVC Plastic Pipe

Date Revised: APR 2012

Supersedes:

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear medium syrupy liquid	Odor Threshold:	0.88 ppm (Cyclohexanone)
Odor:	Ketone	Boiling Range:	56°C (133°F) to 156°C (313°F)
pH:	Not Applicable	Evaporation Rate:	> 1.0 (BUAC = 1)
Melting/Freezing Point:	-108.5°C (-163.3°F) Based on first melting component: THF	Flammability:	Category 2
Boiling Point:	56°C (133°F) Based on first boiling component: Acetone	Flammability Limits:	LEL: 1.1% based on Cyclohexanone UEL: 12.8% based on Acetone
Flash Point:	-20°C (-4°F) TCC based on Acetone	Vapor Pressure:	190 mm Hg @ 20°C (68°F) Acetone
Specific Gravity:	0.920 @23°C (73°F)	Vapor Density:	>2.0 (Air = 1)
Solubility:	Solvent portion soluble in water. Resin portion separates out.	Other Data: Viscosity:	Medium bodied
Partition Coefficient n-octanol/water:	Not Available		
Auto-ignition Temperature:	321°C (610°F) based on THF		
Decomposition Temperature:	Not Applicable		
VOC Content:	When applied as directed, per SCAQMD Rule 1168, Test Method 316A, VOC content is: ≤ 510 g/l.		

SECTION 10 - STABILITY AND REACTIVITY

Stability:	Stable
Hazardous decomposition products:	None in normal use. When forced to burn, this product gives off oxides of carbon, hydrogen chloride and smoke.
Conditions to avoid:	Keep away from heat, sparks, open flame and other ignition sources.
Incompatible Materials:	Oxidizers, strong acids and bases, amines, ammonia

SECTION 11 - TOXICOLOGICAL INFORMATION

Likely Routes of Exposure: Inhalation, Eye and Skin Contact

Acute symptoms and effects:

Inhalation:	Severe overexposure may result in nausea, dizziness, headache. Can cause drowsiness, irritation of eyes and nasal passages.
Eye Contact:	Vapors slightly uncomfortable. Overexposure may result in severe eye injury with corneal or conjunctival inflammation on contact with the liquid.
Skin Contact:	Liquid contact may remove natural skin oils resulting in skin irritation. Dermatitis may occur with prolonged contact.
Ingestion:	May cause nausea, vomiting, diarrhea and mental sluggishness.

Chronic (long-term) effects:

None known to humans

Toxicity:

	LD ₅₀	LC ₅₀
Tetrahydrofuran (THF)	Oral: 2842 mg/kg (rat)	Inhalation 3 hrs. 21,000 mg/m ³ (rat)
Methyl Ethyl Ketone (MEK)	Oral: 2737 mg/kg (rat), Dermal: 6480 mg/kg (rabbit)	Inhalation 8 hrs. 23,500 mg/m ³ (rat)
Cyclohexanone	Oral: 1535 mg/kg (rat), Dermal: 948 mg/kg (rabbit)	Inhalation 4 hrs. 8,000 PPM (rat)
Acetone	Oral: 5800 mg/kg (rat)	Inhalation 50,100 mg/m ³ (rat)

Reproductive Effects	Teratogenicity	Mutagenicity	Embryotoxicity	Sensitization to Product	Synergistic Products
Not Established	Not Established	Not Established	Not Established	Not Established	Not Established

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity:	None Known
Mobility:	In normal use, emission of volatile organic compounds (VOC's) to the air takes place, typically at a rate of ≤ 510 g/l.
Degradability:	Biodegradable
Bioaccumulation:	Minimal to none.

SECTION 13 - WASTE DISPOSAL CONSIDERATIONS

Follow local and national regulations. Consult disposal expert.

SECTION 14 - TRANSPORT INFORMATION

Proper Shipping Name:	Adhesives
Hazard Class:	3
Secondary Risk:	None
Identification Number:	UN 1133
Packing Group:	PG II
Label Required:	Class 3 Flammable Liquid
Marine Pollutant:	NO

EXCEPTION for Ground Shipping

DOT Limited Quantity: Up to 5L per inner packaging, 30 kg gross weight per package.
Consumer Commodity: Depending on packaging, these quantities may qualify under DOT as "ORM-D".

TDG INFORMATION

TDG CLASS:	FLAMMABLE LIQUID 3
SHIPPING NAME:	ADHESIVES
UN NUMBER/PACKING GROUP:	UN 1133, PG II

SECTION 15 - REGULATORY INFORMATION

Precautionary Label Information:	Highly Flammable, Irritant	Ingredient Listings:	USA TSCA, Europe EINECS, Canada DSL, Australia
Symbols:	F, Xi		AICS, Korea ECL/TCCL, Japan MITI (ENCS)
Risk Phrases:	R11: Highly flammable. R20-Harmful by inhalation. R36/37: Irritating to eyes and respiratory system.	R66:	Repeated exposure may cause skin dryness or cracking
Safety Phrases:	S9: Keep container in a well-ventilated place. S16: Keep away from sources of ignition - No smoking. S25: Avoid contact with eyes.	R67:	Vapors may cause drowsiness and dizziness
		S26:	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
		S33:	Take precautionary measures against static discharges.
		S46:	If swallowed, seek medical advice immediately and show this container or label.

SECTION 16 - OTHER INFORMATION

Specification Information:		
Department issuing data sheet:	IPS, Safety Health & Environmental Affairs	All ingredients are compliant with the requirements of the European
E-mail address:	<EHSinfo@ipscorp.com>	Directive on RoHS (Restriction of Hazardous Substances).
Training necessary:	Yes, training in practices and procedures contained in product literature.	
Reissue date / reason for reissue:	6/15/2012 / Updated GHS Standard Format	
Intended Use of Product:	Solvent Cement for PVC Plastic Pipe	

This product is intended for use by skilled individuals at their own risk. The information contained herein is based on data considered accurate based on current state of knowledge and experience. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof.

Mercury Marine Premium Plus TC-W3 Two Cycle Engine Oil

Material Safety Data Sheet

Mercury Marine
W6250 W. Pioneer Rd.
Fond du Lac, WI 54935

MSDS No. 091-0965QC
Revision Date 3/5/2009

IMPORTANT: This MSDS is prepared in accordance with 29 CFR 1910.1200. Read this MSDS before transporting, handling, storing or disposing of this product and forward this information to employees, customers and users of this product.

Emergency Overview

Physical State Liquid.
Color Green. **Odor** Mild petroleum odor

WARNING:

Contains Petroleum Distillates.

Harmful if swallowed - Can enter lungs and cause damage.

If swallowed, DO NOT induce vomiting. Call a physician immediately.

Combustible Liquid.

Heated material can release vapor that can cause flash fire.

Spills may create a slipping hazard.

Hazard Rankings

	HMIS	NFPA
Health Hazard	* 1	1
Fire Hazard	2	2
Reactivity	0	0

* = Chronic Health Hazard

Protective Equipment

Minimum Recommended
See Section 8 for Details



SECTION 1. PRODUCT IDENTIFICATION

Product Name	Mercury Marine Premium Plus TC-W3 Two Cycle Engine Oil	Technical Contact	(920) 929-5000
Product Line	Quicksilver Canada	CHEMTREC Emergency (United States Only)	(800) 424-9300
CAS Number	Mixture.		

Part Number(s) Continued:

92-858026QB1, 858027QB1,
858028QB1, 858026QC1, 858027QC1,
858028QC1, 858029QC1, 858031Q01

Part Number(s): 92-858026E01, 858026Q01,
858027E01, 858027Q01, 858028E01, 858028Q01,
858029Q01, 858025Q01, 824402A 1, 824402A 2, 824402A
4, 824402A 6, 824402A 10, 824402A12, 824402A30,
824402A40, 826667A24, 826667A40, 831281A12,
831281A40, 831283A 6, 831283A30, 831287A 2,
831287A40, 857384A 1, 857385A 1, 857386A 1, 857387A 1,
857387A26, 857469A 1

SECTION 2. COMPOSITION

Component Name(s)	CAS Registry No.	Concentration (%)
Highly-refined petroleum lubricant oils	Various	40 - 70
Distillates (petroleum), hydrotreated light	64742-47-8	<25
Reaction products of isooctadecanoic acid	Proprietary	7 - 13
Polyisobutylene	9003-27-4	3 - 7
Proprietary Ingredients	Proprietary Mixture	1 - 5

SECTION 3. HAZARDS IDENTIFICATION

Also see Emergency Overview and Hazard Ratings on the top of Page 1 of this MSDS.

Major Route(s) of Entry Skin contact. Eye contact. Inhalation.

Signs and Symptoms of Acute Exposure

Inhalation At elevated temperatures or in enclosed spaces, product mist or vapors may irritate the mucous membranes of the nose, the throat, bronchi, and lungs.

Mercury Marine Premium Plus TC-W3 Two Cycle Engine Oil

Eye Contact	This product can cause transient mild eye irritation with short-term contact with liquid sprays or mists. Symptoms include stinging, watering, redness, and swelling.
Skin Contact	This product can cause mild, transient skin irritation. The severity of irritation will depend on the amount of material that is applied to the skin and the speed and thoroughness that it is removed. Symptoms include redness, itching, and burning of the skin. Repeated or prolonged skin contact can produce moderate irritation (dermatitis).
Ingestion	If swallowed, large volumes of material can cause generalized depression, headache, drowsiness, nausea, vomiting and diarrhea. Smaller doses can cause a laxative effect. If aspirated into the lungs, liquid can cause lung damage.
Chronic Health Effects Summary	Prolonged and/or repeated skin contact may cause irritation and inflammation. Symptoms include defatting, redness, dryness, blistering eczema-like lesions, scaly dermatitis, and/or more serious skin disorders. Chronic effects of ingestion and subsequent aspiration into the lungs may cause pneumatocele (lung cavity) formation and chronic lung dysfunction.
Conditions Aggravated by Exposure	Disorders of the following organs or organ systems that may be aggravated by significant exposure to this material or its components include: Skin, Respiratory System, Liver, Kidneys, Central Nervous System (CNS)
Target Organs	May cause damage to the following organs: upper respiratory tract, skin, eyes
Carcinogenic Potential	This product is not known to contain any components at concentrations above 0.1% which are considered carcinogenic by OSHA, IARC or NTP.

OSHA Hazard Classification is indicated by an "X" in the box adjacent to the hazard title. If no "X" is present, the product does not exhibit the hazard as defined in the OSHA Hazard Communication Standard (29 CFR 1910.1200).

OSHA Health Hazard Classification				OSHA Physical Hazard Classification			
Irritant	<input type="checkbox"/>	Sensitizer	<input type="checkbox"/>	Combustible	<input checked="" type="checkbox"/>	Explosive	<input type="checkbox"/>
Toxic	<input type="checkbox"/>	Highly Toxic	<input type="checkbox"/>	Flammable	<input type="checkbox"/>	Oxidizer	<input type="checkbox"/>
Corrosive	<input type="checkbox"/>	Carcinogenic	<input type="checkbox"/>	Compressed Gas	<input type="checkbox"/>	Organic Peroxide	<input type="checkbox"/>
						Pyrophoric	<input type="checkbox"/>
						Water-reactive	<input type="checkbox"/>
						Unstable	<input type="checkbox"/>

SECTION 4. FIRST AID MEASURES

Take proper precautions to ensure your own health and safety before attempting rescue or providing first aid. For more specific information, refer to Exposure Controls and Personal Protection in Section 8 of this MSDS.

Inhalation	Move victim to fresh air. If victim is not breathing, immediately begin rescue breathing. If breathing is difficult, 100 percent humidified oxygen should be administered by a qualified individual. Seek medical attention immediately. Keep the affected individual warm and at rest.
Eye Contact	Check for and remove contact lenses. Flush eyes with cool, clean, low-pressure water while occasionally lifting and lowering eyelids. Seek medical attention if excessive tearing, redness, or pain persists.
Skin Contact	If burned by hot material, cool skin by quenching with large amounts of cool water. For contact with product at ambient temperatures, remove contaminated shoes and clothing. Wipe off excess material. Wash exposed skin with mild soap and water. Seek medical attention if tissue appears damaged or if pain or irritation persists. Thoroughly clean contaminated clothing before reuse. Clean or discard contaminated leather goods. If material is injected under the skin, seek medical attention immediately.
Ingestion	Do not induce vomiting unless directed to by a physician. Do not give anything to drink unless directed to by a physician. Never give anything by mouth to a person who is not fully conscious. If significant amounts are swallowed or irritation or discomfort occurs, seek medical attention immediately.

Mercury Marine Premium Plus TC-W3 Two Cycle Engine Oil

Notes to Physician **INGESTION:** The viscosity range of the product(s) represented by this MSDS is greater than 100 SUS at 100°F. Careful gastric lavage may be considered to evacuate large quantities of material.

SECTION 5. FIRE FIGHTING MEASURES

NFPA Flammability Classification	NFPA Class-III-A combustible liquid.		
Flash Point	Closed cup: 62°C (144°F). (Pensky-Martens (ASTM D-93)) Open cup: 85°C (185°F) (Cleveland.).		
Lower Flammable Limit	No data.	Upper Flammable Limit	No data.
Autoignition Temperature	Not available.		
Hazardous Combustion Products	Carbon dioxide, carbon monoxide, smoke, fumes, unburned hydrocarbons and trace oxides of sulfur and/or nitrogen.		
Special Properties	This material will release vapors when heated above the flash point temperature that can ignite when exposed to a source of ignition. In enclosed spaces, vapors can ignite with explosive force. Mists or sprays may burn at temperatures below the flash point.		
Extinguishing Media	<p>SMALL FIRE: Use dry chemicals, carbon dioxide, foam, or inert gas (nitrogen). Carbon dioxide and inert gas can displace oxygen. Use caution when applying carbon dioxide or inert gas in confined spaces.</p> <p>LARGE FIRE: Use foam, water fog, or water spray. Water fog and spray are effective in cooling containers and adjacent structures. However, water can cause frothing and/or may not extinguish the fire. Water can be used to cool the external walls of vessels to prevent excessive pressure, autoignition or explosion. DO NOT use a solid stream of water directly on the fire as the water may spread the fire to a larger area.</p>		
Protection of Fire Fighters	Firefighters must use full bunker gear including NIOSH-approved positive pressure self-contained breathing apparatus to protect against potential hazardous combustion or decomposition products and oxygen deficiencies. Withdraw immediately from the area if there is a rising sound from a venting safety device or discoloration of vessels, tanks, or pipelines.		

SECTION 6. ACCIDENTAL RELEASE MEASURES

Take proper precautions to ensure your own health and safety before attempting spill control or clean-up. For more specific information, refer to the Emergency Overview on Page 1, Exposure Controls and Personal Protection in Section 8 and Disposal Considerations in Section 13 of this MSDS.

Do not touch damaged containers or spilled material unless wearing appropriate protective equipment. Slipping hazard; do not walk through spilled material. Stop leak if you can do so without risk. For small spills, absorb or cover with dry earth, sand, or other inert non-combustible absorbent material and place into waste containers for later disposal. Contain large spills to maximize product recovery or disposal. Prevent entry into waterways or sewers. In urban area, cleanup spill as soon as possible. In natural environments, seek cleanup advice from specialists to minimize physical habitat damage. This material will float on water. Absorbent pads and similar materials can be used. Comply with all laws and regulations.

SECTION 7. HANDLING AND STORAGE

Mercury Marine Premium Plus TC-W3 Two Cycle Engine Oil

Handling

A spill or leak can cause an immediate fire or explosion hazard. Keep containers closed and do not handle or store near heat, sparks, or any other potential ignition sources. Avoid contact with oxidizing agents. Do not breathe vapor. Use only with adequate ventilation and personal protection. Never siphon by mouth. Avoid contact with eyes, skin, and clothing. Prevent contact with food and tobacco products. Do not take internally.

When performing repairs and maintenance on contaminated equipment, keep unnecessary persons away from the area. Eliminate all potential ignition sources. Drain and purge equipment, as necessary, to remove material residues. Follow proper entry procedures, including compliance with 29 CFR 1910.146 prior to entering confined spaces such as tanks or pits. Use gloves constructed of impervious materials and protective clothing if direct contact is anticipated. Provide ventilation to maintain exposure potential below applicable exposure limits. Use appropriate respiratory protection when concentrations exceed any established occupational exposure level (See Section 8). Promptly remove contaminated clothing. Wash exposed skin thoroughly with soap and water after handling.

Non equilibrium conditions may increase the fire hazard associated with this product. Always bond receiving containers to the fill pipe before and during loading. Always confirm that receiving container is properly grounded. Bonding and grounding alone may be inadequate to eliminate fire and explosion hazards. Carefully review operations that may increase the risks such as tank and container filling, tank cleaning, sampling, gauging, loading, filtering, mixing, agitation, etc. In addition to bonding and grounding, efforts to mitigate the hazards may include, but are not limited to, ventilation, inerting and/or reduction of transfer velocities. Always keep nozzle in contact with the container throughout the loading process. Do NOT fill any portable container in or on a vehicle. Do NOT use compressed air for filling, discharging or other handling operations.

Product container is not designed for elevated pressure. Do not pressurize, cut, weld, braze solder, drill, or grind on containers. Do not expose product containers to flames, sparks, heat or other potential ignition sources. Empty containers may contain product residues that can ignite with explosive force. Observe label precautions. Consult appropriate federal, state and local authorities before reusing, reconditioning, reclaiming, recycling or disposing of empty containers and/or waste residues of this product.

Storage

Keep container tightly closed. Store in a cool, dry, well-ventilated area. Store only in approved containers. Do not store with oxidizing agents. Do not store at elevated temperatures or in direct sunlight. Protect containers against physical damage. Head space in tanks and other containers may contain vapor in the flammable range. Vapor may be ignited by static discharge. Storage area must meet OSHA requirements and applicable fire codes.

Additional information regarding the design and control of hazards associated with the handling and storage of flammable and combustible liquids may be found in professional and industrial documents including, but not limited to, the National Fire Protection Association (NFPA) publications NFPA 30 ("Flammable and Combustible Liquid Code"), NFPA 77 ("Recommended Practice on Static Electricity") and the American Petroleum Institute (API) Recommended Practice 2003, "Protection Against Ignitions Arising Out of Static, Lightning, and Stray Currents" (liquids)."

SECTION 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Engineering Controls

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of mists and/or vapors below the recommended exposure limits (see below). An eye wash station and safety shower should be located near the work-station.

Personal Protective Equipment

Personal protective equipment should be selected based upon the conditions under which this material is used. A hazard assessment of the work area for PPE requirements should be conducted by a qualified professional pursuant to OSHA regulations. The following pictograms represent the minimum requirements for personal protective equipment. For certain operations, additional PPE may be required.

Mercury Marine Premium Plus TC-W3 Two Cycle Engine Oil



Eye Protection	Safety glasses equipped with side shields are recommended as minimum protection in industrial settings. Wear goggles if splashing or spraying is anticipated. Wear goggles and face shield if material is heated above 125°F (51°C). Have suitable eye wash water available.
Hand Protection	Avoid skin contact. Use heavy duty gloves constructed of chemical resistant materials such as Viton® or heavy nitrile rubber. Wash hands with plenty of mild soap and water before eating, drinking, smoking, use of toilet facilities or leaving work. DO NOT use gasoline, kerosene, solvents or harsh abrasives as skin cleaners.
Body Protection	Use clean protective clothing if splashing or spraying conditions are present. Protective clothing may include long-sleeve outer garment, apron, or lab coat. If significant contact occurs, remove oil-contaminated clothing as soon as possible and promptly shower. Launder contaminated clothing before reuse or discard. Wear heat protective boots and protective clothing when handling material at elevated temperatures.
Respiratory Protection	The need for respiratory protection is not anticipated under normal use conditions and with adequate ventilation. If elevated airborne concentrations above applicable workplace exposure levels are anticipated, a NIOSH-approved organic vapor respirator equipped with a dust/mist prefilter should be used. Protection factors vary depending upon the type of respirator used. Respirators should be used in accordance with OSHA requirements (29 CFR 1910.134).
General Comments	Use good personal hygiene practices. Wash hands and other exposed skin areas with plenty of mild soap and water before eating, drinking, smoking, use of toilet facilities, or leaving work. DO NOT use gasoline, kerosene, solvents or harsh abrasives as skin cleaners. Since specific exposure standards/control limits have not been established for this product, the "Oil Mist, Mineral" exposure limits shown below are suggested as minimum control guidelines.

Occupational Exposure Guidelines

Substance	Applicable Workplace Exposure Levels
Oil Mist, Mineral	ACGIH (United States). TWA: 5 mg/m ³ STEL: 10 mg/m ³ OSHA (United States). TWA: 5 mg/m ³
Petroleum hydrocarbon distillates	ACGIH (United States). TWA: 100 ppm OSHA (United States). TWA: 500 ppm

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES (TYPICAL)

Physical State	Liquid.	Color	Green.	Odor	Mild petroleum odor
Specific Gravity	0.87 (Water = 1)	pH	Not applicable	Vapor Density	>1 (Air = 1)
Boiling Range	Not available.			Melting/Freezing Point	Not available.
Vapor Pressure	<0.1 kPa (<1 mm Hg) (at 20°C)			Volatility	AP 250 g/l VOC (w/v)
Solubility in Water	Negligible solubility in cold water.			Viscosity (cSt @ 40°C)	31
Flash Point	Closed cup: 62°C (144°F). (Pensky-Martens (ASTM D-93)) Open cup: 85°C (185°F) (Cleveland.).				

Mercury Marine Premium Plus TC-W3 Two Cycle Engine Oil

Additional Properties

Gravity, °API (ASTM D287) = 31.8 @ 60° F
Density = 7.22 Lbs/gal.
Viscosity (ASTM D2161) = 159 SUS @ 100° F

SECTION 10. STABILITY AND REACTIVITY

Chemical Stability	Stable.	Hazardous Polymerization	Not expected to occur.
Conditions to Avoid	Keep away from extreme heat, sparks, open flame, and strongly oxidizing conditions.		
Materials Incompatibility	Strong oxidizers.		
Hazardous Decomposition Products	No additional hazardous decomposition products were identified other than the combustion products identified in Section 5 of this MSDS.		

SECTION 11. TOXICOLOGICAL INFORMATION

For other health-related information, refer to the Emergency Overview on Page 1 and the Hazards Identification in Section 3 of this MSDS.

Toxicity Data

Highly-refined petroleum lubricant oils

ORAL (LD50): Acute: >5000 mg/kg [Rat].
DERMAL (LD50): Acute: >2000 mg/kg [Rabbit].

Mineral oil mists derived from highly refined oils are reported to have low acute and sub-acute toxicities in animals. Effects from single and short-term repeated exposures to high concentrations of mineral oil mists well above applicable workplace exposure levels include lung inflammatory reaction, lipoid granuloma formation and lipoid pneumonia. In acute and sub-acute studies involving exposures to lower concentrations of mineral oil mists at or near current work place exposure levels produced no significant toxicological effects. In long term studies (up to two years) no carcinogenic effects have been reported in any animal species tested.

Distillates (petroleum), hydrotreated light

ORAL (LD50): Acute: >5000 mg/kg [Rat].
DERMAL (LD50): Acute: >2000 mg/kg [Rabbit].

Studies on laboratory animals have associated similar materials with eye and respiratory tract irritation. Repeated exposure to elevated concentrations of hydrocarbon solvents can produce a variety of transient CNS effects (e.g., dizziness, headache, narcosis, etc). Studies on laboratory animals have shown similar materials to cause skin irritation after repeated or prolonged contact. Repeated direct application of similar materials to the skin can produce defatting dermatitis and kidney damage in laboratory animals. The most common effects observed in repeated dose animal studies with mineral spirits are kidney changes that are consistent with an alpha 2u-globulin- mediated process that is not regarded as relevant to humans. Certain studies have reported effects in the liver as well as hematological or urine chemistry changes. In general, these effects have not to been shown to be dose-related.

Reaction products of isooctadecanoic acid

This product contains a proprietary component that can cause eye and skin irritation. In addition, this product contains a proprietary component that may cause damage to the liver and thyroid following repeated ingestion based on animal data.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity	Analysis for ecological effects has not been conducted on this product. However, if spilled, this product and any contaminated soil or water may be harmful to human, animal, and aquatic life. Also, the coating action associated with petroleum and petroleum products can be harmful or fatal to aquatic life and waterfowl.
Environmental Fate	An environmental fate analysis is not available for this specific product. Plants and animals may experience harmful or fatal effects when coated with petroleum products. Petroleum-based (mineral) lubricating oils normally will float on water. In stagnant or slow-flowing waterways, an oil layer can cover a large surface area. As a result, this oil layer might limit or eliminate natural atmospheric oxygen transport into the water. With time, if not removed, oxygen depletion in the waterway may be sufficient to cause a fish kill or create an anaerobic environment.


SECTION 13. DISPOSAL CONSIDERATIONS

Hazard characteristic and regulatory waste stream classification can change with product use. Accordingly, it is the responsibility of the user to determine the proper storage, transportation, treatment and/or disposal methodologies for spent materials and residues at the time of disposition.

Conditions of use may cause this material to become a "hazardous waste", as defined by federal or state regulations. It is the responsibility of the user to determine if the material is a "hazardous waste" at the time of disposal. Transportation, treatment, storage, and disposal of waste material must be conducted in accordance with RCRA regulations (see 40 CFR 260 through 40 CFR 271). State and/or local regulations may be more restrictive. Contact your regional US EPA office for guidance concerning case specific disposal issues. Empty drums and pails retain residue. DO NOT pressurize, cut, weld, braze, solder, drill, grind, or expose this product's empty container to heat, flame, or other ignition sources. DO NOT attempt to clean it. Empty drums and pails should be drained completely, properly bunged or sealed, and promptly sent to a reconditioner.

SECTION 14. TRANSPORT INFORMATION

The shipping description below may not represent requirements for all modes of transportation, shipping methods or locations outside of the United States.

US DOT Status	A U.S. Department of Transportation regulated material.		
Proper Shipping Name	UN1268, Petroleum Distillates, n.o.s., Combustible Liquid [This product has a flash point temperature between 60.5° to 93°C (141° and 200°F). Bulk shipments of this product are regulated.]		
Hazard Class	Combustible liquid.	Packing Group	Combustible liquid
		UN/NA Number	UN 1268
Reportable Quantity	A Reportable Quantity (RQ) has not been established for this material.		
Placard(s)		Emergency Response Guide No.	128
		MARPOL III Status	Not a DOT "Marine Pollutant" per 49 CFR 171.8.

Mercury Marine Premium Plus TC-W3 Two Cycle Engine Oil

Oil: The product(s) represented by this MSDS is (are) regulated as "oil" under 49 CFR Part 130. Shipments by rail or highway in packaging having a capacity of 3500 gallons or more or in a quantity greater 42,000 gallons are subject to these requirements. In addition, mixtures containing 10% or more of this product may be subject to these requirements.

SECTION 15. REGULATORY INFORMATION

TSCA Inventory	This product and/or its components are listed on the Toxic Substances Control Act (TSCA) inventory.
SARA 302/304 Emergency Planning and Notification	The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires facilities subject to Subparts 302 and 304 to submit emergency planning and notification information based on Threshold Planning Quantities (TPQs) and Reportable Quantities (RQs) for "Extremely Hazardous Substances" listed in 40 CFR 302.4 and 40 CFR 355. No components were identified.
SARA 311/312 Hazard Identification	<p>The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires facilities subject to this subpart to submit aggregate information on chemicals by "Hazard Category" as defined in 40 CFR 370.2. This material would be classified under the following hazard categories:</p> <p>Fire, Acute (Immediate) Health Hazard, Chronic (Delayed) Health Hazard</p>
SARA 313 Toxic Chemical Notification and Release Reporting	This product contains the following components in concentrations above <i>de minimis</i> levels that are listed as toxic chemicals in 40 CFR Part 372 pursuant to the requirements of Section 313 of SARA: No components were identified.
CERCLA	The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) requires notification of the National Response Center concerning release of quantities of "hazardous substances" equal to or greater than the reportable quantities (RQ's) listed in 40 CFR 302.4. As defined by CERCLA, the term "hazardous substance" does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically designated in 40 CFR 302.4. This product or refinery stream is not known to contain chemical substances subject to this statute. However, it is recommended that you contact state and local authorities to determine if there are any other reporting requirements in the event of a spill.
Clean Water Act (CWA)	This material is classified as an oil under Section 311 of the Clean Water Act (CWA) and the Oil Pollution Act of 1990 (OPA). Discharges or spills which produce a visible sheen on waters of the United States, their adjoining shorelines, or into conduits leading to surface waters must be reported to the EPA's National Response Center at (800) 424-8802.
California Proposition 65	<p>This material may contain the following components which are known to the State of California to cause cancer, birth defects or other reproductive harm, and may be subject to the requirements of California Proposition 65 (CA Health & Safety Code Section 25249.5):</p> <p>Naphthalene: <0.05%</p> <p>Ethylbenzene: <0.01%</p>
New Jersey Right-to-Know Label	Petroleum Oil (Two Cycle Engine Oil)
Additional Remarks	No additional regulatory remarks.

Mercury Marine Premium Plus TC-W3 Two Cycle Engine Oil

SECTION 16. OTHER INFORMATION

Refer to the top of Page 1 for the HMIS and NFPA Hazard Ratings for this product.

REVISION INFORMATION

Version Number 4.0
Revision Date 3/5/2009

ABBREVIATIONS

AP: Approximately	EQ: Equal	>: Greater Than	<: Less Than
NA: Not Applicable	ND: No Data	NE: Not Established	

ACGIH: American Conference of Governmental Industrial Hygienists
AIHA: American Industrial Hygiene Association
IARC: International Agency for Research on Cancer
NIOSH: National Institute of Occupational Safety and Health
NPCA: National Paint and Coating Manufacturers Association
EPA: US Environmental Protection Agency
HMIS: Hazardous Materials Information System
OSHA: Occupational Safety and Health Administration
NTP: National Toxicology Program
NFPA: National Fire Protection Association

DISCLAIMER OF LIABILITY

Manufacturer, CITGO Petroleum Corp., PO Box 4689, Houston, TX 77210

THE INFORMATION IN THIS MSDS WAS OBTAINED FROM SOURCES WHICH WE BELIEVE ARE RELIABLE. HOWEVER, THE INFORMATION IS PROVIDED WITHOUT ANY WARRANTY, EXPRESSED OR IMPLIED REGARDING ITS CORRECTNESS. SOME INFORMATION PRESENTED AND CONCLUSIONS DRAWN HEREIN ARE FROM SOURCES OTHER THAN DIRECT TEST DATA ON THE SUBSTANCE ITSELF. THIS MSDS WAS PREPARED AND IS TO BE USED ONLY FOR THIS PRODUCT. IF THE PRODUCT IS USED AS A COMPONENT IN ANOTHER PRODUCT, THIS MSDS INFORMATION MAY NOT BE APPLICABLE. USERS SHOULD MAKE THEIR OWN INVESTIGATIONS TO DETERMINE THE SUITABILITY OF THE INFORMATION OR PRODUCTS FOR THEIR PARTICULAR PURPOSE.

THE CONDITIONS OR METHODS OF HANDLING, STORAGE, USE, AND DISPOSAL OF THE PRODUCT ARE BEYOND OUR CONTROL AND MAY BE BEYOND OUR KNOWLEDGE. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH HANDLING, STORAGE, USE OR DISPOSAL OF THE PRODUCT.

* * * * * END OF MSDS * * * * *



MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product number 715-003
Product name **White Lithium Grease Lubricating Spray**
Effective date 29-Mar-2011
Company information Claire Mfg.
500 Vista Ave.
Addison, IL 60101 United States
Company phone General Assistance 1-630-628-3000
Emergency telephone US 800-424-9300
Emergency telephone outside US 703-527-3887
Version # 06
Supersedes date 30-Dec-2010

2. Hazards Identification

Emergency overview Aerosol. Will be easily ignited by heat, spark or flames. CONTENTS UNDER PRESSURE.
Irritating to skin. Irritating to eyes. Irritating to respiratory system. Prolonged exposure may cause chronic effects. EXTREMELY FLAMMABLE

Potential health effects

Routes of exposure Inhalation. Skin contact.

Eyes Causes eye irritation.

Skin Irritating to skin. Prolonged or repeated contact can result in defatting and drying of the skin which may result in skin irritation and dermatitis (rash).

Inhalation Intentional misuse by concentrating and inhaling the product can be harmful or fatal. Irritating to respiratory system.

Ingestion Exposure by ingestion of an aerosol is unlikely. May cause delayed lung damage.

Target organs Central nervous system.

Chronic effects May cause central nervous system disorder (e.g., narcosis involving a loss of coordination, weakness, fatigue, mental confusion and blurred vision) and/or damage.

Signs and symptoms Narcosis.

3. Composition / Information on Ingredients

Components	CAS #	Percent
Petroleum Distillate	64742-52-5	30 - 40
Aliphatic Petroleum Solvent	64742-89-8	30 - 40
Propane	74-98-6	15 - 20
Synthetic Isoparaaffinic Hydrocarbon	64742-47-8	8 - 10
Non-hazardous and other components below reportable levels		1 - 2.5

4. First Aid Measures

First aid procedures

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation persists after washing.

Skin contact Wash off immediately with plenty of water. Remove and isolate contaminated clothing and shoes. Get medical attention if irritation develops and persists.

Inhalation Move to fresh air. For breathing difficulties, oxygen may be necessary. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Call a physician if symptoms develop or persist.

Ingestion

Do not induce vomiting without advice from poison control center. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Call a physician immediately.

Notes to physician

Symptoms may be delayed.

5. Fire Fighting Measures**Flammable properties**

Heat may cause the containers to explode. Vapor or gas may spread to distant ignition sources and flash back. Runoff to sewer may cause fire or explosion hazard.

Extinguishing media**Suitable extinguishing media**

Water fog. Carbon dioxide (CO₂). Dry chemicals.

Protection of firefighters**Protective equipment and precautions for firefighters**

In case of fire and/or explosion do not breathe fumes. Containers should be cooled with water to prevent vapor pressure build up. Move containers from fire area if you can do so without risk. Cool containers exposed to flames with water until well after the fire is out. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.

6. Accidental Release Measures**Methods for containment**

Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Stop the flow of material, if this is without risk.

Methods for cleaning up

Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

7. Handling and Storage**Handling**

Pressurized container: Do not pierce or burn, even after use. Do not smoke while using or until sprayed surface is thoroughly dry. Use only in area provided with appropriate exhaust ventilation. Do not use if spray button is missing or defective. Do not re-use empty containers. Avoid breathing dust/fume/gas/mist/vapors/spray. Avoid contact with skin. Avoid contact with eyes. Wear personal protective equipment. Avoid prolonged exposure.

Storage

Contents under pressure. Do not puncture, incinerate or crush. Keep away from heat and sources of ignition. Avoid exposure to long periods of sunlight. Store in cool place. Store in a well-ventilated place. Keep out of the reach of children. Keep away from food, drink and animal feedingstuffs. Level 2 Aerosol.

8. Exposure Controls / Personal Protection**Exposure limits****ACGIH****Components****CAS #****TWA****STEL****Ceiling**

Propane

74-98-6

1000 ppm

Not established

Not established

OSHA**Components****CAS #****TWA****STEL****Ceiling**

Propane

74-98-6

1000 ppm

Not established

Not established

Personal protective equipment**Eye / face protection**

Not normally needed.

Skin protection

Wear protective gloves.

Respiratory protection

Wear positive pressure self-contained breathing apparatus (SCBA). If permissible levels are exceeded use NIOSH mechanical filter / organic vapor cartridge or an air-supplied respirator.

9. Physical & Chemical Properties**Appearance**

Compressed liquefied gas.

Boiling point

368.6 °F (187.2 °C) estimated

Color	White.
Density	0.7192 g/cm3 estimated
Flammability (HOC)	26.798 kJ/g estimated
Flash back	Yes
Flash point	-156 °F (-104.4 °C) Propellant
Form	Aerosol.
Freezing point	Not available
Odor	Solvent.
pH	Not applicable
Physical state	Liquid.
Pressure	70 - 90 psig @ 70F
Solubility	Partially
Specific gravity	0.7193 estimated

10. Chemical Stability & Reactivity Information

Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	May include oxides of carbon. No hazardous decomposition products are known.

11. Toxicological Information

Acute effects	Acute LD50: 2886 mg/kg estimated, Rat, Dermal Acute LC50: 4 mg/l/4h estimated, Rat, Inhalation
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Component analysis - LD50

Toxicology Data - Selected LD50s and LC50s

Aliphatic Petroleum Solvent	64742-89-8	Oral LD50 Mouse 5000 mg/kg; Dermal LD50 Rabbit 3000 mg/kg
Petroleum Distillate	64742-52-5	Inhalation LC50 Rat 2.18 mg/L 4 h; Oral LD50 Rat >5000 mg/kg; Dermal LD50 Rabbit >2000 mg/kg
Propane	74-98-6	Inhalation LC50 Rat 658 mg/L 4 h
Synthetic Isoparaffinic Hydrocarbon	64742-47-8	Inhalation LC50 Rat >5.2 mg/L 4 h; Oral LD50 Rat >5000 mg/kg; Dermal LD50 Rabbit >2000 mg/kg

Sensitization	Not expected to be hazardous by OSHA criteria.
Teratogenicity	Not expected to be hazardous by OSHA criteria.

12. Ecological Information

Ecotoxicity	LC50 480 mg/L estimated, Fish, 96.00 Hours, EC50 2568 mg/L estimated, Daphnia, 48.00 Hours, IC50 14696 mg/L estimated, Algae, 72.00 Hours, Contains a substance which causes risk of hazardous effects to the environment.
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13. Disposal Considerations

Waste codes	D001: Waste Flammable material with a flash point <140 F
Disposal instructions	Contents under pressure. Dispose of this material and its container to hazardous or special waste collection point. Do not incinerate sealed containers. If discarded, this product is considered a RCRA ignitable waste, D001. Dispose in accordance with all applicable regulations.

14. Transport Information

Department of Transportation (DOT) Requirements

Basic shipping requirements:

Proper shipping name	Consumer commodity
Hazard class	ORM-D
Subsidiary hazard class	None
Additional information:	
Packaging exceptions	156, 306
Packaging non bulk	156, 306
Packaging bulk	None

IMDG**Basic shipping requirements:**

Proper shipping name AEROSOLS
Hazard class 2.1
UN number 1950
Additional information:
Packaging exceptions LTD QTY
Item 5F
Labels required None
Transport Category 2

**IATA****Basic shipping requirements:**

Proper shipping name Aerosols, flammable
Hazard class 2.1
UN number 1950
Additional information:
Packaging exceptions LTD QTY
Labels required None



15. Regulatory Information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
 CERCLA/SARA Hazardous Substances - Not applicable.

Occupational Safety and Health Administration (OSHA)

29 CFR 1910.1200 hazardous chemical Yes

CERCLA (Superfund) reportable quantity

None

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Section 302 extremely hazardous substance No
Section 311 hazardous chemical Yes
Hazard categories (311/312) Immediate Hazard - Yes
 Delayed Hazard - No
 Fire Hazard - Yes
 Pressure Hazard - Yes
 Reactivity Hazard - No

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of New and Existing Chemicals (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	Yes
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

State regulations**U.S. - Pennsylvania - RTK (Right to Know) List**

Aliphatic Petroleum Solvent	64742-89-8	Present
Petroleum Distillate	64742-52-5	Present
Propane	74-98-6	Present
Synthetic Isoparaffinic Hydrocarbon	64742-47-8	Present

16. Other Information

Further information

HMIS® is a registered trade and service mark of the NPCA.

HMIS® ratings

Health: 1

Flammability: 3

Physical hazard: 0

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. The information in the sheet was written based on the best knowledge and experience currently available.

MSDS sections updated

Product and Company Identification: Product Review

Composition / Information on Ingredients: Ingredients

Physical & Chemical Properties: Physical & Chemical Properties

Prepared by

Regulatory Compliance



Mueller Sports Medicine, Inc.

1 Quench Drive, Prairie du Sac, WI 53578 USA * (608)643-8530* Fax (608)643-2568

MATERIAL SAFETY DATA SHEET

Health : 3

Flammability : 1

Reactivity : 0

MATERIAL Whizzer®	DATE ISSUED 04/17/08 - Rev. 03	UN-1903 Packing Group 3 DOT HAZARD CLASSIFICATION Class 8 PG II DOT SHIPPING NAME Disinfectant, Liquid, Corrosive
CAS NO. See Section I	SUPERCEDES 11/30/04 - Rev. 02	DOT LABEL Corrosive

FORMULA Mixture

CHEMICAL NAME Mixture

***** I - INGREDIENTS *****

	APPROXIMATE WEIGHT %	TWA/TLV
N,N-Dialkyl(C8-10)-N,N-dimethylammonium chloride (CAS No. 68424-95-3)	6.51	None established
N-Alkyl(C12-16)dimethylbenzylammonium chloride (CAS No. 68424-85-1)	4.34	None established
Linear primary and/or secondary alcohol ethoxylates and/or nonylphenol (branched) ethoxylate	4.50	None established
Tetrasodium ethylenediamine tetraacetate (CAS No. 64-02-8)	2.66	None established
Sodium metasilicate (CAS No. 6834-92-0)	0.58	None established
Ethanol (CAS No. 64-17-5)	2.17	1000 ppm (OSHA-PEL) 1000 ppm (ACGIH-TWA)
Water (CAS No. 7732-18-5)	79.24	None established

***** II - PHYSICAL AND CHEMICAL PROPERTIES *****

APPEARANCE Clear liquid

VISCOSITY <100 cps @ 25°C

BOILING POINT Not known

VAPOR DENSITY (Air=1) Not known

PERCENT VOLATILE (by weight) 81.4

EVAPORATION RATE (Butyl Acetate=1) Not known

pH 12.9

ODOR Varies with fragrance added (if any)

MELTING OR FREEZING POINT Not known

VAPOR PRESSURE (mm Hg) Not known

SOLUBILITY IN WATER Soluble

SPECIFIC GRAVITY (WATER = 1) 1.01 @ 25°C



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***** III - FIRE AND EXPLOSION INFORMATION *****

FLASH POINT Not known

AUTO IGNITION TEMPERATURE Not known

LOWER EXPLOSION LIMIT (%) Not known

UPPER EXPLOSION LIMIT (%) Not known

EXTINGUISHING MEDIA FOAM

ALCOHOL FOAM X CO2 X

DRY CHEMICAL X WATER X OTHER

SPECIAL FIRE FIGHTING PROCEDURES:

Must wear NIOSH/MSHA approved self-contained breathing apparatus and protective clothing. Cool fire-exposed containers with water spray.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Products of combustion are toxic.

***** IV - HEALTH EFFECTS INFORMATION *****

PRIMARY ROUTES OF ENTRY -

SKIN CONTACT X

EYE CONTACT X

INHALATION X

INGESTION

EFFECTS OF OVEREXPOSURE

Based upon available animal toxicity information, it is anticipated that this material will be corrosive to the skin and eyes upon direct or prolonged contact. Solvent vapors or mists of products can produce irritation of mucous membranes. Ingestion can produce immediate burning pain in the mouth, throat, and abdomen; severe swelling of the larynx; skeletal muscle paralysis affecting the ability to breathe; circulatory shock; and/or convulsions. May be fatal.

Exposure to ethyl alcohol concentrations of over 1,000 ppm may cause headache, irritation of the eyes, nose and throat, and, if long continued, drowsiness and lassitude, loss of appetite and inability to concentrate.

OVEREXPOSURE MAY AGGRAVATE EXISTING CONDITIONS:

No effects indicated.

EMERGENCY AND FIRST AID PROCEDURES:

Eyes: Flush eyes with large amounts of running water for at least 15 minutes. Hold eyelids apart to ensure rinsing of the entire surface of the eye and lids with water. Get immediate medical attention. If physician not available, flush for additional 15 minutes and then transport victim to medical care.

Skin: Wash with large amounts of running water, and soap if available, for 15 minutes. Remove contaminated clothing and shoes. Get immediate medical attention. Wash clothing and decontaminate shoes before reuse.

Ingestion: If swallowed, immediately give 3-4 glasses of milk (if unavailable, give water). DO NOT induce vomiting. If vomiting occurs, give fluids again. Have physician determine if patient's condition allows for induction of vomiting or evacuation of the stomach. Do not give anything by mouth to a convulsing or unconscious person. Get immediate medical attention.

Inhalation: Remove from area to fresh air. If not breathing, clear airway and start artificial respiration. If victim is having trouble breathing, give supplemental oxygen, if available. Get immediate medical attention.



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***** IV - HEALTH EFFECTS INFORMATION (continued) *****

CHEMICALS LISTED AS CARCINOGEN BY: (YES OR NO)

NATIONAL TOXICOLOGY PROGRAM - No

I.A.R.C. MONOGRAPHS - No

OSHA - No

***** V - REACTIVITY INFORMATION *****

STABILITY:

**STABLE X
UNSTABLE**

CONDITIONS TO AVOID

None known

HAZARDOUS DECOMPOSITION PRODUCTS

Thermal decomposition may produce toxic vapors/fumes of amines and other organic materials, and oxides of carbon and nitrogen.

HAZARDOUS POLYMERIZATION

**MAY
OCCUR**

**WILL NOT X
OCCUR**

CONDITIONS TO AVOID

None known

INCOMPATIBILITY (MATERIALS TO AVOID)

WATER

OTHER

None known

***** VI - SPILL AND DISPOSAL INFORMATION *****

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Danger! Corrosive material. Floors may become slippery. Wear appropriate protective equipment and NIOSH/MSHA approved respirator where mist or vapors of unknown concentrations may be generated (self-contained breathing apparatus preferred).

Dike and contain spill with inert material (sand, earth, etc.) and transfer the liquid and solid separately to containers for recovery or disposal. Keep spill out of sewers and open bodies of water.

WASTE DISPOSAL METHODS

Dispose of in compliance with all Federal, state and local laws and regulations. Incineration is the preferred method.

CONTAINER DISPOSAL

Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

***** VII - PERSONAL PROTECTION INFORMATION *****

ENGINEERING CONTROLS

In processes where TLV may be exceeded, or mists and/or vapors may be generated, proper ventilation must be provided in accordance with good ventilation practices.



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RESPIRATORY PROTECTION

Where mist or vapors are generated by the process or if recommended TWA/TLV for ethyl alcohol is exceeded, a NIOSH/MSHA jointly approved respirator is advised in the absence of proper environmental controls.

PROTECTIVE GLOVES

Rubber or neoprene, when needed, to prevent skin contact.

EYE PROTECTION

Wear chemical splash goggles where there is a potential for eye contact. Use safety glasses with side shields under normal use conditions.

OTHER PROTECTIVE EQUIPMENT

Eye wash; safety shower; protective clothing (long sleeves, coveralls or other, as appropriate), when needed, to prevent skin contact.

******* VIII - STORAGE AND HANDLING *******

PRECAUTIONS FOR STORAGE AND HANDLING:

Store at temperatures below 140°F. Keep containers closed until used.
Do not contaminate drinking water, food or feed by storage or disposal.

******* IX - TOXICOLOGY INFORMATION *******

- oral LD50 (rat): 1650 mg/kg
- dermal LD50 (rabbit): 1870 mg/kg
- skin irritation (rabbit): severe irritant (primary irritation index = 8.0)
- eye irritation (rabbit): severe irritant (primary irritation index = 110)
 - skin corrosion (DOT method - rabbit): corrosive
 -

******* X - MISCELLANEOUS AND REGULATORY INFORMATION *******

NOTE TO PHYSICIAN:

Probable mucosal damage may contraindicate the use of gastric lavage. Supplemental oxygen and other measures to support breathing may be needed to combat circulatory shock. Persistent convulsions may be controlled by the cautious intravenous injection of a short acting barbiturate drug.

FEDERAL LEVEL REGULATIONS:

This is an EPA registered pesticide (EPA Registration No. 6836-77). This material can only be used commercially in the EPA registered application(s) noted on the product label.

TOXIC SUBSTANCES CONTROL ACT (TSCA INVENTORY) STATUS:

All components are currently listed on the U.S. EPA TSCA 8 (b) inventory.

CERCLA (Comprehensive Environmental Response, Compensation and Liability Act of 1980 requires notification of the National Response Center (Telephone 1 -800-424-8802) in the event of a release of quantities of the following hazardous materials contained in this product, if the release is equal to or greater than the Reportable Quantities (RQs) listed in 40 CFR 302.4:



Mueller Sports Medicine, Inc.

1 Quench Drive, Prairie du Sac, WI 53578 USA * (608)643-8530* Fax (608)643-2568

<u>Chemical Name</u>	<u>CAS Number</u>	<u>Typical Maximum Concentration</u>
None known		

SARA Title III, Sections 302/304 (Superfund Amendments and Reauthorization act of 1986) - This act requires emergency planning, including agency notification, for possible release of the following components of this material, based upon the Threshold Planning Quantities (TPQs) and release Reportable Quantities (RQs) listed for the Components in 40 CFR 355:

<u>Chemical Name</u>	<u>CAS Number</u>	<u>Typical Maximum Concentration</u>
None known		

SARA Title III Sections 311/312 - This act requires reporting under the Community Right-to-Know provisions due to the inclusion of the following components of this material in one or more of the five hazard categories listed in 40 CFR 370:

<u>Chemical Name</u>	<u>CAS Number</u>	<u>Hazard *) Categories</u>
N,N-Dialkyl(C8-10)-N,N-dimethylammonium chloride	68424-95-3	A
N-Alkyl(C12-16)dimethylbenzylammonium chloride	68424-85-1	A
Ethanol	64-17-5	F
Linear primary and/or secondary alcohol	Depends upon	A
ethoxylates and/or nonylphenol (branched)	ethoxylate type	
ethoxylate		

***) The five hazard categories are as follows: F= FIRE HAZARD; S= SUDDEN RELEASE OF PRESSURE; R= REACTIVE; A= IMMEDIATE (ACUTE) HEALTH HAZARD; C= DELAYED (CHRONIC) HEALTH HAZARD**

SARA Title 313 - This act requires submission of annual reports of releases of the following components of this material if the threshold reporting quantities, as listed in 40 CFR 372, are met or exceeded:

<u>Chemical Name</u>	<u>CAS Number</u>	<u>Typical Maximum Concentration</u>
None known		

STATE RIGHT-TO-KNOW REGULATIONS:

CALIFORNIA PROPOSITION 65 - Components present in this material which the State of California has found to cause cancer, birth defects or other reproductive harm are as follows:

<u>Chemical Name</u>	<u>CAS Number</u>	<u>Typical Maximum Concentration</u>
Acetaldehyde	75-07-0	800 ppb
Benzene	71-43-2	15 ppm
Benzyl chloride	100-44-7	25 ppm
1,4-Dioxane	123-91-1	800 ppb
Ethylene oxide	75-21-8	80 ppb
N-Nitrosodimethylamine	62-75-9	100 ppb
Propylene oxide	75-56-9	3 ppm
Toluene	108-88-3	25 ppm



Mueller Sports Medicine, Inc.

1 Quench Drive, Prairie du Sac, WI 53578 USA * (608)643-8530* Fax (608)643-2568

MASSACHUSETTS Right-to-Know - The following components of this material are included in the Massachusetts Substance List and are present at or above reportable levels:

<u>Chemical Name</u>	<u>CAS Number</u>	<u>Typical Maximum Concentration</u>
Benzene	71-43-2	15 ppm
Benzyl chloride	100-44-7	25 ppm
Propylene oxide	75-56-9	3 ppm

MICHIGAN Critical Materials - The following components of this material are included in the Michigan Critical Materials List:

<u>Chemical Name</u>	<u>CAS Number</u>
None known	

NEW JERSEY Right-to-Know - The following components of this material are included in the New Jersey Hazardous Substance List and are present at or above reportable levels:

<u>Chemical Name</u>	<u>CAS Number</u>	<u>Typical Maximum Concentration</u>
N,N-Dialkyl(C8-10)-N,N-dimethylammonium chloride	68424-95-3	6.5%
N-Alkyl(C12-16)-N,N-dimethylbenzylammonium chloride	86424-85-1	4.3%
Ethanol	64-17-5	2.2%

PENNSYLVANIA Right-to-Know - The following components of this material are included in the Pennsylvania Hazardous Substance List and are present at or above reportable levels:

<u>Chemical Name</u>	<u>CAS Number</u>	<u>Typical Maximum Concentration</u>
Ethanol	64-17-5	2.2%

WILSON IMPERIAL CO -- WIL-BOND, 3606 -- 8010-00N057689

===== Product Identification =====

Product ID:WIL-BOND, 3606
MSDS Date:10/20/1993
FSC:8010
NIIN:00N057689
MSDS Number: BWRTN
=== Responsible Party ===
Company Name:WILSON IMPERIAL CO
Address:115 CHESTNUT ST
City:NEWARK
State:NJ
ZIP:07105
Country:US
Info Phone Num:201-589-6050
Emergency Phone Num:201-589-6050;800-424-9300 (CHEMTREC)
CAGE:25585

=== Contractor Identification ===

Company Name:WILSON IMPERIAL CO
Address:115 CHESTNUT ST
Box:City:NEWARK
State:NJ
ZIP:07105
Country:US
Phone:201-589-6050
CAGE:25585

===== Composition/Information on Ingredients =====

Ingred Name:TOLUENE (SARA 313) (CERCLA). VP:25 @ 25C
CAS:108-88-3
RTECS #:XS5250000
Fraction by Wt: 70-75%
OSHA PEL:200 PPM
ACGIH TLV:50 PPM, S
EPA Rpt Qty:1000 LBS
DOT Rpt Qty:1000 LBS

Ingred Name:ISOPROPYL ALCOHOL (SARA 313). VP:32.8 @ 20C.
CAS:67-63-0
RTECS #:NT8050000
Fraction by Wt: 10-20%
OSHA PEL:400 PPM
ACGIH TLV:400 PPM;500 STEL

Ingred Name:ACETONE (SARA 313) (CERCLA). VP:180 @ 20C.
CAS:67-64-1
RTECS #:AL3150000
Fraction by Wt: 5-10%
OSHA PEL:1000 PPM
ACGIH TLV:750 PPM;1000 STEL
EPA Rpt Qty:5000 LBS
DOT Rpt Qty:5000 LBS

Ingred Name:LIGROINE; (VM&P NAPHTHA). VP:97.3 @ 20C. (SUBSTITUTION MAY
OCCUR W/INGS 5 OR 6)
CAS:8032-32-4

RTECS #:OI6180000
 Fraction by Wt: <5%
 OSHA PEL:300 PPM
 ACGIH TLV:300 PPM

Ingred Name:LACOLENE; (SOLVENT NAPHTHA)
 CAS:64742-89-8
 OSHA PEL:N/K
 ACGIH TLV:N/K

Ingred Name:HYDROCARBONS, C7-9; (SOLVENT NAPHTHA)
 CAS:68920-06-9
 OSHA PEL:N/K
 ACGIH TLV:N/K

Ingred Name:METHYL ALCOHOL; (METHANOL) (SARA 313) (CERCLA). VP:97.3 @ 20C.
 CAS:67-56-1
 RTECS #:PC1400000
 Fraction by Wt: <3.5%
 OSHA PEL:200 PPM, S
 ACGIH TLV:200 PPM;250 STEL, S
 EPA Rpt Qty:5000 LBS
 DOT Rpt Qty:5000 LBS

Ingred Name:XYLENE (SARA 313) (CERCLA). VP:25 @ 25C.
 CAS:1330-20-7
 RTECS #:ZE2100000
 Fraction by Wt: <2%
 OSHA PEL:100 PPM
 ACGIH TLV:100 PPM;150 STEL
 EPA Rpt Qty:1000 LBS
 DOT Rpt Qty:1000 LBS

Ingred Name:ACETIC ACID, BUTYL ESTER; (BUTYL ACETATE) (CERCLA). VP:8.4 @ 20C.
 CAS:123-86-4
 RTECS #:AF7350000
 Fraction by Wt: <2%
 OSHA PEL:150 PPM
 ACGIH TLV:150 PPM;200 STEL
 EPA Rpt Qty:5000 LBS
 DOT Rpt Qty:5000 LBS

Ingred Name:OTHER PROT EQUIP:FOR REPEATED & PROLONGED USE OF THIS PRODUCT.
 RTECS #:9999999ZZ

===== Hazards Identification =====

LD50 LC50 Mixture:NONE SPECIFIED BY MANUFACTURER.
 Routes of Entry: Inhalation:YES Skin:NO Ingestion:NO
 Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO
 Health Hazards Acute and Chronic:VAP & LIQ ARE EYE & SKIN IRRITS. BRTHG EXCESSIVE QTYs OF VAP MAY CAUSE DIZZ, HDCH, NAUS & OTHER CENTRAL NERV EFTS & MAY BE FATAL. PRLNG & RPTD INHAL OF VAPS MAY CAUSE KIDNEY/LIVER DMG. RPTS HAVE ASSOC RPTD & PRLNG OCCUP OVEREXP TO SOLVS W/BRAIN & NERV SYS DMG. INTENTIONAL MISUSE BY DELIB CONCENTRATING (EFTS OF OVEREXP)
 Explanation of Carcinogenicity:NOT RELEVANT

Effects of Overexposure:HLTH HAZ:& INHALING CONTENTS MAY BE
 HARMFUL/FATAL. NOTE:TOLUENE APPEARS ON NAVY LIST OF OCCUP CHEM
 REPRO HAZS. SEEK CONSULTATION FROM APPROP HLTH PROFESSIONALS
 CONCERNING LATEST HAZ LIST INFO & SAFE H NDLG & EXPOS INFO .
 Medical Cond Aggravated by Exposure:THOSE HAVING RESPIRATORY OR HEART
 CONDITIONS SHOULD EXERCISE DUE CAUTION USING THIS PRODUCT. SKIN
 CONTACT MAY AGGRAVATE EXISTING DERMATITIS.

===== First Aid Measures =====

First Aid:INHAL:REMOVE VICTIM TO FRESH AIR & RESTORE BRTHG IF NEC. GET
 EMER ASSISTANCE IMMED. FOR EYE CONT, FLUSH IMMED W/LG AMTS OF WATER
 FOR AT LST 15 MINS. TAKE TO MD FOR MED TREATMENT. SKIN:WASH
 AFFECTED AR EAS W/SOAP & WATER. REMOVE & LAUNDER CONTAM CLTHG
 BEFORE REUSE. CONSULT MD IF IRRIT PERSISTS. INGEST:DO NOT INDUCE
 VOMITING. CALL MD IMMEDIATELY.

===== Fire Fighting Measures =====

Flash Point Method:TCC
 Flash Point:29.0F,-1.7C
 Lower Limits:1.2%
 Extinguishing Media:DRY CHEMICAL.
 Fire Fighting Procedures:USE NIOSH/MSHA APPRVD SCBA &FULL PROT EQUIP .
 CNTNRS EXPOS TO INTENSE HEAT, SHOULD BE COOLED W/WATER TO PVNT VAP
 PRESS BUILD-UP, WHICH COULD RSLT(SUPDAT)
 Unusual Fire/Explosion Hazard:KEEP CONTAINER TIGHTLY CLOSED. ISOLATE
 FROM HEAT, PILOT LIGHTS, ELECTRICAL EQUIPMENT, SPARKS & OPEN FLAME.

===== Accidental Release Measures =====

Spill Release Procedures:KEEP ALL SOURCES OF IGNIT & HOT SURFS AWAY
 FROM SPILL. FOR SM SPILL FLUSH W/WATER. FOR LG SPILL, USE SAND,
 EARTH/OTHER SUITABLE ABSORB MATL. IF SPILL IS INDOORS, OPEN ALL
 WINDOWS & DOORS, VENTILATE AR EA OF SPILL. REPORT SPILL TO APPROP
 FED, (SUPDAT)
 Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

===== Handling and Storage =====

Handling and Storage Precautions:STORE IN COOL, DRY PLACE W/CONTAINER
 PROPERLY SEALED. KEEP AWAY FROM HEAT, SPARKS, PILOT LIGHTS,
 ELECTRIC OUTLETS & OPEN FLAME.
 Other Precautions:DO NOT MIX W/OTHER MATERIALS, OTHER THAN AS
 RECOMMENDED IN LABEL INSTRUCTIONS. KEEP OUT OF REACH OF CHILDREN.

===== Exposure Controls/Personal Protection =====

Respiratory Protection:NIOSH/MSHA APPROVED CHEMICAL CARTRIDGE
 RESPIRATOR FOR SOLVENT VAPORS (TC-23-C OR EQUIVALENT).
 Ventilation:IF CURRENT VENT PRACTICES ARE NOT ADEQ TO MAINTAIN VAP
 CONCS BELOW ESTABLISHED EXPOS LIMS, ADDNL LOC EXHST VENT (SUPDAT)
 Protective Gloves:SOLVENT RESISTANT GLOVES.
 Eye Protection:ANSI APPROVED CHEM WORKERS GOGGS .
 Other Protective Equipment:EYE WASH FOUNTAIN & DELUGE SHOWER WHICH MEET
 ANSI DESIGN CRITERIA . USE SOLV RESIST APRON/IMPERVIOUS CLTHG(ING
 10)
 Work Hygienic Practices:WASH HANDS BEFORE EATING OR USING RESTROOM.
 Supplemental Safety and Health
 FIRE FIGHT PROC:IN CNTNR RUPTURE. SPILL PROC:STATE/LOC AUTHS & REQUEST

ASSISTANCE IF NEEDED. BEFORE ATTEMPTING TO CLEAN UP REFER TO HAZ INFO IN OTHER SECTIONS OF THIS MSDS. VENT:CAPABLE OF MAINTAINING VAP LEVELS BELOW REC EXPOS LIMS MAY BEREQD. USE EXPLO-PROOF, NON-SPARKING EQUIP.

===== Physical/Chemical Properties =====

Boiling Pt:B.P. Text:>131F,>55C
Vapor Pres:SEE INGS
Vapor Density:HVR/AIR
Spec Gravity:0.84
Evaporation Rate & Reference:SLOWER THAN ETHER
Appearance and Odor:NONE SPECIFIED BY MANUFACTURER.
Percent Volatiles by Volume:100

===== Stability and Reactivity Data =====

Stability Indicator/Materials to Avoid:YES
STRONG OXIDIZING AGENTS.
Stability Condition to Avoid:HEAT, SPARKS, PILOT LIGHTS, STATIC
ELECTRICITY & FLAME. DO NOT USE IN CONFINED SPACES.
Hazardous Decomposition Products:CARBON MONOXIDE & OTHER ORGANIC
COMPOUNDS MAY BE FORMED DURING COMBUSTION.

===== Disposal Considerations =====

Waste Disposal Methods:SEAL IN CLOSED METAL CONTAINER & DISPOSE OF
I/A/W LOCAL, STATE & FEDERAL REGULATIONS.

Disclaimer (provided with this information by the compiling agencies):
This information is formulated for use by elements of the Department
of Defense. The United States of America in no manner whatsoever,
expressly or implied, warrants this information to be accurate and
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document should seek competent professional advice to verify and
assume responsibility for the suitability of this information to their
particular situation.

SAFETY DATA SHEET



Date Issued : 10/4/2013
SDS No : WI-00710

1. PRODUCT AND COMPANY IDENTIFICATION

GENERAL USE: Polish cast iron stoves
PRODUCT CODE: WI-00710

MANUFACTURER

Rutland Products
7 Crabtree Rd.
Jacksonville, IL 62650
Alternate Emergency Phone: 217-245-7810
Customer Service: 800-544-1307
E-Mail: sales@rutland.com

24 HR. EMERGENCY TELEPHONE NUMBERS

Poison Control Center (Medical) : (877) 800-5553
CHEMTREC (US Transportation) : (800) 424-9300

2. HAZARDS IDENTIFICATION

GHS LABEL

Exclamation
mark

SIGNAL WORD: WARNING

HAZARD STATEMENTS

H320: Causes eye irritation.
H315: Causes skin irritation.
H303: May be harmful if swallowed.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Vol. %	CAS
Carbon Black	---	1333-86-4
Graphite (natural)	---	7782-42-5
Octadecanoic Acid	---	57-11-4
Alcohols, C16-18	---	67762-27-0
Ethanol, 2, 2', 2''-nitritoltris	---	102-71-6

4. FIRST AID MEASURES

EYES: Immediately flush eyes with plenty of water. Get medical attention, if irritation persists.

SKIN: Wash with soap and water. Get medical attention if irritation develops or persists.

INGESTION: Get immediate medical attention. Do not induce vomiting unless instructed to do so by poison center or physician.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

EYES: Irritation

SKIN: Irritation, rash.

INGESTION: Not yet Known

5. FIRE FIGHTING MEASURES

FLAMMABLE CLASS: NA = Not Applicable

EXPLOSION HAZARDS: NA = Not Applicable

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Absorb spilled material and place in appropriate container for disposal.

7. HANDLING AND STORAGE

GENERAL PROCEDURES: Avoid contact with eyes, skin, and clothing.

STORAGE: Store in a tightly closed container.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION**PERSONAL PROTECTIVE EQUIPMENT**

EYES AND FACE: Wear safety glasses with side shields. Chemical splash goggles and face shield (ANSI Z87.1 or approved equivalent) are recommended.

SKIN: Wear protective clothing, including long sleeves and gloves, to prevent skin contact. Thoroughly wash clothing before reuse.

RESPIRATORY: Good general ventilation should be sufficient to control airborne levels.

9. PHYSICAL AND CHEMICAL PROPERTIES

ODOR: Mild waxy odor.

COLOR: Black

PHYSICAL STATE COMMENTS: Paste

FLAMMABLE LIMITS: 0 to 0

SOLUBILITY IN WATER: Soluble

SPECIFIC GRAVITY: 1

10. STABILITY AND REACTIVITY

STABLE: Yes

HAZARDOUS DECOMPOSITION PRODUCTS: Not yet Known

INCOMPATIBLE MATERIALS: Strong acids, bases, and oxidizers

11. TOXICOLOGICAL INFORMATION**EYE EFFECTS:** Acute eye irritant**SKIN EFFECTS:** Skin irritant**CHRONIC:** Not yet Known**CARCINOGENICITY****Notes:** Not Established**12. ECOLOGICAL INFORMATION**

ENVIRONMENTAL DATA: Effect of low concentrations on aquatic life is unknown. May be dangerous if it enters water intakes. Notify local health and wildlife officials and operators of nearby water intakes in accordance with local, state and federal regulations.

13. DISPOSAL CONSIDERATIONS**DISPOSAL METHOD:** Dispose of this product in accordance with all applicable local, state and federal regulations.**14. TRANSPORT INFORMATION****DOT (DEPARTMENT OF TRANSPORTATION)****OTHER SHIPPING INFORMATION:** Not Regulated**ROAD AND RAIL (ADR/RID):** Not regulated**AIR (ICAO/IATA):** Not regulated**VESSEL (IMO/IMDG):** Not regulated**15. REGULATORY INFORMATION****UNITED STATES****TSCA (TOXIC SUBSTANCE CONTROL ACT)**

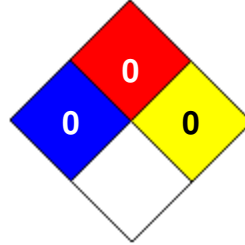
Chemical Name	CAS
Carbon Black	1333-86-4
Graphite (natural)	7782-42-5
Octadecanoic Acid	57-11-4
Alcohols, C16-18	67762-27-0
Ethanol, 2, 2', 2''-nitrilotris	102-71-6

CALIFORNIA PROPOSITION 65

Chemical Name	Vol. %	Listed
Carbon Black	---	Cancer

16. OTHER INFORMATION**PREPARED BY:** Chad Stewart**HMIS RATING**

HEALTH	<input type="text"/>	0
FLAMMABILITY	<input type="text"/>	0
PHYSICAL HAZARD	<input type="text"/>	0
PERSONAL PROTECTION	<input type="text"/>	B

NFPA CODES

MANUFACTURER DISCLAIMER: The information presented herein is believed to be accurate but is not warranted. Recipients are advised to confirm in advance that the information is current, applicable and suitable to their circumstances.

Material Safety Data Sheet

according to ANSI Z400.1- 2004 and 29 CFR 1910.1200



WINDEX® ANTIBACTERIAL DISINFECTANT MULTI-SURFACE CLEANER

Version 1.

Print Date 04/23/2009

Revision Date 08/25/2008

MSDS Number 350000004960

1. PRODUCT AND COMPANY IDENTIFICATION

Product information

Trade name : WINDEX® ANTIBACTERIAL DISINFECTANT MULTI-SURFACE CLEANER

Use of the Substance/Preparation : Disinfectant

Company : S.C. Johnson and Son, Limited
1 Webster Street
Brantford ON N3T 5R1

Emergency telephone : 24 Hour Transport & Medical Emergency Phone (866) 231-5406
24 Hour International Emergency Phone (952) 852-4647
24 Hour Canadian Transport Emergency Phone (CANUTEC) (613) 996-6666

2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance / Odor : clear / liquid / characteristic

Immediate Concerns

: Caution
Avoid contact with skin, eyes and clothing.

Potential Health Effects

Routes of exposure : Eye, Skin, Inhalation, Ingestion.

Eyes : May cause:
Mild eye irritation

Skin : Prolonged or repeated contact may dry skin and cause irritation.

Inhalation : None known.

Ingestion : None known.

Aggravated Medical Condition : None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No.	Weight %
Deionized Water	7732-18-5	60.00 - 100.00
Isopropanol	67-63-0	1.00 - 5.00
Ethyleneglycol	112-25-4	0.10 - 1.00

Material Safety Data Sheet

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Monohexylether		
Lactic Acid	79-33-4	0.18

4. FIRST AID MEASURES

- Eye contact : Flush immediately with plenty of water for at least 15 to 20 minutes. Get medical attention if irritation develops and persists.
- Skin contact : Wash off with soap and water.
- Inhalation : Remove to fresh air. If breathing is affected, get medical attention.
- Ingestion : If swallowed, DO NOT induce vomiting unless directed to do so by medical personnel. Drink 1 or 2 glasses of water. Never give anything by mouth to an unconscious person. Get medical attention immediately.

5. FIRE-FIGHTING MEASURES

- Suitable extinguishing media : Alcohol foam, carbon dioxide, dry chemical, water fog
- Specific hazards during fire fighting : Container may melt and leak in heat of fire.
- Further information : Although this product has a flash point below 200 Deg F, it is an aqueous solution containing an alcohol and does not sustain combustion. Standard procedure for chemical fires. Wear full protective clothing and positive pressure self-contained breathing apparatus.
- Flash point : 124 °F
Method: Tag Closed Cup (TCC)
- Flash point : 51 °C
Method: Tag Closed Cup (TCC)
- Upper explosion limit : Note: no data available

6. ACCIDENTAL RELEASE MEASURES

- Personal precautions : Remove all sources of ignition.
- Methods for cleaning up : Soak up with inert absorbent material.

Material Safety Data Sheet

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Sweep up and shovel into suitable containers for disposal.
Dike large spills.

7. HANDLING AND STORAGE

Handling

Advice on safe handling : KEEP OUT OF REACH OF CHILDREN AND PETS.
Use only as directed.

Advice on protection : Keep away from heat and sources of ignition.
against fire and explosion

Storage

Requirements for storage : Keep container closed when not in use.
areas and containers : Keep in a dry, cool and well-ventilated place.
Do not freeze.

Material Safety Data Sheet

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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits

Components	CAS-No.	mg/m3	ppm	Basis
Isopropanol	67-63-0		400 ppm	ACGIH_STEL
			200 ppm	ACGIH_TWAS
		1,230 mg/m3	500 ppm	CA-AB_STEL
		983 mg/m3	400 ppm	CA-AB_TWAS
			400 ppm	CA-BC_STEL
			200 ppm	CA-BC_TWAS
		1,230 mg/m3	500 ppm	CA-NB_STEL
		983 mg/m3	400 ppm	CA-NB_TWAS
			400 ppm	CA-NS_STEL
			200 ppm	CA-NS_TWAS
		1,228 mg/m3	500 ppm	CA-NT_STEL
		983 mg/m3	400 ppm	CA-NT_TWAS
		1,228 mg/m3	500 ppm	CA-NU_STEL
		983 mg/m3	400 ppm	CA-NU_TWAS
			400 ppm	CA-ON_STEV
			200 ppm	CA-ON_TWAE
		1,230 mg/m3	500 ppm	CA-QC_STEV
		1,225 mg/m3	500 ppm	CA-YK_STEL
		980 mg/m3	400 ppm	CA-YK_TWAS
		1,225 mg/m3	500 ppm	NIOSH_STEL

Material Safety Data Sheet

according to ANSI Z400.1- 2004 and 29 CFR 1910.1200



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		980 mg/m3	400 ppm	NIOSH_TWAS
			400 ppm	CA-MB_STEL
			200 ppm	CA-MB_TWAS
		983 mg/m3	400 ppm	CA-QC_TWAE
			400 ppm	CA-SK_STEL
			200 ppm	CA-SK_TWAS
		983 mg/m3	400 ppm	GCC_OELTWA
			2,000 ppm	NIOSH_IDLH

Personal protective equipment

- Respiratory protection : No personal respiratory protective equipment normally required.
- Hand protection : not required under normal use
- Eye protection : No special requirements.
- Hygiene measures : Use only with adequate ventilation. Wash thoroughly after handling. Substantial amounts of mist/vapors can be controlled with local exhaust ventilation or respiratory protection. Wear suitable protective clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

- Form : liquid
- Color : clear
- Odor : characteristic
- pH : 2.3 - 3.3
- Boiling point : no data available
- Flash point : 124 °F
Method: Tag Closed Cup (TCC)
- Flash point : 51 °C
Method: Tag Closed Cup (TCC)

Material Safety Data Sheet

according to ANSI Z400.1- 2004 and 29 CFR 1910.1200



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MSDS Number 350000004960

Evaporation rate	:	no data available
Autoignition temperature	:	no data available
Upper explosion limit	:	no data available
Vapour pressure	:	similar to water
Water solubility	:	completely soluble
Partition coefficient: n-octanol/water	:	no data available

10. STABILITY AND REACTIVITY

Conditions to avoid	:	Heat, flames and sparks.
Materials to avoid	:	Do not mix with oxidizing agents. Do not mix with bleach or any other household cleaners.
Hazardous decomposition products	:	When exposed to fire, produces normal products of combustion.
Hazardous reactions	:	Stable

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity	:	LD50 rat Dose: > 5,000 mg/kg
Acute inhalation toxicity	:	LC50 rat Dose: > 5.59 mg/l
Acute dermal toxicity	:	LD50 rabbit Dose: > 5,000 mg/kg no data available
Chronic effects		
Carcinogenicity	:	no data available
Mutagenicity	:	no data available
Reproductive effects	:	no data available

Material Safety Data Sheet

according to ANSI Z400.1- 2004 and 29 CFR 1910.1200



WINDEX® ANTIBACTERIAL DISINFECTANT MULTI-SURFACE CLEANER

Version 1.

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Revision Date 08/25/2008

MSDS Number 350000004960

Teratogenicity : no data available

Sensitisation : no data available

12. ECOLOGICAL INFORMATION

Ecotoxicity effects : Not Available

13. DISPOSAL CONSIDERATIONS

Product : Observe all applicable Federal, Provincial and State regulations and Local/Municipal ordinances regarding disposal.

14. TRANSPORT INFORMATION

Land transport

▪ **U.S. DOT and Canadian TDG Surface Transportation:**

NA number 1993
Proper shipping name Combustible Liquid, N.O.S.
Class: Combustible liquid
Packaging group: III

Note: SC Johnson ships this product as "Non-Regulated" per DOT exception for Combustible Liquids. (49 CFR 173.150)

Sea transport

▪ **IMDG:**

UN-Number: None.
Packaging group: None.
Proper shipping name not regulated
Class: None.

Air transport

▪ **ICAO/IATA:**

Class: None.
Packaging group: None.
Proper shipping name not regulated
UN/ID No.: None.

Material Safety Data Sheet

according to ANSI Z400.1- 2004 and 29 CFR 1910.1200



WINDEX® ANTIBACTERIAL DISINFECTANT MULTI-SURFACE CLEANER

Version 1.

Print Date 04/23/2009

Revision Date 08/25/2008

MSDS Number 350000004960

15. REGULATORY INFORMATION

Global Chemical Inventories

- Notification status : All ingredients of this product are listed or are excluded from listing on the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.
- : All ingredients of this product comply with the New Substances Notification requirements under the Canadian Environmental Protection Act (CEPA).
- California Prop. 65 : This product does not contain any chemicals known to State of California to cause cancer, birth, or any other reproductive defects.
- : This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.
- EPA Registration Number : 4822-549

16. OTHER INFORMATION

HMIS Ratings

Health	1
Flammability	2
Reactivity	0

NFPA Ratings

Health	1
Fire	2

Material Safety Data Sheet

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Reactivity	0
Special	

Further information

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Prepared by:	SC Johnson Global Safety Assessment & Regulatory Affairs (GSARA)
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Material Safety Data Sheet

according to ANSI Z400.1- 2004 and 29 CFR 1910.1200



WINDEX® MULTI-SURFACE ANTIBACTERIAL DISINFECTANT CLEANER

Version 2.0

Print Date 08/24/2011

Revision Date 08/24/2011

MSDS Number 350000004960
SITE_FORM Number
30000000000000004266.001

1. PRODUCT AND COMPANY IDENTIFICATION

Product information

Trade name : WINDEX® MULTI-SURFACE ANTIBACTERIAL DISINFECTANT CLEANER

Use of the Substance/Mixture : Disinfectant

Company : S.C. Johnson and Son, Limited
1 Webster Street
Brantford ON N3T 5R1

Emergency telephone number : 24 Hour Transport & Medical Emergency Phone (866) 231-5406
24 Hour International Emergency Phone (952) 852-4647
24 Hour Canadian Transport Emergency Phone (CANUTEC) (613) 996-6666

2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance / Odor : clear / liquid / characteristic

Immediate Concerns

: Caution
Avoid contact with skin, eyes and clothing.

Potential Health Effects

Exposure routes : Eye, Skin, Inhalation, Ingestion.

Eyes : May cause:
Mild eye irritation

Skin : Prolonged or repeated contact may dry skin and cause irritation.

Inhalation : No adverse effects expected when used as directed.

Ingestion : May cause abdominal discomfort.

Aggravated Medical Condition : Persons with pre-existing skin disorders may be more susceptible to irritating effects.

Material Safety Data Sheet

according to ANSI Z400.1- 2004 and 29 CFR 1910.1200



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3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous chemicals present at or above reportable levels as defined by OSHA 29 CFR 1910.1200 or the Canadian Controlled Products Regulations are listed in this table:

Chemical Name	CAS-No.	Weight percent
Isopropanol	67-63-0	1.00 - 5.00
Ethyleneglycol Monohexylether	112-25-4	1.00 - 5.00
Lactic Acid	79-33-4	0.10 - 1.00

For additional information on product ingredients, see www.whatsinsidescjohnson.com.

4. FIRST AID MEASURES

- | | |
|--------------|--|
| Eye contact | : Flush immediately with plenty of water for at least 15 to 20 minutes. Get medical attention if irritation develops and persists. |
| Skin contact | : Wash off with soap and water. |
| Inhalation | : Remove to fresh air. If breathing is affected, get medical attention. |
| Ingestion | : If swallowed, DO NOT induce vomiting unless directed to do so by medical personnel. Drink 1 or 2 glasses of water. Never give anything by mouth to an unconscious person. Get medical attention immediately. |

5. FIREFIGHTING MEASURES

- | | |
|--------------------------------------|--|
| Suitable extinguishing media | : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. |
| Specific hazards during firefighting | : Container may melt and leak in heat of fire. |
| Further information | : Cool and use caution when approaching or handling fire-exposed containers. Wear full protective clothing and positive pressure self-contained breathing apparatus. In case of fire and/or explosion do not breathe fumes. Although this product has a flash point below 200 Deg F, it is an aqueous solution |

Material Safety Data Sheet

according to ANSI Z400.1- 2004 and 29 CFR 1910.1200



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containing an alcohol and does not sustain combustion.

Flash point : 51 °C
123.8 °F
Method: Tag Closed Cup (TCC)

Lower explosion limit : Note: no data available

Upper explosion limit : Note: no data available

6. ACCIDENTAL RELEASE MEASURES

- Personal precautions : Remove all sources of ignition.
Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
Wear personal protective equipment.
- Environmental precautions : Outside of normal use, avoid release to the environment.
- Methods for cleaning up : Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).
Use only non-sparking equipment.
Dike large spills.
Clean residue from spill site.

7. HANDLING AND STORAGE

Handling

- Advice on safe handling : Use only as directed.
KEEP OUT OF REACH OF CHILDREN AND PETS.
- Advice on protection against fire and explosion : Keep away from heat and sources of ignition.
Take measures to prevent the build up of electrostatic charge.

Storage

- Requirements for storage areas and containers : Keep container closed when not in use.
Keep in a dry, cool and well-ventilated place.

Material Safety Data Sheet

according to ANSI Z400.1- 2004 and 29 CFR 1910.1200



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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits

Components	CAS-No.	mg/m3	ppm	Non-standard units	Basis
Isopropanol	67-63-0	-	400 ppm	-	ACGIH STEL
Isopropanol	67-63-0	-	200 ppm	-	ACGIH TWA

Personal protective equipment

Respiratory protection

Industrial setting : No personal respiratory protective equipment normally required.

Household setting : Use only with adequate ventilation.

Hand protection : No special requirements.

Eye protection

Industrial setting : No special requirements.

Household setting : Avoid contact with eyes.

Skin and body protection : No special requirements.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form : liquid

Color : clear

Odor : characteristic

pH : 2.3 - 3.3

Material Safety Data Sheet

according to ANSI Z400.1- 2004 and 29 CFR 1910.1200



WINDEX® MULTI-SURFACE ANTIBACTERIAL DISINFECTANT CLEANER

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Boiling point	:	no data available
Freezing point	:	no data available
Flash point	:	51 °C 123.8 °F Method: Tag Closed Cup (TCC)
Evaporation rate	:	no data available
Autoignition temperature	:	no data available
Lower explosion limit	:	no data available
Upper explosion limit	:	no data available
Vapour pressure	:	similar to water
Density	:	0.996 g/cm3
Water solubility	:	completely soluble
Partition coefficient: n-octanol/water	:	no data available
Volatile Organic Compounds Total VOC (wt. %)*	:	3 % - additional exemptions may apply *as defined by US Federal and State Consumer Product Regulations

10. STABILITY AND REACTIVITY

Conditions to avoid	:	Heat, flames and sparks.
Materials to avoid	:	Strong oxidizing agents Do not mix with bleach or any other household cleaners.
Hazardous decomposition products	:	Thermal decomposition can lead to release of irritating gases and vapours.
Hazardous reactions	:	Stable under recommended storage conditions.

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity	:	LD50
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Material Safety Data Sheet

according to ANSI Z400.1- 2004 and 29 CFR 1910.1200



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		estimated > 5,000 mg/kg
Acute inhalation toxicity	:	LC50 estimated > 5.59 mg/l
Acute dermal toxicity	:	LD50 estimated > 5,000 mg/kg
Chronic effects		
Carcinogenicity	:	no data available
Mutagenicity	:	no data available
Reproductive effects	:	no data available
Teratogenicity	:	no data available
Sensitisation	:	Not known to be a sensitizer.

12. ECOLOGICAL INFORMATION

Ecotoxicity effects : no data available

13. DISPOSAL CONSIDERATIONS

Observe all applicable Federal, Provincial and State regulations and Local/Municipal ordinances regarding disposal.
Consumer may discard empty container in trash, or recycle where facilities exist.

RCRA waste class : D001 (Ignitable Waste)

14. TRANSPORT INFORMATION

Land transport

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MSDS Number 350000004960

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30000000000000004266.001

U.S. DOT and Canadian TDG Surface Transportation:

Proper shipping name Combustible Liquid, N.O.S.

Class: 3

NA number 1993

Packaging group: III

Note: SC Johnson ships this product as "Non-Regulated" per TDG and per DOT exception for Combustible Liquids. (49 CFR 173.150)

Sea transport

IMDG:

Proper shipping name not regulated

Class: None.

UN/ID No.: None.

Packaging group None.

Air transport

ICAO/IATA:

Proper shipping name not regulated

Class: None.

UN/ID No.: None.

Packaging group None.

15. REGULATORY INFORMATION

Notification status : All ingredients of this product are listed or are excluded from listing on the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

Notification status : All ingredients of this product comply with the New Substances Notification requirements under the Canadian Environmental Protection Act (CEPA).

California Prop. 65 : This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Canada Regulations : This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

16. OTHER INFORMATION

HMIS Ratings

Health

1

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MSDS Number 350000004960
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30000000000000004266.001

Flammability	2
Reactivity	0

NFPA Ratings

Health	1
Fire	2
Reactivity	0
Special	-

Further information

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Prepared by:	SC Johnson Global Safety Assessment & Regulatory Affairs (GSARA)
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Material Safety Data Sheet

according to ANSI Z400.1- 2004 and 29 CFR 1910.1200



WINDEX® OUTDOOR WINDOW & SURFACE CONCENTRATED CLEANER

Version 1.1

Print Date 01/19/2009

Revision Date 12/03/2008

MSDS Number 350000004965

1. PRODUCT AND COMPANY IDENTIFICATION

Product information

Trade name : WINDEX® OUTDOOR WINDOW & SURFACE
CONCENTRATED CLEANER

Use of the
Substance/Preparation
Company : Speciality Cleaner
: S.C. Johnson & Son, Inc.
1525 Howe Street
Racine WI 53403-2236

Emergency telephone : 24 Hour Transport & Medical Emergency Phone (866) 231-
5406
24 Hour International Emergency Phone (952) 852-4647

2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance / Odor : clear / liquid / characteristic

Immediate Concerns

: Caution
CAUSES EYE IRRITATION.
Avoid contact with skin, eyes and clothing.

Potential Health Effects

Routes of exposure : Eye, Skin, Inhalation, Ingestion.

Eyes : May cause:
Moderate eye irritation

Skin : Prolonged or repeated contact may dry skin and cause irritation.

Inhalation : May cause nose, throat, and lung irritation.

Ingestion : May cause:
Abdominal discomfort.

Aggravated Medical
Condition : Persons with pre-existing skin disorders may be more
susceptible to irritating effects.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No.	Weight %
Water	7732-18-5	60.00 - 100.00
Ethoxylated iso-decanol	61827-42-7	1.00 - 5.00

Material Safety Data Sheet

according to ANSI Z400.1- 2004 and 29 CFR 1910.1200



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Sodium xylene sulfonate	1300-72-7	1.00 - 5.00
Trisodium citrate	68-04-2	1.00 - 5.00
Sodium carbonate	497-19-8	1.00 - 5.00

4. FIRST AID MEASURES

- Eye contact : Flush immediately with plenty of water for at least 15 to 20 minutes. Get medical attention if irritation develops and persists.
- Skin contact : Wash off with soap and water. Get medical attention if irritation develops and persists.
- Inhalation : Remove to fresh air. If breathing is affected, get medical attention.
- Ingestion : Drink 1 or 2 glasses of water. Get medical attention immediately. Do NOT induce vomiting. Never give anything by mouth to an unconscious person.

5. FIRE-FIGHTING MEASURES

- Suitable extinguishing media : Alcohol foam, carbon dioxide, dry chemical, water fog
- Specific hazards during fire fighting : Container may melt and leak in heat of fire.
- Further information : Standard procedure for chemical fires.
- Flash point : Note: does not flash
- Lower explosion limit : Note: no data available
- Upper explosion limit : Note: no data available

6. ACCIDENTAL RELEASE MEASURES

- Methods for cleaning up : Soak up with inert absorbent material.
Sweep up and shovel into suitable containers for disposal.

7. HANDLING AND STORAGE

Handling

Material Safety Data Sheet

according to ANSI Z400.1- 2004 and 29 CFR 1910.1200



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Revision Date 12/03/2008

MSDS Number 350000004965

Advice on safe handling : Use only as directed.
Avoid contact with skin, eyes and clothing.
KEEP OUT OF REACH OF CHILDREN AND PETS.

Storage

Requirements for storage : Keep container closed when not in use.
areas and containers : Keep in a dry, cool and well-ventilated place.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits

ACGIH or OSHA exposure limits have not been established for this product or reportable ingredients unless noted in the table above.

Personal protective equipment

Respiratory protection

Industrial setting : No personal respiratory protective equipment normally required.

Household setting : No personal respiratory protective equipment normally required.

Hand protection

Industrial setting : not required under normal use

Household setting : not required under normal use

Eye protection

Industrial setting : If prolonged or repeated contact is possible:
Safety glasses with side-shields

Household setting : No special requirements.

Hygiene measures : Use only with adequate ventilation. Wash thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form : liquid

Material Safety Data Sheet

according to ANSI Z400.1- 2004 and 29 CFR 1910.1200



WINDEX® OUTDOOR WINDOW & SURFACE CONCENTRATED CLEANER

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MSDS Number 350000004965

Color	: clear
Odor	: characteristic
pH	: 10 - 11
Melting point	: no data available
Boiling point	: no data available
Freezing point	: no data available
Flash point	: does not flash
Evaporation rate	: no data available
Autoignition temperature	: no data available
Lower explosion limit	: no data available
Upper explosion limit	: no data available
Vapour pressure	: no data available
Water solubility	: completely soluble
Partition coefficient: n-octanol/water	: no data available
Specific Gravity	: 1.04
Percent volatile	: not determined

10. STABILITY AND REACTIVITY

Conditions to avoid	: None known.
Materials to avoid	: None known.
Hazardous decomposition products	: When exposed to fire, produces normal products of combustion.
Hazardous reactions	: Stable

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity	: LD50 rat
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MSDS Number 350000004965

Dose: Calculated > 7,000 mg/kg

Acute inhalation toxicity : no data available

Acute dermal toxicity : LD50 rabbit
Dose: Calculated > 2,000 mg/kg

Chronic effects

Carcinogenicity : no data available

Mutagenicity : no data available

Reproductive effects : no data available

Teratogenicity : no data available

Sensitisation : no data available

12. ECOLOGICAL INFORMATION

Ecotoxicity effects : Not Available

13. DISPOSAL CONSIDERATIONS

Industrial setting : Observe all applicable Federal, Provincial and State regulations and Local/Municipal ordinances regarding disposal.

Household setting : Consumer may discard empty container in trash, or recycle where facilities exist.

14. TRANSPORT INFORMATION

Land transport

U.S. DOT and Canadian TDG Surface Transportation:

UN-Number : None.
Proper shipping name : not regulated
Class: : None.
Packaging group : None.

Sea transport

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according to ANSI Z400.1- 2004 and 29 CFR 1910.1200



WINDEX® OUTDOOR WINDOW & SURFACE CONCENTRATED CLEANER

Version 1.1

Print Date 01/19/2009

Revision Date 12/03/2008

MSDS Number 350000004965

IMDG:

UN-Number:	None.
Packaging group:	None.
Proper shipping name	not regulated
Class:	None.

Air transport

ICAO/IATA:

Class:	None.
Packaging group:	None.
Proper shipping name	not regulated
UN/ID No.:	None.

15. REGULATORY INFORMATION

Global Chemical Inventories

Notification status	: All ingredients of this product are listed or are excluded from listing on the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.
	: All ingredients of this product comply with the New Substances Notification requirements under the Canadian Environmental Protection Act (CEPA).
California Prop. 65	: This product is not subject to the reporting requirements under California's Proposition 65.
	: This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

16. OTHER INFORMATION

HMIS Ratings

Health	2
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Material Safety Data Sheet

according to ANSI Z400.1- 2004 and 29 CFR 1910.1200



WINDEX® OUTDOOR WINDOW & SURFACE CONCENTRATED CLEANER

Version 1.1

Print Date 01/19/2009

Revision Date 12/03/2008

MSDS Number 350000004965

Flammability	0
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Reactivity	0
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NFPA Ratings

Health	2
--------	---

Fire	0
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Reactivity	0
------------	---

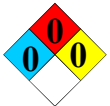
Special	
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Prepared by:	SC Johnson Global Safety Assessment & Regulatory Affairs (GSARA)
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WINDEX POWERIZED FORMULA (READY TO USE)

National Fire Protection Association (NFPA)	Fire Hazard Health  Reactivity Specific Hazard	Hazardous Material Information System (HMIS)	Health 0 Fire Hazard 0 Reactivity 0
Protective Clothing	None required.	Emergency Overview	Clear Blue. Liquid. See Section 9. CAUTION: COMBUSTIBLE.

Section 1. Chemical Product and Company Identification

Product Name	WINDEX POWERIZED FORMULA (READY TO USE)	Code	90940
Product Use	Industrial/Institutional: Cleaning product.	PMS#	433166
MSDS#	126011001	Validation Date	04/19/2000
U.S. Headquarters	Drackett Professional A Division of S.C. Johnson Commercial Markets, Inc. 8310 16th Street Sturtevant, Wisconsin 53177-0902 Phone: (888) 352-2249	Print Date	04/20/2000
		Supersedes	04/13/2000.
		In Case of Emergency	(800) 851-7145

Section 2. Composition and Information on Ingredients

Ingredients	CAS #	% by Weight	Exposure Limits	LC50/LD50
Ammonium Hydroxide	1336-21-6	0.5-1.5	Not available.	ORAL (LD50): Acute: 350 mg/kg [Rat].
2-Butoxyethanol	111-76-2	1-5	TWA: 120 (mg/m ³) from OSHA (PEL) [United States] TWA: 97 (mg/m ³) from ACGIH (TLV) [United States]	ORAL (LD50): Acute: 506 mg/kg [Rat]. DERMAL (LD50): Acute: 406 mg/kg [Rabbit]. VAPOR (LC50): Acute: 450 ppm 4 hours [Rat].
Water	7732-18-5	60-100	Not available.	Not available.

Section 3. Hazards Identification

Routes of Entry	Inhalation. Eye contact.
Potential Acute Health Effects	
Eyes	Practically non-irritating to eyes.
Skin	None known.
Inhalation	May be irritating to nose, throat, and respiratory tract.
Ingestion	Irritating to mouth, throat and stomach.
Medical Conditions	None known.
Aggravated by Overexposure:	
See Toxicological Information (section 11)	

Section 4. First Aid Measures

Eye Contact	Rinse with plenty of running water.
Skin Contact	Rinse with plenty of running water.
Inhalation	Remove to fresh air.
Ingestion	No specific first aid measures are required.

Section 5. Fire Fighting Measures

Flammability of the Product	COMBUSTIBLE.
Flash Points	CLOSED CUP: >93°C (199.4°F).
Products of Combustion	None known.
Fire Fighting Media and Instructions	Use water spray to keep fire-exposed containers cool. Dry chemical, carbon dioxide.
Special Remarks on Fire and Explosion Hazards	Material may burn in heat of fire.

Section 6. Accidental Release Measures

Personal Precautions	Put on appropriate personal protective equipment (see Section 8.).
Environmental Precautions and Clean-up Methods	Eliminate all ignition sources. In the event of major spillage: Use appropriate containment to avoid environmental contamination. Take up with sand or other non-combustible material. Place in suitable clean, dry containers for disposal by approved methods.

Section 7. Handling and Storage

Handling	Avoid contact with eyes. Use appropriate hygiene measures when handling product. FOR INDUSTRIAL USE ONLY
Storage	Store in a dry, cool and well-ventilated area. Protect from freezing. Keep away from heat, sparks and flame. KEEP OUT OF REACH OF CHILDREN.

Section 8. Exposure Controls/Personal Protection

Engineering Controls	No special ventilation requirements. General room ventilation is adequate.
Personal Protection	
<i>Eyes</i>	No special protective clothing is required.
<i>Hands</i>	No special protective clothing is required.
<i>Respiratory</i>	No special protective clothing is required.
<i>Feet</i>	No special protective clothing is required.
<i>Body</i>	No special protective clothing is required.

Section 9. Physical and Chemical Properties

Physical State and Appearance	Liquid.
Odor	Mild. Ammoniacal.
Color	Clear Blue.
pH	10.2 to 11.2 [Basic.]
Specific Gravity	0.99
Boiling/Condensation Point	100°C (212°F)
Melting/Freezing Point	0°C (32°F)
Solubility in water	Complete.

Section 10. Stability and Reactivity

Stability and Reactivity	The product is stable.
Conditions of Instability	None known.
Incompatibility with Various Substances	Not available.
Hazardous Decomposition Products	When exposed to fire: Produces normal products of combustion.
Hazardous Polymerization	Will not occur.

Section 11. Toxicological Information

Acute toxicity ORAL (LD50) Estimated to be greater than 5000 mg/kg (rat).

Effects of Chronic Exposure None known.

Other Toxic Effects Not available.

Section 12. Ecological Information

Not available.

Section 13. Disposal Considerations

Waste Information No special precautions. Dispose of according to all federal, state and local regulations.

Section 14. Transport Information

DOT Classification

Not regulated

TDG Classification

Not regulated

Section 15. Regulatory Information

Reporting in this section is based on ingredients disclosed in Section 2

US Regulations

Federal CERCLA: Hazardous substances.: 2-Butoxyethanol

State New Jersey spill list: 2-Butoxyethanol

New Jersey: 2-Butoxyethanol

Massachusetts spill list: 2-Butoxyethanol

Massachusetts RTK: 2-Butoxyethanol

Pennsylvania RTK: 2-Butoxyethanol

This product is not subject to the reporting requirements under California's Proposition 65.

Registered Product Not applicable.

Information

Canadian Regulations

Canadian NPRI Not applicable.

WHMIS Classification Not controlled under WHMIS (Canada).

WHMIS Icon

Registered Product Not applicable.

Information

Chemical Inventory Status All ingredients of this product are listed or are excluded from listing on the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

Section 16. Other Information

Other Special Considerations Not available.

Version 1

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Material Safety Data Sheet

1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Chemical Product Name	Sodium Chloride (Salt)
Chemical Family	Alkali Metal/Halide
Chemical Name	Sodium Chloride
Formula	NaCl
Molecular Weight	58.44
Commercial Name	Diamond Crystal® Halite Winter Melt® Deicing Crystals

Manufacturer
Cargill Incorporated
Salt Division
P. O. Box 5621
Minneapolis, MN 55440

Emergency Telephone Numbers
(952) 984-8214 during business hours

2. COMPOSITION/INFORMATION ON INGREDIENTS

Description
White crystalline solid.

Ingredient Name	Exposure Limits	Concentration (%)
CAS Number Sodium Chloride 7647-14-5		100%

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

None - GRAS Substance (Generally Recognized As Safe)

Potential Health Effects

Route(s) Of Entry: Ingestion, skin/eye contact, inhalation.

Human Effects and Symptoms of Overexposure:

Acute Inhalation: Irritation of the respiratory tract.

Chronic Inhalation: No applicable information found for chronic systemic effects

Acute Skin Contact: Large amounts can cause irritation and if applied to damaged skin, absorption can occur with effects similar to those via ingestion.

Chronic Skin Contact: No applicable information found for chronic systemic effects.

Acute Eye Contact: Irritation with burning and tearing (salt concentrations greater than the normal saline present).

Chronic Eye Contact: No applicable information found for chronic systemic effects.

Acute Ingestion: Intake of large amounts has generally occurred for deliberate reasons: suicide, absorption, and to induce vomiting. The following effects were observed; nausea and vomiting, diarrhea, cramps, restlessness, irritability, dehydration, water retention, nose bleed, gastrointestinal tract damage, fever, sweating, sunken eyes, high blood pressure, muscle weakness, dry mouth and nose, shock, cerebral (fluid on brain) or pulmonary edema (fluid in lungs), blood cell shrinkage, and brain damage (due to dehydration of brain cells). Death is generally due to cardiovascular collapse or CNS damage. Less than a few grams would not be harmful. For larger quantities, drink large amounts of water or milk.

Chronic Ingestion: No applicable information found for chronic systemic effects.

Carcinogenicity

NTP: Not listed as a carcinogen or mutagen.

IARC: Not listed as a carcinogen or mutagen.

OSHA: Not listed as a carcinogen or mutagen.

Medical Conditions Aggravated by Exposure: In some cases of confirmed hypertension, ingestion may result in elevated blood pressure.

4. FIRST AID MEASURES

First Aid For Eyes: For eye contact, flush with water immediately, lifting eyelids occasionally.

First Aid For Skin: Remove clothing from affected area. Wash skin thoroughly. Rinse carefully.

First Aid For Inhalation: If person breathes large quantities, remove to fresh air at once. If breathing stops, apply artificial respiration immediately.

First Aid For Ingestion: Less than a few grams would not be harmful. For larger quantities, drink large amounts of water or milk.

5. FIRE AND MEASURES

Flash Point: N/A

Extinguishing Media: N/A. This product is nonflammable.

Special Fire Fighting Procedures: N/A.

6. ACCIDENTAL RELEASE MEASURES

Spill or Leak Procedures: Contain spills to prevent contamination of water supply or sanitary sewer system. Vacuum or sweep into containers for proper disposal.

7. HANDLING AND STORAGE

Storage Temperature (min./max.): Avoid humid or wet conditions as product will cake and become hard.

Special Sensitivity: Avoid contact with strong acids.

Handling and Storage Precautions: Becomes hygroscopic at 70% Relative Humidity

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye Protection Requirements: Eyeglasses or goggles should be worn in dusty areas.

Skin Protection Requirements: Protective clothing may be worn in dusty areas, but is generally not required.

Respiratory/Ventilation Requirements: NIOSH/MSHA approved respirator for particulates.

Exposure Limits: Not listed.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical Form: White crystalline solid with slight halogen odor.

Color: White crystalline solid

Odor: Halogen odor

Boiling Point (760mm Hg) (°C): 760 mm Hg. 1465 degrees C.

Melt Point/Freeze Point (°C): 801 degrees C.

PH: 6.7 - 7.3

Solubility In Water (g/cc, %): 26.4%

Specific Gravity (H₂O=1): 2.16 (H₂O)

Bulk Density: 53-83 Lbs/Ft³

% Volatile By Weight: N/A

Vapor Pressure (mm Hg/747°C): = 2.4

Vapor Density (Air=1): (Air=1) N/A

10. REACTIVITY

Stability: Stable

Incompatibilities: Avoid contact with strong acids. Becomes corrosive to metals when wet.

Decomposition Products: May evolve chlorine gas when in contact with strong acids.

11. TOXICOLOGICAL INFORMATION

Description: Not Listed

12. ECOLOGICAL INFORMATION

Ecotoxicity: Not Listed.

Environmental Degradation: Not Listed.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method: Follow applicable Federal, state and local regulations.

14. TRANSPORTATION INFORMATION

D.O.T. Shipping Name: Not Listed

Technical Shipping Name: Not Listed

D.O.T Hazard Class: Not Listed

U.N./N.A. Number: Not Listed

Product Rq (lbs.): N/A

D.O.T. Label: Not Listed

D.O.T. Placard: N/A

Freight Class Bulk: N/A

Freight Class Package: N/A

Product Label: N/A

15. REGULATORY INFORMATION

OSHA Status: Not Listed

TSCA Status: Listed as non hazardous.

Cercla reportable Quantity

SARA Title III

Section 302 Extremely

Hazardous Substances: Not Listed

Section 311/312

Hazard categories: Not Listed

Section 313

Toxic Chemicals: Not Listed

RCRA Status: Not Listed

State Regulatory Information

Component Name

/CAS Number

Concentration

State-Code

N/A

16. OTHER INFORMATION

Reason For Issue: Regulatory Compliance

Prepared By: Skip Niman

Approved By: Dave Merriweather

Title: Director-Quality Administration

Approval Date: September 2002

Supersedes Date: April 2002

MSDS Number: ND2

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SAFETY DATA SHEET

WINSOR & NEWTON WINTON OIL COLOURS

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY:

PRODUCT NAME: WINSOR & NEWTON WINTON OIL COLOURS

APPLICATIONS: Fine Art Painting

SUPPLIER: Colart
Whitefriars Avenue
Harrow
Middlesex HA3 5RH
Tel: +44 (0) 208 4274343
Fax: 44 (0) 208 42433217

2. COMPOSITION/INFORMATION ON INGREDIENTS:

COMPOSITION COMMENTS: No ingredients classified as hazardous

3. HAZARDS IDENTIFICATION:

Not regarded as a health hazard under current legislation.

4. FIRST AID MEASURES:

INHALATION: Move the exposed person to fresh air at once. Get medical attention if any discomfort continues.

INGESTION: NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! Rinse mouth thoroughly. Drink plenty of water. Get medical attention if any discomfort continues.

SKIN: Remove affected person from source of contamination. Get medical attention if irritation persists after washing.

EYES: Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

5. FIRE FIGHTING MEASURES:

EXTINGUISHING MEDIA: Fire can be extinguished using: Powder, foam or CO2.

UNUSUAL FIRE & EXPLOSION HAZARDS: May ignite other combustible materials.

HAZARDOUS COMBUSTION PRODUCTS: Fire creates: Oxides of: Carbon.

6. ACCIDENTAL RELEASE MEASURES:

SPILL CLEANUP METHODS: Absorb in vermiculite, dry sand or earth and place into containers. Flush with plenty of water to clean spillage area. Do not contaminate water sources or sewer.

7. HANDLING AND STORAGE:

USAGE PRECAUTIONS: Avoid spilling, skin and eye contact.

STORAGE PRECAUTIONS: Keep in original container. Store at moderate temperatures in dry, well ventilated area.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION:

INGREDIENT COMMENTS: No exposure limits noted for ingredient(s).

VENTILATION: Provide adequate general and local exhaust ventilation.

PROTECTIVE GLOVES: Use suitable protective gloves if risk of skin contact.

EYE PROTECTION: N/A.

OTHER PROTECTION: Use barrier creams to prevent skin contact.

HYGIENIC WORK PRACTICES: Use appropriate hand lotion to prevent defatting and cracking of skin. No specific hygiene procedures noted, but good personal hygiene practices are always advisable, especially when working with chemicals.

9. PHYSICAL AND CHEMICAL PROPERTIES:

APPEARANCE: Paste or slurry.

COLOUR: Varying.

ODOUR/TASTE: Characteristic.

BOILING POINT (°C, interval): > 300

Pressure: 760mmHg

DENSITY/SPECIFIC GRAVITY (g/ml): 1.00 - 2.7

Temperature (°C): 20

PARTICLE SIZE (micron): < 25

SOLUBILITY DESCRIPTION: Not miscible with water.

FLASH POINT (°C): > 230

Method: CC (Closed cup).

AUTO IGNITION TEMP. (°C): > 300

10. STABILITY AND REACTIVITY:

STABILITY:	Normally stable.
CONDITIONS TO AVOID:	Keep away from combustible material. Possible spontaneous combustion on drying.
HAZARDOUS DECOMP. PRODUCTS:	Fire creates: Carbon monoxide (CO). Carbon dioxide (CO ₂).

11. TOXICOLOGICAL INFORMATION:

HEALTH WARNINGS:	No specific health warnings noted.
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12. ECOLOGICAL INFORMATION:

ECOLOGICAL INFORMATION:	Not regarded as dangerous for the environment.
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13. DISPOSAL CONSIDERATIONS:

DISPOSAL METHODS:	Dispose of in accordance with Local Authority requirements.
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14. TRANSPORT INFORMATION:

RAIL TRANSPORT NOTES:	Not Classified.
SEA TRANSPORT NOTES:	Not Classified.
AIR TRANSPORT NOTES:	Not Classified.

15. REGULATORY INFORMATION:

NC Not classified

STATUTORY INSTRUMENTS:	Chemicals (Hazard Information and Packaging) Regulations.
APPROVED CODE OF PRACTICE:	Classification and Labelling of Substances and Preparations Dangerous for Supply.
GUIDANCE NOTES:	Occupational Exposure Limits EH40. Introduction to Local Exhaust Ventilation HS(G)37. CHIP for everyone HSG(108).

16. OTHER INFORMATION:

REVISION DATE:	17/12/2001
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SAFETY DATA SHEET STATUS: Approved.

SPRAY PRODUCTS CORP -- WORKABLE FIXATIVE SPRAY -- 0000-

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MSDS Safety Information

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MSDS Date: 01/22/1991
MSDS Num: CKZBK
Tech Review: 02/26/2001
Product ID: WORKABLE FIXATIVE SPRAY
Responsible Party
Cage: 12625
Name: SPRAY PRODUCTS CORP
Address: CONSHOHOCKEN RD
Box: 737
City: NORRISTOWN PA 19404 US
Info Phone Number: 215-277-1010
Emergency Phone Number: 215-277-1010 / 800-424-9300
Resp. Party Other MSDS No.: #43803
Chemtrec IND/Phone: (800)424-9300

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Contractor Summary

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Cage: 27028
Name: HAMMETT J L CO
Address: 1 HAMMETT PL
Box: 859057
City: BRAINTREE MA 02185 US
Phone: 617-848-1000
Cage: 12625
Name: SPRAY PRODUCTS CORPORATION
Address: CONSHOHOCKEN RD
Box: 737
City: NORRISTOWN PA 19404 US
Phone: 610-277-1010

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Ingredients

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Cas: 67-64-1
RTECS #: AL3150000
Name: ACETONE
Percent by Wt: 65.5
Other REC Limits: NONE RECOMMENDED
ACGIH TLV: 750PPM
EPA Rpt Qty: 5000 LBS
DOT Rpt Qty: 5000 LBS
Ozone Depleting Chemical: N

Cas: 75-28-5
RTECS #: TZ4300000
Name: ISOBUTANE
= Wt: 12.5
Other REC Limits: NONE RECOMMENDED
ACGIH TLV: 800 PPM
Ozone Depleting Chemical: N

Cas: 108-65-6
RTECS #: AI8295000
Name: PROPYLENE GLYCOL MONOMETHYL ETHER ACETATE

= Wt: 4.8
Other REC Limits: NONE RECOMMENDED
ACGIH TLV: N/E
Ozone Depleting Chemical: N

Cas: 74-98-6
RTECS #: TX2275000
Name: PROPANE
= Wt: 12.5
Other REC Limits: NONE RECOMMENDED
ACGIH TLV: 1000 PPM
Ozone Depleting Chemical: N
=====

Health Hazards Data

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Route Of Entry Inds - Inhalation: YES
Skin: YES
Ingestion: NO
Carcinogenicity Inds - NTP: NO
IARC: NO
OSHA: NO
Effects of Exposure: REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED
OVEREXPOSURE TO SOLVENTS W/PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE.
MAY CAUSE DEFATTING AND DRYING OF SKIN.
Signs And Symptions Of Overexposure: HEADACHE, DIZZINESS, NAUSEA, LOSS
OF
CONSCIOUSNESS. DRYING AND DEFATTING OF SKIN.
Medical Cond Aggravated By Exposure: DRYING AND DEFATTING OF SKIN.
First Aid: INHALATION-REMOVE TO FRESH AIR. SKIN-WASH WITH SOAP & WATER.
EYES-FLUSH WITH WATER. INGESTED-DO NOT INDUCE VOMITING. CALL A
PHYSICIAN
IMMEDIATELY.
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Handling and Disposal

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Spill Release Procedures: ELIMINATE ALL SOURCES OF HEAT OR IGNITION.
VENTILATE AREA. APPLY ABSORBENT MATERIAL TO SPILL.
Waste Disposal Methods: DISPOSE OF IN ACCORDANCE TO LOCAL, STATE AND
FEDERAL REGULATIONS.
Handling And Storage Precautions: EXTREMELY FLAMMABLE. STORE AND USE
AWAY
FROM HEAT AND IGNITION.
Other Precautions: CONTENTS UNDER PRESSURE-DO NOT STORE ABOVE 120F.
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Fire and Explosion Hazard Information

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Flash Point: =-104.4C, -156.F
Lower Limits: 2.2
Upper Limits: 8.9
Extinguishing Media: FOAM, CARBON DIOXIDE, DRY CHEMICALS.
Fire Fighting Procedures: HANDLE AS FLAMMABLE LIQUID.
Unusual Fire/Explosion Hazard: CONTENTS UNDER PRESSURE.
=====

Control Measures

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Respiratory Protection: USE NIOSH APPROVED ORGANIC VAPOR RESPIRATOR.
Ventilation: LOCAL EXHAUST: YES. MECHANICAL (GENERAL): IF REQUIRED.

SPECIAL: NONE. OTHER: NONE.
Protective Gloves: NEOPRENE IF SUBJECTED TO.
Eye Protection: CHEMICAL SPLASH GOGGLES. OR SAFETY GLASSES.
Other Protective Equipment: NONE.
Work Hygienic Practices: AVOID BREATHING VAPOR AND EYE AND SKIN
EXPOSURE.
Supplemental Safety and Health: SECTION IIA-NON TOXIC CERTIFICATION: CP
SEAL NOT KNOWN. AP SEAL NOT KNOWN. ASTM D4236 NOT KNOWN.

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Physical/Chemical Properties

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HCC: V3
Boiling Point: =-41.9C, -43.7F
Melt/Freeze Pt: =-93.7C, -137.F
Vapor Pres: 153 MM HG
Vapor Density: 2.2
Spec Gravity: 0.814
Evaporation Rate & Reference: 4.86 (N-BUTYL ACETATE=1)
Solubility in Water: APPRECIABLE
Appearance and Odor: CLEAR COLOR; SOLVENT ODOR.

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Reactivity Data

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Stability Indicator: YES
Stability Condition To Avoid: KEEP AWAY FROM SPARKS, HEAT OR OPEN
FLAME.
Materials To Avoid: NONE.
Hazardous Decomposition Products: CARBON MONOXIDE & CARBON DIOXIDE MAY
BE
FORMED DURING COMBUSTION.
Hazardous Polymerization Indicator: NO
Conditions To Avoid Polymerization: WILL NOT OCCUR.

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Toxicological Information

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Ecological Information

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MSDS Transport Information

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Regulatory Information

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Federal Regulatory Information: ACETONE: CERCLA RQ = 5000 LB, RCRA
CODE:
U0002, ISOBUTANE: CAA TQ = 10000 LB, PROPANE: CAA TQ = 10000 LB

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Other Information

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Transportation Information

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Responsible Party Cage: 12625
Trans ID NO: 156085
Product ID: WORKABLE FIXATIVE SPRAY
MSDS Prepared Date: 01/22/1991

Review Date: 02/26/2001
Article W/O MSDS: N
Limited Quantity IND: N
Multiple KIT Number: 0
Unit Of Issue: CY
Type Of Container: CYLINDER

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Detail DOT Information

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DOT PSN Code: AGC
DOT Proper Shipping Name: AEROSOLS, FLAMMABLE,
DOT PSN Modifier: (EACH NOT EXCEEDING 1 L CAPACITY)
Hazard Class: 2.1
UN ID Num: UN1950
Label: FLAMMABLE GAS
Special Provision: N82
Non Bulk Pack: NONE
Bulk Pack: NONE
Max Qty Pass: 75 KG
Max Qty Cargo: 150 KG
Vessel Stow Req: A
Water/Ship/Other Req: 40,48,85

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Detail IMO Information

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IMO PSN Code: AKD
IMO Proper Shipping Name: AEROSOLS o
IMDG Page Number: 2102
UN Number: 1950
UN Hazard Class: 2(T)
IMO Packaging Group: -
Subsidiary Risk Label: T
EMS Number: 2-13
MED First Aid Guide NUM: 620

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Detail IATA Information

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IATA PSN Code: ALS
IATA UN ID Num: 1950
IATA Proper Shipping Name: AEROSOLS, FLAMMABLE
IATA PSN Modifier: (EACH NOT EXCEEDING 1 L CAPACITY)
IATA UN Class: 2.1
IATA Label: FLAMMABLE GAS
Packing Note Passenger: 203
Max Quant Pass: 75KG
Max Quant Cargo: 150KG
Packaging Note Cargo: 203

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Detail AFI Information

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AFI PSN Code: ALR
AFI Symbols: *
AFI Proper Shipping Name: AEROSOLS, FLAMMABLE, N.O.S.
AFI PSN Modifier: (EACH NOT EXCEEDING 1L CAPACITY)
AFI Hazard Class: 2.1
AFI UN ID NUM: UN1950
Special Provisions: P4

Back Pack Reference: A6.3

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HAZCOM Label

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Product ID: WORKABLE FIXATIVE SPRAY
Cage: 12625
Company Name: SPRAY PRODUCTS CORPORATION
Street: CONSHOHOCKEN RD
PO Box: 737
City: NORRISTOWN PA
Zipcode: 19404 US
Health Emergency Phone: 215-277-1010 / 800-424-9300
Date Of Label Review: 02/26/2001
Chronic Hazard IND: Y
Eye Protection IND: YES
Skin Protection IND: YES
Signal Word: DANGER
Respiratory Protection IND: YES
Health Hazard: Moderate
Contact Hazard: Slight
Fire Hazard: Severe
Reactivity Hazard: None
Hazard And Precautions: REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED
OVEREXPOSURE TO SOLVENTS W/PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE.
MAY CAUSE DEFATTING AND DRYING OF SKIN.

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FLINN SCIENTIFIC, INC.

Safety Data Sheet (SDS)

SDS #: 849.00

Revision Date: March 21, 2014

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Wright's Stain

Flinn Scientific, Inc. P.O. Box 219, Batavia, IL 60510 (800) 452-1261

CHEMTREC Emergency Phone Number: (800) 424-9300

Signal Word **DANGER**

Pictograms



SECTION 2 — HAZARDS IDENTIFICATION

Hazard class: Acute toxicity, oral (Category 4). Harmful if swallowed (H302). Do not eat, drink or smoke when using this product (P270).

Hazard class: Serious eye damage or irritation (Category 1). Causes serious eye damage (H318).

SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Wright's stain	68988-92-1	$C_{52}H_{42}Br_4N_6O_5S_2$	1214.1	
Synonym: Blood stain				

SECTION 4 — FIRST AID MEASURES

Immediately call a POISON CENTER or physician (P310).

If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing (P305+P351+P338).

If on skin: Wash with plenty of water.

If swallowed: Rinse mouth. Call a POISON CENTER or physician if you feel unwell (P302+P301+P312).

SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable solid.

When heated to decomposition, may emit toxic fumes.

In case of fire: Use a tri-class dry chemical fire extinguisher.

NFPA CODE

None
established

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Wipe up, place in sealed bag or container and dispose. Ventilate area and wash spill site after material pickup is complete. See Sections 8 and 13 for further information.

SECTION 7 — HANDLING AND STORAGE

Flinn Suggested Chemical Storage Pattern: Organic #9. Store with dyes, indicators and stains.
Keep container tightly closed. Store in a cool, dry place.

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Wear protective gloves, protective clothing, and eye protection (P280). Wash hands thoroughly after handling. Will stain skin, clothing, and surfaces.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Dark green, crystalline-like powder. Odorless. Biological stain (blood cell stain).
Soluble: Alcohol
A mixture of halogenated xanthenes and amino-phenothiazines.

SECTION 10 — STABILITY AND REACTIVITY

Avoid contact with oxidizing agents.
Shelf life: Indefinite, if stored properly.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Serious eye irritant, nausea, vomiting.	ORL-RAT LD ₅₀ : N.A.
Chronic effects: N.A.	IHL-RAT LC ₅₀ : N.A.
Target organs: Eyes and digestive tract.	SKN-RBT LD ₅₀ : N.A.

N.A. = Not available, not all health aspects of this substance have been fully investigated.

SECTION 12 — ECOLOGICAL INFORMATION

Toxic to aquatic life.

SECTION 13 — DISPOSAL CONSIDERATIONS

Please review all federal, state and local regulations that may apply before proceeding.
Flinn Suggested Disposal Method #26a is one option.

SECTION 14 — TRANSPORT INFORMATION

Shipping name: Not regulated. Hazard class: N/A. UN number: N/A.

N/A = Not applicable

SECTION 15 — REGULATORY INFORMATION

Not listed.

SECTION 16 — OTHER INFORMATION

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Consult your copy of the *Flinn Science Catalog/Reference Manual* for additional information about laboratory chemicals.

Revision Date: March 21, 2014

Material Safety Data Sheet

May be used to comply with
 OSHA's Hazard Communication Standard,
 29 CFR 1910.1200. Standard must be
 consulted for specific requirements.

U.S. Department of Labor

Occupational Safety and Health Administration
 (Non-Mandatory Form)

Form Approved

OMB No. 1218-0072

245930/330-050

IDENTITY (As Used on Label and List)

RECD April 2000 SPEEDBALL Super Black India Ink (3268, 3338, 32110, 3378, 3231,
 SPEEDBALL Black Waterproof Ink 3398 & 3251)

Section I

Manufacturer's Name



P.O. Box 5167
 Statesville, NC 28687
 ©1997 Speedball Art Products Company

Emergency Telephone Number

704-838-1475

Telephone Number for Information

704-838-1475

Date Prepared

1/29/98

Signature of Preparer (optional)

Section II — Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	% (optional)
Certified non-toxic as per ASTM D4236. Approved for the AP Seal as per the Art and Craft Materials Institute, Inc. (ACMI)				

Section III — Physical/Chemical Characteristics

Boiling Point	212-374°F	Specific Gravity (H ₂ O = 1)	1.1
Vapor Pressure (mm Hg.)	17mmHg	Melting Point	<32°F.
Vapor Density (AIR = 1)	less than 1	Evaporation Rate (Butyl Acetate = 1)	less than 1

Solubility in Water

Dilutable

Appearance and Odor

Thick paste/Acrylic emulsion odor

Section IV — Fire and Explosion Hazard Data

Flash Point (Method Used)	Flammable Limits	LEL	UEL
Not applicable (N/A)	N/A	N/A	N/A

Extinguishing Media

N/A

Special Fire Fighting Procedures

wear self-contained breathing apparatus (pressure-demand, MSHA/NIOSH approved or equivalent) and full protective gear.

Unusual Fire and Explosion Hazards

Material can spatter above 212°F. Film can burn.

(Reproduce locally)

OSHA 174, Sept. 1985

Section V — Reactivity Data

Stability	Unstable	X	Conditions to Avoid	Onset of decomposition is 350°F.
	Stable			
Incompatibility (Materials to Avoid) N/A				

Hazardous Decomposition or Byproducts

Hazardous Polymerization	May Occur	X	Conditions to Avoid	N/A
	Will Not Occur			
Oxides of carbon and nitrogen.				

Section VI — Health Hazard Data

Route(s) of Entry:	N/A	Inhalation?	Skin?	Ingestion?
Health Hazards (Acute and Chronic) N/A				

Carcinogenicity:	N/A	NTP?	IARC Monographs?	OSHA Regulated?
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Signs and Symptoms of Exposure	N/A
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Medical Conditions Generally Aggravated by Exposure	N/A
---	-----

Emergency and First Aid Procedures	Contact with eyes may cause mild irritation: Flush with water.
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Section VII — Precautions for Safe Handling and Use

Steps to Be Taken in Case Material is Released or Spilled	Floor may be slippery; use care to avoid falling. Transfer to containers for recovery or disposal. Keep out of municipal sewers and open bodies of water.
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Waste Disposal Method	Incinerate at a permitted facility according to current local, state and federal regulations.
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Precautions to Be Taken in Handling and Storing	Keep from freezing - product may coagulate.
---	---

Other Precautions	N/A
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Section VIII — Control Measures

Respiratory Protection (Specify Type)			
None required with adequate ventilation & normal operating conditions.			
Ventilation	Local Exhaust	Adequate	Special
	Mechanical (General)		Other
Protective Gloves		Eye Protection	
Impervious		Safety glasses	
Other Protective Clothing or Equipment			
N/A			
Work/Hygienic Practices			
Use protective cream where excessive skin contact is likely.			

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name X-CON 322 PLUS AEROSOL

Product Code 5611

Information on Manufacturer

MANTEK, DIVISION OF NCH CORP.

BOX 152170

IRVING, TEXAS 75015

Recommended Use Solvent-borne coatings

Chemical Nature Solvent mixture

Emergency Telephone Number

CHEMTREC ® 800-424-9300

2. HAZARDS IDENTIFICATION

Emergency Overview

Danger

Extremely flammable

Harmful if inhaled

Severe skin irritation

Severe eye irritation

May be harmful if absorbed through skin

Harmful or fatal if swallowed

Contents under pressure

Color White

Potential Health Effects

Principle Route of Exposure

Primary Routes of Entry

Acute Effects

Eyes

Skin

Inhalation

Ingestion

Chronic Effects

Target Organ Effects

Aggravated Medical Conditions

Potential Environmental Effects

Physical State Aerosol

Odor Strong Pungent

Skin contact, Eye contact, Inhalation.

Inhalation, Skin Absorption.

Severe eye irritant. May cause irreversible eye damage.

Severe skin irritant.

Harmful by inhalation. Inhalation may cause central nervous system effects. May cause drowsiness and dizziness. Irregular cardiac activity.

Harmful or fatal if swallowed. Causes headache, drowsiness or other effects to the central nervous system. Aspiration hazard.

Smallest quantities reaching the lungs through swallowing or subsequent vomiting may result in lung edema or pneumonia.

Liver and kidney injuries may occur.

Central nervous system, Central Vascular System, Liver, Lungs, Kidney, Blood, Skin, Eyes.

Central nervous system. Liver disorders. Respiratory disorders. Skin disorders.

See Section 12 for additional Ecological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS-No
Methylene chloride	75-09-2
Propane	74-98-6
Butane	106-97-8
Palmitic acid	57-10-3
Stearic acid	57-11-4

4. FIRST AID MEASURES

General Advice

Eye Contact

Skin Contact

Inhalation

Ingestion

Notes to Physician

Do not get in eyes, on skin, or on clothing. Do not breathe dust/fume/gas/mist/vapors/spray.

Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. Get medical attention immediately.

Wash off immediately with plenty of water for at least 15 minutes. Get medical attention if symptoms occur.

Move to fresh air. In case of shortness of breath, give oxygen. If breathing has stopped, apply artificial respiration. Get medical attention immediately.

Drink 1 or 2 glasses of water. Do not induce vomiting. Get medical attention immediately. Never give anything by mouth to an unconscious person.

Aspiration hazard if swallowed - can enter lungs and cause damage. May cause cardiac arrhythmia.

5. FIRE-FIGHTING MEASURES

Flash Point > 201°F / > 94°C

Autoignition Temperature No information available.

Flammability Limits in Air % Mixture.

Suitable Extinguishing Media

Water spray. Carbon dioxide (CO2). Dry chemical. Foam.

Specific Hazards Arising from the Chemical

Solvent vapors are heavier than air and may spread along floors. Vapors may travel to areas away from work site before igniting/flashing back to vapor source. Material can create slippery conditions. Flame extension: >18 inches / >45 cm and Burnback: 0 inches / 0 cm.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA	Health	2	Flammability	4	Instability	0
HMIS	Health	2	Flammability	4	Instability	0

Method

Seta closed cup

Upper 23

Lower 1.8

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions

Environmental Precautions

Methods for Containment

Methods for Cleaning Up

Neutralizing Agent

Remove all sources of ignition. Ensure adequate ventilation. Material can create slippery conditions.

Prevent product from contaminating soil or from entering sewage, drainage systems, and bodies of water. Do not flush into surface water or sanitary sewer system.

No information available.

Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).

Not applicable.

7. HANDLING AND STORAGE

Handling

Avoid contact with skin, eyes, and clothing. Wear personal protective equipment. Remove and wash contaminated clothing before re-use. Do not breathe vapors or spray mist. Avoid breathing vapors or mists.
Keep out of the reach of children.

Storage

Storage Temperature
Storage Conditions

Minimum 35°F / 2°C
Indoor X Outdoor

Maximum 130°F / 54°C
Heated Refrigerated

8. EXPOSURE CONTROLS / PERSONAL PROTECTION**Exposure Guidelines**

Component	ACGIH TLV	OSHA PEL	NIOSH
Methylene chloride	TWA: 50 ppm	TWA: 25 ppm STEL: 125 ppm	IDLH: 2300 ppm
Propane	TWA: 1000 ppm	TWA: 1000 ppm TWA: 1800 mg/m ³	IDLH: 2100 ppm TWA: 1000 ppm TWA: 1800 mg/m ³
Butane	TWA: 1000 ppm	No data available	TWA: 1900 mg/m ³ TWA: 800 ppm
Palmitic acid	No data available	No data available	No data available
Stearic acid	No data available	No data available	No data available

Engineering Measures

Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment**Eye/Face Protection**

Tightly fitting safety goggles.

Skin Protection

Impervious gloves.

Respiratory Protection

Use NIOSH approved respiratory protection.

General Hygiene Considerations

Ensure that eyewash stations and safety showers are close to the workstation location. Remove and wash contaminated clothing before re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES**Physical State**

Aerosol

Viscosity

Non viscous

Color

White

Odor

Strong Pungent

Appearance

Opaque

pH

Not applicable

Specific Gravity

1.20

Evaporation Rate

>1 (Butyl acetate=1)

Percent Volatile (Volume)

No information available

VOC Content (%)

No information available

Vapor Pressure

2844 mmHg @ 70 °F

Vapor Density

>1 (Air = 1.0)

Solubility

Insoluble

Boiling Point/Range

No data available

10. STABILITY AND REACTIVITY**Chemical Stability**

Stable under normal conditions. Hazardous polymerization does not occur.

Conditions to Avoid

Heat, flames, and sparks.

Incompatible Products

Strong oxidizing agents, Acids, Alkali metals.

Hazardous Decomposition Products

Carbon oxides, Chlorine gas., Hydrogen chloride gas, Phosgene.

Possibility of Hazardous Reactions

None under normal processing..

11. TOXICOLOGICAL INFORMATION**Product Information**

No information available.

Component Information**Acute toxicity**

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation	Draize Test	Other
Methylene chloride	2000 mg/kg (Rat)	no data available	76000 mg/m ³ (Rat) 4 h	no data available	no data available
Propane	no data available	no data available	658 mg/L (Rat) 4 h	no data available	no data available
Butane	no data available	no data available	658 mg/L (Rat) 4 h	no data available	no data available
Palmitic acid	10 g/kg (Rat)	no data available	no data available	no data available	no data available
Stearic acid	no data available	5 g/kg (Rabbit)	no data available	no data available	no data available

Chronic Toxicity

Component	Mutagenicity	Sensitization	Developmental Toxicity	Reproductive Toxicity	Target Organ Effects
Methylene chloride	X	Cardiovascular	X	Female reproductive toxin.	skin, CVS, eyes, CNS (in animals: lung, liver, salivary and mammary gland tumors), Blood, Heart, Kidney
Propane	no data available	no data available	no data available	no data available	CNS, liver, heart
Butane	no data available	no data available	no data available	no data available	CNS, liver, heart
Palmitic acid	no data available	no data available	no data available	no data available	no data available
Stearic acid	no data available	no data available	no data available	no data available	no data available

Carcinogenicity

Component	ACGIH	IARC	NTP	OSHA	Other
Methylene chloride	A3	Group 2B	Reasonably Anticipated	X	not applicable
Propane	not applicable	not applicable	not applicable	not applicable	not applicable
Butane	not applicable	not applicable	not applicable	not applicable	not applicable
Palmitic acid	not applicable	not applicable	not applicable	not applicable	not applicable
Stearic acid	not applicable	not applicable	not applicable	not applicable	not applicable

12. ECOLOGICAL INFORMATION**Product Information**

No information available.

Component Information

Component	Toxicity to Algae	Toxicity to Fish	Microtox	Water Flea	log Pow
Methylene chloride	h EC50 96 Selenastrum capricornutum >660 mg/L	h LC50 96 Pimephales promelas 140.8-277.8 mg/L h LC50 96 Pimephales promelas 262-855 mg/L	EC50 = 1 mg/L 24 h EC50 = 2.88 mg/L 15 min	h EC50 48 140 mg/L	1.25

Propane	no data available	n LC50 96 <i>Lepomis macrochirus</i> 193 mg/L	no data available	no data available	2.3
Butane	no data available	no data available	no data available	no data available	2.89
Palmitic acid	no data available	n LC50 96 <i>Oryzias latipes</i> 150 mg/L	no data available	no data available	N/A
Stearic acid	no data available	no data available	no data available	no data available	N/A

Persistence and Degradability
Bioaccumulation
Mobility

No information available.
No information available.
No information available.

13. DISPOSAL CONSIDERATIONS

Product Disposal
Container Disposal

Dispose of in accordance with local regulations
Warning! Container under pressure. Do not puncture. Empty remaining contents. Do not re-use empty containers. Empty containers should be taken for local recycling, recovery or waste disposal.

14. TRANSPORT INFORMATION

DOT
Proper Shipping Name
Hazard Class
Description

DOT
Consumer commodity
ORM-D
Consumer commodity ,ORM-D.

TDG
Proper shipping name
Hazard Class
UN-No
Description

Aerosols
2.1
UN1950
AEROSOLS,2.1,UN1950 LTD QTY

ICAO
UN-No
Proper Shipping Name
Hazard Class
Shipping Description

UN1950
Aerosols
2.1
UN1950, AEROSOLS, FLAMMABLE, 2.1 LTD QTY

IATA
UN-No
Proper Shipping Name
Hazard Class
ERG Code
Shipping Description

UN1950
Aerosols, flammable
2.1
10L
UN1950,Aerosols, flammable,2.1 LTD QTY

IMDG/IMO
Proper Shipping Name
Hazard Class
UN-No
EmS No.
Shipping Description

Aerosols
2
UN1950
F-D, S-U
UN1950, Aerosols,2.1 LTD QTY

15. REGULATORY INFORMATION

Inventories
TSCA
DSL

Complies
Complies

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40n of the Code of Federal Regulations, Part 372:

Component	CAS-No	Weight %	SARA 313 - Threshold Values
Methylene chloride	75-09-2	45-50	0.1

SARA 311/312 Hazardous Categorization

Acute Health Hazard	Chronic Health Hazard	Fire Hazard	Sudden Release of Pressure Hazard	Reactive Hazard
Yes	Yes	Yes	Yes	No

CERCLA

Component	Hazardous Substances RQs	CERCLA EHS RQs
Methylene chloride	1000 lb	Not applicable
Propane	Not applicable	Not applicable
Butane	Not applicable	Not applicable
Palmitic acid	Not applicable	Not applicable
Stearic acid	Not applicable	Not applicable

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

WHMIS Hazard Class

A Compressed gases, B5 Flammable aerosol, D2A Very toxic materials.



16. OTHER INFORMATION

Prepared By
Supersedes Date
Issuing Date

Dan Hollas
Not applicable
03/10/2009

Reason for Revision

No information available.

Glossary

No information available.

List of References.

No information available

MANTEK, DIVISION OF NCH CORP. assumes no responsibility for personal injury or property damage caused by the use, storage, or disposal of the product in a manner not recommended on the product label. Users assume all risks associated with such unrecommended use, storage or disposal of the product. The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

XEROX**Material Safety Data Sheet****MSDS No:** D-0401**Date:** 3/8/83**Revision:** 9/20/05**Supplier:** Xerox Corporation
Rochester, NY 14644Xerox Canada Ltd.
5650 Yonge Street
North York, Ontario M2M 4G7**Telephone #(s):***Safety Information: (800) 828-6571**Health Emergency: (585)422-2177**Transportation Emergency (Chemtrec): (800)424-9300***Section I - Product Identification****Trade Names/Synonyms:** Formula A Cleaner, Liquid Cleaning Kit,
Exterior Cleaner, Formula B Cleaner**Part No.:** 43P48, 43P49, 43P50, 43P51*Included in Kits: 8R1169*, 8R582*,
8R3674, 8R3800***Chemical Name:** None

XCI: 544P20361 Contained in: 8R3709

WHMIS Status: Class B/Div. 3, Combustible and Class D/Div. 2B, Toxic

*Cancelled

Ingredients (% by wt.)**CAS No.**

Water (75-80%)	7732-18-5
Isopropanol (5-10%) ^{1,2}	67-63-0
1-Butoxy - 2-propanol (5-10%) ^{1,2}	5131-66-8
Linear alcohol surfactant; C ₁₁ - C ₁₅ (<5%)	68131-40-8
Sodium xylenesulfonate (<5%)	1300-72-7

Section II - Emergency and First Aid**Primary Route of Entry:**

Inhalation

Eyes:

Flush thoroughly with water.

Skin:

Wash thoroughly with soap and water.

Inhalation:

Remove from exposure.

Ingestion:

Dilute stomach contents with several glasses of water.

Symptoms of Overexposure:

Central nervous system depression, cardiovascular and respiratory depression and gastrointestinal irritation.

Medical Conditions Generally Aggravated by Exposure:

None when used as described by product literature.

Additional Information:

None.

Section III - Toxicology and Health Information*This material has been evaluated by Xerox Corporation.*

Oral LD₅₀: >5 g/kg (rats) practically non-toxic.
Dermal LD₅₀: >10.2 g/kg (rabbits) practically non-toxic.
Inhalation LC₅₀: >200 mg/l practically non-toxic.
Eye Irritation: Irritant
Skin Sensitization: Not a sensitizer.
Skin Irritation: Not an irritant.
Human Patch: N.D.
Mutagenicity: N.D.
Carcinogens: None present
Aquatic LC₅₀: N.D.

TLV: 400 ppm (isopropanol)
PEL: 400 ppm (isopropanol)
STEL: 500 ppm (isopropanol)
Ceiling: N.E.
XEL³: 25 ppm (1-butoxy-2-propanol)

Additional Information: None

¹This product contains a toxic chemical(s) subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40CFR Part 372. ²Hazardous ingredient(s) as defined by WHMIS. ³XEL-Xerox Exposure Limit.

Section IV - Physical Data

Appearance/Odor:	Clear liquid / slight odor	Softening Range:	N.A.
Boiling Point:	89-99°C	Melting Point:	N.A.
Solubility in Water:	Completely	Specific Gravity (H₂O=1):	~1
Evaporation Rate	2,9 (N-butylacetate=1)	Vapor Pressure @ 20°C (mm Hg):	15
Vapor Density (Air=1):	2.07	pH:	9.6
Volatile:	96.4% (Wt.) N.A. % (Vol.)	VOC:	200 g/l

Section V - Fire and Explosion Data

Flash Point (Method Used):	106 °F (41.1°C) (P.M.C.C.)
Flammable Limits:	LEL: 2%*, UEL: 12% *Value for isopropanol at 760mm and 82°C.
NFPA 704:	Health - 0, Fire - 2, Reactivity - 0
Extinguishing Media:	Water, foam, dry chemical, CO ₂ .
Special Fire Fighting Procedures:	Use water spray to cool containers.
Fire and Explosion Hazards:	A moderate explosion hazard occurs when this material is exposed to heat or flames.

Section VI -Reactivity Data

Stability:	Stable
Hazardous Polymerization:	Will Not Occur
Hazardous Decomposition Products:	None
Incompatibility (Materials to Avoid):	None

Section VII - Special Protection Information

Respiratory Protection:	None required when used as intended in Xerox products.
Eye Protection:	Safety glasses with side shields or goggles required.
Protective Gloves:	Rubber or vinyl coated gloves recommended.
Other:	None required when used as intended in Xerox products.

Section VIII - Special Precautions

Handling and Storage:	Do not store near heat, flames, or sparks. This material is similar to soap and may be irritating to eyes.
Conditions to Avoid:	None

Section IX- Spill, Leak, and Disposal Procedures

For Spills or Leakage:	No special procedures. (Similar to washroom soaps.)
Waste Disposal Method:	Dispose of in accordance with local, state and federal regulations.

Section X - Transportation Information

	<u>Proper Shipping name</u>	<u>Hazard Class</u>	<u>ID#</u>	<u>Packing Group</u>	<u>Exceptions may apply</u>
D.O.T.	NOT Regulated, per 49 CFR 173.150 (e)(2) [Aqueous solutions of alcohol]				
I.A.T.A.	Flammable Liquid, n.o.s. (isopropyl alcohol)	3	UN1993	III	yes
I.M.O.	Flammable Liquid, n.o.s. 3 (isopropyl alcohol)	3	UN1993	III	yes
T.D.G.	Flammable liquid N.O.S. (isopropyl alcohol)	3	UN1993.	III	1.37 Alcohol Exemption - applies to these products for road, rail and Canadian domestic water shipment

Distributor: Xerox Corporation
Rochester, NY 14644

Telephone # (s): *Safety Information:* (800) 828-6571
Health Emergency: (585) 422-2177
Transportation Emergency (Chemtrec): (800) 424-9300

Section I - Product Identification

Trade Names/Synonyms:

Fuser Oil - 840/970/1005/1055/1200/2300/2350/2400/3600-1/4000/4500/
5400/5600/5700/7000/7080/7085/8700/8700 MICR/8790/8790 MICR/
9200/9400/9700/9700MICR/9790/9790 MICR, 990, 2510/2511/2515/
2520,4900,4354/8830/8836, DocuPrint 420 CFT/ DocuPrint 377CF/
DocuPrint C55, 8825, 3040, 3001, DocuPrint NC60, DocuPrint 350/425/500,
DocuPrint 700/850/1000, Wide Format 510 DP

Fuser Lubricant - 1040/1045/1048/1050/5042/5050/5052/5053/5345/5355/
Bookmark35,1075/1090/4050/4090/4250/4450/4650/4850/4890/5388/
DocuTech90/5680, 5892, 8855 ,DocuPrint 92C, DocuPrint 350 HC / 390 HC

Fuser Web - 5100,5016/5018/5021/5028/5034/5126/5328,5337/5334/5340,
5818/5820/5828/5830/5350,5343,5343C,5352, 5352C/5624/5626/5665, 5800,
Bookmark-21, 5800,5885,5890,5895, 5900, 5900I, 5990, 5995, XC-1875/
XC-2675/8233/ Document Centre 240/255/265/455/460/465/470/480/490,
DocuTech 65, DocuTech 75, DocuTech 90, DocuPrint 65, DocuPrint 75, DocuPrint 90
WorkCentre Pro 65/75/90; Copy Centre C65/C75/C90

Fuser Wick - 4030/4197,4213/4215/4219,4220/MRP/4230,4505/4520/8810,
7041/7042,/3010,5051,5321/3030/3050/3060,8855

Fuser Roll - 5113/5114/5614/5380DADF/5385RDH

Part No.: WH: 4R64, 5E2260, 5K1580, 5K1770, 5K2796, 5K31
5K3341, 5K3711, 5K3721, 5R780, 600K47141, 600S4902,
6R281, 70N20, **70N28**, 70P88, 8R111, 8R12874, 8R12891, 8R24
8R3692, 8R3805, 8R3826, 8R3847, 8R3913, 8R4096,
8R7612, 8R7639, 8R7654, 8R7696, 8R7724, 8R7854,
8R79, 8R7980, 8R983, 93E770, 93E811, 94E90510,
94E95071, 94E95090, 8R12936, 94K95051,
94S20750, 13R413, 13R415, 13R418, 13R52,19E2013,
19E3032, 19K2691, 22K37870, 22K84501, **108R358**, 109R327,
109R328, 109R329, 109R330, 109R331, 109R332, 109R333,
109R334, 109R335, 109R336, 109R337, 109R338, 109R339
109R340, 109R341, 109R342, 109R343, 109R344, 109R345,
109R346, 109R347, 109R491, 109R492, 109R493, 109R494,
109R495, 109R496, 109R497, 109R498, 109R499, 109R500
109R511, 109R512, 109R513, 109R514, 109R515, 109R516,
109R517, 109R518, 109R519, 109R520, 604K00180

XLA: 6R282, 13R48, 13R49; **FX:** 19K3310; **XCI:** 13R513,
13R515 **XL:** 13R416, 13R53, 8R90351

XE: 8R4004, 8R90351, 8R404

Included with: 6R855, 13R406, 19E9760, 19K2541,
19K2692, 94K231, 94K1891, 94K1981, 94K2660
94K3300, 106R53, 106R55, 113R2

Cancelled - 5K90780, 19E6250, 19E7110, 19E7170,
19E17500, 73K68755, 94E95510

Chemical Name: Polydimethylsiloxane

WHMIS Status: This is not a WHMIS controlled product.

Ingredients (% by wt.)

Polydimethylsiloxane (100%)

CAS No.

63148-62-9

Section II - Emergency and First Aid

Primary Route of Entry:

Inhalation

Eyes:

Flush with water.

Skin:

Wash with soap and water.

Inhalation:

Remove from exposure.

Ingestion:

Dilute stomach contents with several glasses of water.

Symptoms of Overexposure:

May cause minimal irritation of respiratory passages on
continuous exposure to high concentrations.

Medical Conditions Generally Aggravated by Exposure:

None when used as described by product literature.

Additional Information:

None

Section III - Toxicology and Health Information

This material has been evaluated by Xerox Corporation.

Oral LD₅₀: >35 g/kg (rats) practically non-toxic.

Dermal LD₅₀: >3 g/kg (rabbits) practically non-toxic.

Inhalation LC₅₀: >11 mg/l (rats) practically non-toxic
>44 mg/l (rats, calc. 1 hr exposure) non-poisonous DOT.¹

Eye Irritation: Not an irritant

Skin Sensitization: Not a sensitizer.

Skin Irritation: Not an irritant.

Human Patch: Non-irritating, non-sensitizing

Mutagenicity: No mutagenicity detected in Ames, UDS, and Dominant Lethal Assays.

Carcinogens: None present

Aquatic LC₅₀: >1000 mg/l (fathead minnows) non-toxic.

TLV: N.E.

PEL: N.E.

STEL: N.E.

Ceiling: N.E.

XEL²: N.E.

Additional Information: None

¹Not tested to the highest dose or concentration. ²XEL-Xerox Exposure Limit

N.A. - Not Applicable N.E. -None Established N.D. -Not Determined

600E7417

Xerox**MSDS No.: D-040**

Trade Name: Fuser Oil - 840/970/1005/1055/1200/2300/2350/2400/3600-1/4000/4500/5400/5600/5700/7000/7080/7085/
8700/8700 MICR/8790/8790 MICR/9200/9400/9700/9700MICR/9790/9790 MICR, 990, 2510/2511/2515/2520,4900,4354/8830/8836, DocuPrint 420 CFT/
DocuPrint 377CF/DocuPrint C55, 8825, 3040, 3001, DocuPrint NC60, DocuPrint 350/425/500, DocuPrint 700/850/1000, Wide Format 510 DP,
Fuser Lubricant – 8700/1040/1045/1048/1050/5042/5050/5052/5053/5345/5355/Bookmark35/1075/1090/4050/4090/4250/4450/4650/4850/
4890/5388/DocuTech 90/5680/5892/8855/ DocuPrint 92C/DocuPrint 350 HC/390 HC
FuserWeb5100/5016/5018/5021/5028/5034/5126/5328/5337/5334/5340/5350/5343/
5343C/5352/5352C/5624/5626/5665/5800/5818/5820/5828/5830/Bookmark-21/ 5800,5885/5890,5895, 5900,5900I, 5990,5995,/XC-1875/XC-2675/8233/
Document Centre 240/255/265/455/460/465/470/480/490, DocuTech 65, DocuTech 75, DocuTech 90, DocuPrint 65, DocuPrint 75, DocuPrint 90 ; WorkCen
Pro 65/75/90; Copy Centre C65/C75/C90
Fuser Wick -4030/ 4197/4213/4215/4219/4220/MRP/4230/4505/4520/8810/7041/7042/3010/
5051/5321/3030/3050/3060,8855 **Fuser Roll** – 5113/5114/5614/5380DADF/5385RDH

Section IV - Physical Data

Appearance/Odor:	Clear liquid / slight odor	Softening Range:	N.A.
Boiling Point:	149 °C	Melting Point:	N.A.
Solubility in Water:	Negligible	Specific Gravity (H₂O=1):	0.98
Evaporation Rate:	<1 (ether=1)	Vapor Pressure (mm Hg):	<5
Vapor Density (Air=1):	N.A.	pH:	N.A.
Volatile:	N.A. % (Wt.) N.A. % (Vol.)		

Section V - Fire and Explosion Data

Flash Point (Method Used):	>200 °F; >95 °C C.O.C.
Flammable Limits:	LEL: N.A. / UEL: N.A.
NFPA 704:	Health - 0, Fire - 1, Reactivity - 0
Extinguishing Media:	Foam, carbon dioxide, water spray.
Special Fire Fighting Procedures:	Wear self-contained breathing apparatus and protective clothing.

Fire and Explosion Hazards: None

Section VI -Reactivity Data

Stability:	Stable
Hazardous Polymerization:	Will Not Occur
Hazardous Decomposition Products:	Silicone dioxide, carbon dioxide, and traces of incompletely burned carbon products.
Incompatibility (Materials to Avoid):	Strong oxidizing materials.

Section VII - Special Protection Information

Respiratory Protection:	None required when used as intended in Xerox equipment.
Eye Protection:	None required when used as intended in Xerox equipment.
Protective Gloves:	PVC or plastic gloves recommended.
Other:	None required when used as intended in Xerox equipment.

Section VIII - Special Precautions

Handling and Storage:	Use reasonable care and caution. Clean up spills completely as residue is slippery.
Conditions to Avoid:	None

Section IX- Spill, Leak, and Disposal Procedures

For Spills or Leakage:	Soak up with an absorbent material.
Waste Disposal Method:	Absorb liquid on vermiculite or other absorbent material. Dispose of in accordance with local, state, and federal regulations.

Section X - Transportation Information

DOT Proper Shipping Name:	N.A. (Not Regulated)	ID Number:	N.A.
Hazard Classification:	N.A.	Packing Group:	N.A.

600E74170

REVERE CHEMICAL CO -- X-JT JOINT SEALANT -- 8030-00F028364

===== Product Identification =====

Product ID:X-JT JOINT SEALANT
MSDS Date:02/08/1990
FSC:8030
NIIN:00F028364
MSDS Number: BRBXK
=== Responsible Party ===
Company Name:REVERE CHEMICAL CO
Address:30875 CARTER
Box:39518
City:SOLON
State:OH
ZIP:44139-3517
Country:US
Info Phone Num:800-321-1976
Emergency Phone Num:800-255-3924
CAGE:GO229
=== Contractor Identification ===
Company Name:REVERE CHEMICAL CO
Address:30875 CARTER
Box:39518
City:SOLON
State:OH
ZIP:44139-3517
Country:US
Phone:800-321-1976
CAGE:GO229
Company Name:REVERE PRODUCTS CO
Address:4529 INDUSTRIAL PKY
Box:35311
City:CLEVELAND
State:OH
ZIP:44135-0311
Country:US
Phone:800-321-1976
CAGE:31622

===== Composition/Information on Ingredients =====

Ingred Name:GLYCIDOXYPROPYLTRIMETHYOXSILANE
CAS:2530-83-8
RTECS #:VV4025000
Fraction by Wt: 0.40%

Ingred Name:DIBUTYL TIN DILAURATE
CAS:77-58-7
RTECS #:WH7000000
Fraction by Wt: 0.50%
Other REC Limits:0.1 MG/CUM (SN)
OSHA PEL:0.1 MG/CUM (SN)
ACGIH TLV:0.1 MG/CUM, SN(SKIN)

Ingred Name:SOLVENT NAPHTHA, PETROLEUM, LIGHT AROMATIC, HIGH FLASH
AROMATIC NAPHTHA
CAS:64742-95-6
RTECS #:WF3400000

Fraction by Wt: 5%
OSHA PEL:25 PPM
ACGIH TLV:25 PPM

Ingred Name:CHLORINATED PARAFFIN, CHLOROALKANES *93-1*
CAS:61788-76-9
Fraction by Wt: 5.00%

Ingred Name:FREE ISOCYANATE
Fraction by Wt: 1%

===== Hazards Identification =====

Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO
Health Hazards Acute and Chronic:EYES/SKIN: IRRITATION. INHALATION:
RESPIRATORY SYSTEM IRRITATION. ALLERGIC CONDITIONS MAY OCCUR IN
INDIVIDUALS W/HIGH SENSITIVITY TO ISOCYANATES. THIS MAY RESULT IN
ASTHMA LIKE CONDITIONS. CNS DEPRESS ION. LIVER/KIDNEY DAMAGE.
INGESTION: MOUTH/THROAT/STOMACH IRRITATION.
Explanation of Carcinogenicity:NONE
Effects of Overexposure:SKIN: SENSITIZATION. DERMATITIS. INHALATION:
PERMANENT BRAIN & NERVOUS SYSTEM DAMAGE.
Medical Cond Aggravated by Exposure:CHRONIC DISEASES OF THE NOSE,
THROAT, RESPIRATORY TRACT, CNS, LIVER OR KIDNEYS.

===== First Aid Measures =====

First Aid:EYES: IMMEDIATELY FLUSH W/LARGE AMOUNTS OF WATER FOR AT LEAST
15 MINS. SKIN: WASH CONTAMINATED BODY AREA W/LARGE AMOUNTS OF
WATER. WASH AFFECTED AREA W/SOAP & WATER. INHALATION: REMOVE TO
FRESH AIR. RESTORE BREATHING BY ARTIFICIAL RESUSCITATION. TREAT
SYMPTOMATICALLY. INGESTION: DRINK 1 OR 2 GLASSES OF WATER TO
DILUTE. DON'T INDUCE VOMITING. OBTAIN MEDICAL ATTENTION IN ALL
CASES.

===== Fire Fighting Measures =====

Flash Point:115F
Lower Limits:1%
Upper Limits:7%
Extinguishing Media:FOAM, ALCOHOL FOAM, CO2, DRY CHEMICAL, WATER FOG,
HALON 1211.
Fire Fighting Procedures:USE FULL PROTECTIVE CLOTHING & EQUIPMENT,
INCLUDING SELF-CONTAINED BREATHING APPARATUS. IF WATER IS USED, FOG
NOZZLES ARE PREFERRED.
Unusual Fire/Explosion Hazard:WATER MAY BE USED TO COOL CLOSED
CONTAINERS TO PREVENT PRESSURE BUILDUP & POSSIBLE AUTO IGNITION OR
EXPLOSION.

===== Accidental Release Measures =====

Spill Release Procedures:EVACUATE PERSONNEL. VENTILATE AREA. CONTAIN &
REMOVE W/INERT ABSORBENT MATERIAL & NON-SPARKING TOOLS.

===== Handling and Storage =====

Handling and Storage Precautions:DON'T STORE OR USE NEAR HEAT, OR OPEN
FLAME. KEEP CONTAINERS TIGHTLY CLOSED. ISOLATE FROM HEAT,
ELECTRICAL EQUIPMENT, SPARKS, & SOURCES OF IGNITION.
Other Precautions:AVOID BREATHING SANDING DUST. PREVENT PROLONGED OR
REPEATED BREATHING OF VAPOR OR SPRAY MISTS. DON'T HANDLE UNTIL THE
MANUFACTURER'S SAFETY PRECAUTIONS HAVE BEEN READ & UNDERSTOOD.
DON'T WELD/FLAME-CU T AN EMPTY DRUM. EMPTY DRUMS REUSABLE.

===== Exposure Controls/Personal Protection =====

Respiratory Protection:NIOSH/MSHA APPROVED AIRLINE TYPE RESPIRATOR
Ventilation:LOCAL EXHAUST; HOODS
Protective Gloves:NEOPRENE, NITRILE, RUBBER
Eye Protection:SAFETY GLASSES W/SIDE SHIELDS
Other Protective Equipment:DISPOSABLE OR IMPERVIOUS CLOTHING.
Work Hygienic Practices:REMOVE & WASH CONTAMINATED CLOTHES BEFORE
REUSE. WASH HANDS BEFORE EATING, SMOKING OR USING WASHROOM.
Supplemental Safety and Health
DON'T SMOKE IN ANY CHEMICAL HANDLING OR STORAGE AREA. FOOD OR BEVERAGES
SHOULDN'T BE CONSUMED ANYWHERE NEAR PRODUCT.

===== Physical/Chemical Properties =====

Vapor Density:>1
Spec Gravity:1.1
Solubility in Water:SLIGHT
Appearance and Odor:GRAY LIQUID, MILD ODOR.

===== Stability and Reactivity Data =====

Stability Indicator/Materials to Avoid:YES
AMINES, ACIDS, HYDROXYL OR OTHER ACTIVE HYDROGEN COMPOUNDS.
Stability Condition to Avoid:HEAT, ELECTRICAL EQUIPMENT, SPARKS, OPEN
FLAME, OTHER SOURCES OF IGNITION & HIGH TEMPERATURE.
Hazardous Decomposition Products:CO, CO2, MONOMERIC, ISOCYANATE & TRACE
OF HYDROGEN CYANIDE, NITRITE.

===== Disposal Considerations =====

Waste Disposal Methods:DISPOSAL SHOULD BE DONE IN ACCORDANCE W/FEDERAL,
(40CFR PART 261), STATE & LOCAL ENVIRONMENTAL CONTROL REGULATIONS
BEFORE ATTEMPTING CLEANUP. IF WASTE IS DETERMINED TO BE HAZARDOUS,
USE LICENSED HAZAR DOUS WASTE TRANSPORTER & DISPOSAL FACILITY.

Disclaimer (provided with this information by the compiling agencies):
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assume responsibility for the suitability of this information to their
particular situation.

MATERIAL SAFETY DATA SHEET

PREMIER INDUSTRIAL SUPPLY, INC.

Product Name: XTRABOND 150 GENERAL PURPOSE SILICONE SEALANT
Date Issued: March 3, 2009

1. Company Identification & Chemical Product

Product Brand Name: XtraBond 150 General Purpose Silicone Sealant
Product Use: Sealant & Adhesive
Proper DOT Shipping: Caulking & Glaziers, NOI
DOT Hazard Classification: NONE

Company Contact Information

Premier Industrial Supply, Inc.
1833 W. Calle De Pompas
Phoenix, AZ 85085

Emergency Telephone Number

CHEMTREC: 800-424-9300 (24 hours)
Telephone: 866-512-4583

2. Information on Ingredients

<u>CHEMICAL NAME</u>	<u>CAS NUMBER</u>	<u>WEIGHT %</u>
Methyltriacetoxysilane	4253-34-3	<5%
Ethyltriacetoxysilane	17689-77-9	<5%

3. Hazards Identification

Emergency Overview

Heavy Paste with mild odor, various colors: Grey, Beige, Almond
Can Cause Skin & Eye Irritation

Combustible Material. In case of fire, use foam, dry chemical, CO2

First Aid Measures

ROUTE OF ENTRY

Inhalation (breathing); eye & skin contact

CAUTION: Can cause skin & eye irritation

SYMPTOMS OF EXPOSURE

Inhalation: Material is not likely to present an inhalation hazard at ambient conditions. However if material is heated or high vapor/aerosol concentrations are attained, central nervous system depression may occur, which is characterized by drowsiness, dizziness, confusion or loss of coordination. Overexposure may cause drowsiness and irritation.

Eye Contact: Can cause eye irritation with direct contact. Symptoms include stinging, tearing, redness and swelling of eyes.

Skin Contact: A single short exposure can cause skin irritation. Symptoms may include redness and burning of skin

Ingestion: Low ingestion hazard in normal use.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:

No Known Applicable information

CHRONIC EFFECTS

Over exposure to a component of this material has been suggested as a cause of liver abnormalities in laboratory animals.

CARCINOGEN: NONE

TERATOGENS: NONE

REPRODUCTIVE TOXINS: NONE

4. FIRST AID MEASURES

Inhalation: Material is not likely to present an inhalation hazard at ambient conditions. If material is heated or vapor/mist/dust/fumes are generated, care should be taken to prevent inhalation. Remove subject to fresh air. Get Medical attention if ill effects persist

Eye Contact: Immediately flush eyes with copious amounts of water for 15 minutes. Get medical attention if irritation develops.

Skin Contact: Immediately wash affected areas with large amounts of soap & water. Continue for 15 minutes. Get Medical attention if irritation develops.

Ingestion: Do not induce vomiting or give anything by mouth. Get immediate medical attention.

Comments: Treat according to person's condition and specifics or exposure.

5. FIRE FIGHTING MEASURES

Flash Point & Method.....>212 F

GENERAL HAZARD:

This product is combustible.

AUTO-IGNITION TEMPERATURE:

Not Determined

EXTINGUISHING MEDIA

On large fires use dry chemical, foam or water spray. On small fires use carbon dioxide, dry chemicals or water spray. Water can be utilized to cool containers exposed to fires.

FLAMMABILITY LIMITS in AIR

Not Determined

SPECIAL FIREFIGHTIN INSTRUCTIONS

Self-contained breathing apparatus and protective clothing should be worn when fighting large fires involving chemicals. Determine the need to evacuate or isolate the area according to your local emergency plan. Use water spray to keep fire exposed containers cool.

UNUSAL FIRE or EXPLOSION HAZARDS:

None

HAZARDOUS DECOMPOSITION PRODUCT:

Thermal breakdown of this product during fire or very high heat conditions may evolve the following hazardous decomposition products:

Carbon oxides and traces of incompletely burned carbon compounds
Formaldehyde
Silicone Dioxide

Depending on color, hazardous decomposition products may also include:

Hydrogen
Nitrogen oxides
Metal oxides
Sulfur oxides

6. ACCIDENTAL RELEASE MEASURES

Containment/Clean Up: Observe all personal protective equipment recommendations as described in Section 8. Scrape all spilled materials for disposal. This material is not classified as a hazardous waste per 40 CFR 261. State and local laws may impose regulatory restrictions.

7. HANDLING AND STORAGE

Personal Pre Cautionary Measures: Avoid Breathing vapors in top of shipping containers. Keep containers closed. Use with adequate ventilation. Avoid contact with skin and clothing. Wash thoroughly after handling. Observe all PPE Suggestions in section 8.

See Section 8 for information about personal protective equipment for spills.

8. EXPOSURE CONTROLS & PERSONAL PROTECTION

COMPONENT EXPOSURE LIMITS

Component Name: Ethyltriacetoxysilane
CAS Number: 17689-77-9
Exposure Limits: See acetic acid comments

Component Name: Methyltriacetoxysilane
CAS Number: 4253-34-3
Exposure Limits: See acetic acid comments

Acetic acid is formed upon contact with water or humid air. Provide adequate ventilation to controlled exposures within guideline of OSHA PEL: TWA 10 ppm and ACGIH TLV: TWA 10 ppm, STEL 15 ppm.

COMPONENT EXPOSURE LIMITS- Almond only

Component Name: Dimethylsiloxane, trimethoxysilyl-terminated
CAS Number: PMN871176
Exposure Limits: See methyl alcohol comments

Component Name: Aluminum
CAS Number: 7429-90-5
Exposure Limits: OSHA PEL (final rule): TWA 15mg/m³ total dust, 5 mg/m³ respirable dust ACGIH TLV: TWA 10mg/m³

Methyl alcohol forms on contact with water or humid air. Provide adequate ventilation to controlled exposures within guideline of OSHA PEL: TWA 200 ppm and ACGIH TLV-skin: TWA 200 ppm, STEL 250 ppm.

COMPONENT EXPOSURE LIMITS- Aluminum only

Component Name: Aluminum
CAS Number: 7429-90-5
Exposure Limits: OSHA PEL (final rule): TWA 15mg/m³ total dust, 5 mg/m³ respirable dust ACGIH TLV: TWA 10mg/m³

Engineering Controls:

Local Ventilation: Recommended
General Ventilation: Recommended

Eye Production: Wear safety glasses with side shields as a minimum

Skin Protection: Impervious gloves are suggested. Wash at mealtimes and end of shift. Chemical protective gloves are recommended

Respiratory Protection: If engineering controls do not maintain airborne concentrations of hazardous ingredients below limits in Section 2 of this MSDS, then a NIOSH/MSHA approved organic vapor respirator should be used.

Suitable Respirator Respiratory protection is not needed under ambient conditions. If vapor/mist/dust/fumes are generated when material is heated or handled, the following is advised: general and local exhaust ventilation is recommended to maintain vapor exposures below recommended limits. Where concentrations are above recommended limits or are unknown, appropriate respiratory protection should be worn. Follow OSHA respirator regulations (29 CFR 910.134)

Gloves: Nitrile Gloves

Clothes: Wear clothing that will protect the skin from exposure to this chemical.

ENGINEERING CONTROLS

Use local exhaust or general dilution ventilation system.

PERSONAL PROTECTIVE EQUIPMENT FOR SPILLS:

Eyes: Use full face respirator

Skin: Wash at mealtime and end of shift. Contaminated clothing and shoes should be removed as soon as practical and thoroughly cleaned before reuse. Chemical protective gloves are recommended.

Inhalation/Suitable Respirator: Respiratory protection recommended. Follow OSHA Respirator Regulations (29 CFR 910.134) and use NIOSH/MSHA approved respirators. Protection provided by air purifying respirators against exposure to any hazardous chemical is limited. Use a positive pressure air supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstance where air purifying respirators may not provide adequate protection.

PRECAUTIONARY MEASURES:

Avoid eye contact. Avoid skin contact. Avoid breathing vapor. Keep container closed. Do not take internally. Use reasonable care.

COMMENTS:

Product evolves acetic acid when exposed to water or humid air. Provide ventilation during use to control acetic acid within exposure guidelines or use respiratory protection. When heated to temperatures above 150c in the presence of air, product can form formaldehyde vapors. Formaldehyde is a potential cancer hazard, a known skin and respiratory sensitizer, and an irritant to the eyes, nose throat, skin and digestive system. Safe handling conditions may be maintained by keeping vapor concentrations within the OSHA Permissible Exposure Limit for formaldehyde.

NOTE:

These precautions are for room temperature handling. Use at elevated temperatures or aerosol/spray applications may require added precautions.

9. PHYSICAL & CHEMICAL PROPERTIES

VOC Content:	36 grams/liter	PH:	N/A
Boiling Point:	N/A	Water Solubility:	N/A
Vapor Density:	N/A	Freeze Point:	N/A
Odor:	Acetic Acid Odor	State:	Paste
Color:	Various	Specific Gravity:	1.032
Melting Point:	N/A	Reactivity to Water:	N/A

10. STABILITY AND REACTIVITY

INCOMPATIBILITIES:

Oxidizing & Acid can cause a reaction. Water, moisture or humid air can cause hazardous vapors to form.

CHEMICAL STABILITY:

Stable

HAZARDOUS DECOMPOSITION PRODUCTS:

Will not occur

CONDITIONS TO AVOID:

None

11. TOXICOLOGICAL INFORMATION

SPECIAL HAZARD INFORMATION ON PRODUCT:

No Known applicable information

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL FATE & DISTRIBUTION

Complete information is not yet available

ENVIRONMENTAL EFFECTS

Complete information is not yet available

FATE & EFFECTS in WASTE WATER TREATMENT PLANTS

Complete information is not yet available

13. DISPOSAL CONSIDERATIONS

RCRA WASTE CODE

Not Regulated. Observed all applicable federal, state, and local regulations. Material is not classified as a hazardous waste per 40 CFR 261.

We make no guarantee or warranty of any kind that the use or disposal of this product complies with all local, state or federal laws. It is also the obligation of each user of the product mentioned herein to determine and comply with the requirements of all applicable statutes.

14. TRANSPORT INFORMATION

Marine Transport

None

DOT (usa):

Not subject to DOT

DOT Hazard Classification:

None

UN/NA Number:

Not Applicable

Label Required:

None

15. REGULATORY INFORMATION

OSHA HAZARD COMMUNICATION STANDARD (29 CFR 1910.1200)

Comply

TSCA STATUS

All Chemical substance in this material are included on or exempted from listing on the TSCA Inventory of Chemical Substance

SARA TITLE III EXTREMELY HAZARDOUS SUBSTANCE (302)

CHEMICAL NAME	TPQ (lbs)	RQ (lbs)/ (kg)
N/A	N/A	N/A

SARA TITLE III CERCLA HAZARDOUS SUBSTANCE (304)

CHEMICAL NAME	TPQ (lbs)	RQ (lbs)/ (kg)
N/A	N/A	N/A

SARA TITLE III SECTION 312 HAZARD CLASS

YES Acute YES Chronic NO Fire NO Pressure NO Reactive

SARA TITLE III TOXIC CHEMICALS (313) DEPENDING UPON COLOR

CHEMICAL NAME	CASE #	%
Alumina hydrate	21645-51-2	N/A
Aluminum	7429-90-5	
Antimony chromium manganese titanium brown rutile	6991-68-0	

WORK PLACE HAZARDOUS MATERIAL INFORMATION SYSTEMS (CRP Section 33)

This product has been classified according to the hazard criteria of the Controlled Products Regulation and the MSDS contains all required information.

STATE REGULATION

California Proposition 65

None Known

This product contains the following chemicals known to the State of California, under the Safe Drinking and Toxic Enforcement Act of 1986 as being known to cause cancer, birth defects and reproductive harm.

Massachusetts Right to Know List:

Silica, amorphous, alumina hydrate, aluminum, barium sulfate, carbon black, iron oxide, Titanium Dioxide

Pennsylvania Right to Know List:

Dimethyl siloxane, hydroxyl-terminated, Hydrotreated middle petroleum distillates, silica, amorphous. Depending upon color, may also contain, Alumina hydrate, aluminum, antimony chromium manganese titanium brown rutile, barium sulfate, black iron oxide, carbon black, CI Pigment Blue 29, Dimethyl siloxane, trimethylsilyl-terminated, iron hydroxide oxide, iron oxide, magnesium ferrite, mineral oil, polydimethylsiloxane, tetrabenzotetrakis-5-10-20-diazaphthalocyanine, titanium dioxide, yellow iron oxide.

New Jersey Right to Know List:

Dimethyl siloxane, hydroxyl-terminated, Ethyltriacetoxysilane, Hydrotreated middle petroleum distillates, silica, amorphous. Depending upon color, may also contain, Alumina hydrae, aluminum, antimony chromium manganese titanium brown rutile, barium sulfate, black iron oxide, carbon black, CI Pigment Blue 29, Dimethyl siloxane, triimethylsilyl-terminated, iron hydroxide oxide, iron oxide, magnesium ferrite, mineral oil, polydimethylsiloxane, tetrabenz-5-10-20-diazaporphyrinephthalocyanine, titanium dioxide, yellow iron oxide.

16. OTHER INFORMATION

Disclaimer: The opinions expressed herein are those of qualified experts within Premier Industrial Supply Inc. We believe the information contained herein is current as the date of this MSDS. Since the use of the product is not within the control of Premier Industrial Supply Inc. it is the user's obligation to determine the conditions of safe use.

PREPARED BY:	Premier Industrial Supply Inc.
MSDS #:	XTRABOND150
DATE PREPARED:	March 3, 2009
DATE ISSUED:	March, 2009



Safety Data Sheet

Spartan Chemical Company, Inc.

Revision Date: 29-Jul-2015

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name: XTRACTION II
Product Number: 3096
Recommended Use: Carpet cleaner
Uses Advised Against: For Industrial and Institutional Use Only

Manufacturer/Supplier: Spartan Chemical Company, Inc.
1110 Spartan Drive
Maumee, Ohio 43537 USA
800-537-8990 (Business hours)
www.spartanchemical.com

24 Hour Emergency Phone Numbers:

Medical Emergency/Information: 888-314-6171
Transportation/Spill/Leak: CHEMTREC 800-424-9300

2. HAZARDS IDENTIFICATION

GHS Classification

Skin Corrosion/Irritation: Category 1
Serious Eye Damage/Eye Irritation: Category 1

GHS Label Elements

Signal Word:

Symbols:

Danger



Hazard Statements:

Causes severe skin burns and serious eye damage.

Precautionary Statements:

Prevention:

Do not breathe mist, vapors or spray.

Wash hands and any exposed skin thoroughly after handling.

Wear protective gloves. Wear eye / face protection. Wear protective clothing.

IMMEDIATELY CALL A POISON CENTER OR PHYSICIAN.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Wash contaminated clothing before reuse.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

See Safety Data Sheet Section 4: "FIRST AID MEASURES" for additional information.

Response:

-Eyes

-Skin

-Inhalation:

-Ingestion:

-Specific Treatment:

Storage:

Store locked up.

Disposal:

Dispose of contents and container in accordance with local, state and federal regulations.

Hazards Not Otherwise Classified: Not Applicable

Other Information:

- May be harmful if swallowed.
- Inhalation of vapors or mist may cause respiratory irritation.
- Keep out of reach of children.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
water	7732-18-5	60-100
alcohol ethoxylate	68439-46-3	1-5
sodium carbonate	497-19-8	1-5
2-butoxyethanol	111-76-2	1-5
tetrasodium ethylenediaminetetraacetate	64-02-8	1-5
sodium alkylnaphthalenesulfonate	PROPRIETARY	1-5

Specific chemical identity and/or exact percentage of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

- Eye Contact:** Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IMMEDIATELY CALL A POISON CENTER OR PHYSICIAN.
- Skin Contact:** Take off immediately all contaminated clothing and shoes. Rinse with water or shower for at least 15 minutes. IMMEDIATELY CALL A POISON CENTER OR PHYSICIAN. Wash contaminated clothing before reuse. Discard or destroy contaminated shoes.
- Inhalation:** Remove victim to fresh air and keep at rest in a position comfortable for breathing. IMMEDIATELY CALL A POISON CENTER OR PHYSICIAN.
- Ingestion:** Rinse mouth. Do NOT induce vomiting. IMMEDIATELY CALL A POISON CENTER OR PHYSICIAN. Never give anything by mouth to an unconscious person.
- Note to Physicians:** Treat symptomatically.

5. FIRE-FIGHTING MEASURES

- Suitable Extinguishing Media:** Product does not support combustion, Use extinguishing agent suitable for type of surrounding fire
- Specific Hazards Arising from the Chemical:** Dried product is capable of burning. Combustion products are toxic.
- Hazardous Combustion Products:** May include Carbon monoxide Carbon dioxide and other toxic gases or vapors.
- Protective Equipment and Precautions for Firefighters:** Wear MSHA/NIOSH approved self-contained breathing apparatus (SCBA) and full protective gear. Cool fire-exposed containers with water spray.

6. ACCIDENTAL RELEASE MEASURES

- Personal Precautions:** Avoid contact with skin, eyes or clothing. Use personal protective equipment as required.
- Environmental Precautions:** Do not rinse spill onto the ground, into storm sewers or bodies of water.
- Methods for Clean-Up:** Prevent further leakage or spillage if safe to do so. Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see Section 13).

7. HANDLING AND STORAGE

- Advice on Safe Handling:** Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly after handling.
- Storage Conditions:** Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Keep from freezing.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits:

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH
2-butoxyethanol 111-76-2	TWA: 20 ppm	TWA: 50 ppm TWA: 240 mg/m ³ (vacated) TWA: 25 ppm (vacated) TWA: 120 mg/m ³ (vacated) S* S*	IDLH: 700 ppm TWA: 5 ppm TWA: 24 mg/m ³

Engineering Controls:

Provide good general ventilation.

If work practices generate dust, fumes, gas, vapors or mists which expose workers to chemicals above the occupational exposure limits, local exhaust ventilation or other engineering controls should be considered.

Personal Protective Equipment

Eye/Face Protection:

Wear splash goggles.

Skin and Body Protection:

Wear rubber or other chemical-resistant gloves.

Respiratory Protection:

Not required with expected use.

If occupational exposure limits are exceeded or respiratory irritation occurs, use of a NIOSH/MSHA approved respirator suitable for the use-conditions and chemicals in Section 3 should be considered.

General Hygiene Considerations:

Wash hands and any exposed skin thoroughly after handling.

See 29 CFR 1910.132-138 for further guidance.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance/Physical State:	Liquid
Color:	Light green
Odor:	Floral fragrance
pH:	11.3-11.8
Melting Point / Freezing Point:	No information available.
Boiling Point / Boiling Range:	100 °C / 212 °F
Flash Point:	> 100 °C / > 212 °F ASTM D56
Evaporation Rate:	< 1 (Butyl acetate = 1)
Flammability (solid, gas)	No information available.
Upper Flammability Limit:	No information available.
Lower Flammability Limit:	No information available.
Vapor Pressure:	No information available.
Vapor Density:	No information available.
Specific Gravity:	1.049
Solubility(ies):	Soluble in water
Partition Coefficient:	No information available.
Autoignition Temperature:	No information available.
Decomposition Temperature:	No information available.
Viscosity:	No information available.

10. STABILITY AND REACTIVITY

Reactivity:

This material is considered to be non-reactive under normal conditions of use.

Chemical Stability:

Stable under normal conditions.

Possibility of Hazardous Reactions:

Not expected to occur with normal handling and storage.

Conditions to Avoid:

Extremes of temperature and direct sunlight.

Incompatible Materials:

Strong oxidizing agents. Strong acids.

Hazardous Decomposition Products:

May include carbon monoxide, carbon dioxide (CO₂) and other toxic gases or vapors.

11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure:	Eyes, Skin, Ingestion, Inhalation.
Symptoms of Exposure:	
-Eye Contact:	Pain, redness, swelling of the conjunctiva and tissue damage. Eye contact may cause permanent damage.
-Skin Contact:	Pain, redness, blistering and possible chemical burn.
-Inhalation:	Nasal discomfort and coughing.
-Ingestion:	Pain, nausea, vomiting and diarrhea.
Immediate, Delayed, Chronic Effects	
Product Information:	Data not available or insufficient for classification.
Chronic Toxicity:	May cause adverse effects on the bone marrow and blood-forming system. May cause adverse liver effects.
Target Organ Effects:	Blood. Central nervous system. -Eyes. hematopoietic system. kidney. Liver. Respiratory System. -Skin.

Numerical Measures of Toxicity

The following acute toxicity estimates (ATE) are calculated based on the GHS document.

ATEmix (oral):	9234 mg/kg
ATEmix (dermal):	30069 mg/kg
ATEmix (inhalation-dust/mist):	34.4 mg/l
ATEmix (inhalation-vapor):	108.5 mg/l

Component Acute Toxicity Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
water 7732-18-5	> 90 mL/kg (Rat)	Not Available	Not Available
alcohol ethoxylate 68439-46-3	= 1378 mg/kg (Rat)	> 2 g/kg (Rabbit)	Not Available
sodium carbonate 497-19-8	= 4090 mg/kg (Rat)	Not Available	Not Available
2-butoxyethanol 111-76-2	= 470 mg/kg (Rat)	= 2270 mg/kg (Rat) = 220 mg/kg (Rabbit)	= 2.21 mg/L (Rat) 4 h = 450 ppm (Rat) 4 h
tetrasodium ethylenediaminetetraacetate 64-02-8	= 10 g/kg (Rat)	Not Available	Not Available

Carcinogenicity: No components present at 0.1% or greater are listed as to being carcinogens by ACGIH, IARC, NTP or OSHA.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Algae/Aquatic Plants	Fish	Toxicity to Microorganisms	Crustacea
sodium carbonate 497-19-8	242: 120 h Nitzschia mg/L EC50	300: 96 h Lepomis macrochirus mg/L LC50 static 310 - 1220: 96 h Pimephales promelas mg/L LC50 static	Not Available	265: 48 h Daphnia magna mg/L EC50
2-butoxyethanol 111-76-2	Not Available	1490: 96 h Lepomis macrochirus mg/L LC50 static 2950: 96 h Lepomis macrochirus mg/L LC50	Not Available	1698 - 1940: 24 h Daphnia magna mg/L EC50 1000: 48 h Daphnia magna mg/L EC50
tetrasodium ethylenediaminetetraacetate 64-02-8	1.01: 72 h Desmodesmus subspicatus mg/L EC50	41: 96 h Lepomis macrochirus mg/L LC50 static 59.8: 96 h Pimephales promelas mg/L LC50 static	Not Available	610: 24 h Daphnia magna mg/L EC50

Persistence and Degradability: No information available.

Bioaccumulation: No information available.

Other Adverse Effects: No information available.

13. DISPOSAL CONSIDERATIONS

Disposal of Wastes: Dispose of in accordance with federal, state and local regulations.
Contaminated Packaging: Dispose of in accordance with federal, state and local regulations.

14. TRANSPORT INFORMATION

DOT:

UN/ID No: UN1760
Proper Shipping Name: Corrosive liquids, n.o.s., (contains sodium hydroxide)
Hazard Class: 8
Packing Group: III
Special Provisions: Shipping descriptions may vary based on mode of transport, quantities, package size, and/or origin and destination. Check with a trained hazardous materials transportation expert for information specific to your situation.

IMDG:

UN/ID No: UN1760
Proper Shipping Name: Corrosive liquids, n.o.s., (contains sodium hydroxide)
Hazard Class: 8
Packing Group: III

15. REGULATORY INFORMATION

TSCA Status: (Toxic Substance Control Act Section 8(b) Inventory)

All chemical substances in this product are included on or exempted from listing on the TSCA Inventory of Chemical Substances.

SARA 313

This product contains the following listed substances:

2-butoxyethanol

CAS No 111-76-2 applies to R-(OCH₂CH₂)_n-OR', where n = 1, 2, or 3, R=Alkyl C7 or less, or R = Phenyl or Alkyl substituted phenyl, R' = H or Alkyl C7 or less, or OR' consisting of Carboxylic acid ester, Sulfate, Phosphate, Nitrate, or Sulfonate, Chemical Category N230

SARA 311/312 Hazard Categories

Acute Health Hazard:	Yes
Chronic Health Hazard:	Yes
Fire Hazard:	No
Sudden release of pressure hazard:	No
Reactive Hazard:	No

California Proposition 65

This product is not subject to warning requirements under California Proposition 65.

16. OTHER INFORMATION

NFPA	Health Hazards: 3	Flammability: 0	Instability: 0	Special: N/A
HMIS	Health Hazards: 3*	Flammability: 0	Physical Hazards: 0	

Revision Date: 29-Jul-2015
Reasons for Revision: Section 14 and 15

Disclaimer:

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

1 of 5

PRODUCT NAME: 1 Gal Camco -20 Windshield

Note - NFPA ratings are based on a 0-4 rating scale with 0 representing minimal hazards or risks and 4 representing extreme hazards or risks.

PRODUCT CODE: 30907

MANUFACTURER'S NAME: Camco Manufacturing, Inc.

ADDRESS : **121 Landmark Drive**
Greensboro, NC 27409

EMERGENCY PHONE : 1-800-535-5053 DATE REVISED : 11/23/2004

INFORMATION PHONE : 336-668-7661

NAME OF PREPARER: CAMCO MANUFACTURING INC.

**121 LANDMARK DR.
GREENSBORO, NC 27409
1-800-334-2004**

REPORTABLE COMPONENTS	CAS NUMBER	VAPOR PRESSURE mm Hg @ TEMP		WEIGHT PERCENT
Methanol	67-56-1	96.1	20C	<35

Exposure Guidelines: Methanol

OSHA STD - 8HR TIME WEIGHTED AVG(TWA) 200PPM

BOILING RANGE: 170 – 190 F

VAPOR DENSITY: Not Determined

SOLUBILITY IN WATER: Completely Soluble

APPEARANCE AND ODOR: Clear, blue liquid, mild alcohol odor

SPECIFIC GRAVITY (H2O=1): 0.9561 @ 70° F

EVAPORATION RATE: Not Determined

MATERIAL SAFETY DATA SHEET

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1 Gal Camco -20 Windshield

===== SECTION IV - FIRE AND EXPLOSION HAZARD DATA =====

FLASH POINT: 98 F

METHOD USED: TCC

EXPLOSIVE LIMITS FOR 100% METHANOL - LOWER: 6% **UPPER:** 36%

EXTINGUISHING MEDIA: Dry chemical, carbon dioxide, water spray or foam. Water may be ineffective, but may be used to cool exposed containers to prevent pressure build-up and possible auto-ignition or explosion when exposed to extreme heat.

SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS: Wear a self-contained breathing apparatus with a full facepiece operated in the positive pressure demand mode with appropriate turn-out gear and chemical resistant personal protective equipment.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Handle as flammable liquid. Methanol vapors are heavier than air and may travel along the ground or may be moved by ventilation and ignited by pilot lights, other flames, sparks, heaters, smoking, electric motors, static discharge, or other ignition sources at locations distant from material handling point. Never use welding or cutting torch on or near container, even if it is empty.

*****Flammable*****

===== SECTION V - REACTIVITY DATA =====

STABILITY: Stable

CONDITIONS TO AVOID: Excessive heat

INCOMPATIBILITY (MATERIALS TO AVOID): Reactive metals such as aluminum and magnesium, strong acids, strong oxidizing agents.

HAZARDOUS DECOMPOSITION OR BYPRODUCTS: Carbon dioxide and carbon monoxide.

HAZARDOUS POLYMERIZATION: Do not occur

===== SECTION VI - HEALTH HAZARD DATA =====

INHALATION: Breathing of vapor or mist is possible. Breathing small amounts during normal handling is not likely to cause harmful effects. Breathing large amounts can be

MATERIAL SAFETY DATA SHEET

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1 Gal Camco -20 Windshield

harmful. Symptoms usually occur at air concentrations higher than the recommended exposure limits.

EYE: May cause mild irritation. Symptoms include stinging, tearing, and redness.

SKIN: May cause mild irritation. Prolonged or repeated contact may dry the skin. Symptoms may include redness, burning, drying and cracking of the skin.

INGESTION: Swallowing this material may be harmful.

SYMPTOMS OF EXPOSURE: Symptoms of exposure may include: nausea, vomiting, diarrhea, irritation (nose, throat, airways), dizziness, drowsiness, weakness, fatigue, headache, unconsciousness, leg cramps, pain in the abdomen and lower back, blurred vision, shortness of breath, cyanosis (causes blue coloring of the skin and nails from lack of oxygen), visual impairment (including blindness).

HEALTH HAZARDS (ACUTE AND CHRONIC): No data

CARCINOGENICITY: No

NTP CARCINOGEN: No

IARC MONOGRAPHS: No

OSHA REGULATED: No

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: Exposure to this material may aggravate any preexisting condition sensitive to a decrease in available oxygen, such as chronic lung disease, coronary artery disease or anemias.

EMERGENCY AND FIRST AID PROCEDURES

INHALATION: Move individual to fresh air. If symptoms persist seek medical attention. If breathing is difficult administer oxygen provided a qualified operator is present.

EYE CONTACT: Flush immediately with large quantities of water for 15 minutes, lifting eye lids to ensure that all surfaces are flushed. Seek medical attention.

SKIN: Remove contaminated clothing and wash contaminated skin with large amounts of soap and water. If irritation persists, get medical attention. Launder clothing before reuse.

INGESTION: Seek medical attention immediately. If individual is conscious, they may dilute by drinking water. If individual is drowsy or unconscious, do not give anything by

MATERIAL SAFETY DATA SHEET

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1 Gal Camco -20 Windshield

mouth. Under either circumstance, do not leave the individual unattended if at all possible. Contact a physician, medical facility, or poison control center immediately.

===== SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE =====

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Eliminate all ignition sources, such as flames, hot surfaces, and sources of electrical, static or frictional sparks. Absorb liquid with absorbent material. If necessary, contain spill by diking.

WASTE DISPOSAL METHOD: Dispose of in accordance with all applicable local, state and federal regulations.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:

No smoking or open flame in storage use or handling areas. Avoid storage with incompatible materials.

OTHER PRECAUTIONS

Store in closed containers in a cool, dry, well ventilated area. Keep away from sparks and open flame.

===== SECTION VIII - CONTROL MEASURES =====

RESPIRATORY PROTECTION

Use an approved NIOSH approved respirator when airborne concentrations exceed exposure limits.

VENTILATION: Provide sufficient ventilation to maintain airborne concentrations, below exposure limits.

PROTECTIVE GLOVES: Wear appropriate impermeable gloves

EYE PROTECTION:

Use chemical safety glasses, goggles, or faceshields for eye protection.

MATERIAL SAFETY DATA SHEET

5 of 5

1 Gal Camco -20 Windshield

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: It is the responsibility of the user to determine the proper protective equipment that is needed based on how the product will be used.

WORK/HYGIENIC PRACTICES:

Wash thoroughly after handling.

===== SECTION IX - DISCLAIMER =====

To the best of our knowledge, the information contained herein is accurate, obtained from sources believed by Camco Manufacturing, Inc., to be accurate. However, the information is provided without any representation or warranty, expressed or implied, regarding its accuracy or correctness.

The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. It is the responsibility of the user to determine the safety, toxicity and suitability of his own use, handling and disposal of this product.

SAFETY DATA SHEET

Version 4.3

Revision Date 04/02/2014

Print Date 06/25/2014

1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifiers

Product name : Xylene Cyanol FF

Product Number : X4126

Brand : Sigma

REACH No. : A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

CAS-No. : 2650-17-1

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Manufacture of substances

1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO 63103
USA

Telephone : +1 800-325-5832

Fax : +1 800-325-5052

1.4 Emergency telephone number

Emergency Phone # : (314) 776-6555

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Skin irritation (Category 2), H315

Eye irritation (Category 2A), H319

Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word

Warning

Hazard statement(s)

H315

Causes skin irritation.

H319

Causes serious eye irritation.

H335

May cause respiratory irritation.

Precautionary statement(s)

P261

Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

P264

Wash skin thoroughly after handling.

P271

Use only outdoors or in a well-ventilated area.

P280

Wear protective gloves/ eye protection/ face protection.

P302 + P352

IF ON SKIN: Wash with plenty of soap and water.

P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312	Call a POISON CENTER or doctor/ physician if you feel unwell.
P321	Specific treatment (see supplemental first aid instructions on this label).
P332 + P313	If skin irritation occurs: Get medical advice/ attention.
P337 + P313	If eye irritation persists: Get medical advice/ attention.
P362	Take off contaminated clothing and wash before reuse.
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P501	Dispose of contents/ container to an approved waste disposal plant.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Synonyms : XC
Cyanol FF
Acid blue 147

Formula : $C_{25}H_{27}N_2NaO_6S_2$
Molecular Weight : 538.61 g/mol
CAS-No. : 2650-17-1
EC-No. : 220-167-5

Hazardous components

Component	Classification	Concentration
Sodium hydrogen 4-[[4-(ethylamino)-m-tolyl][4-(ethylimino)-3-methylcyclohexa-2,5-dien-1-ylidene]methyl]benzene-1,3-disulphonate		
	Skin Irrit. 2; Eye Irrit. 2A; STOT SE 3; H315, H319, H335	-

For the full text of the H-Statements mentioned in this Section, see Section 16.

4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

no data available

5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

Carbon oxides, nitrogen oxides (NO_x), Sulphur oxides, Sodium oxides

5.3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

5.4 Further information

no data available

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

For personal protection see section 8.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection

impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Do not let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES**9.1 Information on basic physical and chemical properties**

- | | |
|---|---|
| a) Appearance | Form: crystalline
Colour: dark green |
| b) Odour | no data available |
| c) Odour Threshold | no data available |
| d) pH | no data available |
| e) Melting point/freezing point | Melting point/range: 295 °C (563 °F) |
| f) Initial boiling point and boiling range | no data available |
| g) Flash point | no data available |
| h) Evaporation rate | no data available |
| i) Flammability (solid, gas) | no data available |
| j) Upper/lower flammability or explosive limits | no data available |
| k) Vapour pressure | no data available |
| l) Vapour density | no data available |
| m) Relative density | no data available |
| n) Water solubility | soluble |
| o) Partition coefficient: n-octanol/water | no data available |
| p) Auto-ignition temperature | no data available |
| q) Decomposition temperature | no data available |
| r) Viscosity | no data available |
| s) Explosive properties | no data available |
| t) Oxidizing properties | no data available |

9.2 Other safety information

no data available

10. STABILITY AND REACTIVITY**10.1 Reactivity**

no data available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

no data available

10.4 Conditions to avoid

no data available

10.5 Incompatible materials

Strong oxidizing agents

10.6 Hazardous decomposition products

Other decomposition products - no data available

In the event of fire: see section 5

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

no data available

Inhalation: no data available

Dermal: no data available

no data available

Skin corrosion/irritation

no data available

Serious eye damage/eye irritation

no data available

Respiratory or skin sensitisation

no data available

Germ cell mutagenicity

no data available

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity

no data available

no data available

Specific target organ toxicity - single exposure

May cause respiratory irritation.

Specific target organ toxicity - repeated exposure

no data available

Aspiration hazard

no data available

Additional Information

RTECS: Not available

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

no data available

12.2 Persistence and degradability

no data available

12.3 Bioaccumulative potential

no data available

12.4 Mobility in soil

no data available

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects

no data available

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US)

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

15. REGULATORY INFORMATION

REACH No. : A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

Acute Health Hazard

Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components

Sodium hydrogen 4-[[4-(ethylamino)-m-tolyl][4-(ethylimino)-3-methylcyclohexa-2,5-dien-1-ylidene]methyl]benzene-1,3-disulphonate	CAS-No. 2650-17-1	Revision Date
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New Jersey Right To Know Components

Sodium hydrogen 4-[[4-(ethylamino)-m-tolyl][4-(ethylimino)-3-methylcyclohexa-2,5-dien-1-ylidene]methyl]benzene-1,3-disulphonate

CAS-No.
2650-17-1

Revision Date

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

16. OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3.

Eye Irrit.	Eye irritation
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
Skin Irrit.	Skin irritation
STOT SE	Specific target organ toxicity - single exposure

HMIS Rating

Health hazard:	2
Chronic Health Hazard:	
Flammability:	0
Physical Hazard	0

NFPA Rating

Health hazard:	2
Fire Hazard:	0
Reactivity Hazard:	0

Further information

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Preparation Information

Sigma-Aldrich Corporation
Product Safety – Americas Region
1-800-521-8956

Version: 4.3

Revision Date: 04/02/2014

Print Date: 06/25/2014

FLINN SCIENTIFIC, INC.

Safety Data Sheet (SDS)

SDS #: 855.00

Revision Date: January 16, 2014

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Yeast

Flinn Scientific, Inc. P.O. Box 219, Batavia, IL 60510 (800) 452-1261

CHEMTREC Emergency Phone Number: (800) 424-9300

Signal Word N/A

Pictograms

SECTION 2 — HAZARDS IDENTIFICATION

This chemical is considered nonhazardous according to GHS classifications for the Hazard Communication Standard. Treat all laboratory chemicals with caution.

Although this material is considered to be nonhazardous, unpredictable reactions among chemicals are always possible. Prudent laboratory practices should be observed.

Product should be treated as a chemical and is not for consumption as it has been stored with other nonfood-grade chemicals.

SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Yeast	None established	Unspecified	Unspecified	

SECTION 4 — FIRST AID MEASURES

Call a POISON CENTER or physician if you feel unwell.

If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing.

If on skin: Wash with plenty of water.

If swallowed: Rinse mouth. Call a POISON CENTER or physician if you feel unwell.

SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable solid.

When heated to decomposition, may emit toxic fumes.

In case of fire: Use a tri-class dry chemical fire extinguisher.

NFPA CODE

None
established

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Sweep up, place in sealed bag or container and dispose. Wash spill site after material pickup is complete. See Sections 8 and 13 for further information.

SECTION 7 — HANDLING AND STORAGE

Flinn Suggested Chemical Storage Pattern: Organic Miscellaneous.

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Wear protective gloves, protective clothing, and eye protection. Wash hands thoroughly after handling.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Light tan fine powder granules. Faint odor of beer.

Not for human consumption.

Soluble: Slightly in water.

Brewers yeast is nonviable, and Bakers yeast is freeze-dried, viable for baking, culturing.

SECTION 10 — STABILITY AND REACTIVITY

Shelf life: Fair, will expire.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: N.A.

ORL-RAT LD₅₀: N.A.

Chronic effects: N.A.

IHL-RAT LC₅₀: N.A.

Target organs: N.A.

SKN-RBT LD₅₀: N.A.

N.A. = Not available, not all health aspects of this substance have been fully investigated.

SECTION 12 — ECOLOGICAL INFORMATION

Data not yet available.

SECTION 13 — DISPOSAL CONSIDERATIONS

Please review all federal, state and local regulations that may apply before proceeding.

Flinn Suggested Disposal Method #26a is one option.

SECTION 14 — TRANSPORT INFORMATION

Shipping name: Not regulated. Hazard class: N/A. UN number: N/A.

N/A = Not applicable

SECTION 15 — REGULATORY INFORMATION

Not listed.

SECTION 16 — OTHER INFORMATION

This Safety Data Sheet (SDS) is for guidance and is based upon information and tests believed to be reliable. Flinn Scientific, Inc. makes no guarantee of the accuracy or completeness of the data and shall not be liable for any damages relating thereto. The data is offered solely for your consideration, investigation, and verification. The data should not be confused with local, state, federal or insurance mandates, regulations, or requirements and CONSTITUTE NO WARRANTY. Any use of this data and information must be determined by the science instructor to be in accordance with applicable local, state or federal laws and regulations. The conditions or methods of handling, storage, use and disposal of the product(s) described are beyond the control of Flinn Scientific, Inc. and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THIS PRODUCT(S).

Consult your copy of the *Flinn Science Catalog/Reference Manual* for additional information about laboratory chemicals.

Revision Date: January 16, 2014

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to get the MSDS you need FAST!



Material Safety Data Sheet

SECTION I - Material Identity
SECTION II - Manufacturer's Information
SECTION III - Physical/Chemical Characteristics
SECTION IV - Fire and Explosion Hazard Data
SECTION V - Reactivity Data
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SECTION VII - Precautions for Safe Handling and Use
SECTION VIII - Control Measures
SECTION IX - Label Data
SECTION X - Transportation Data
SECTION XI - Site Specific/Reporting Information
SECTION XII - Ingredients/Identity Information

SECTION I - Material Identity

Item Name	
Part Number/Trade Name	YELLOW 77 WIRE PULLING LUBRICANT
National Stock Number	9150P31358
CAGE Code	30119
Part Number Indicator	A
MSDS Number	194628
HAZ Code	B

SECTION II - Manufacturer's Information

Manufacturer Name	IDEAL INDUSTRIES INC
Street	BECKER PL
City	SYCAMORE
State	IL
Country	US
Zip Code	60178
Emergency Phone	815-895-5181
Information Phone	815-895-5181

MSDS Preparer's Information

MSDS Preparer Name	RONALD K. PETERSEN
Date MSDS Prepared/Revised	23OCT02
Date of Technical Review	21OCT92
Active Indicator	Y

Alternate Vendors

Vendor #1 Name	SAADY AND HILL ELECTRICAL SUPPLY CO
Vendor #1 CAGE	58121
Vendor #5 CAGE	BPBZC

SECTION III - Physical/Chemical Characteristics

Specification Number	N/R
Specification Type/Grade/Class	N/R
Hazard Storage Compatibility Code	N1
NRC License Number	N/R
Net Propellant Weight (Ammo)	N/R
Appearance/Odor	YELLOW CREAMY PASTE, SLIGHT ODOR
Boiling Point	212F/100C
Melting Point	N/K
Vapor Pressure	1.0
Vapor Density	N/K
Specific Gravity	0.98
Decomposition Temperature	UNKNOWN
Evaporation Rate	<1.0 (WATER=1)
Solubility in Water	MODERATE
Percent Volatiles by Volume	90
Chemical pH	7-8.5
Corrosion Rate	UNKNOWN
Container Type	N
Container Pressure Code	1
Temperature Code	4
Product State Code	S

SECTION IV - Fire and Explosion Hazard Data

Flash Point Method	COC
Lower Explosion Limit	N/A
Upper Explosion Limit	N/A
Extinguishing Media	

Special Fire Fighting Procedures	USE EXTINGUISHING MEDIA SUITABLE FOR SURROUNDING MATERIALS
Unusual Fire/Explosion Hazards	SELF-CONTAINED RESPIRATORY PROTECTION SHOULD BE PROVIDED FOR FIRE FIGHTERS. KEEP FIRE- EXPOSED CONTAINERS COOL WITH WATER
	NONE

SECTION V - Reactivity Data

Stability	YES
Stability Conditions to Avoid	NONE
Materials to Avoid	AVOID STRONG OXIDIZERS
Hazardous Decomposition Products	EXCESSIVE HEAT MAY CAUSE THE RELEASE OF CARBON DIOXIDE, CARBON MONOXIDE
Hazardous Polymerization	NO
Polymerization Conditions to Avoid	AVOID PROLONGED STORAGE AT TEMPERATURES ABOVE 120F
LD50 - LD50 Mixture	ORAL RAT LD50 IS N/K

SECTION VI - Health Hazard Data

Route of Entry: Skin	YES
Route of Entry: Ingestion	YES
Route of Entry: Inhalation	YES
Health Hazards - Acute and Chronic	TEMP EYE DISCOMFORT MAY RESULT WITH PROLONGED CONTACT. IF MATTERIL IS USED IN EXTREME HEAT (120F), PROLONGED AND REPEATED EXPOSURE COULD POSE A RISK OF PULMONARY DISEASE. EXPOSURE BELOW MIST TLV (5 MG/M3) APPEARS TO BE WITHOUT SIGNIFICANT HEALTH RISK
Carcinogenity: NTP	NO
Carcinogenity: IARC	NO
Carcinogenity: OSHA	NO
Explanation of Carcinogenity	SUPPLIER DID NOT ADDRESS THIS FIELD. HMIS COULD NOT FIND REFERENCE IN ANY LIST OF CARCINOGENS
Symptoms of Overexposure	IRRITATION OF EYES AND SKIN
Medical Cond. Aggravated by Exposure	NO INFORMATION GIVEN ON MSDS BY SUPPLIER
Emergency/First Aid Procedures	EYE: FLUSH AREA WITH COPIOUS AMOUNTS OF WATER. SKIN: FLUSH AREA WITH COPIOUS AMOUNTS OF WATER. INGESTED: INDUCE

VOMITING. CONSULT PHYSICIAN OR
LOCAL POISON CONTROL CENTER.
INHALED: NO INFORMATION GIVEN
ON MSDS BY SUPPLIER

SECTION VII - Precautions for Safe Handling and Use

Steps if Material Released/Spilled	WIPE UP OR SHOVEL OR VACUUM SPILLED MATERIAL. USE ABSORBENT MEDIA IF REQUIRED. CLEAN UP SPILLS IMMEDIATELY AS THEY CAN BE SLIPPERY AND DANGEROUS
Neutralizing Agent	NO INFORMATION GIVEN ON MSDS BY SUPPLIER
Waste Disposal Method	DISPOSE OF AS SOLID LANDFILL IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS
Handling and Storage Precautions	RE AT TEMPERATURES BETWEEN 40F AND 120F. KE
Other Precautions	KEEP MATERIAL AWAY FROM CHILDREN AND PETS

SECTION VIII - Control Measures

Respiratory Protection	NORMALLY NONE REQUIRED
Ventilation	MECH (GEN) OR LOCAL EXHAUST RECOMMENDED IN CLOSED AREAS. OTHER TYPES ARE "NONE REQUIRED"
Protective Gloves	NEOPRENE
Eye Protection	SAFETY GLASSES OR SPLASH GOGGLES
Other Protective Equipment	EYE FOUNTAIN IN WORK AREA IS RECOMMENDED
Work Hygienic Practices	NO INFORMATION GIVEN ON MSDS BY SUPPLIER
Supplemental Health/Safety Data	NONE
Disposal Code	O

SECTION IX - Label Data

Protect Eye	YES
Protect Skin	YES
Protect Respiratory	NO
Chronic Indicator	NO
Contact Code	SLIGHT
Fire Code	UNKNOWN

Health Code	UNKNOWN
React Code	UNKNOWN

SECTION X - Transportation Data

Container Quantity	1
Unit of Measure	QT

SECTION XI - Site Specific/Reporting Information

Volatile Organic Compounds (P/G)	0
Volatile Organic Compounds (G/L)	0

SECTION XII - Ingredients/Identity Information

Ingredient #	01
Ingredient Name	WATER
CAS Number	7732185
Percent	90
Ingredient #	02
Ingredient Name	PARAFFIN WAX
CAS Number	64742434
Percent	5
Ingredient #	03
Ingredient Name	PETROLATUM
CAS Number	8009038
Percent	3
Ingredient #	04
Ingredient Name	NAPTHENIC MINERAL OIL
CAS Number	64742536
Percent	3
Ingredient #	05
Ingredient Name	POLYETHYLENE GLYCOL ETHER
CAS Number	9005087
Percent	4
Ingredient #	06
Ingredient Name	ETHOXYLATED TALLOW AMINE
CAS Number	61791444
Percent	1
Ingredient #	07
Ingredient Name	PERFUME
CAS Number	25265718
Percent	0.1
Ingredient #	08
Ingredient Name	

CAS Number	ACRYLAMIDE SODIUM ACRYLATE
Percent	COPOLYMER W/ TRIDECETH-6
Ingredient #	8042475
Ingredient Name	1
	09
CAS Number	ACRYLAMIDE SODIUM ACRYLATE
Percent	COPOLYMER W/ TRIDECETH-6
Ingredient #	24838918
Ingredient Name	1
	10
	1,3-PROPANEDIOL, 2-BROMO-2-NITRO-
CAS Number	52517
Percent	0.1
Ingredient #	11
Ingredient Name	YELLOW PIGMENT
CAS Number	6358312
Percent	0.1



Material Safety Data Sheet

Section 1. Chemical Product and Company Identification

Product name High Traffic Floor Finish
Product code ZU0812
Date of issue 11/08/07 **Supersedes**

Emergency Telephone Numbers

For MSDS Information:

Compliance Services 404-603-7903

For Medical Emergency

INFOTRAC: (877) 541-2016 Toll Free - All Calls Recorded

For Transportation Emergency

CHEMTREC: (800) 424-9300 - All Calls Recorded
In the District of Columbia (202) 483-7616

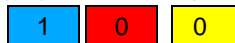
Prepared By

Compliance Services Group
1420 Seaboard Industrial Blvd.
Atlanta, GA 30318

Section 2. Hazards Identification

Emergency overview

*Hazard Determination System (HDS): Health, Flammability, Reactivity



WARNING.
CAUSES EYE AND SKIN IRRITATION.
MAY BE HARMFUL IF ABSORBED THROUGH SKIN.

NOTE: MSDS data pertains to the product as delivered in the original shipping container(s). Risk of adverse effects are lessened by following all prescribed safety precautions, including the use of proper personal protective equipment.

Acute Effects

Routes of Entry

Skin contact. Eye contact.

Eyes

Causes eye irritation. Inflammation of the eye is characterized by redness, watering and itching.

Skin

Causes skin irritation. May be harmful if absorbed through the skin. Skin inflammation is characterized by itching, scaling, or reddening.

Inhalation

Inhalation of high concentrations of vapor may affect the central nervous system. Can cause dizziness, light-headedness, headache, nausea and blurred vision.

Ingestion

Harmful if swallowed. Ingestion may cause nausea, weakness and central nervous system effects.

Chronic effects

Repeated or prolonged exposure to the substance can produce damage to kidneys, liver.
Repeated or prolonged contact with irritants may cause dermatitis.

Carcinogenicity Ingredients: Not listed as carcinogen by OSHA, NTP or IARC.

Additional Information: See Toxicological Information (Section 11)

Section 3. Composition/Information on Ingredients

Name of Hazardous Ingredients

CAS number

% by Weight

DIPROPYLENE GLYCOL METHYL ETHER; dipropylene glycol monomethyl ether	34590-94-8	1 - 5
2-(2-ETHOXYETHOXY)-ETHANOL; diethylene glycol monoethyl ether, ethoxydiglycol	111-90-0	1 - 5

Section 4. First Aid Measures

Eye Contact

Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. If irritation persists, get medical attention.

Skin Contact

Rinse with plenty of running water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Wash clothing before reuse. Get medical attention if irritation develops.

Inhalation

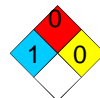
Move exposed person to fresh air. Get medical attention if adverse health effects persist or are severe.

Ingestion

Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Section 5. Fire Fighting Measures

National Fire Protection Association (U.S.A.)



Flash Point	None.
Flammable Limits	Not applicable.
Flammability	Non-flammable.
Fire hazard	No specific hazard.
Fire-Fighting Procedures	No special precautions or equipment.

Section 6. Accidental Release Measures

Spill Clean up	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container.
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Section 7. Handling and Storage

Handling	Put on appropriate personal protective equipment (see section 8). Workers should wash hands and face before eating, drinking and smoking. Do not get in eyes or on skin or clothing. Use with adequate ventilation. Do not ingest. Do not reuse container.
Storage	Store in accordance with local regulations. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Protect from freezing. Store between the following temperatures: 40°F - 120°F (4.4°C - 49°C).

Section 8. Exposure Controls/Personal Protection**Product name**

Dipropylene Glycol Methyl Ether

Exposure limits

ACGIH TLV (United States, 2003). Skin

TWA: 100 ppm 8 hour(s).

STEL: 150 ppm 15 minute(s).

OSHA PEL (United States, 2003). Skin

TWA: 100 ppm 8 hour(s).

Personal Protective Equipment (PPE)

Eyes	Safety glasses with side-shields
Body	For prolonged or repeated handling, use the following type of gloves: Nitrile, Neoprene, latex rubber
Respiratory	Ensure ventilation is adequate if there is a risk of vapor build-up.

Section 9. Physical and Chemical Properties

Physical State	Liquid.	Color	Milky-white, Translucent.
pH	8.0 - 9.0	Odor	Characteristic.
Boiling Point	100°C (212°F)	Vapor Pressure	Not determined.
Specific Gravity	1.02 (Water = 1)	Vapor Density	Not determined.
Solubility	Easily soluble in the following materials: cold water and hot water.	Evaporation Rate	Not determined.

VOC (Consumer) 64 (g/l). 0.54 lb/gal 6.3%**Section 10. Stability and Reactivity**

Stability and Reactivity	The product is stable.
Incompatibility	Reactive or incompatible with the following materials: oxidizing materials.
Hazardous Polymerization	Will not occur.
Hazardous Decomposition Products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological Information**Acute Toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
Dipropylene Glycol Methyl Ether	LD50 Dermal	Rabbit	13000 mg/kg	-
	LD50 Oral	Rat	5220 mg/kg	-
Diethylene Glycol Monoethyl Ether	LD50 Dermal	Rabbit	9143 mg/kg	-
	LD50 Oral	Rat	10502 mg/kg	-
	LD50 Oral	Mouse	6301 mg/kg	-
	LC50 Inhalation Vapor	Rat	>200 mg/L	1 hours

Section 12. Ecological Information**Environmental Effects**

No known significant effects or critical hazards.

Aquatic Ecotoxicity

Not available.

Section 13. Disposal Considerations**Waste Information**

Waste must be disposed of in accordance with federal, state and local environmental control regulations. Consult your local or regional authorities for additional information.

Waste Stream Non-regulated waste**Section 14. Transport Information**

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label
DOT Classification	None.	Not regulated.	Not applicable	-	
TDG Classification	None.	Not regulated.	Not applicable	-	
IMDG Class	Not available.	Not available.	Not available.	-	

NOTE: DOT classification applies to most package sizes. For specific container size classifications or for size exceptions, refer to the Bill of Lading with your shipment.

PG* : Packing group

Section 15. Regulatory Information**U.S. Federal Regulations**

SARA 313 toxic chemical notification and release reporting:

Product nameCAS numberConcentration

Diethylene Glycol Monoethyl Ether

Clean Water Act (CWA) 307: No products were found.**Clean Water Act (CWA) 311:** No products were found.**Clean Air Act (CAA) 112 regulated toxic substances:** Diethylene Glycol Monoethyl Ether

All Components of this product are listed or exempt from listing on TSCA Inventory.

State Regulations**California Prop 65**

WARNING: This product contains a chemical or chemicals known to the state of California to cause cancer, birth defects or other reproductive harm.: Ethylene Glycol Monoethyl Ether

Canada**WHMIS (Canada)**

Class D-2B: Material causing other toxic effects (Toxic).

Section 16. Other Information

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

*NOTE: Hazard Determination System (HDS) ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although these ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HDS ratings are to be used with a fully implemented program to relay the meanings of this scale.

Zinc Carbonate

Material Safety Data Sheet

Zinc carbonate

ACC# 25330 Section 1 - Chemical Product and Company Identification

MSDS Name: Zinc carbonate

Catalog Numbers: AC612365000, Z30-500

Synonyms: Zinc carbonate (1:1); Zinc Monocarbonate; Carbonic acid, zinc salt.

Company Identification:

Fisher Scientific

1 Reagent Lane

Fair Lawn, NJ 07410

For information, call: 201-796-7100 begin_of_the_skype_highlighting

201-796-7100 end_of_the_skype_highlighting

Emergency Number: 201-796-7100 begin_of_the_skype_highlighting

201-796-7100 end_of_the_skype_highlighting

For CHEMTREC assistance, call: 800-424-9300 begin_of_the_skype_highlighting

800-424-9300 end_of_the_skype_highlighting

For International CHEMTREC assistance, call: 703-527-3887

begin_of_the_skype_highlighting 703-527-3887

end_of_the_skype_highlighting

Section 2 - Composition, Information on Ingredients

CAS# Chemical Name Percent EINECS/ELINCS

3486-35-9 Zinc carbonate 90-100 222-477-6

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: white solid.

Caution! May cause eye, skin, and respiratory tract irritation. The toxicological properties of this material have not been fully investigated.

Target Organs: None.

Potential Health Effects

Eye: May cause eye irritation.

Skin: May cause skin irritation.

Ingestion: May cause gastrointestinal irritation with nausea, vomiting and diarrhea.

Inhalation: May cause respiratory tract irritation.

Chronic: No information found.

Zinc Carbonate

Section 4 - First Aid Measures

Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

Skin: Get medical aid if irritation develops or persists. Flush skin with plenty of soap and water.

Ingestion: If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid if irritation or symptoms occur.

Inhalation: Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear.

Notes to Physician: Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Extinguishing Media: Use extinguishing media most appropriate for the surrounding fire.

Flash Point: Not applicable.

Autoignition Temperature: Not applicable.

Explosion Limits, Lower: Not available.

Upper: Not available.

NFPA Rating: (estimated) Health: 1; Flammability: 0; Instability: 0

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Sweep up or absorb material, then place into a suitable clean, dry, closed container for disposal.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Avoid contact with skin and eyes. Avoid ingestion and inhalation.

Storage: Store in a cool, dry place. Keep containers tightly closed.

Section 8 - Exposure Controls, Personal Protection

Zinc Carbonate

Engineering Controls: Use adequate ventilation to keep airborne concentrations low.

Exposure Limits Chemical Name ACGIH NIOSH OSHA - Final PELs

Zinc carbonate none listed none listed none listed

OSHA Vacated PELs: Zinc carbonate: No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

Section 9 - Physical and Chemical Properties

Physical State: Solid

Appearance: white

Odor: odorless

pH: Not applicable.

Vapor Pressure: Not applicable.

Vapor Density: Not applicable.

Evaporation Rate: Not applicable.

Viscosity: Not applicable.

Boiling Point: Not applicable.

Freezing/Melting Point: Decomposes.

Decomposition Temperature: 300 deg C

Solubility: Insoluble in water.

Specific Gravity/Density: 4.398

Molecular Formula: ZnCO3

Molecular Weight: 125.3782

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures. Decomposed by acids with effervescence, evolution of carbon dioxide.

Conditions to Avoid: Dust generation.

Incompatibilities with Other Materials: Strong acids.

Hazardous Decomposition Products: Carbon dioxide, zinc oxides.

Hazardous Polymerization: Will not occur.

Section 11 - Toxicological Information

Zinc Carbonate

RTECS#:

CAS# 3486-35-9: FG3375000

LD50/LC50:

Not available.

Carcinogenicity:

CAS# 3486-35-9: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: No data available.

Teratogenicity: No data available.

Reproductive Effects: Zinc carbonate has caused skin abnormalities when administered orally to lactating female mice 14 days post birth at a dose of 2800 mg/kg.

Mutagenicity: No data available.

Neurotoxicity: No data available.

Other Studies:

Section 12 - Ecological Information

No information available.

Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed.

RCRA U-Series: None listed.

Section 14 - Transport Information

US DOT Canada TDG

Shipping Name: Not regulated as a hazardous material No information available.

Hazard Class:

UN Number:

Packing Group:

Section 15 - Regulatory Information

US FEDERAL

TSCA

CAS# 3486-35-9 is listed on the TSCA inventory.

Health & Safety Reporting List

Zinc Carbonate

None of the chemicals are on the Health & Safety Reporting List.

Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

Section 12b

None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

CERCLA Hazardous Substances and corresponding RQs

CAS# 3486-35-9: 1000 lb final RQ; 454 kg final RQ

SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

Section 313

This material contains Zinc carbonate (listed as Zinc compounds), 90-100%, (CAS# 3486-35-9) which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

Clean Air Act:

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depleters.

This material does not contain any Class 2 Ozone depleters.

Clean Water Act:

CAS# 3486-35-9 is listed as a Hazardous Substance under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA. CAS# 3486-35-9 is listed as a Toxic Pollutant under the Clean Water Act.

OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

STATE

CAS# 3486-35-9 can be found on the following state right to know lists:

California, New Jersey, Pennsylvania, Massachusetts.

California Prop 65

California No Significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols:

Not available.

Risk Phrases:

Safety Phrases:

S 24/25 Avoid contact with skin and eyes.

WGK (Water Danger/Protection)

CAS# 3486-35-9: 0

Canada - DSL/NDSL

CAS# 3486-35-9 is listed on Canada's DSL List.

Canada - WHMIS

Zinc Carbonate

This product has a WHMIS classification of D2B.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

Canadian Ingredient Disclosure List

CAS# 3486-35-9 is not listed on the Canadian Ingredient Disclosure List.

Section 16 - Additional Information

MSDS Creation Date: 9/02/1997

Revision #4 Date: 9/26/2007

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Fisher has been advised of the possibility of such damages.

FLINN SCIENTIFIC, INC.

Safety Data Sheet (SDS)

SDS #: 861.00

Revision Date: March 21, 2014

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Zinc Chloride

Flinn Scientific, Inc. P.O. Box 219, Batavia, IL 60510 (800) 452-1261

CHEMTREC Emergency Phone Number: (800) 424-9300

Signal Word **DANGER**

Pictograms



SECTION 2 — HAZARDS IDENTIFICATION

Hazard class: Acute toxicity, oral (Category 4). Harmful if swallowed (H302). Do not eat, drink or smoke when using this product (P270).

Hazard class: Skin corrosion or irritation (Category 1). Causes severe skin burns and eye damage (H314).

SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Zinc chloride, anhydrous	7646-85-7	ZnCl ₂	136.29	
Synonym: Zinc dichloride				

SECTION 4 — FIRST AID MEASURES

Immediately call a POISON CENTER or physician (P310).

If inhaled: Remove victim to fresh air in a position comfortable for breathing (P304+P340).

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing (P305+P351+P338). **If on skin:** Immediately remove all contaminated clothing. Rinse skin with water (P303+P361+P353). Wash contaminated clothing before reuse (P363).

If swallowed: Rinse mouth. Do NOT induce vomiting (P301+P330+P331).

SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable solid.

When heated to decomposition, may emit toxic fumes.

In case of fire: Use a tri-class dry chemical fire extinguisher.

NFPA CODE

None

established

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Sweep up, place in sealed bag or container and dispose. Ventilate area and wash spill site after material pickup is complete. See Sections 8 and 13 for further information.

SECTION 7 — HANDLING AND STORAGE

Flinn Suggested Chemical Storage Pattern: Inorganic #2. Store with acetates, halides, sulfates, sulfites, thiosulfates and phosphates. Deliquescent. Store in a cool, dry place within a Flinn Chem-Saf™ bag.

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Wear protective gloves, protective clothing, and eye protection. Wash hands thoroughly after handling (P264).
Exposure guidelines: (as fume) PEL/TLV 1 mg/m³ (OSHA, ACGIH) STEL 2 mg/m³ (ACGIH)

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

White crystals or powder. Odorless.

Soluble: Water and alcohol

Boiling point: 732 °C

Melting point: 290 °C

Specific gravity: 2.91

SECTION 10 — STABILITY AND REACTIVITY

Avoid contact with strong oxidizers.

Shelf life: Fair to poor, deliquescent. See Section 7 for further information.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Toxic, corrosive.

Chronic effects: Possible mutagen.

Target organs: N.A.

ORL-RAT LD₅₀: 350 mg/kg

IHL-RAT LC₅₀: N.A.

SKN-RBT LD₅₀: N.A.

N.A. = Not available, not all health aspects of this substance have been fully investigated.

SECTION 12 — ECOLOGICAL INFORMATION

Data not yet available.

SECTION 13 — DISPOSAL CONSIDERATIONS

Please review all federal, state and local regulations that may apply before proceeding.

Flinn Suggested Disposal Method #26a is one option.

SECTION 14 — TRANSPORT INFORMATION

Shipping name: Zinc chloride, anhydrous. Hazard class: 8, Corrosive. UN number: UN2331.

N/A = Not applicable

SECTION 15 — REGULATORY INFORMATION

TSCA-listed, EINECS-listed (231-592-0).

SECTION 16 — OTHER INFORMATION

This Safety Data Sheet (SDS) is for guidance and is based upon information and tests believed to be reliable. Flinn Scientific, Inc. makes no guarantee of the accuracy or completeness of the data and shall not be liable for any damages relating thereto. The data is offered solely for your consideration, investigation, and verification. The data should not be confused with local, state, federal or insurance mandates, regulations, or requirements and CONSTITUTE NO WARRANTY. Any use of this data and information must be determined by the science instructor to be in accordance with applicable local, state or federal laws and regulations. The conditions or methods of handling, storage, use and disposal of the product(s) described are beyond the control of Flinn Scientific, Inc. and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THIS PRODUCT(S).

Consult your copy of the *Flinn Science Catalog/Reference Manual* for additional information about laboratory chemicals.

Revision Date: March 21, 2014

FLINN SCIENTIFIC, INC.

Safety Data Sheet (SDS)

SDS #: 862.00

Revision Date: March 21, 2014

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Zinc Nitrate

Flinn Scientific, Inc. P.O. Box 219, Batavia, IL 60510 (800) 452-1261

CHEMTREC Emergency Phone Number: (800) 424-9300

Signal Word **DANGER**

Pictograms



SECTION 2 — HAZARDS IDENTIFICATION

Hazard class: Oxidizing solids (Category 2). May intensify fire; oxidizer (H272). Keep away from heat, sparks, open flames, and hot surfaces. No smoking (P210).

Hazard class: Acute toxicity, oral (Category 4). Harmful if swallowed (H302). Do not eat, drink or smoke when using this product (P270).

Hazard class: Skin and serious eye damage, corrosion or irritation (Category 2, 2A). Causes skin and serious eye irritation (H315+H319).

Hazard class: Specific target organ toxicity, single exposure; Respiratory tract irritation (Category 3). May cause respiratory irritation (H335). Avoid breathing dust or fumes (P261).

SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Zinc nitrate hexahydrate	10196-18-6	$\text{Zn}(\text{NO}_3)_2 \cdot 6\text{H}_2\text{O}$	297.49	
Synonym: Zinc dinitrate				

SECTION 4 — FIRST AID MEASURES

If exposed or concerned: Get medical advice or attention (P308+P313).

If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing (P304+P340).

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing (P305+P351+P338). **If eye irritation persists:** Get medical advice or attention (P337+P313).

If on skin: Rinse cautiously with water for several minutes (P351).

If swallowed: Rinse mouth. Call a POISON CENTER or physician if you feel unwell (P301+P330+P312).

SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable solid.

Strong oxidizer. Fire and explosion risk when in contact with combustible materials. When heated to decomposition, may emit toxic fumes.

In case of fire: Use a tri-class dry chemical fire extinguisher.

NFPA CODE
None
established

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Sweep up, place in sealed bag or container and dispose. Ventilate area and wash spill site after material pickup is complete. See Sections 8 and 13 for further information.

SECTION 7 — HANDLING AND STORAGE

Flinn Suggested Chemical Storage Pattern: Inorganic #3. Store with amides, nitrates, nitrites and azides. Store in a cool, dry place. Keep away from combustible materials (P220). Take any precautions to avoid mixing with combustibles (P221). Keep container tightly closed (P233). Use only in a hood or well-ventilated area (P271).

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Wear protective gloves, protective clothing, eye protection, and face protection (P280). Wash hands thoroughly after handling (P264). Use only in a hood or well-ventilated area (P271).

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Moist, white lumps or crystals. Odorless.
Soluble: Water and alcohol

Melting point: 36.4 °C
Specific gravity: 2.065

SECTION 10 — STABILITY AND REACTIVITY

Avoid contact with strong reducers, organic and combustible materials.
Shelf life: Indefinite, if stored properly.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Corrosive.
Chronic effects: N.A.
Target organs: N.A.

ORL-RAT LD₅₀: 1190 mg/kg
IHL-RAT LC₅₀: N.A.
SKN-RBT LD₅₀: N.A.

N.A. = Not available, not all health aspects of this substance have been fully investigated.

SECTION 12 — ECOLOGICAL INFORMATION

Data not yet available.

SECTION 13 — DISPOSAL CONSIDERATIONS

Please review all federal, state and local regulations that may apply before proceeding.
Flinn Suggested Disposal Method #26b is one option.

SECTION 14 — TRANSPORT INFORMATION

Shipping name: Zinc Nitrate. Hazard class: 5.1, Oxidizer. UN number: UN1514

N/A = Not applicable

SECTION 15 — REGULATORY INFORMATION

TSCA-listed, EINECS-listed (292-366-5), RCRA code D001.

SECTION 16 — OTHER INFORMATION

This Safety Data Sheet (SDS) is for guidance and is based upon information and tests believed to be reliable. Flinn Scientific, Inc. makes no guarantee of the accuracy or completeness of the data and shall not be liable for any damages relating thereto. The data is offered solely for your consideration, investigation, and verification. The data should not be confused with local, state, federal or insurance mandates, regulations, or requirements and CONSTITUTE NO WARRANTY. Any use of this data and information must be determined by the science instructor to be in accordance with applicable local, state or federal laws and regulations. The conditions or methods of handling, storage, use and disposal of the product(s) described are beyond the control of Flinn Scientific, Inc. and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THIS PRODUCT(S).

Consult your copy of the *Flinn Science Catalog/Reference Manual* for additional information about laboratory chemicals.

Revision Date: March 21, 2014

FLINN SCIENTIFIC INC.

"Your Safer Source for Science Supplies"

Material Safety Data Sheet (MSDS)

MSDS #: 864.00

Revision Date: May 22, 2001

Section 1 — Chemical Product and Company Identification

Zinc Oxide

Flinn Scientific, Inc. P.O. Box 219 Batavia, IL 60510 (800) 452-1261

CHEMTREC Emergency Phone Number: (800) 424-9300

Section 2 — Composition, Information on Ingredients

Zinc Oxide

Synonym: zinc white

CAS#: 1314-13-2

Section 3 — Hazards Identification

Pale-yellow granular powder. Odorless.

Moderately toxic by ingestion and inhalation. Body tissue irritant. Avoid all body tissue contact.

FLINN AT-A-GLANCE

Health-2

Flammability-0

Reactivity-1

Exposure-1

Storage-0

0 is low hazard, 3 is high hazard

Section 4 — First Aid Measures

Call a physician, seek medical attention for further treatment, observation and support after first aid.

Inhalation: Remove to fresh air at once. If breathing has stopped give artificial respiration immediately.

Eye: Immediately flush with fresh water for 15 minutes.

External: Wash continuously with fresh water for 15 minutes.

Internal: Give large quantities of water. Call a physician or poison control at once.

Section 5 — Fire Fighting Measures

Non flammable solid.

NFPA CODE

None established

Section 6 — Accidental Release Measures

Restrict unprotected personnel from area. Sweep up, place in sealed bag or container and dispose. Ventilate area and wash spill site after material pickup is complete. See Sections 8 and 13 for further information.

Section 7 — Handling and Storage

Flinn Suggested Chemical Storage Pattern: Inorganic #4. Store with hydroxides, oxides, silicates and carbonates.

Store in a cool, dry place. Use and dispense in a hood.

Section 8 — Exposure Controls, Personal Protection

Avoid contact with eyes, skin and clothing. Wear chemical splash goggles, chemical-resistant gloves and chemical-resistant apron. Use ventilation to keep airborne concentrations below exposure limits. Always wear a NIOSH-approved respirator with proper cartridges or a positive pressure, air-supplied respirator when handling this material in emergency situations (spill or fire).

Exposure guidelines: TWA 5 mg/m³, STEL 10 mg/m³ (OSHA, ACGIH)

Section 9 — Physical and Chemical Properties

Pale-yellow granular powder. Odorless.
Solubility: Acids and alkali.
Formula: ZnO
Formula Weight: 81.38

Specific Gravity: 5.47
Melting Point: 1975 C

Section 10 — Stability and Reactivity

Zinc oxide, powder reacts violently with chlorinated rubber. Avoid heating.
Shelf Life: Indefinite.

Section 11 — Toxicological Information

Acute effects: Harmful dust
Chronic effects: N.A.
Target organs: N.A.

ORL-RAT LD50: 630 mg/kg
IHL-MUS LC50: 2500 mg/m3
SKN-RBT LD50: N.A.

N.A. = Not available, not all health aspects of this substance have been fully investigated.

Section 12 — Ecological Information

Data not yet available.

Section 13 — Disposal Considerations

Please consult with state and local regulations.
Flinn Suggested Disposal Method #26a is one option.

Section 14 — Transport Information

Shipping Name: Not regulated
Hazard Class: N/A
UN Number: N/A

N/A = Not applicable

Section 15 — Regulatory Information

TSCA-listed, EINECS-listed (215-222-5).

Section 16 — Other Information

Consult your copy of the Flinn Scientific Catalog/Reference Manual for additional information about laboratory chemicals. This Material Safety Data Sheet (MSDS) is for guidance and is based upon information and tests believed to be reliable. Flinn Scientific Inc. makes no guarantee of the accuracy or completeness of the data and shall not be liable for any damages relating thereto. The data is offered solely for your consideration, investigation, and verification. Flinn Scientific Inc. assumes no legal responsibility for use or reliance upon this data.

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flinn@flinnsci.com www.flinnsci.com
P.O. Box 219 Batavia IL 60510
(800) 452-1261 Fax (866) 452-1436

MSDS Number: **Z4560** * * * * * Effective Date: **11/10/05** * * * * * Supersedes: **01/10/03**

MSDS Material Safety Data Sheet		24 Hour Emergency Telephone: 908-659-2151 CHEMTREC: 1-800-424-9300
From: Mallinckrodt Baker, Inc. 222 Red School Lane Phillipsburg, NJ 08865		National Response in Canada CANUTEC: 613-696-6666
Mallinckrodt CHEMICALS		Outside U.S. and Canada Chemtrec: 703-527-3887
J.T. Baker		NOTE: CHEMTREC, CANUTEC and National Response Center emergency numbers to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals.
All non-emergency questions should be directed to Customer Service (1-800-582-2537) for assistance.		

Zinc Sulfate, 7-Hydrate

1. Product Identification

Synonyms: Sulfuric acid, zinc salt (1:1) heptahydrate; Zinc vitriol, heptahydrate; Zinc sulfate, heptahydrate
CAS No.: 7733-02-0 (Anhydrous) 7446-20-0 (heptahydrate)
Molecular Weight: 287.56
Chemical Formula: ZnSO₄·7H₂O
Product Codes:
J.T. Baker: 4382, 4383, 4384
Mallinckrodt: 7805, 8872, 8880

2. Composition/Information on Ingredients

Ingredient	CAS No	Percent	Hazardous
Zinc Sulfate	7733-02-0	100%	Yes

3. Hazards Identification

Emergency Overview

WARNING! HARMFUL IF SWALLOWED OR INHALED. CAUSES IRRITATION TO SKIN, EYES AND RESPIRATORY TRACT.

SAF-T-DATA^(tm) Ratings (Provided here for your convenience)

Health Rating: 2 - Moderate (Life)
Flammability Rating: 0 - None
Reactivity Rating: 1 - Slight
Contact Rating: 3 - Severe
Lab Protective Equip: GOGGLES & SHIELD; LAB COAT & APRON; VENT HOOD; PROPER GLOVES
Storage Color Code: Green (General Storage)

Potential Health Effects

Inhalation:

Causes irritation to the respiratory tract. Symptoms may include coughing, shortness of breath.

Ingestion:

As with other soluble zinc salts, zinc sulfate may hydrolyze into acid if swallowed. Severe irritation and burns of the mouth, throat and digestive system may occur. Symptoms may include vomiting, stomach pain, increased pulse rate without blood pressure decrease, blood pressure decrease, acute pulmonay edema (fluid in the lungs), diarrhea, kidney damage, other gastrointestinal disturbances and hemorrhagic pancreatitis. A fatality following ingestion of 10 grams has been reported.

Skin Contact:

Causes irritation to skin. Symptoms include redness, itching, and pain.

Eye Contact:

Irritant, can cause pain and redness, possible mechanical harm. May cause severe irritation.

Chronic Exposure:

Chronic exposure may cause fatigue, slow tendon reflexes, intestinal inflammation (with bleeding), diarrhea, blood effects, central nervous system depression, tremors and paralysis of the extremities. Repeated skin or eye contact can cause skin and eye effects.

Aggravation of Pre-existing Conditions:

Persons with pre-existing skin disorders or impaired respiratory function may be more susceptible to the effects of the substance.

4. First Aid Measures

Inhalation:

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Ingestion:

If swallowed, give several glasses of water to drink. Vomiting may occur spontaneously, but DO NOT INDUCE! Never give anything by mouth to an unconscious person. Get medical attention.

Skin Contact:

Wipe off excess material from skin then immediately flush skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.

Eye Contact:

Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

5. Fire Fighting Measures

Fire:

Not considered to be a fire hazard.

Explosion:

Sealed containers may rupture when heated.

Fire Extinguishing Media:

Use any means suitable for extinguishing surrounding fire. Use water carefully as material will react with water to form acidic solution. Water spray may be used to keep fire exposed containers cool.

Special Information:

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode. Zinc sulfate can decompose at high temperatures to form toxic oxides, sulfur and zinc oxide as well as water vapor. Sealed containers of this material may rupture at moderate temperatures (release of water vapor). Forms acidic solutions in water.

6. Accidental Release Measures

Ventilate area of leak or spill. Keep unnecessary and unprotected people away from area of spill. Wear appropriate personal protective equipment as specified in Section 8. Spills: Pick up and place in a suitable container for reclamation or disposal, using a method that does not generate dust. Material dissolves in water to form an acidic solution. US Regulations (CERCLA) require reporting spills and releases to soil, water and air in excess of reportable quantities. The toll free number for the US Coast Guard National Response Center is (800) 424-8802.

7. Handling and Storage

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Material dissolves in water to form an acidic solution. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.

8. Exposure Controls/Personal Protection

Airborne Exposure Limits:

None established.

Ventilation System:

A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.

Personal Respirators (NIOSH Approved):

For conditions of use where exposure to dust or mist is apparent and engineering controls are not feasible, a particulate respirator (NIOSH type N95 or better filters) may be worn. If oil particles (e.g. lubricants, cutting fluids, glycerine, etc.) are present, use a NIOSH type R or P filter. For emergencies or instances where the exposure levels are not known, use a full-face positive-pressure, air-supplied respirator. WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

Skin Protection:

Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Eye Protection:

Use chemical safety goggles and/or a full face shield where splashing is possible. Maintain eye wash fountain and quick-drench facilities in work area.

9. Physical and Chemical Properties

Appearance:

Colorless crystals or granules.

Odor:

Odorless.

Solubility:

Soluble in water.

Specific Gravity:

1.97

pH:

ca. 4.5 Aqueous solution

% Volatiles by volume @ 21C (70F):

0

Boiling Point:

> 500C (> 932F) Decomposes.

Melting Point:

100C (212F) Loses all water at 280C.

Vapor Density (Air=1):

No information found.

Vapor Pressure (mm Hg):

No information found.

Evaporation Rate (BuAc=1):

No information found.

10. Stability and Reactivity

Stability:

Stable under ordinary conditions of use and storage.

Hazardous Decomposition Products:

Oxides of sulfur and oxides of zinc. Reacts with water to form sulfuric acid.

Hazardous Polymerization:

Will not occur.

Incompatibilities:

Lead, calcium, strontium salts, borax, alkali carbonates and hydroxides, silver protein and tannins.

Conditions to Avoid:

Heat, moisture, incompatibles.

11. Toxicological Information

Hydrate: Oral rat LD50: 2150 mg/kg. Investigated as a mutagen.

For anhydrous zinc sulfate: oral rat LD50: 1710 mg/kg; Irritation, rabbit eye, standard Draize: 420 ug, moderate. Investigated as a tumorigen, mutagen, reproductive effector.

-----\Cancer Lists\-----			
Ingredient	---NTP Carcinogen---		IARC Category
	Known	Anticipated	

Zinc Sulfate (7733-02-0)	No	No	None

12. Ecological Information

Environmental Fate:

No information found.

Environmental Toxicity:

The LC50/96-hour values for fish are between 1 and 10 mg/l. This material is expected to be toxic to aquatic life.

13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

14. Transport Information

Not regulated.

15. Regulatory Information

-----\Chemical Inventory Status - Part 1\-----				
Ingredient	TSCA	EC	Japan	Australia

Zinc Sulfate (7733-02-0)	Yes	Yes	Yes	Yes
-----\Chemical Inventory Status - Part 2\-----				
Ingredient	--Canada--			
	Korea	DSL	NDSL	Phil.

Zinc Sulfate (7733-02-0)	Yes	Yes	No	Yes
-----\Federal, State & International Regulations - Part 1\-----				
Ingredient	-SARA 302-		-SARA 313-	
	RQ	TPQ	List	Chemical Catg.

Zinc Sulfate (7733-02-0)	No	No	No	Zinc compound
-----\Federal, State & International Regulations - Part 2\-----				
-RCRA- -TSCA-				

Ingredient	CERCLA	261.33	8 (d)
Zinc Sulfate (7733-02-0)	1000	No	No

Chemical Weapons Convention: No TSCA 12(b): No CDTA: No
SARA 311/312: Acute: Yes Chronic: No Fire: No Pressure: No
Reactivity: No (Pure / Solid)

Australian Hazchem Code: None allocated.

Poison Schedule: S6

WHMIS:

This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

16. Other Information

NFPA Ratings: Health: 1 Flammability: 0 Reactivity: 0

Label Hazard Warning:

WARNING! HARMFUL IF SWALLOWED OR INHALED. CAUSES IRRITATION TO SKIN, EYES AND RESPIRATORY TRACT.

Label Precautions:

Avoid breathing dust.

Keep container closed.

Use only with adequate ventilation.

Wash thoroughly after handling.

Avoid contact with eyes, skin and clothing.

Label First Aid:

If swallowed, give several glasses of water to drink. Vomiting may occur spontaneously, but DO NOT INDUCE! Never give anything by mouth to an unconscious person. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. In case of contact, wipe off excess material from skin then immediately flush eyes or skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Wash clothing before reuse. In all cases, get medical attention.

Product Use:

Laboratory Reagent.

Revision Information:

No Changes.

Disclaimer:

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Prepared by: Environmental Health & Safety

Phone Number: (314) 654-1600 (U.S.A.)

FLINN SCIENTIFIC, INC.

Safety Data Sheet (SDS)

SDS #: 866.00

Revision Date: March 21, 2014

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Zinc Sulfate

Flinn Scientific, Inc. P.O. Box 219, Batavia, IL 60510 (800) 452-1261

CHEMTREC Emergency Phone Number: (800) 424-9300

Signal Word **DANGER**

Pictograms



SECTION 2 — HAZARDS IDENTIFICATION

Hazard class: Acute toxicity, oral (Category 4). Harmful if swallowed (H302). Do not eat, drink or smoke when using this product (P270).

Hazard class: Serious eye damage or irritation (Category 1). Causes serious eye damage (H318).

SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Zinc sulfate heptahydrate	7446-20-0	$\text{ZnSO}_4 \cdot 7\text{H}_2\text{O}$	287.56	
Synonym: White vitriol				

SECTION 4 — FIRST AID MEASURES

Immediately call a POISON CENTER or physician (P310).

If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing (P305+P351+P338).

If on skin: Wash with plenty of water.

If swallowed: Rinse mouth. Call a POISON CENTER or physician if you feel unwell (P301+P330+P312).

SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable solid.

When heated to decomposition, may emit toxic fumes.

In case of fire: Use a tri-class dry chemical fire extinguisher.

NFPA CODE

None
established

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Sweep up, place in sealed bag or container and dispose. Ventilate area and wash spill site after material pickup is complete. See Sections 8 and 13 for further information.

SECTION 7 — HANDLING AND STORAGE

Flinn Suggested Chemical Storage Pattern: Inorganic #2. Store with acetates, halides, sulfates, sulfites, thiosulfates and phosphates. Efflorescent. Store in a Flinn Chem-Saf™ bag. Store in a cool, dry place.

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Wear protective gloves, protective clothing, and eye protection (P280). Wash hands thoroughly after handling (P264).

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Colorless crystals, small needles or granular powder. Odorless.
Soluble: Water. Insoluble in alcohol.

Melting point: 100 °C
Specific gravity: 1.957

SECTION 10 — STABILITY AND REACTIVITY

Avoid contact with strong oxidizers, moist air.

Shelf life: Fair to poor, efflorescent. See Section 7 for further information.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Irritant.

ORL-RAT LD₅₀: 1260 mg/kg

Chronic effects: N.A.

IHL-RAT LC₅₀: N.A.

Target organs: N.A.

SKN-RBT LD₅₀: N.A.

N.A. = Not available, not all health aspects of this substance have been fully investigated.

SECTION 12 — ECOLOGICAL INFORMATION

Data not yet available.

SECTION 13 — DISPOSAL CONSIDERATIONS

Please review all federal, state and local regulations that may apply before proceeding.

Flinn Suggested Disposal Method #26a is one option.

SECTION 14 — TRANSPORT INFORMATION

Shipping name: Not regulated. Hazard class: N/A. UN number: N/A.

N/A = Not applicable

SECTION 15 — REGULATORY INFORMATION

TSCA-listed, EINECS-listed (231-793-3).

SECTION 16 — OTHER INFORMATION

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Consult your copy of the *Flinn Science Catalog/Reference Manual* for additional information about laboratory chemicals.

Revision Date: March 21, 2014

FLINN SCIENTIFIC, INC.

Safety Data Sheet (SDS)

SDS #: 859.00

Revision Date: December 18, 2014

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Zinc

Flinn Scientific, Inc. P.O. Box 219, Batavia, IL 60510 (800) 452-1261

CHEMTREC Emergency Phone Number: (800) 424-9300

Signal Word N/A

Pictograms

SECTION 2 — HAZARDS IDENTIFICATION

This chemical is considered nonhazardous according to GHS classifications for the Hazard Communication Standard. Treat all laboratory chemicals with caution.

As shipped, no adverse effects or dangers are associated with zinc in the form of a shot, sheet, foil, or granular. Combustible hazards are associated with the dust or powdered forms.

SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Zinc	7440-66-6	Zn	65.37	

SECTION 4 — FIRST AID MEASURES

Call a POISON CENTER or physician if you feel unwell.

If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing.

If on skin: Brush off loose particles from skin (P335). Wash with plenty of water.

If swallowed: Rinse mouth. Call a POISON CENTER or physician if you feel unwell.

SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable solid.

Finely divided zinc dust is a severe fire hazard. Zinc dust in contact with acids, water or damp air evolves hydrogen gas. The heat produced may ignite the hydrogen gas. Minimize contact with moisture.

In case of fire: Use a tri-class dry class fire extinguisher (P370+P378). If there is contact with water use class D fire extinguisher according to NFPA book.

NFPA CODE
None
established

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Sweep up, place in sealed bag or container and dispose. Ventilate area and wash spill site after material pickup is complete. See Sections 8 and 13 for further information.

SECTION 7 — HANDLING AND STORAGE

Flinn Suggested Chemical Storage Pattern: Inorganic #1. Store with metals and metal hydrides.

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Wear protective gloves, protective clothing, and eye protection. Wash hands thoroughly after handling.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Shiny white metal with bluish-gray luster. Forms: granular, mossy dust, metal pieces, foil, sheets, shot, strips. Odorless.
Soluble: Acids and alkalis. Insoluble in water.

Boiling point: 908 °C
Melting point: 419 °C
Specific gravity: 7.14

SECTION 10 — STABILITY AND REACTIVITY

Avoid strong acids, strong bases, cadmium, sulfur chlorinated solvents, amines, and carbon disulfide. Avoid any source of flame for zinc dust only! Zinc dust can spontaneously combust when in contact with moisture.

Shelf life: Indefinite, if stored properly.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Dust may cause lung irritations.

ORL-RAT LD₅₀: N.A.

Chronic effects: N.A.

IHL-RAT LC₅₀: N.A.

Target organs: N.A.

SKN-RBT LD₅₀: N.A.

N.A. = Not available, not all health aspects of this substance have been fully investigated.

SECTION 12 — ECOLOGICAL INFORMATION

Data not yet available.

SECTION 13 — DISPOSAL CONSIDERATIONS

Please review all federal, state and local regulations that may apply before proceeding.

Flinn Suggested Disposal Method #26a is one option.

SECTION 14 — TRANSPORT INFORMATION

Shipping name: Not regulated. Hazard class: N/A. UN number: N/A.

N/A = Not applicable

SECTION 15 — REGULATORY INFORMATION

TSCA-listed, EINECS-listed (231-175-3).

SECTION 16 — OTHER INFORMATION

This Safety Data Sheet (SDS) is for guidance and is based upon information and tests believed to be reliable. Flinn Scientific, Inc. makes no guarantee of the accuracy or completeness of the data and shall not be liable for any damages relating thereto. The data is offered solely for your consideration, investigation, and verification. The data should not be confused with local, state, federal or insurance mandates, regulations, or requirements and CONSTITUTE NO WARRANTY. Any use of this data and information must be determined by the science instructor to be in accordance with applicable local, state or federal laws and regulations. The conditions or methods of handling, storage, use and disposal of the product(s) described are beyond the control of Flinn Scientific, Inc. and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THIS PRODUCT(S).

Consult your copy of the *Flinn Science Catalog/Reference Manual* for additional information about laboratory chemicals.

Revision Date: December 18, 2014

Safety Data Sheet



1. Identification

Product Name:	BEYE QT 6 PK 1-2-3	Revision Date:	5/14/2015
Product Identifier:	2004	Supersedes Date:	5/6/2015
Product Use/Class:	Topcoat/ Waterbased		
Supplier:	Rust-Oleum Corporation 11 Hawthorn Parkway Vernon Hills, IL 60061 USA	Manufacturer:	Rust-Oleum Corporation 11 Hawthorn Parkway Vernon Hills, IL 60061 USA
Preparer:	Regulatory Department		
Emergency Telephone:	24 Hour Hotline: 847-367-7700		

2. Hazard Identification

EMERGENCY OVERVIEW: Use ventilation necessary to keep exposures below recommended exposure limits, if any. May cause eye, skin, or respiratory tract irritation. KEEP OUT OF REACH OF CHILDREN. Harmful if inhaled. Causes eye irritation.

Classification

Symbol(s) of Product



Signal Word

Warning

GHS HAZARD STATEMENTS

Acute Toxicity, Dermal, category 5	H313	May be harmful in contact with skin.
Skin Irritation, category 2	H315	Causes skin irritation.
Aspiration Hazard, category 2	H305	May be harmful if swallowed and enters airways
Skin Irritation, category 3	H316	Causes mild skin irritation
Eye Irritation, category 2B	H320	Causes eye irritation

GHS LABEL PRECAUTIONARY STATEMENTS

P102	Keep out of reach of children.
P103	Read label before use.
P202	Do not handle until all safety precautions have been read and understood.
P234	Keep only in original container.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P262	Do not get in eyes, on skin, or on clothing.
P264	Wash ... thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P281	Use personal protective equipment as required.
P285	In case of inadequate ventilation wear respiratory protection.

P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P335	Brush off loose particles from skin.
P350	Gently wash with plenty of soap and water.
P351	Rinse cautiously with water for several minutes.
P374	Fight fire with normal precautions from a reasonable distance.
P402	Store in a dry place.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P362	Take off contaminated clothing.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P332+P313	If skin irritation occurs: Get medical advice/attention.

3. Composition/Information On Ingredients

HAZARDOUS SUBSTANCES

<u>Chemical Name</u>	<u>CAS-No.</u>	<u>Wt.% Range</u>	<u>GHS Symbols</u>	<u>GHS Statements</u>
Limestone	1317-65-3	10-25		
Titanium Dioxide	13463-67-7	2.5-10		
Hydrous Magnesium Silicate	14807-96-6	1.0-2.5		
Ethylene Glycol	107-21-1	1.0-2.5		
Zinc Oxide	1314-13-2	1.0-2.5		
Blend of Nonionic Surfactants	PROPRIETARY	0.1-1.0		

The text for GHS Hazard Statements shown above (if any) is given in the "16. Other Information" section.

4. First-aid Measures

FIRST AID - EYE CONTACT: Immediately flush eyes with plenty of water for at least 15 minutes holding eyelids open. Get medical attention. Do NOT allow rubbing of eyes or keeping eyes closed.

FIRST AID - SKIN CONTACT: Wash skin with soap and water. Remove contaminated clothing. Get medical attention if irritation develops or persists.

FIRST AID - INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention. Do NOT use mouth-to-mouth resuscitation. If you experience difficulty in breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical assistance immediately.

FIRST AID - INGESTION: Swallowing less than an ounce will not cause significant harm. For larger amounts, do not induce vomiting, but give one or two glasses of water to drink and get medical attention. If swallowed, rinse mouth with water. If feeling unwell, get medical attention.

5. Fire-fighting Measures

EXTINGUISHING MEDIA: Alcohol Film Forming Foam, Carbon Dioxide, Dry Chemical, Water Fog

UNUSUAL FIRE AND EXPLOSION HAZARDS: FLASH POINT IS TESTED TO BE GREATER THAN 200 DEGREES F. No unusual fire or explosion hazards noted. Keep containers tightly closed.

SPECIAL FIREFIGHTING PROCEDURES: Water may be used to cool closed containers to prevent buildup of steam. If water is used, fog nozzles are preferred.

6. Accidental Release Measures

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: Dispose of according to local, state (provincial) and federal regulations. Do not incinerate closed containers. If spilled, contain spilled material and remove with inert absorbent. Dispose of contaminated absorbent, container, and unused contents in accordance with local, state, and federal regulations. Do not incinerate closed containers

7. Handling and Storage

HANDLING: Wash thoroughly after handling. Wash hands before eating. Avoid contact with eyes. Remove contaminated clothing and launder before reuse. Use only with adequate ventilation. Follow all MSDS/label precautions even after container is emptied because it may retain product residues. Avoid breathing fumes, vapors, or mist. Avoid contact with eyes, skin and clothing.

STORAGE: Keep from freezing. Keep container closed when not in use. Store in a dry, well ventilated place. Keep container tightly closed when not in use.

8. Exposure Controls/Personal Protection

Chemical Name	CAS-No.	Weight % Less Than	ACGIH TLV-TWA	ACGIH TLV-STEL	OSHA PEL-TWA	OSHA PEL-CEILING
Limestone	1317-65-3	15.0	15 mg/m ³ (Total Dust, OSHA)	N.E.	5 mg/m ³ (Respirable Dust)	N.E.
Titanium Dioxide	13463-67-7	10.0	10 mg/m ³ (Total Dust)	N.E.	15 mg/m ³ [Total Dust]	N.E.
Hydrous Magnesium Silicate	14807-96-6	5.0	2 mg/m ³ (Respirable Dust)	N.E.	20 mppcf (Mineral Dust <1% Quartz)	N.E.
Ethylene Glycol	107-21-1	5.0	N.E.	39 ppm	N.E.	N.E.
Zinc Oxide	1314-13-2	5.0	2 mg/m ³ (respirable dust)	10 mg/m ³ (respirable dust)	5 mg/m ³ (respirable dust or fume)	N.E.
Blend of Nonionic Surfactants	PROPRIETARY	1.0	N.E.	N.E.	N.E.	N.E.

PERSONAL PROTECTION

ENGINEERING CONTROLS: Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Prevent build-up of vapors by opening all doors and windows to achieve cross-ventilation.

RESPIRATORY PROTECTION: A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

SKIN PROTECTION: Use gloves to prevent prolonged skin contact. Nitrile or Neoprene gloves may afford adequate skin protection.

EYE PROTECTION: Use safety eyewear designed to protect against splash of liquids.

OTHER PROTECTIVE EQUIPMENT: Refer to safety supervisor or industrial hygienist for further information regarding personal protective equipment and its application. Refer to safety supervisor or industrial hygienist for further guidance regarding types of personal protective equipment and their applications.

HYGIENIC PRACTICES: Wash thoroughly with soap and water before eating, drinking or smoking. Remove contaminated clothing immediately and launder before reuse.

9. Physical and Chemical Properties

Appearance:	Liquid	Physical State:	Liquid
Odor:	Mild	Odor Threshold:	N.E.
Relative Density:	1.292	pH:	N.D.
Freeze Point, °C:	N.D.	Viscosity:	N.D.
Solubility in Water:	Miscible	Partition Coefficient, n-octanol/water:	No Information
Decomposition Temp., °C:	No Information	Explosive Limits, vol%:	0.9 - 17.7
Boiling Range, °C:	0 - 450	Flash Point, °C:	>93
Flammability:	Does not Support Combustion	Auto-ignition Temp., °C:	No Information
Evaporation Rate:	Slower than Ether	Vapor Pressure:	N.D.
Vapor Density:	Heavier than Air		

(See "Other information" Section for abbreviation legend)

10. Stability and Reactivity

CONDITIONS TO AVOID: Avoid contact with strong acid and strong bases.

INCOMPATIBILITY: Incompatible with strong oxidizing agents, strong acids and strong alkalies.

HAZARDOUS DECOMPOSITION: By open flame, carbon monoxide and carbon dioxide. When heated to decomposition, it emits acrid smoke and irritating fumes.

HAZARDOUS POLYMERIZATION: Will not occur under normal conditions.

STABILITY: This product is stable under normal storage conditions.

11. Toxicological information

EFFECTS OF OVEREXPOSURE - EYE CONTACT: Causes eye irritation. Irritating, and may injure eye tissue if not removed promptly.

EFFECTS OF OVEREXPOSURE - SKIN CONTACT: Substance may cause slight skin irritation. Low hazard for usual industrial handling or commercial handling by trained personnel.

EFFECTS OF OVEREXPOSURE - INHALATION: Low hazard for usual industrial handling or commercial handling by trained personnel. High gas, vapor, mist or dust concentrations may be harmful if inhaled. Avoid breathing fumes, spray, vapors, or mist.

EFFECTS OF OVEREXPOSURE - INGESTION: Substance may be harmful if swallowed.

EFFECTS OF OVEREXPOSURE - CHRONIC HAZARDS: Contains Titanium Dioxide. Titanium Dioxide is listed as a Group 2B-"Possibly carcinogenic to humans" by IARC. No significant exposure to Titanium Dioxide is thought to occur during the use of products in which Titanium Dioxide is bound to other materials, such as in paints during brush application or drying. Risk of overexposure depends on duration and level of exposure to dust from repeated sanding of surfaces or spray mist and the actual concentration of Titanium Dioxide in the formula. (Ref: IARC Monograph, Vol. 93, 2010)

PRIMARY ROUTE(S) OF ENTRY: Eye Contact, Ingestion, Inhalation, Skin Absorption, Skin Contact

ACUTE TOXICITY VALUES

The acute effects of this product have not been tested. Data on individual components are tabulated below:

CAS-No.	Chemical Name	Oral LD50	Dermal LD50	Vapor LC50
13463-67-7	Titanium Dioxide	>10000 mg/kg Rat	N.I.	N.I.
107-21-1	Ethylene Glycol	4000 mg/kg Rat	N.I.	N.I.
1314-13-2	Zinc Oxide	>5000 mg/kg Rat	N.I.	N.I.

N.I. - No Information

12. Ecological Information

ECOLOGICAL INFORMATION: Product is a mixture of listed components.

13. Disposal Information

DISPOSAL INFORMATION: Dispose of material in accordance to local, state, and federal regulations and ordinances. Do not allow to enter waterways, wastewater, soil, storm drains or sewer systems.

14. Transport Information

	<u>Domestic (USDOT)</u>	<u>International (IMDG)</u>	<u>Air (IATA)</u>	<u>TDG (Canada)</u>
UN Number:	N.A.	N.A.	N.A.	N.A.
Proper Shipping Name:	Not Regulated	Not Regulated	Not Regulated	Not Regulated
Hazard Class:	N.A.	N.A.	N.A.	N.A.
Packing Group:	N.A.	N.A.	N.A.	N.A.
Limited Quantity:	No	No	No	No

15. Regulatory Information

U.S. Federal Regulations:**CERCLA - SARA Hazard Category**

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Acute Health Hazard, Chronic Health Hazard

Sara Section 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

<u>Chemical Name</u>	<u>CAS-No.</u>
Ethylene Glycol	107-21-1
Zinc Oxide	1314-13-2

Toxic Substances Control Act:

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(b) if exported from the United States:

<u>Chemical Name</u>	<u>CAS-No.</u>
Sodium Nitrite	7632-00-0
5-Chloro-2-Methyl-4-Isothiazolin-3-one	26172-55-4
Methyl-4-Isothiazolin-3-one	2682-20-4

CALIFORNIA PROPOSITION 65:

WARNING: This product contains a substance known to the State of California to cause cancer.

<u>Chemical Name</u>	<u>CAS-No.</u>
Titanium Dioxide	13463-67-7
Blend of Nonionic Surfactants	PROPRIETARY
Crystalline Silica / Quartz	14808-60-7
Diethanolamine	111-42-2
Lead Compounds	7439-92-1
Arsenic Compounds	7440-38-2
Nickel Compounds	7440-02-0
Cadmium Compounds	7440-43-9

CALIFORNIA PROPOSITION 65 REPRODUCTIVE TOXINS

WARNING: This product contains a substance known to the State of California to cause birth defects or other reproductive harm.

<u>Chemical Name</u>	<u>CAS-No.</u>
Blend of Nonionic Surfactants	PROPRIETARY
Lead Compounds	7439-92-1
Cadmium Compounds	7440-43-9
Mercury Compounds (Inorganic)	7439-97-6

International Regulations:**CANADIAN WHMIS:**

This SDS has been prepared in compliance with Controlled Product Regulations except for the use of the 16 headings.

16. Other Information**HMIS RATINGS**

Health: 2* Flammability: 1 Physical Hazard: 0 Personal Protection: X

CANADIAN WHMIS CLASS: D2A

NFPA RATINGS

Health: 2 Flammability: 1 Instability: 0

VOLATILE ORGANIC COMPOUNDS, g/L: 84

MSDS REVISION DATE: 5/14/2015

REASON FOR REVISION: No Information

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

Icons for GHS Pictograms shown in Section 3 describing each ingredient:

No GHS Pictograms exist for Section 3

No Information

Material Safety Data Sheet

24 Hour Assistance:

1-847-367-7700

Rust-Oleum Corp.

www.rustoleum.com



1. Identification

Product Name: BEYE QT 6 PK SEALCOAT UNIV SANDING **Revision Date:** 10/30/2013
Product Number: 854
Product Use/Class: Wood Sealer/Shellac
Supplier: Rust-Oleum Corporation
 11 Hawthorn Parkway
 Vernon Hills, IL 60061
 USA
Manufacturer: Rust-Oleum Corporation
 11 Hawthorn Parkway
 Vernon Hills, IL 60061
 USA
Prepared by: Regulatory Department

2. Hazard Identification

EMERGENCY OVERVIEW: Harmful if swallowed. Causes eye irritation. Flammable liquid and vapor. Causes nose and throat irritation. Harmful if inhaled. May affect the brain or nervous system causing dizziness, headache or nausea. Vapor Harmful. Causes Eye, Skin, Nose, and Throat Irritation. May cause eye, skin, or respiratory tract irritation. KEEP OUT OF REACH OF CHILDREN. Harmful if inhaled. Use ventilation necessary to keep exposures below recommended exposure limits, if any.

EFFECTS OF OVEREXPOSURE - EYE CONTACT: Causes Serious Eye Irritation

EFFECTS OF OVEREXPOSURE - SKIN CONTACT: Prolonged or repeated skin contact may cause irritation. Causes skin irritation. Allergic reactions are possible.

EFFECTS OF OVEREXPOSURE - INHALATION: Harmful if inhaled. Avoid breathing fumes, spray, vapors, or mist. May cause headaches and dizziness. High vapor concentrations are irritating to the eyes, nose, throat and lungs. High gas, vapor, mist or dust concentrations may be harmful if inhaled. Prolonged or excessive inhalation may cause respiratory tract irritation.

EFFECTS OF OVEREXPOSURE - INGESTION: Harmful if swallowed. Aspiration hazard if swallowed; can enter lungs and cause damage.

EFFECTS OF OVEREXPOSURE - CHRONIC HAZARDS: Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. High concentrations may lead to central nervous system effects (drowsiness, dizziness, nausea, headaches, paralysis, and blurred vision) and/or damage.

PRIMARY ROUTE(S) OF ENTRY: Eye Contact, Ingestion, Inhalation, Skin Absorption, Skin Contact

3. Composition/Information On Ingredients

Chemical Name	CAS-No.	Weight % Less Than	ACGIH TLV- TWA	ACGIH TLV- STEL	OSHA PEL-TWA	OSHA PEL- CEILING
Ethanol	64-17-5	70.0	1000 ppm	N.E.	1000 ppm	N.E.
Isopropyl Alcohol	67-63-0	5.0	200 ppm	400 ppm	400 ppm	N.E.

4. First-aid Measures

FIRST AID - EYE CONTACT: Immediately flush eyes with plenty of water for at least 15 minutes holding eyelids open. Get medical attention. Do NOT allow rubbing of eyes or keeping eyes closed.

FIRST AID - SKIN CONTACT: Wash skin with soap and water. Remove contaminated clothing. Get medical attention if irritation develops or persists.

FIRST AID - INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention. Do NOT use mouth-to-mouth resuscitation. If you experience difficulty in breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical assistance immediately.

FIRST AID - INGESTION: Aspiration hazard: Do not induce vomiting or give anything by mouth because this material can enter the lungs and cause severe lung damage. Get immediate medical attention. If swallowed, get medical attention.

5. Fire-fighting Measures

Flash Point, °F 55 (Setaflash)

Extinguishing Media: Alcohol Film Forming Foam, Carbon Dioxide, Dry Chemical, Dry Sand, Water Fog

UNUSUAL FIRE AND EXPLOSION HAZARDS: Isolate from heat, electrical equipment, sparks and open flame. Vapors can travel to a source of ignition and flash back. Vapors may form explosive mixtures with air. No unusual fire or explosion hazards noted. Closed containers may explode when exposed to extreme heat due to buildup of steam. Keep containers tightly closed.

SPECIAL FIREFIGHTING PROCEDURES: Water may be used to cool closed containers to prevent pressure buildup and possible autoignition or explosion. Evacuate area and fight fire from a safe distance. Use water spray to keep fire-exposed containers cool. Containers may explode when heated.

6. Accidental Release Measures

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: Contain spilled liquid with sand or earth. DO NOT use combustible materials such as sawdust. Eliminate all ignition sources; use explosion-proof equipment. Place material in a container and dispose of according to local, provincial, state and federal regulations. Remove all sources of ignition, ventilate area and remove with inert absorbent and non-sparking tools. Dispose of according to local, state (provincial) and federal regulations. Do not incinerate closed containers. Ventilate area, isolate spilled material, and remove with inert absorbent. Dispose of contaminated absorbent, container, and unused contents in accordance with local, state, and federal regulations.

7. Handling and Storage

HANDLING: Wash thoroughly after handling. Wash hands before eating. Use only with adequate ventilation. Follow all MSDS/label precautions even after container is emptied because it may retain product residues. Remove contaminated clothing and launder before reuse. Avoid breathing fumes, vapors, or mist. Avoid contact with eyes, skin and clothing.

STORAGE: Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame. Keep away from heat, sparks, flame and sources of ignition. Keep container closed when not in use. Product should be stored in tightly sealed containers and protected from heat, moisture, and foreign materials. Store in a dry, well ventilated place. Keep container tightly closed when not in use. Contents under pressure. Do not store above 120 ° F. Store large quantities in buildings designed and protected for storage of NFPA Class I flammable liquids. Avoid excess heat.

8. Exposure Controls/Personal Protection

ENGINEERING CONTROLS: Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Prevent build-up of vapors by opening all doors and windows to achieve cross-ventilation.

RESPIRATORY PROTECTION: A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use. A NIOSH/MSHA approved air purifying respirator with organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits.

SKIN PROTECTION: Use impervious gloves to prevent skin contact and absorption of this material through the skin. Nitrile or Neoprene gloves may afford adequate skin protection. Use gloves to prevent prolonged skin contact.

EYE PROTECTION: Use safety eyewear designed to protect against splash of liquids.

OTHER PROTECTIVE EQUIPMENT: Refer to safety supervisor or industrial hygienist for further information regarding personal protective equipment and its application. Refer to safety supervisor or industrial hygienist for further guidance regarding types of personal protective equipment and their applications.

HYGIENIC PRACTICES: Wash thoroughly with soap and water before eating, drinking or smoking. Remove contaminated clothing immediately and launder before reuse.

9. Physical and Chemical Properties

Vapor Density	Heavier than Air	Odor:	Alcohol Like
Appearance:	Liquid	Evaporation Rate:	Slower than Ether
Solubility in Water:	Slight	Freeze Point:	N.D.
Specific Gravity:	0.866	pH:	5.0-6.5
Physical State:	Liquid		

(See section 16 for abbreviation legend)

10. Stability and Reactivity

CONDITIONS TO AVOID: Avoid all possible sources of ignition. Avoid temperatures above 120 ° F. Avoid contact with strong acid and strong bases.

INCOMPATIBILITY: Incompatible with strong oxidizing agents, strong acids and strong alkalies.

HAZARDOUS DECOMPOSITION: By open flame, carbon monoxide and carbon dioxide. When heated to decomposition, it emits acrid smoke and irritating fumes. Contains solvents which may form carbon monoxide, carbon dioxide, and formaldehyde

HAZARDOUS POLYMERIZATION: Will not occur under normal conditions.

STABILITY: This product is stable under normal storage conditions.

11. Toxicological Information

<u>Chemical Name</u>	<u>LD50</u>	<u>LC50</u>
Ethanol	90 mL/kg (Rat, Oral)	N.E.
Isopropyl Alcohol	5800 mg/kg (Rat)	12000 ppm (Rat, 8Hr)

12. Ecological Information

ECOLOGICAL INFORMATION: Product is a mixture of listed components. Product is a mixture of listed components.

13. Disposal Information

DISPOSAL INFORMATION: Dispose of material in accordance to local, state and federal regulations and ordinances. Do not allow to enter waterways, wastewater. soil, storm drains or sewer systems.

14. Transport Information

	<u>Domestic (USDOT)</u>	<u>International (IMDG)</u>	<u>Air (IATA)</u>	<u>TDG (Canada)</u>
UN Number:	N.A.	1263	1263	N.A.
Proper Shipping Name:	Paint Products in Limited Quantities	Paint	Paint	Paint Products in Limited Quantities
Hazard Class:	N.A.	3	3	N.A.
Packing Group:	N.A.	II	II	N.A.
Limited Quantity:	Yes	Yes	No	Yes

15. Regulatory Information

U.S. Federal Regulations:**CERCLA - SARA Hazard Category**

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Fire Hazard, Acute Health Hazard, Chronic Health Hazard

Sara Section 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

<u>Chemical Name</u>	<u>CAS-No.</u>
Isopropyl Alcohol	67-63-0

Toxic Substances Control Act:

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

No TSCA 12(b) components exist in this product.

International Regulations:**CANADIAN WHMIS:**

This MSDS has been prepared in compliance with Controlled Product Regulations except for the use of the 16 headings.

Canadian WHMIS Class: B2 D2A

16. Other Information**HMIS Ratings:**

Health:	2	Flammability:	3	Physical Hazard:	0	Personal Protection:	X
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NFPA Ratings:

Health:	2	Flammability:	3	Instability	0
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VOLATILE ORGANIC COMPOUNDS, g/L: 653

REASON FOR REVISION: Regulatory Update

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

Rust-Oleum Corporation believes, to the best of its knowledge, information and belief, the information contained herein to be accurate and reliable as of the date of this safety data sheet. However, because the conditions of handling, use, and storage of these materials are beyond our control, we assume no responsibility or liability for personal injury or property damage incurred by the use of these materials. Rust-Oleum Corporation makes no warranty, expressed or implied, regarding the accuracy or reliability of the data or results obtained from their use. All materials may present unknown hazards and should be used with caution. The information and recommendations in this material safety data sheet are offered for the users' consideration and examination. It is the responsibility of the user to determine the final suitability of this information and to comply with all applicable international, federal, state, and local laws and regulations.

Material Safety Data Sheet

Section 1 General Information

Manufacturer:

Zinsser Company, Inc.
173 Belmont Drive
Somerset, NJ 08875
(732) 469-8100

Emergency Telephone: Chemtrec (800) 424-9300**Date:** April 15, 2005**Product Name:** Bulls Eye 3 Lb. Clear Shellac**Product Codes:** 300, 301, 304, 308, 316

Section 2 Hazardous Ingredients

<u>Hazardous Component</u>	<u>CAS#</u>	OSHA <u>PEL</u>	ACGIH <u>TLV</u>
Ethyl Alcohol	64-17-5	1000 ppm	1000 ppm
Isopropyl Alcohol	67-63-0	400 ppm	200 ppm
Methyl Isobutyl Ketone	108-10-1	100 ppm	50 ppm

Section 3 Hazard Identification

Emergency Overview: This material is cloudy beige colored liquid coating used to finish wood and other surfaces. It has an alcohol type odor and a flashpoint of 60° F.

Primary Routes of Exposure:

Inhalation

Potential Acute Health Effects:

Eye: May cause eye irritation.

Skin: May cause skin irritation.

Ingestion: May be harmful if swallowed.

Inhalation: Vapors may be irritating to eyes and respiratory tract. May cause CNS depression.

Potential Chronic Health Effects:

N/A: Not Applicable N/D: Not Determined N/E: Not Established N/R: Not Required Est.: Estimated

Signs and Symptoms: Chronic exposures may result in irritation to mucous membranes, headache, drowsiness, CNS depression, and/or liver damage.

(See also Sections 4, 8, and 11 for related information)

Section 4 First Aid Measures

Eye contact: Flush eyes with water for at least 15 minutes.

Skin contact: Wash with soap and water.

Ingestion: If the person is conscious and able to swallow have them drink water to dilute. Call a poison control center, physician, or emergency room.

Inhalation: If exposed to excessive levels of vapor or mist, remove to fresh air. Seek medical attention if cough or other symptoms develop.

Section 5 Fire Fighting Measures

Flash Point (method): 60° F

Extinguishing Media: Use dry chemical, “alcohol resistant” foam, or carbon dioxide. Water may be ineffective but water applied as a spray can absorb some of the fire’s heat and should be used to keep fire-exposed containers cool.

Protection of Firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand, NIOSH and full protective gear. Evacuate area and fight fire from safe distance.

Fire and Explosion Hazards: Vapors may form explosive mixture with air.

Section 6 Accidental Release Measures

Personal Precautions: Avoid skin contact. Avoid breathing vapors. Wash hands before eating.

Clean Up Methods: Keep unnecessary people away. Remove all sources of ignition. Dike and contain spill with inert material (sand, earth, etc.) and transfer liquid to containers for recovery or disposal. Keep spill out of sewer and open bodies of water. Floors may be slippery; care should be exercised to avoid falls. Avoid runoff into storm sewers and ditches that lead to waterways.

(See also Section 8 for information on Exposure Controls and Personal Protective Equipment)

Section 7 Handling and Storage

N/A: Not Applicable N/D: Not Determined N/E: Not Established N/R: Not Required Est.: Estimated

Handling: Keep away from heat, spark, and flame. Keep operating temperatures below ignition temperatures at all times. Use with adequate ventilation. Avoid contact with eyes, skin, and clothing.

Storage: Store away from heat. Keep away from heat, sparks and flame. Keep containers tightly closed and upright when not in use. Protect against physical damage.

Section 8 Exposure Controls / Personal Protection

Engineering Controls: Use general room dilution ventilation, process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

Personal Protective Equipment (PPE):

Eye Protection: Where contact is likely, wear chemical splash goggles and/or full-face shield.

Skin Protection: Where contact is likely, wear chemical resistant gloves and other protective clothing to prevent skin contact.

Respiratory Protection: Wear vapor levels exceed allowable exposure limits, wear a NIOSH approved air purifying respirator with an organic vapor cartridge.

General Hygiene Practices: Avoid eye and skin contact. Avoid breathing vapors. Wash hands before eating and drinking. Do not smoke while using this material.

Section 9 Physical Data

Appearance:	Cloudy beige liquid	Odor:	Alcohol type odor
Physical State:	Liquid	pH:	4.5 – 5.5
Boiling Point:	173° F*	Melting/Freezing Point:	N/A
Vapor Pressure:	40 mm/Hg*	Vapor Density:	1.59
Odor Threshold:	N/D	Viscosity:	25 – 300 cps
Specific Gravity (water = 1):	0.89	Autoignition Temp:	685° F*

Water Solubility: The alcohol portion is soluble in water, the shellac portion is not soluble and will form a gelatinous layer on top of water.

* based on pure ethyl alcohol.

N/A: Not Applicable N/D: Not Determined N/E: Not Established N/R: Not Required Est.: Estimated

Section 10 Stability and Reactivity

Stability: Stable, non-reactive.

Hazardous Polymerization: Will not occur.

Hazardous Decomposition Products: Carbon monoxide during incomplete combustion.

Conditions to Avoid: Heat, sparks, flames.

Incompatibility: Oxidizing agents

Section 11 Toxicological Information

Carcinogenicity: This material is not considered a carcinogen by IARC or NTP and is not regulated as a carcinogen by OSHA.

(See also Section 15 for related information)

Section 12 Ecological Information

Chemical Fate and Effects: No data available.

Section 13 Disposal Considerations

RCRA Hazardous Waste: This material, when discarded or disposed of, could be a hazardous waste according to federal regulations (40 CFR 261) due to the characteristic of ignitability (D001). The transportation, storage, treatment, and disposal of this waste must be conducted in compliance with 40 CFR 262, 263, 264, 268, and 270. Disposal can only occur in properly permitted facilities. Check state and local regulations for any additional requirements as these may be more restrictive than federal laws and regulations. Chemical additions, processing or otherwise altering this material may make the waste management information presented in this MSDS incomplete, inaccurate, or otherwise inappropriate.

Section 14 Transportation Information

Regulated by the DOT: Yes

DOT Proper Shipping Name: Paint

UN / NA Number: UN 1263

Class: 3, Flammable Liquid

Packing Group: II

N/A: Not Applicable N/D: Not Determined N/E: Not Established N/R: Not Required Est.: Estimated

Section 15 Regulatory Information

CERCLA:

The Comprehensive Environmental Response Compensation and Liability Act of 1980 (CERCLA) requires notification to the National Response Center for releases of quantities of Hazardous Substances equal to or greater than the reportable quantities (RQs) in 40 CFR 302.4 (for CERCLA 102).

Components present in this product at a level which could require reporting under the statute are:

<u>Chemical Name</u>	<u>CAS#</u>	<u>Maximum Concentration (Wt. %)</u>
None	N/A	N/A

SARA Title III, section 311/312:

The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires emergency planning based on Threshold Planning Quantities (TPQs) and release reporting based on Reportable Quantities (RQs) in 40 CFR 355 (used for SARA 302, 304, 311 and 312).

Components present in this product at a level which could require reporting under the statute are:

<u>Chemical Name</u>	<u>CAS#</u>	<u>Maximum Concentration (Wt. %)</u>
None	N/A	N/A

SARA Title III, section 313:

The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires submission of annual reports of release of toxic chemicals that appear in 40 CFR 372 (for SARA 313).

Components present in this product at a level which could require reporting under the statute are:

<u>Chemical Name</u>	<u>CAS#</u>	<u>Maximum Concentration (Wt. %)</u>
Methyl Isobutyl Ketone	108-10-1	1%

TSCA:

The components of this mixture are listed in the Toxic Substance Control Act Inventory of Chemical Substances.

This product contains the following chemicals which require export notification under section 12(b) of the TSCA regulation:

<u>Chemical Name</u>	<u>CAS#</u>	<u>TSCA Section</u>
None		

Section 16 Other Information

Legend: N/A: Not Applicable
N/E: Not Established

N/D: Not Determined
N/R: Not Required

N/A: Not Applicable	N/D: Not Determined	N/E: Not Established	N/R: Not Required	Est.: Estimated
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STEL: Short Term Exposure Limit
cps: Centipoise
mppcf: million particles per cubic foot of air.
PPB: Parts Per Billion
TLV: Threshold Limit Value
ACGIH: American Conference of Governmental Industrial Hygienists
CPSC: Consumer Product Safety Commission
DOT: US Dept. of Transportation
FHSA: Federal Hazardous Substance Act
OSHA: Occupational Safety and Health Administration (US Dept. of Labor)
RCRA: Resource Conservation and Recovery Act
SARA: Superfund Amendment and Reauthorization Act
Skin: This substance has the potential to be absorbed systemically through the skin.
TSCA: Toxic Substance Control Act

C: OSHA Ceiling Value
mg/m³: milligrams per cubic meter
PPM: Parts Per Million
PEL: Permissible Exposure Limit
TWA: Time Weighted Average

Prepared By: Zinsser Health and Safety Manager, Regulatory Compliance Dept.
 173 Belmont Drive Somerset, NJ 08875 (732) 469-8100

Disclaimer: Zinsser Company, Inc. believes, to the best of its knowledge, information and belief, the information contained herein to be accurate and reliable as of the date of this material safety data sheet. However, because the conditions of handling, use, and storage of these materials are beyond our control, we assume no responsibility or liability for personal injury or property damage incurred by the use of these materials and make no warranty, expressed or implied, regarding the accuracy or reliability of the data or results obtained from their use. All materials may present unknown hazards and should be used with caution. The information and recommendations in this material safety data sheet are offered for the users' consideration and examination. It is the responsibility of the user to determine the final suitability of this information and data and to comply with all applicable international, federal, state, and local laws and regulations.

N/A: Not Applicable N/D: Not Determined N/E: Not Established N/R: Not Required Est.: Estimated

Safety Data Sheet



1. Identification

Product Name:	BEYE 12-OZ 6 PK SPRAY SHELLAC	Revision Date:	5/18/2015
Product Identifier:	408	Supersedes Date:	New SDS
Product Use/Class:	Topcoat/Aerosols		
Supplier:	Rust-Oleum Corporation 11 Hawthorn Parkway Vernon Hills, IL 60061 USA	Manufacturer:	Rust-Oleum Corporation 11 Hawthorn Parkway Vernon Hills, IL 60061 USA
Preparer:	Regulatory Department		
Emergency Telephone:	24 Hour Hotline: 847-367-7700		

2. Hazard Identification

EMERGENCY OVERVIEW: Extremely flammable liquid and vapor. Vapors may cause flash fire or explosion. Harmful if inhaled. May affect the brain or nervous system causing dizziness, headache or nausea. Contents Under Pressure. May cause eye, skin, or respiratory tract irritation. KEEP OUT OF REACH OF CHILDREN. Harmful if inhaled. Harmful if swallowed. Causes eye irritation. Use ventilation necessary to keep exposures below recommended exposure limits, if any. Vapor Harmful. Causes Eye, Skin, Nose, and Throat Irritation.

Classification

Symbol(s) of Product



Signal Word

Danger

GHS HAZARD STATEMENTS

Flammable Aerosol, category 1	H222	Extremely flammable aerosol.
Flammable Liquid, category 1	H224	Extremely flammable liquid and vapour.
Acute Toxicity, Oral, category 5	H303	May be harmful if swallowed.
Acute Toxicity, Dermal, category 5	H313	May be harmful in contact with skin.
Skin Irritation, category 2	H315	Causes skin irritation.
Eye Irritation, category 2	H319	Causes serious eye irritation.
Acute Toxicity, Inhalation, category 4	H332	Harmful if inhaled.
STOT, single exposure, category 3, RTI	H335	May cause respiratory irritation.
STOT, single exposure, category 3, NE	H336	May cause drowsiness or dizziness.
Aspiration Hazard, category 2	H305	May be harmful if swallowed and enters airways
Eye Irritation, category 2B	H320	Causes eye irritation
Flammable Aerosol, category 1	H280	Contains gas under pressure; may explode if heated.

Germ Cell Mutagenicity, category 1B	H340	May cause genetic defects . Classified as mutagenic Category 1 if one ingredient is present at or above 0.1% Applies to liquids, Solids (w/w units) and gases (v/v). The substance may also have its own exposure limit. Routes of exposure are dependant on ingredient form.
Carcinogenicity, category 1A	H350	May cause cancer. Classified as carcinogenic Category 1 on the basis of epidemiological and/or animal data. Mixtures are classified as carcinogenic when at least 1 ingredient has been classified as carcinogenic and is present at 0.1% or above Routes of exposure are dependant on ingredient form. May cause cancer <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.

GHS LABEL PRECAUTIONARY STATEMENTS

P211	Do not spray on an open flame or other ignition source.
P251	Do not pierce or burn, even after use.
P375	Fight fire remotely due to the risk of explosion.
P102	Keep out of reach of children.
P103	Read label before use.
P234	Keep only in original container.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P262	Do not get in eyes, on skin, or on clothing.
P264	Wash ... thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P281	Use personal protective equipment as required.
P285	In case of inadequate ventilation wear respiratory protection.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P350	Gently wash with plenty of soap and water.
P374	Fight fire with normal precautions from a reasonable distance.
P402	Store in a dry place.
P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50°C/ 122°F.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P403+P235	Store in a well-ventilated place. Keep cool.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P362	Take off contaminated clothing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313	If eye irritation persists: Get medical advice/attention.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P201	Obtain special instructions before use.
P308+P313	IF exposed or concerned: Get medical advice/attention.

3. Composition/Information On Ingredients

HAZARDOUS SUBSTANCES

<u>Chemical Name</u>	<u>CAS-No.</u>	<u>Wt.% Range</u>	<u>GHS Symbols</u>	<u>GHS Statements</u>
Ethanol	64-17-5	25-50	GHS02	H225
Acetone	67-64-1	25-50	GHS02-GHS07	H225-336-319
Liquefied Petroleum Gas	68476-86-8	10-25	GHS08	H340-350
n-Butanol	71-36-3	2.5-10	GHS02-GHS05-GHS07	H226-302-335-336-315-318
2-Propanol	67-63-0	1.0-2.5	GHS02-GHS07	H225-336-319

The text for GHS Hazard Statements shown above (if any) is given in the "16. Other Information" section.

4. First-aid Measures

FIRST AID - EYE CONTACT: Immediately flush eyes with plenty of water for at least 15 minutes holding eyelids open. Get medical attention. Do NOT allow rubbing of eyes or keeping eyes closed.

FIRST AID - SKIN CONTACT: Wash skin with soap and water. Remove contaminated clothing. Get medical attention if irritation develops or persists.

FIRST AID - INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention. Do NOT use mouth-to-mouth resuscitation. If you experience difficulty in breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical assistance immediately.

FIRST AID - INGESTION: Aspiration hazard: Do not induce vomiting or give anything by mouth because this material can enter the lungs and cause severe lung damage. Get immediate medical attention. If swallowed, get medical attention.

5. Fire-fighting Measures

EXTINGUISHING MEDIA: Alcohol Film Forming Foam, Carbon Dioxide, Dry Chemical, Dry Sand, Water Fog

UNUSUAL FIRE AND EXPLOSION HAZARDS: FLASH POINT IS LESS THAN 20°F. EXTREMELY FLAMMABLE LIQUID AND VAPOR! Water spray may be ineffective. Closed containers may explode when exposed to extreme heat due to buildup of steam. Closed containers may explode when exposed to extreme heat. Vapors may form explosive mixtures with air. Vapors can travel to a source of ignition and flash back. Isolate from heat, electrical equipment, sparks and open flame. Perforation of the pressurized container may cause bursting of the can. No unusual fire or explosion hazards noted. Keep containers tightly closed.

SPECIAL FIREFIGHTING PROCEDURES: Full protective equipment including self-contained breathing apparatus should be used. Evacuate area and fight fire from a safe distance. Water may be used to cool closed containers to prevent pressure buildup and possible autoignition or explosion. Use water spray to keep fire-exposed containers cool. Containers may explode when heated.

6. Accidental Release Measures

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: Contain spilled liquid with sand or earth. DO NOT use combustible materials such as sawdust. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Remove all sources of ignition, ventilate area and remove with inert absorbent and non-sparking tools. Dispose of according to local, state (provincial) and federal regulations. Do not incinerate closed containers. Ventilate area, isolate spilled material, and remove with inert absorbent. Dispose of contaminated absorbent, container, and unused contents in accordance with local, state, and federal regulations.

7. Handling and Storage

HANDLING: Wash thoroughly after handling. Wash hands before eating. Remove contaminated clothing and launder before reuse. Use only with adequate ventilation. Follow all MSDS/label precautions even after container is emptied because it may retain product residues. Avoid breathing fumes, vapors, or mist. Avoid contact with eyes, skin and clothing.

STORAGE: Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame. Contents under pressure. Do not store above 120 ° F. Store large quantities in buildings designed and protected for storage of NFPA Class I flammable liquids. Product should be stored in tightly sealed containers and protected from heat, moisture, and foreign materials. Store in a dry, well ventilated place. Keep container tightly closed when not in use. Keep away from heat, sparks, flame and sources of ignition. Avoid excess heat.

8. Exposure Controls/Personal Protection

Chemical Name	CAS-No.	Weight % Less Than	ACGIH TLV- TWA	ACGIH TLV- STEL	OSHA PEL-TWA	OSHA PEL- CEILING
Ethanol	64-17-5	35.0	N.E.	1000 ppm	1000 ppm	N.E.
Acetone	67-64-1	30.0	500 ppm	750 ppm	1000 ppm	N.E.
Liquefied Petroleum Gas	68476-86-8	25.0	N.E.	N.E.	N.E.	N.E.
n-Butanol	71-36-3	5.0	N.E.	20 ppm	100 ppm	N.E.
2-Propanol	67-63-0	5.0	200 ppm	400 ppm	400 ppm	N.E.

PERSONAL PROTECTION

ENGINEERING CONTROLS: Use explosion-proof ventilation equipment. Provide general dilution of local exhaust ventilation in volume and pattern to keep TLV of hazardous ingredients below acceptable limits. Prevent build-up of vapors by opening all doors and windows to achieve cross-ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

RESPIRATORY PROTECTION: A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use. A NIOSH/MSHA approved air purifying respirator with organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits.

SKIN PROTECTION: Use gloves to prevent prolonged skin contact. Nitrile or Neoprene gloves may afford adequate skin protection.

EYE PROTECTION: Use safety eyewear designed to protect against splash of liquids.

OTHER PROTECTIVE EQUIPMENT: Refer to safety supervisor or industrial hygienist for further guidance regarding types of personal protective equipment and their applications.

HYGIENIC PRACTICES: Wash thoroughly with soap and water before eating, drinking or smoking. Remove contaminated clothing immediately and launder before reuse.

9. Physical and Chemical Properties

Appearance:	Aerosolized Mist	Physical State:	Liquid
Odor:	Solvent Like	Odor Threshold:	N.E.
Relative Density:	0.745	pH:	N.A.
Freeze Point, °C:	N.D.	Viscosity:	N.D.
Solubility in Water:	Miscible	Partition Coefficient, n-octanol/water:	No Information
Decomposition Temp., °C:	No Information	Explosive Limits, vol%:	1.4 - 20.0
Boiling Range, °C:	0 - 244	Flash Point, °C:	-105
Flammability:	Does not Support Combustion	Auto-ignition Temp., °C:	No Information
Evaporation Rate:	Faster than Ether	Vapor Pressure:	N.D.
Vapor Density:	Heavier than Air		

(See "Other information" Section for abbreviation legend)

10. Stability and Reactivity

CONDITIONS TO AVOID: Avoid temperatures above 120 ° F. Avoid contact with strong acid and strong bases. Avoid all possible sources of ignition.

INCOMPATIBILITY: Incompatible with strong oxidizing agents, strong acids and strong alkalies.

HAZARDOUS DECOMPOSITION: By open flame, carbon monoxide and carbon dioxide. When heated to decomposition, it emits acrid smoke and irritating fumes. Contains solvents which may form carbon monoxide, carbon dioxide, and formaldehyde.

HAZARDOUS POLYMERIZATION: Will not occur under normal conditions.

STABILITY: This product is stable under normal storage conditions.

11. Toxicological information

EFFECTS OF OVEREXPOSURE - EYE CONTACT: Causes Serious Eye Irritation

EFFECTS OF OVEREXPOSURE - SKIN CONTACT: May cause skin irritation. Allergic reactions are possible.

EFFECTS OF OVEREXPOSURE - INHALATION: High gas, vapor, mist or dust concentrations may be harmful if inhaled. High vapor concentrations are irritating to the eyes, nose, throat and lungs. Harmful if inhaled. Avoid breathing fumes, spray, vapors, or mist. Prolonged or excessive inhalation may cause respiratory tract irritation.

EFFECTS OF OVEREXPOSURE - INGESTION: Harmful if swallowed.

EFFECTS OF OVEREXPOSURE - CHRONIC HAZARDS: May cause central nervous system disorder (e.g., narcosis involving a loss of coordination, weakness, fatigue, mental confusion, and blurred vision) and/or damage. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. High concentrations may lead to central nervous system effects (drowsiness, dizziness, nausea, headaches, paralysis, and blurred vision) and/or damage.

PRIMARY ROUTE(S) OF ENTRY: Eye Contact, Ingestion, Inhalation, Skin Absorption, Skin Contact

ACUTE TOXICITY VALUES

The acute effects of this product have not been tested. Data on individual components are tabulated below:

<u>CAS-No.</u>	<u>Chemical Name</u>	<u>Oral LD50</u>	<u>Dermal LD50</u>	<u>Vapor LC50</u>
64-17-5	Ethanol	N.I.	N.I.	124.7 mg/L Rat
71-36-3	n-Butanol	790 mg/kg Rat	3400 mg/kg Rabbit	N.I.
67-63-0	2-Propanol	4396 mg/kg Rat	12800 mg/kg Rabbit	N.I.

N.I. - No Information

12. Ecological Information**ECOLOGICAL INFORMATION:** Product is a mixture of listed components.**13. Disposal Information****DISPOSAL INFORMATION:** Dispose of material in accordance to local, state, and federal regulations and ordinances. Do not allow to enter waterways, wastewater, soil, storm drains or sewer systems.**14. Transport Information**

	<u>Domestic (USDOT)</u>	<u>International (IMDG)</u>	<u>Air (IATA)</u>	<u>TDG (Canada)</u>
UN Number:	N.A.	1950	1950	N.A.
Proper Shipping Name:	Paint Products in Limited Quantities	Aerosols	Aerosols	Paint Products in Limited Quantities
Hazard Class:	N.A.	2.1	2.1	N.A.
Packing Group:	N.A.	N.A.	N.A.	N.A.
Limited Quantity:	Yes	Yes	Yes	Yes

15. Regulatory Information**U.S. Federal Regulations:****CERCLA - SARA Hazard Category**

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Fire Hazard, Pressure Hazard, Acute Health Hazard, Chronic Health Hazard

Sara Section 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

<u>Chemical Name</u>	<u>CAS-No.</u>
n-Butanol	71-36-3

Toxic Substances Control Act:

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(b) if exported from the United States:

No TSCA 12(b) components exist in this product.

CALIFORNIA PROPOSITION 65:

WARNING: This product contains a substance known to the State of California to cause cancer.

<u>Chemical Name</u>	<u>CAS-No.</u>
Ethanol	64-17-5
Benzene	71-43-2

CALIFORNIA PROPOSITION 65 REPRODUCTIVE TOXINS

WARNING: This product contains a substance known to the State of California to cause birth defects or other reproductive harm.

Chemical Name

Ethanol
Benzene

CAS-No.

64-17-5
71-43-2

International Regulations:**CANADIAN WHMIS:**

This SDS has been prepared in compliance with Controlled Product Regulations except for the use of the 16 headings.

16. Other Information**HMIS RATINGS**

Health: 2 Flammability: 4 Physical Hazard: 0 Personal Protection: X

CANADIAN WHMIS CLASS: AB5 D2A

NFPA RATINGS

Health: 2 Flammability: 4 Instability: 0

VOLATILE ORGANIC COMPOUNDS, g/L: 604

MSDS REVISION DATE: 5/18/2015

REASON FOR REVISION: No Information

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

Text for GHS Hazard Statements shown in Section 3 describing each ingredient:

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H340	May cause genetic defects <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.
H350	May cause cancer <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.

Icons for GHS Pictograms shown in Section 3 describing each ingredient:

GHS02



GHS05



GHS07**GHS08**

Rust-Oleum Corporation believes, to the best of its knowledge, information and belief, the information contained herein to be accurate and reliable as of the date of this safety data sheet. However, because the conditions of handling, use, and storage of these materials are beyond our control, we assume no responsibility or liability for personal injury or property damage incurred by the use of these materials. Rust-Oleum Corporation makes no warranty, expressed or implied, regarding the accuracy or reliability of the data or results obtained from their use. All materials may present unknown hazards and should be used with caution. The information and recommendations in this material safety data sheet are offered for the users' consideration and examination. It is the responsibility of the user to determine the final suitability of this information and to comply with all applicable international, federal, state, and local laws and regulations.

Material Safety Data Sheet

Section 1 General Information

Manufacturer:

Zinsser Company, Inc.
173 Belmont Drive
Somerset, NJ 08875
(732) 469-8100

HIMIS Rating

HEALTH: 1
FLAMMABILITY: 3
REACTIVITY: 0

Emergency Telephone: Chemtrec (800) 424-9300

Date: July 22, 2003

Product Name: Covers Up

Product Codes: 03688

Section 2 Hazardous Ingredients

<u>Hazardous Component</u>	<u>CAS#</u>	<u>OSHA</u> <u>PEL</u>	<u>ACGIH</u> <u>TLV</u>
Acetone	67-64-1	1000 ppm	500 ppm
Limestone	1317-65-3	15 mg/m ³ * (5 mg/m ³ **)	10 mg/m ³ † (3 mg/m ³ **)
Propane	74-98-6	1000 ppm	2500 ppm
Titanium dioxide	13463-67-7	15 Mg/m ³ *	10 Mg/m ³
n-Butane	106-97-8	N/E	1000 ppm

* Total Dust

** Respirable Dust Fraction

† Inhalable fraction

Section 3 Hazard Identification

Emergency Overview: This material is an aerosol spray coating. The container is pressurized and extremely flammable. As packaged, this material has a flashpoint of less than 32° F.

Primary Routes of Exposure:

Inhalation
Skin Contact
Eye Contact

Potential Acute Health Effects:

Eye: May cause eye irritation.

Skin: Prolonged contact may cause skin irritation.

N/A: Not Applicable N/D: Not Determined N/E: Not Established N/R: Not Required Est.: Estimated

Ingestion: Although ingestion is not anticipated route of exposure, this material can be harmful if swallowed. It may cause depression of the central nervous system, nausea, and vomiting.

Inhalation: May cause headache, drowsiness, dizziness, nausea, and respiratory tract irritation.

Potential Chronic Health Effects: None known.

(See also Sections 4, 8, and 11 for related information)

Section 4 First Aid Measures

Eye contact: Flush eyes with water for 15 minutes.

Skin contact: Wash affected area thoroughly with soap and water.

Ingestion: Call a physician or poison control center.

Inhalation: Remove person to fresh air. Contact physician or poison control center if symptoms persist.

Section 5 Fire Fighting Measures

Flash Point (method): < 32° F (< 0° C)

Extinguishing Media: Foam, CO₂, dry chemical, water fog.

Protection of Firefighters: As in any fire, wear NIOSH approved self-contained breathing apparatus in pressure-demand mode and full protective gear.

Fire and Explosion Hazards: Contents under pressure. Containers can build up pressure if exposed to heat (fire).

Section 6 Accidental Release Measures

Personal Precautions: Use with adequate ventilation. Avoid breathing vapors. Avoid contact with eyes and skin. Do not eat, drink or smoke in areas of use or storage.

Clean Up Methods: Dispose of in accordance with federal, state, local, regulations.

(See also Section 8 for information on Exposure Controls and Personal Protective Equipment)

N/A: Not Applicable N/D: Not Determined N/E: Not Established N/R: Not Required Est.: Estimated

Section 7 Handling and Storage

Handling: Do not use near heat, sparks, or open flame. Keep operating temperatures below ignition temperatures at all times. Use only in a well-ventilated area.

Storage: Store at room temperature. Protect against physical damage. Contents under pressure. Do not expose to heat. Keep away from heat, spark, and flame. Do not puncture, incinerate, or store above 120° F. Do not discard empty container in garbage compactor. Exposure to heat or prolonged exposure to sunlight may cause bursting.

Section 8 Exposure Controls / Personal Protection

Engineering Controls: General dilution ventilation or local exhaust ventilation may be necessary to control vapors below applicable exposure limits.

Personal Protective Equipment (PPE):

Eye Protection: Wear safety glasses, splash goggles, or full face shield to prevent eye contact.

Skin Protection: Wear rubber gloves to prevent skin contact.

Respiratory Protection: Use NIOSH approved respirator with organic vapor cartridges if vapor levels exceed applicable workplace exposure limits.

General Hygiene Practices: Wash thoroughly after handling. Prevent Eye contact. Avoid prolonged skin or inhalation contact.

Section 9 Physical Data

Appearance:	Off-white colored aerosol	Odor:	Mild odor.
Physical State:	Spray mist	pH:	N/A
Boiling Point:	N/D	Melting Point:	N/D
Vapor Pressure:	N/D	Vapor Density:	Greater than air
Odor Threshold:	N/D	Viscosity:	N/D
Solubility in Water:	N/D	Specific Gravity (water = 1):	0.9

N/A: Not Applicable N/D: Not Determined N/E: Not Established N/R: Not Required Est.: Estimated

Section 10 Stability and Reactivity

Stability: Stable, non-reactive.

Hazardous Polymerization: Will not occur.

Hazardous Decomposition Products: None known.

Conditions to Avoid: Heat, sparks, and open flames.

Incompatibilities: Strong oxidizing agents.

Section 11 Toxicological Information

Carcinogenicity: This material is not considered a carcinogen by IARC or NTP and is not regulated as a carcinogen by OSHA.

(See also Section 15 for related information)

Section 12 Ecological Information

Chemical Fate and Effects: No data available.

Section 13 Disposal Considerations

RCRA Hazardous Waste: This material, when discarded or disposed of, could be a hazardous waste according to federal regulations (40 CFR 261) due to the characteristic of ignitability (D001). The transportation, storage, treatment, and disposal of this waste must be conducted in compliance with 40 CFR 262, 263, 264, 268, and 270. Disposal can only occur in properly permitted facilities. Check state and local regulations for any additional requirements as these may be more restrictive than federal laws and regulations. Chemical additions, processing or otherwise altering this material may make the waste management information presented in this MSDS incomplete, inaccurate, or otherwise inappropriate.

Section 14 Transportation Information

Regulated by the DOT: Yes

DOT Proper Shipping Name: Paint

UN / NA Number: UN 1950, Aerosols, Class 2

N/A: Not Applicable N/D: Not Determined N/E: Not Established N/R: Not Required Est.: Estimated

Section 15 Regulatory Information

CERCLA:

The Comprehensive Environmental Response Compensation and Liability Act of 1980 (CERCLA) requires notification to the National Response Center for releases of quantities of Hazardous Substances equal to or greater than the reportable quantities (RQs) in 40 CFR 302.4 (for CERCLA 102).

Components present in this product at a level which could require reporting under the statute are:

<u>Chemical Name</u>	<u>CAS#</u>	<u>Maximum Concentration (Wt. %)</u>
None	N/A	N/A

SARA Title III, section 311/312:

The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires emergency planning based on Threshold Planning Quantities (TPQs) and release reporting based on Reportable Quantities (RQs) in 40 CFR 355 (used for SARA 302, 304, 311 and 312).

Components present in this product at a level which could require reporting under the statute are:

<u>Chemical Name</u>	<u>CAS#</u>	<u>Maximum Concentration (Wt. %)</u>
None	N/A	N/A

SARA Title III, section 313:

The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires submission of annual reports of release of toxic chemicals that appear in 40 CFR 372 (for SARA 313).

Components present in this product at a level which could require reporting under the statute are:

<u>Chemical Name</u>	<u>CAS#</u>	<u>Maximum Concentration (Wt. %)</u>
None	N/A	N/A

TSCA:

The components of this mixture are listed in the Toxic Substance Control Act Inventory of Chemical Substances.

This product contains the following chemicals which require export notification under section 12(b) of the TSCA regulation:

<u>Chemical Name</u>	<u>CAS#</u>	<u>TSCA Section</u>
None	N/A	N/A

N/A: Not Applicable N/D: Not Determined N/E: Not Established N/R: Not Required Est.: Estimated

Section 16 Other Information

Legend: N/A: Not Applicable
N/E: Not Established
STEL: Short Term Exposure Limit
cps: Centipoise
mppcf: million particles per cubic foot of air.
PPB: Parts Per Billion
TLV: Threshold Limit Value
ACGIH: American Conference of Governmental Industrial Hygienists
CPSC: Consumer Product Safety Commission
DOT: US Department of Transportation
FHSA: Federal Hazardous Substance Act
OSHA: Occupational Safety and Health Administration (US Dept. of Labor)
RCRA: Resource Conservation and Recovery Act
SARA: Superfund Amendment and Reauthorization Act
Skin: This substance has the potential to be absorbed systemically through the skin.
TSCA: Toxic Substance Control Act

N/D: Not Determined
N/R: Not Required
C: OSHA Ceiling Value
mg/m³: milligrams per cubic meter
PPM: Parts Per Million
PEL: Permissible Exposure Limit
TWA: Time Weighted Average

HMIS Key

4 = Severe Hazard
3 = Serious Hazard
2 = Moderate Hazard
1 = Slight Hazard
0 = Minimal Hazard

Prepared By: Zinsser Health and Safety Manager, Regulatory Compliance Dept.
173 Belmont Drive Somerset, NJ 08875 (732) 469-8100

Disclaimer: Zinsser Company, Inc. believes, to the best of its knowledge, information and belief, the information contained herein to be accurate and reliable as of the date of this material safety data sheet. However, because the conditions of handling, use, and storage of these materials are beyond our control, we assume no responsibility or liability for personal injury or property damage incurred by the use of these materials and make no warranty, expressed or implied, regarding the accuracy or reliability of the data or results obtained from their use. All materials may present unknown hazards and should be used with caution. The information and recommendations in this material safety data sheet are offered for the users' consideration and examination. It is the responsibility of the user to determine the final suitability of this information and data and to comply with all applicable international, federal, state, and local laws and regulations.

N/A: Not Applicable	N/D: Not Determined	N/E: Not Established	N/R: Not Required	Est.: Estimated
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Material Safety Data Sheet

24 Hour Assistance:
1-847-367-7700

Rust-Oleum Corp.
www.rustoleum.com

1. Identification

Product Name: GARDZ QT 6PK

Revision Date: 2/28/2013

Identification Number: 2304

Product Use/Class: Topcoat/ Waterbased

Supplier: Rust-Oleum Corporation
11 Hawthorn Parkway
Vernon Hills, IL 60061
USA

Manufacturer: Rust-Oleum Corporation
11 Hawthorn Parkway
Vernon Hills, IL 60061
USA

Preparer: Regulatory Department

2. Hazard Identification

EMERGENCY OVERVIEW: Use ventilation necessary to keep exposures below recommended exposure limits, if any.

EFFECTS OF OVEREXPOSURE - EYE CONTACT: Causes eye irritation.

EFFECTS OF OVEREXPOSURE - SKIN CONTACT: Substance may cause slight skin irritation.

EFFECTS OF OVEREXPOSURE - INHALATION: Low hazard for usual industrial handling or commercial handling by trained personnel.

EFFECTS OF OVEREXPOSURE - INGESTION: Substance may be harmful if swallowed.

EFFECTS OF OVEREXPOSURE - CHRONIC HAZARDS: No Information

PRIMARY ROUTE(S) OF ENTRY: Eye Contact, Ingestion, Inhalation, Skin Absorption, Skin Contact

3. Composition/Information On Ingredients

Chemical Name	CAS-No.	Weight % Less Than	ACGIH TLV- TWA	ACGIH TLV- STEL	OSHA PEL-TWA	OSHA PEL- CEILING
Propylene Glycol Monobutyl Ether	5131-66-8	5.0	N.E.	N.E.	N.E.	N.E.

4. First-aid Measures

FIRST AID - EYE CONTACT: Immediately flush eyes with plenty of water for at least 15 minutes holding eyelids open. Get medical attention. Do NOT allow rubbing of eyes or keeping eyes closed.

FIRST AID - SKIN CONTACT: Wash skin with soap and water. Remove contaminated clothing. Get medical attention if irritation develops or persists.

FIRST AID - INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention. Do NOT use mouth-to-mouth resuscitation.

FIRST AID - INGESTION: Swallowing less than an ounce will not cause significant harm. For larger amounts, do not induce vomiting, but give one or two glasses of water to drink and get medical attention.

5. Fire-fighting Measures

Flash Point, °F >200 (Setaflash)

Extinguishing Media: Alcohol Foam, Carbon Dioxide, Dry Chemical, Foam, Water Fog

UNUSUAL FIRE AND EXPLOSION HAZARDS: FLASH POINT IS TESTED TO BE GREATER THAN 200 DEGREES F.

SPECIAL FIREFIGHTING PROCEDURES: Water may be used to cool closed containers to prevent buildup of steam.

6. Accidental Release Measures

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: Dispose of according to local, state (provincial) and federal regulations. Do not incinerate closed containers.

7. Handling and Storage

HANDLING: Wash thoroughly after handling. Wash hands before eating. Avoid contact with eyes.

STORAGE: Keep from freezing. Keep container closed when not in use.

8. Exposure Controls/Personal Protection

ENGINEERING CONTROLS: Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Prevent build-up of vapors by opening all doors and windows to achieve cross-ventilation.

RESPIRATORY PROTECTION: A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

SKIN PROTECTION: Use gloves to prevent prolonged skin contact. Nitrile or Neoprene gloves may afford adequate skin protection.

EYE PROTECTION: Use safety eyewear designed to protect against splash of liquids.

OTHER PROTECTIVE EQUIPMENT: Refer to safety supervisor or industrial hygienist for further information regarding personal protective equipment and its application.

HYGIENIC PRACTICES: Wash thoroughly with soap and water before eating, drinking or smoking.

9. Physical and Chemical Properties

Vapor Density	Heavier than Air	Odor:	Mild
Appearance:	Liquid	Evaporation Rate:	Slower than Ether
Solubility in Water:	Miscible	Freeze Point:	N.D.
Specific Gravity:	1.012	pH:	N.D.
Physical State:	Liquid		

(See section 16 for abbreviation legend)

10. Stability and Reactivity

CONDITIONS TO AVOID: Avoid contact with strong acid and strong bases.

INCOMPATIBILITY: Incompatible with strong oxidizing agents, strong acids and strong alkalies.

HAZARDOUS DECOMPOSITION: By open flame, carbon monoxide and carbon dioxide. When heated to decomposition, it emits acrid smoke and irritating fumes.

HAZARDOUS POLYMERIZATION: Will not occur under normal conditions.

STABILITY: This product is stable under normal storage conditions.

11. Toxicological Information

<u>Chemical Name</u>	<u>LD50</u>	<u>LC50</u>
Propylene Glycol Monobutyl Ether	2200 mg/kg (Rat, Oral)	N.E.

12. Ecological Information

ECOLOGICAL INFORMATION: Product is a mixture of listed components.

13. Disposal Information

DISPOSAL INFORMATION: Dispose of material in accordance to local, state and federal regulations and ordinances. Do not allow to enter waterways, wastewater, soil, storm drains or sewer systems.

14. Transport Information

	Domestic (USDOT)	International (IMDG)	Air (IATA)
Proper Shipping Name:	Not Regulated	Not Regulated	Not Regulated
Hazard Class:	N.A.	N.A.	N.A.
UN Number:	N.A.	N.A.	N.A.
Packing Group:	N.A.	N.A.	N.A.
Limited Quantity:	No	No	No

15. Regulatory Information

U.S. Federal Regulations:

CERCLA - SARA Hazard Category

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Acute Health Hazard

Sara Section 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

No Sara 313 components exist in this product.

Toxic Substances Control Act:

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

<u>Chemical Name</u>	<u>CAS-No.</u>
5-chloro-2-methyl-4-isothiazolin-3-one	26172-55-4
Methyl-4-isothiazolin-3-one	2682-20-4

International Regulations:**CANADIAN WHMIS:**

This MSDS has been prepared in compliance with Controlled Product Regulations except for the use of the 16 headings.

Canadian WHMIS Class: D2B

16. Other Information**HMIS Ratings:**

Health: 2 Flammability: 1 Physical Hazard: 0 Personal Protection: X

NFPA Ratings:

Health: 2 Flammability: 1 Instability: 0

Volatile Organic Compounds, g/L: 53

REASON FOR REVISION: Regulatory Update

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

Rust-Oleum Corporation believes, to the best of its knowledge, information and belief, the information contained herein to be accurate and reliable as of the date of this safety data sheet. However, because the conditions of handling, use, and storage of these materials are beyond our control, we assume no responsibility or liability for personal injury or property damage incurred by the use of these materials. Rust-Oleum Corporation makes no warranty, expressed or implied, regarding the accuracy or reliability of the data or results obtained from their use. All materials may present unknown hazards and should be used with caution. The information and recommendations in this material safety data sheet are offered for the users' consideration and examination. It is the responsibility of the user to determine the final suitability of this information and to comply with all applicable international, federal, state, and local laws and regulations.

Material Safety Data Sheet

Section 1 General Information

Manufacturer:

Rust-Oleum Corporation

11 Hawthorn Parkway

Vernon Hills, IL 60061

24 Hour Assistance: 1-847-367-7700www.rustoleum.com**Date:** April 6, 2009**Product Name:** Jomax RTU Mold Killer & Deodorizer**Codes:** 60190 60191

Section 2 Hazardous Ingredients

<u>Hazardous Component</u>	<u>CAS#</u>	<u>OSHA</u> <u>PEL</u>	<u>ACGIH</u> <u>TLV</u>
Oxychlorine Compounds	N/A	N/E	N/E
Dimethyl Didecyl Ammonium Chloride	7173-51-5	N/E	N/E
Alcohols	N/A	N/E	N/E

Section 3 Hazard Identification

Emergency Overview:Hazards to Human & Domestic Animals

Caution: Cause moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse. Avoid contamination of food.

Primary Routes of Exposure:

Skin Contact

Eye Contact

Inhalation

Potential Acute Health Effects:**Eye Contact:** Causes moderate irritation.**Skin:** Causes irritation. Prolonged contact may cause dermatitis.

Ingestion: Ingestion may be harmful and may causes irritation of the gastrointestinal tract, nausea, vomiting and diarrhea. Ingestion of large amounts may cause central nervous system depression.

N/A: Not Applicable N/D: Not Determined N/E: Not Established N/R: Not Required Est.: Estimated

Inhalation: Inhalation causes respiratory tract irritation and coughing. Exposure to high concentrations results in central nervous system depression with symptoms of headache, dizziness, fatigue, muscular weakness, drowsiness, in-coordination and unconsciousness.

Note: Upon contact with acids, organic materials, reducing agents or chlorine donors, this product will release CHLORINE DIOXIDE gas. Inhalation of chlorine dioxide can cause respiratory tract irritation, coughing, wheezing and burns of the mucous membranes. Inhalation of large amounts may lead to pulmonary edema and bronchitis. Prolonged or repeated inhalation of chlorine dioxide gas may cause chronic bronchitis or emphysema. Direct contact with chlorine dioxide causes eye and skin irritation and may cause burns. Chlorine Dioxide is toxic by ingestion. Oxychlorine compounds have been shown to cause blood disorders in laboratory animals. Exposure to chlorine dioxide may aggravate existing medical conditions may aggravate existing medical conditions such as eye, skin and respiratory disorders and allergies.

(See also Sections 4, 8, and 11 for related information)

Section 4 First Aid Measures

KEEP OUT OF REACH OF CHILDREN

Eye contact: If in eyes, hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice

Skin contact: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice

Ingestion: If swallowed, call poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

Inhalation: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

Note to Physician: Probable mucosal damage may contraindicate the use of gastric lavage

Section 5 Fire Fighting Measures

Flash Point (method): >200 F (>93 degrees C)

Method: PMCC

Extinguishing Media: Water

N/A: Not Applicable	N/D: Not Determined	N/E: Not Established	N/R: Not Required	Est.: Estimated
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Protection of Firefighters: Evacuate personnel to a safe area. Wear self-contained breathing apparatus (SCBA) and full protective equipment.

Section 6 Accidental Release Measures

Safeguards (Personnel): Note: Review Fire Fighting Measures and Handling sections before proceeding with clean-up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean-up.

Accidental Release Measures: Flush with water to dilute. Do not allow contact with rags, paper or other oxidizable materials. For large spills, evacuate area, contain liquid and transfer to closed polyethylene drums. Prevent contact with oxidizers and acids. Do not allow liquid solution to dry. Keep out of water supply. Flush area with water after liquid is removed.

(See also Section 8 for information on Exposure Controls and Personal Protective Equipment)

Section 7 Handling and Storage

Handling: Do not breathe vapor or mist. Avoid contact with eyes, skin or clothing. Wash thoroughly after handling. Wash clothing after use. Avoid contamination of food and feed products. Do not allow solution to evaporate to dryness. Protect from heat, freezing and ultraviolet light. Keep container closed

Storage: Store in original closed container in a cool, dry place away from heat and open flame.

Section 8 Exposure Controls / Personal Protection

Engineering Controls: Use only with adequate ventilation. Safety shower and eyewash facilities should be immediately accessible.

Personal Protective Equipment (PPE):

Eye Protection: Wear safety glasses. Where splash potential exists, wear chemical splash goggles.

Skin Protection: Impervious gloves.

Respiratory Protection: Wear NIOSH approved respiratory protection, as appropriate.

N/A: Not Applicable	N/D: Not Determined	N/E: Not Established	N/R: Not Required	Est.: Estimated
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Protective Clothing: Where there is potential for skin contact, have available and wear as appropriate impervious gloves, apron, pants and jacket and boots.

General Hygiene Practices: Avoid eye and skin contact. Avoid breathing vapors. Wash hands before eating and drinking. Do not smoke while using this material.

Section 9 Physical Data

Appearance: Clear

Odor: Alcohol

Physical State: liquid Solution

pH: 9.0

Boiling Point: 93.3 degrees C

Vapor Pressure: Approximates Water

Solubility in Water: 100%

Density: 8.44 lb/gallon

Specific Gravity (water = 1): 1.012

Section 10 Stability and Reactivity

Stability: Stable at normal temperature and storage conditions.

Hazardous Polymerization: Polymerization will not occur

Hazardous Decomposition Products: Decomposes with heat and UV light.

Incompatibility with Other Materials: None reasonably foreseeable.

Section 11 Toxicological Information

Carcinogenicity: None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA, or ACGIH as a carcinogen.

(See also Section 15 for related information)

Section 12 Ecological Information

No Data Available

Section 13 Disposal Considerations

N/A: Not Applicable N/D: Not Determined N/E: Not Established N/R: Not Required Est.: Estimated

RCRA Hazardous Waste: This material is not considered hazardous waste under Federal Hazardous Waste Regulations (40CFR 261). However, state and local requirements for waste disposal may be more restrictive or otherwise differ from federal regulations. Chemical additions, processing or otherwise altering this material may render the waste management information presented in this MSDS incomplete, inaccurate or otherwise inappropriate. Consult all applicable federal, state, and local regulations regarding the proper disposal of this material. Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, State/Provincial, and Local Regulations.

Recommended Waste Disposal Method: Do not contaminate water, food or feed by storage or disposal. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. For container disposal, triple rinse (or equivalent), then place in trash receptacle.

Section 14 Transportation Information

This product is not regulated as a hazardous material by DOT, IMO, or IATA

Section 15 Regulatory Information

CERCLA:

The Comprehensive Environmental Response Compensation and Liability Act of 1980 (CERCLA) requires notification to the National Response Center for releases of quantities of Hazardous Substances equal to or greater than the reportable quantities (RQs) in 40 CFR 302.4 (for CERCLA 102).

Components present in this product at a level which could require reporting under the statute are:

<u>Chemical Name</u>	<u>CAS#</u>	<u>Maximum Concentration (Wt. %)</u>
None	N/A	N/A

SARA Title III, section 311/312:

The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires emergency planning based on Threshold Planning Quantities (TPQs) and release reporting based on Reportable Quantities (RQs) in 40 CFR 355 (used for SARA 302, 304, 311 and 312).

Components present in this product at a level which could require reporting under the statute are:

<u>Chemical Name</u>	<u>CAS#</u>	<u>Maximum Concentration (Wt. %)</u>
None	N/A	N/A

SARA Title III, section 313:

The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires submission of annual reports of release of toxic chemicals that appear in 40 CFR 372 (for SARA 313).

Components present in this product at a level which could require reporting under the statute are:

N/A: Not Applicable	N/D: Not Determined	N/E: Not Established	N/R: Not Required	Est.: Estimated
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Chemical Name
None

CAS#
N/A

Maximum Concentration (Wt. %)
N/A

FIFRA Registration:

EPA registration number is 71654-22-71240

TSCA:

The components of this mixture are listed in the Toxic Substance Control Act Inventory of Chemical Substances.

This product does not contain any chemicals that require export notification under Section 12(b) of the TSCA regulation.

Section 16 Other Information

Legend: N/A: Not Applicable
N/E: Not Established
cps: Centipoise
STEL: Short Term Exposure Limit
PPM: Parts per Million
PEL: Permissible Exposure Limit
TWA: Time Weighted Average
mppcf: Million particles per cubic foot of air.
ACGIH: American Conference of Governmental Industrial Hygienists
OSHA: Occupational Safety and Health Administration (US Dept. of Labor)
PMCC: Pensky-Martens Closed Cup
RCRA: Resource Conservation and recovery Act
SARA: Superfund Amendment and Reauthorization Act
TSCA: Toxic Substance Control Act
FHSA: Federal Hazardous Substance Act

N/D: Not Determined
N/R: Not Required
KU: Krebs Units
C: OSHA Ceiling Value
PPB: Parts Per Billion
TLV: Threshold Limit Value
mg/m³: Milligrams per cubic Meter

Prepared By: Rust-Oleum Regulatory Compliance Dept.
173 Belmont Drive Somerset, NJ 08875 (732) 469-8100

Disclaimer: Rust-Oleum Corporation believes, to the best of its knowledge, information and belief, the information contained herein to be accurate and reliable as of the date of this material safety data sheet. However, because the conditions of handling, use, and storage of these materials are beyond our control, we assume no responsibility or liabilities for personal injury or property damage incurred by the use of these materials and make no warranty, expressed or implied, regarding the accuracy or reliability of the data or results obtained from their use. All materials may present unknown hazards and should be used with caution. The information and recommendations in this material safety data sheet are offered for the users' consideration and examination. It is the responsibility of the user to determine the

N/A: Not Applicable N/D: Not Determined N/E: Not Established N/R: Not Required Est.: Estimated

final suitability of this information and data and to comply with all applicable international, federal, state, and local laws and regulations.

N/A: Not Applicable	N/D: Not Determined	N/E: Not Established	N/R: Not Required	Est.: Estimated
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Material Safety Data Sheet

Section 1 General Information

Manufacturer:

Rust-Oleum Corporation

11 Hawthorn Parkway

Vernon Hills, IL 60061

24 Hour Assistance: 1-847-367-7700www.rustoleum.com**Date: April 9, 2009****Product Name: Zinsser PermaWhite® Mold & Mildew Proof* Interior Paint****Gloss Level: Satin**

Product Codes: 02700 02702 02704 02705 02711

Section 2 Hazardous Ingredients

<u>Hazardous Component</u>	<u>CAS#</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>
Calcium Carbonate	471-34-1	15 mg/m ³ * (5 mg/m ³ **)	10 mg/m ³ = (3 mg/m ³ **)
Limestone	1317-65-3	15 mg/m ³ * 5 mg/m ³ **	10 mg/m ³
Talc	14807-96-6	20 mppcf	1 mg/m ³ **
Titanium Dioxide	13463-67-7	15 mg/m ³ *	10 mg/m ³
Zinc Oxide	1314-13-2	15 mg/m ³ * (5 mg/m ³ **)	2 mg/m ³ (10 mg/m ³ * STEL)

* Total Dust

** Respirable Dust Fraction

Section 3 Hazard Identification

Product Overview: This material is a wall paint. It is a stable, non-flammable, white flowable liquid with a flashpoint above 200° Fahrenheit.

Primary Routes of Exposure:

Eye Contact

Skin Contact

Inhalation

Potential Acute Health Effects:**Eye:** May cause eye irritation.

Skin: Prolonged contact may cause skin irritation. Absorption through skin contact not considered a significant route of exposure.

N/A: Not Applicable N/D: Not Determined N/E: Not Established N/R: Not Required Est.: Estimated

Ingestion: Although ingestion not considered a significant route of exposure, Gastrointestinal irritation and nausea may occur if swallowed.

Inhalation: Although inhalation is not considered a significant route of exposure, high vapor concentrations may cause respiratory irritation.

Potential Chronic Health Effects: None known.

(See also Sections 4, 8, and 11 for related information)

Section 4 First Aid Measures

Eye contact: Flush eye with water for 15 minutes. Get medical attention.

Skin contact: Wash with soap and water. Get medical attention if symptoms occur.

Ingestion: If swallowed, call a physician or poison control center.

Inhalation: No specific treatment is necessary since this material is not likely to be hazardous by inhalation. If exposed to excessive levels of vapor, remove victim to fresh air and seek medical attention if cough or other symptoms develop.

Section 5 Fire Fighting Measures

The liquid material will not burn. However, the dried paint film may burn in a fire.

Flash Point (method): >200° F.

Extinguishing Media: Use water spray, foam, or carbon dioxide when fighting fires involving this material.

Protection of Firefighters: As in any fire, wear self-contained breathing apparatus in pressure demand mode and full protective gear.

Section 6 Accidental Release Measures

Clean Up Methods: Keep unnecessary people away. Dike and contain spill with inert material (sand, earth, etc.). Transfer liquid to containers for recovery or disposal, or absorb with absorbent materials and place into containers for disposal. Keep spill out of sewer and open bodies of water. Floors may be slippery; care should be exercised to avoid falls during clean up operations. (See also Section 8 for information on Exposure Controls and Personal Protective Equipment)

N/A: Not Applicable N/D: Not Determined N/E: Not Established N/R: Not Required Est.: Estimated

Section 7 Handling and Storage

Handling: Avoid contact with eyes, skin, and clothing.

Storage: Keep from freezing. Keep container closed when not in use.

Section 8 Exposure Controls / Personal Protection

Engineering Controls: If exposure conditions warrant, use mechanical local exhaust ventilation or general dilution ventilation to reduce vapor concentrations.

Personal Protective Equipment (PPE):

Eye Protection: Wear safety glasses or face shield to prevent eye and face contact.

Skin Protection: Wear gloves to prevent prolonged skin contact.

Respiratory Protection: None required under normal, intended use conditions. If vapor exposure causes discomfort and in areas of poor ventilation wear NIOSH approved respirator.

Protective Clothing: For brief contact, no special precautions other than clean body-covering clothing should be needed. When prolonged or frequent repeated contact with the material could occur, use protective clothing that is impervious to this material (such as tyvek).

General Hygiene Practices: Wash thoroughly after handling. Prevent Eye contact. Avoid prolonged skin or inhalation contact.

Section 9 Physical Data

Appearance:	White emulsion.	Boiling Point:	N/D (est. >200 ° F)
Odor:	Slight ammonia like	Freezing Point:	N/D (est. 32 ° F)
Physical State:	Liquid.	pH:	9 - 10
Specific Gravity:	1.34 (water = 1).	Viscosity:	1100 – 3000 cps
Soluble in Water:	Yes		

Section 10 Stability and Reactivity

N/A: Not Applicable N/D: Not Determined N/E: Not Established N/R: Not Required Est.: Estimated

Stability: Stable. Not reactive.

Hazardous Polymerization: Will not occur.

Hazardous Decomposition Products: None known.

Hazardous Conditions to Avoid: None known.

Incompatibility: None known.

Section 11 Toxicological Information

Carcinogenicity: The following ingredients are present at greater than 0.1% and are classified by IARC, NTP, or OSHA as carcinogenic:

<u>Ingredient</u>	<u>CAS #</u>	<u>IARC</u>	<u>NTP</u>	<u>OSHA</u>
None	N/A	N/A	N/A	N/A

(See also Section 15 for related information)

Section 12 Ecological Information

Chemical Fate and Effects: No data available.

Section 13 Disposal Considerations

Recommended Waste Disposal Method: This material is not considered hazardous waste under federal hazardous waste regulations (40 CFR 261). However, state and local requirements for waste disposal may be more restrictive or otherwise differ from federal regulations. Chemical additions, processing or otherwise altering this material may render the waste management information presented in this MSDS incomplete, inaccurate or otherwise inappropriate. Consult all applicable federal, state, and local regulations regarding the proper disposal of this material.

Section 14 Transportation Information

Not regulated by USDOT

Section 15 Regulatory Information

CERCLA:

N/A: Not Applicable N/D: Not Determined N/E: Not Established N/R: Not Required Est.: Estimated

The Comprehensive Environmental Response Compensation and Liability Act of 1980 (CERCLA) requires notification to the National Response Center for releases of quantities of Hazardous Substances equal to or greater than the reportable quantities (RQs) in 40 CFR 302.4 (for CERCLA 102).

Components present in this product at a level which could require reporting under the statute are:

<u>Chemical Name</u>	<u>CAS#</u>	<u>Maximum Concentration (Wt. %)</u>
None	N/A	N/A

SARA Title III, section 311/312:

The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires emergency planning based on Threshold Planning Quantities (TPQs) and release reporting based on Reportable Quantities (RQs) in 40 CFR 355 (used for SARA 302, 304, 311 and 312).

Components present in this product at a level which could require reporting under the statute are:

<u>Chemical Name</u>	<u>CAS#</u>	<u>Maximum Concentration (Wt. %)</u>
None	N/A	N/A

SARA Title III, section 313:

The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires submission of annual reports of release of toxic chemicals that appear in 40 CFR 372 (for SARA 313).

Components present in this product at a level which could require reporting under the statute are:

<u>Chemical Name</u>	<u>CAS#</u>	<u>Maximum Concentration (Wt. %)</u>
None	N/A	N/A

TSCA:

The components of this mixture are listed in the Toxic Substance Control Act Inventory of Chemical Substances.

This product does not contain any chemicals that require export notification under Section 12(b) of the TSCA regulation.

Section 16 Other Information

Legend: N/A: Not Applicable
N/E: Not Established

N/D: Not Determined
N/R: Not Required

N/A: Not Applicable N/D: Not Determined N/E: Not Established N/R: Not Required Est.: Estimated

STEL: Short Term Exposure Limit	C: Ceiling Limit
PPM: Parts Per Million	PPB: Parts Per Billion
PEL: Permissible Exposure Limit	TLV: Threshold Limit Value
TWA: Time Weighted Average	Mg/M³: Milligrams per cubic Meter
> Greater Than	< Less Than
Mppcf: Million particles per cubic foot of air	
ACGIH: American Conference of Governmental Industrial Hygienists	
CERCLA: Comprehensive Environmental Response Compensation and Liability Act	
OSHA: Occupational Safety and Health Administration (US Dept. of Labor)	
RCRA: Resource Conservation and Recovery Act	
SARA: Superfund Amendment and Reauthorization Act	
TSCA: Toxic Substance Control Act	

Prepared By: Rust-Oleum Regulatory Compliance Dept.
 173 Belmont Drive Somerset, NJ 08875 (732) 469-8100

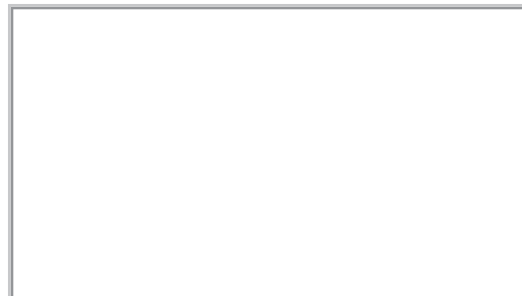
Disclaimer: Rust-Oleum Corporation believes, to the best of its knowledge, information and belief, the information contained herein to be accurate and reliable as of the date of this material safety data sheet. However, because the conditions of handling, use, and storage of these materials are beyond our control, we assume no responsibility or liability for personal injury or property damage incurred by the use of these materials and make no warranty, expressed or implied, regarding the accuracy or reliability of the data or results obtained from their use. All materials may present unknown hazards and should be used with caution. The information and recommendations in this material safety data sheet are offered for the users' consideration and examination. It is the responsibility of the user to determine the final suitability of this information and data and to comply with all applicable international, federal, state, and local laws and regulations.

N/A: Not Applicable	N/D: Not Determined	N/E: Not Established	N/R: Not Required	Est.: Estimated
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SAFETY DATA SHEET

Section 1: Product and Company Identification

Product Name: Zoom Spout® Oiler
Product Code: 79704
Product Use: Lubricating oil for general applications.
Supplier: LA-CO Industries, Inc.
1201 Pratt Boulevard
Elk Grove Village, IL.
60007-5746
E-mail Contact: customer_service@laco.com
Phone Number: (847) 956-7600
Fax: (847) 956-9885
24-hour Emergency: CHEMTREC: (800) 424-9300



Section 2: Hazards Identification

2.1 Classification of the substance or mixture according to GHS Classifications (UNECE 3rd Revised Edition):

Not classified as a hazardous chemical.

2.2 Label elements:

No hazard classifications.

2.3 Other hazards:

May cause an allergic skin reaction in some individuals.

2.4 Other hazard classifications:

USA: This material is not considered a hazardous chemical by the OSHA Hazard Communication Standard 29 CFR 1910.1200 (2012).

Canada: This is not a controlled product under WHMIS.

European Union (EU): This product is not classified as hazardous according to CLP Regulation (EC) No 1272/2008.

Section 3: Composition / Information on Ingredients

Chemical Name	CAS No.	Wt. %	GHS Classifications according to UNECE 3 rd Revised Edition
Lubricating base oil and proprietary additives. No hazardous/dangerous ingredients by OSHA and WHMIS criteria.	Not available	100	Not classified

Section 4: First Aid Measures

4.1 Description of first aid measures:

Inhalation: If symptoms are experienced, remove source of contamination or have victim move to fresh air. Obtain medical advice.

Eye Contact: Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for 5 minutes while holding the eyelids open. If irritation persists, obtain medical attention.

Skin Contact: If irritation does occur flush with lukewarm, gently flowing water for 5 minutes. If irritation persists, obtain medical advice.

Ingestion: If swallowed, do not induce vomiting. If vomiting occurs naturally, have victim lean forward to reduce the risk of aspiration. Obtain medical advice or call a POISON CENTER or doctor/physician.

4.2 Most important symptoms and effects, both acute and delayed:

Skin Contact: A component of this material may cause an allergic skin reaction. Symptoms may include redness and a burning sensation.

Ingestion: Not an expected route of exposure with normal use of the product. Acute oral toxicity of the component substances is low. Ingestion of large amounts of the product may cause nausea, vomiting and diarrhea.

SAFETY DATA SHEET

Section 5: Fire Fighting Measures

5.1 Extinguishing media:

For small fires, use dry chemicals, carbon dioxide, appropriate foam, or inert gas (nitrogen).
For large fires, use appropriate foam, water fog, or water spray. Water can be used to cool fire-exposed containers.
Do not use water jet; may spread the fire.

5.2 Special hazards arising from the substance:

Not classified as a flammable or combustible liquid.
Product will burn if involved in a fire. Flashpoint: >150°C (>302°F) ASTM D93.

5.3 Advice for firefighters:

If involved in a fire, combustion may produce toxic and irritating fumes and gases including carbon dioxide, carbon monoxide, nitrogen oxides, sulfur oxides, smoke, fumes, and/or unburned hydrocarbons.
As for any fire, evacuate the area and fight the fire from a safe distance. Firefighters must wear full protective clothing and positive pressure self-contained breathing apparatus.

Section 6: Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures:

Shut off or extinguish all sources of ignition. Avoid contact with skin and eyes. Ventilate the area.

6.2 Environmental precautions:

Prevent the spilled liquid from entering sewers or waterways.

6.3 Methods and material for containment and cleaning up:

Stop the spill if it is safe to do so.
Absorb the spilled liquid using dry earth, sand or non-combustible absorbent material and transfer to appropriate, covered and labeled waste containers.

6.4 Additional Information:

See Section 8 for information on selection of personal protective equipment.
See Section 13 for information on disposal of spilled product and contaminated absorbents.

Section 7: Handling and Storage

7.1 Precautions for safe handling:

Keep out of reach of children.
Avoid contact with skin and eyes.
Do not use near hot surfaces or flames.
No smoking.

7.2 Conditions for safe storage, including any incompatibilities:

Store in a well ventilated place. Keep cool. Keep containers tightly closed when not in use.

Section 8: Exposure Controls/Personal Protection

8.1 Control parameters:

Occupational Exposure Limits:

Consult local authorities for acceptable exposure limits.

Component	ACGIH TLV (8-hr. TWA) (mg/m ³)	U.S. OSHA PEL (8-hr. TWA) (mg/m ³)	British Columbia (Canada) TWA (mg/m ³)
Lubricant Base Oil (Petroleum)	Not available	5 mg/m ³ as Oil Mist, if generated	Not available

SAFETY DATA SHEET

Section 8: Exposure Controls/Personal Protection, continued

8.2 Exposure controls:

Engineering Controls:

General ventilation is normally adequate.

Personal Protection: Workers must comply with the Personal Protective Equipment requirements of the workplace in which this product is handled.

Eye/Face Protection: Not required for normal use. Safety glasses equipped with side shields are recommended as minimum protection in industrial settings.

Skin Protection: Not required for normal use. Wear heavy duty gloves made of nitrile when needed to prevent repeated or prolonged skin contact.

Respiratory Protection: If ventilation and other engineering controls and work practices are not effective in controlling exposure to mists/aerosols of this material, then wear suitable personal protective equipment including approved respiratory protective equipment (RPE). In workplaces where respiratory protection is required, institute a complete respiratory protection program including selection, fit testing, training, maintenance and inspection. Consult with respirator manufacturer to determine respirator selection, use and limitations.

Other Protection: If product comes in contact with clothing, immediately remove soaked clothing. Promptly remove and discard contaminated leather goods (e.g. watchbands, belts).

Section 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties:

Appearance:	Liquid, clear, colorless.
Odor:	Petroleum
Odor threshold:	Not applicable
pH:	Not applicable
Melting point/freezing point:	< -18°C (0.4°F)
Initial boiling point and boiling range:	Not available
Flash point:	>150°C (>302°F) ASTM D93
Flammability	Will burn but does not ignite readily.
Auto-ignition temperature:	Not available
Upper/lower flammability or explosive limits:	Not available
Explosive properties:	Not available
Oxidizing properties:	Not available
Sensitivity to mechanical impact:	Not available
Sensitivity to static discharge:	Not available
Vapor pressure:	<1 mm Hg
Evaporation rate:	<1 (n-butyl acetate = 1)
Vapor density:	<1
Relative density:	0.86 – 0.87 (water = 1)
Solubility (is):	Insoluble in water.
Partition coefficient (n-octane/water):	Not available
Decomposition temperature:	Not available
Viscosity:	30 – 110 @ 30°C 5 - 11 cSt @ 100°C ASTM D445

Section 10: Stability and Reactivity

10.1 Reactivity:

Not classified for reactivity hazards.

10.2 Chemical Stability:

Stable at normal ambient and anticipated storage and handling conditions of temperature and pressure.

10.3 Possibility of Hazardous Reactions:

None known

10.4 Conditions to Avoid:

Do not use in conditions of heat or near open flames and sparks.

SAFETY DATA SHEET

Section 10: Stability and Reactivity, continued

10.5 Incompatible Materials:

Incompatible with strong oxidizers, such as chlorine and oxygen, and strong reducing agents.

10.6 Hazardous Decomposition Products:

Not available. Combustion may produce irritating and/or toxic gases.

Section 11: Toxicological Information

11.1 Information on toxicological effects:

Acute Health Effects:

Inhalation: This product does not easily form a vapor; inhalation exposure is unlikely to occur, unless this material is heated or misted. Exposures to high vapor or mist concentrations may cause respiratory tract irritation.

Ingestion: Not an expected route of exposure with normal use of the product.

Skin: Contact with the skin may cause irritation. Symptoms may include redness and a burning sensation.

Eye: Direct contact with the liquid may cause irritation.

Acute Toxicity Data::

<u>Component Substance</u>	<u>LD₅₀ Oral</u> (mg/kg)	<u>LD₅₀ Dermal</u> (mg/kg)	<u>LC₅₀ Inhalation</u> (4 hrs.)
Lubricant oil	>5 000 (species not available)	>2 000	Not available

Chronic Health Effects:

Data are not available.

Sensitization:

Data are not available for the product. Contains a substance (>1% wt/wt) which may cause an allergic skin reaction.

Neurological Effects:

Data are not available.

Genetic Effects:

Data are not available.

Reproductive Effects:

Data are not available.

Developmental Effects:

Data are not available.

Target Organ Effects:

Data are not available.

Carcinogenicity:

The petroleum base oils contained in this product have been highly refined by a variety of processes including severe hydrocracking/hydroprocessing to reduce aromatics and improve performance characteristics. All of the oils meet the IP-346 criteria of less than 3 percent PAH's and are not considered carcinogens by NTP, IARC, or OSHA.

Medical Conditions Aggravated by Exposure:

Repeated skin contact may aggravate an existing dermatitis.

Interactions With Other Chemicals:

Data are not available.

SAFETY DATA SHEET

Section 12: Ecological Information

12.1 Toxicity:

Assays have demonstrated acute aquatic toxicity values greater than 1000 mg/L.

12.2 Persistence and degradability:

Volatilization to air is not expected to be a significant fate process due to the low vapor pressure of this material. In water, base oils will float and spread over the surface.
Not readily biodegradable.

12.3 Bioaccumulative potential:

Log K_{ow} values measured for the hydrocarbon components of this material range from 4 to 6.

12.4 Mobility in soil:

Not available

Section 13: Disposal Considerations

13.1 Waste treatment methods:

Do NOT discard into any sewers, on the ground or into any body of water. Store material for disposal as indicated in Section 7 Handling and Storage. Dispose of in accordance with local, state/provincial and federal laws and regulations.

The conditions of use, storage and disposal of this product are beyond our control and may be beyond our knowledge. For this and other reasons, LA-CO Industries, Inc. does not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of this product.

Section 14: Transport Information:

Transport Regulations:

U.S. Hazardous Materials Regulation (DOT 49CFR): Not regulated.
If shipped by land in a packaging having a capacity of 3,500 gallons or more, the provisions of 49 CFR, Part 130 apply. (Contains oil)

Canadian Transportation of Dangerous Goods (TDG): Not regulated as a dangerous good for transport.

IMO Classification: Not regulated as a dangerous good for transport.

ICAO/IATA Classification: Not regulated as a dangerous good for transport.

Section 15: Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:

USA

OSHA: Non-Hazardous Chemical according to OSHA Hazard Communication Standard 29 CFR 1910.120 (2012).

SARA Title III

Sec. 302/304: None
Sec. 311/312: Not applicable
Sec. 313: None
CERCLA RQ: None

California Prop 65: Not applicable

SAFETY DATA SHEET

Section 15: Regulatory Information, continued

Canada

This product has been classified in accordance with the hazard criteria of the *Controlled Products Regulations* and the SDS contains all the information required by the *Controlled Products Regulations*.

WHMIS Classification:

Not controlled

DSL Status:

All component substances listed on the DSL (Domestic Substances List).

NPRI Substances:

Not applicable

Europe

OSHA: This product is not classified as hazardous according to CLP Regulation (EC) No 1272/2008.

Section 16: Other Information

Preparation Information:

Revision date: February 13, 2013

References and sources for data:

CCOHS – ChemInfo

Legend to abbreviations:

ACGIH – American Conference of Governmental Industrial Hygienists

GHS- Globally Harmonised System for Classification and Labeling

IARC – International Agency for Research on Cancer

LD50- Median lethal dose; the dose causing 50 % lethality

LEV- Local exhaust ventilation

OSHA – United States, Occupational Safety and Health Administration

STEL – Short term exposure limit

TWA – Time weighted average

TLV - Threshold Limit Value

NTP – National Toxicology Program

WHMIS – Canada, Workplace Hazardous Materials Information System

Supplier Note:

The information contained herein is based on data available to us and is accurate and reliable to the best of our knowledge and belief. However, LA-CO Industries, Inc. makes no representations as to its completeness or accuracy. Information is supplied on condition that persons receiving such information will make their own determination as to its suitability for their purposes prior to use. In no event will LA-CO Industries, Inc. be responsible for damages of any nature whatsoever resulting from the use of or reliance upon the information contained herein.

Prepared by:

LEHDER Environmental Services Limited (519) 336-4101
www.lehder.com

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advertisements

DRUMMOND AMERICAN CORP -- ZYMOX, DA6440 -- 7930-00N022473

===== Product Identification =====

Product ID:ZYMOX, DA6440
MSDS Date:07/01/1988
FSC:7930
NIIN:00N022473
MSDS Number: BLWXD
=== Responsible Party ===
Company Name:DRUMMOND AMERICAN CORP
Address:1700 SHERWIN AVE
City:DES PLAINES
State:IL
ZIP:60018
Country:US
Info Phone Num:312-297-1777
Emergency Phone Num:312-297-1777;800-424-9300 (CHEMTREC)
Preparer's Name:RICK LOWE
CAGE:64557

=== Contractor Identification ===

Company Name:DRUMMOND AMERICAN CORPORATION
Address:600 CORPORATE WOODS PKWY.
Box:City:VERNON HILLS
State:IL
ZIP:60061
Country:US
Phone:708-913-9313
CAGE:64557

===== Composition/Information on Ingredients =====

Ingred Name:ALKANES, C-3 TO C-4 (PROPELLANT)
CAS:68475-59-2
Fraction by Wt: 1.5%

===== Hazards Identification =====

LD50 LC50 Mixture:NONE SPECIFIED BY MANUFACTURER.
Routes of Entry: Inhalation:NO Skin:YES Ingestion:YES
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO
Health Hazards Acute and Chronic:MAY BE HARMFUL IF SWALLOWED. MAY CAUSE
EYE OR SKIN IRRITATION. CAUSES GASTROINTESTINAL IRRITATION.
Explanation of Carcinogenicity:NOT RELEVANT
Effects of Overexposure:SEE HEALTH HAZARDS.
Medical Cond Aggravated by Exposure:UNKNOWN TO THE MANUFACTURER.

===== First Aid Measures =====

First Aid:SKIN: WASH OFF WITH SOAP & WATER. EYES: FLUSH W/WATER FOR A
MINIMUM OF 15 MINUTES. CALL MD IF IRRITATION PERSISTS. INGEST:
DRINK LARGE AMOUNTS OF WATER OR MILK. CALL MD. INHAL: REMOVE TO
FRESH AIR. SU PPORT BREATHING (GIVE O*2/ARTF RESP) .

===== Fire Fighting Measures =====

Flash Point Method:TOC

Extinguishing Media:WATER FOG.

Fire Fighting Procedures:TREAT AS CYLINDER OF COMPRESSED GAS. KEEP
CONTAINERS COOL. USE NIOSH/ MSHA APPROVED SCBA & FULL PROTECTIVE
EQUIPMENT .

Unusual Fire/Explosion Hazard:AT ELEVATED TEMPERATURES (OVER 130F)
CONTAINERS MAY VENT, RUPTURE OR BURST.

===== Accidental Release Measures =====

Spill Release Procedures:REMOVE SOURCES OF HEAT, FLAMES OR SPARKS.
PROVIDE ADEQUATE VENTILATION. MOP UP SPILLS, THEN RINSE WITH WATER.
Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

===== Handling and Storage =====

Handling and Storage Precautions:CONTENTS UNDER PRESSURE. STORE IN A
DRY, COOL AREA. KEEP OUT OF REACH OF CHILDREN. DO NOT STORE WHERE
TEMPERATURES MAY EXCEED 130F.
Other Precautions:READ ENTIRE LABEL BEFORE USING.

===== Exposure Controls/Personal Protection =====

Respiratory Protection:NONE REQUIRED. IF NECESSARY, USE NIOSH/MSHA
APPROVED RESPIRATOR APPROPRIATE FOR EXPOSURE OF CONCERN .
Ventilation:MECHANICAL (GENERAL): MAINTAIN ADEQUATE VENTILATION.
Protective Gloves:IMPERVIOUS GLOVES .
Eye Protection:CHEMICAL WORKERS GOGGLES .
Other Protective Equipment:NOT REQUIRED.
Supplemental Safety and Health
NONE SPECIFIED BY MANUFACTURER.

===== Physical/Chemical Properties =====

Boiling Pt:B.P. Text:212F,100C
Vapor Pres:18
Vapor Density: