

# SAFETY DATA SHEET

## Section 1 - Chemical Product and Company Information

Product Name: S-1193 Silicone Epoxy Product Code: S-1193

Trade Name: Glyptal

Manufactured by:

*IN CASE OF EMERGENCY:*

GLYPTAL, INC.  
305 Eastern Ave.  
Chelsea, MA 02150  
Telephone (617) 884-6918

CHEMTREC 1-800-424-9300

Product Use: Coatings

Not recommended for: Nonindustrial Use

## Section 2 - Hazards Identification

NFPA Ratings, risk phrases, and suggested WHMIS Hazard Categories:

### GHS Ratings:

|                             |    |                                                                                                                                                        |
|-----------------------------|----|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| Flammable liquid            | 3  | Flash point $\geq 23^{\circ}\text{C}$ and $\leq 60^{\circ}\text{C}$ (140°F)                                                                            |
| Skin corrosive              | 2  | Reversible adverse effects in dermal tissue, Draize score: $\geq 2.3 < 4.0$ or persistent inflammation                                                 |
| Eye corrosive               | 1  | Serious eye damage: Irreversible damage 21 days after exposure, Draize score: Corneal opacity $\geq 3$ , Iritis $> 1.5$                                |
| Carcinogen                  | 2  | Limited evidence of human or animal carcinogenicity                                                                                                    |
| Reproductive toxin          | 1B | Presumed, Based on experimental animals                                                                                                                |
| Organ toxin single exposure | 3  | Transient target organ effects- Narcotic effects- Respiratory tract irritation                                                                         |
| Aspiration hazard           | 1  | Aspiration Toxicity Category 1: Known (regarded)- human evidence - hydrocarbons with kinematic viscosity $\leq 20.5$ mm <sup>2</sup> /s at 40° C.      |
| Aquatic toxicity            | C3 | Acute toxicity $> 10.0$ but $< 100.0$ mg/l and lack of rapid degradability and log Kow $> 4$ unless BCF $< 500$ and unless chronic toxicity $> 1$ mg/l |

### GHS Hazards

|      |                                          |
|------|------------------------------------------|
| H227 | Combustible liquid                       |
| H302 | Harmful if swallowed                     |
| H315 | Causes skin irritation                   |
| H318 | Causes serious eye damage                |
| H336 | May cause drowsiness or dizziness        |
| H351 | Suspected of causing cancer              |
| H360 | May damage fertility or the unborn child |
| H401 | Toxic to aquatic life                    |

### GHS Precautions

|      |                                                                          |
|------|--------------------------------------------------------------------------|
| P202 | Do not handle until all safety precautions have been read and understood |
| P210 | Keep away from heat/sparks/open flames/hot surfaces – No smoking         |
| P233 | Keep container tightly closed                                            |
| P240 | Ground/bond container and receiving equipment                            |
| P241 | Use explosion-proof electrical/ventilating/light/.../equipment           |
| P242 | Use only non-sparking tools                                              |
| P243 | Take precautionary measures against static discharge                     |

|                |                                                                                                                                   |
|----------------|-----------------------------------------------------------------------------------------------------------------------------------|
| 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                                                                                    |
| P273           | Avoid release to the environment                                                                                                  |
| P280           | Wear protective gloves/protective clothing/eye protection/face protection                                                         |
| P331           | Do NOT induce vomiting                                                                                                            |
| P362           | Take off contaminated clothing and wash before reuse                                                                              |
| P301+P312      | IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell                                                         |
| P303+P361+P353 | IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing.<br>Rinse skin with water/shower                      |
| P304+P312      | IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell                                                           |
| 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 continuously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing |
| P308+P313      | IF exposed or concerned: Get medical advice/attention                                                                             |
| P332+P313      | If skin irritation occurs: Get medical advice/attention                                                                           |
| P337+P313      | If eye irritation persists, get medical advice/attention                                                                          |
| P370+P378      | In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction                                              |
| P403+P233      | Store in a well ventilated place. Keep container tightly closed                                                                   |
| P403+P235      | Store in a well ventilated place. Keep cool                                                                                       |
| P501           | Dispose of contents/container to an approved waste disposal plant                                                                 |

**Signal Word: Danger**



### Section 3 - Composition/Information on Ingredients

| Chemical Name                         | CAS number | Weight Concentration % |
|---------------------------------------|------------|------------------------|
| Methyl Isobutyl Ketone                | 108-10-1   | 10.00% - 20.00%        |
| n-Butyl Acetate                       | 123-86-4   | 5.00% - 10.00%         |
| Propylene Glycol Methyl Ether Acetate | 108-65-6   | 5.00% - 10.00%         |
| n-Butanol                             | 71-36-3    | 1.00% - 5.00%          |
| Cyclohexanone                         | 108-94-1   | 1.00% - 5.00%          |
| Xylene (mixed isomers)                | 1330-20-7  | 1.00% - 5.00%          |

### Section 4 - First Aid Measures

**INHALATION** - Remove from area to fresh air. If symptomatic, contact a poison control center, emergency room, or physician as further medical treatment may be necessary. Administer oxygen if a qualified operator is available.

**EYE CONTACT** - In case of eye contact, flush the eyes with water for fifteen (15) minutes. If contact lenses are worn, quickly remove them, then flush the eyes with water. If irritation persists, contact a poison control center, emergency room, or physician as further medical treatment may be necessary.

**SKIN CONTACT** - In case of skin contact, remove contaminated clothing. Flush the skin with large amounts of water, then wash the skin with soap and water. If symptoms persist, contact a poison control center, emergency

room, or physician as further medical treatment may be necessary.

**INGESTION** - If material is ingested, seek immediate medical attention. Do not induce vomiting. If vomiting occurs spontaneously, keep the head below the hips to prevent aspiration of liquid into the lungs. Contact a poison control center, emergency room, or physician as further medical treatment will be necessary.

## Section 5 - Fire Fighting Measures

Flash Point: 35 C (95 F)

LEL: 1.00

UEL: 12.00

**EXTINGUISHING MEDIA:** Use carbon dioxide (CO<sub>2</sub>), "alcohol" foam, dry chemical

**UNUSUAL FIRE OR EXPLOSION HAZARDS:** The product vapor is heavier than air and may travel a considerable distance to a source of ignition and flashback. Closed containers may explode or burst when exposed to extreme heat. May produce hazardous decomposition products when exposed to extreme heat.

**HAZARDOUS COMBUSTION PRODUCTS:** See section 10 for a list of hazardous decomposition products for this mixture.

**FIRE FIGHTING:** 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. If evacuation of personnel is necessary, evacuate to an upwind area. Decontaminate personnel and equipment with a water wash-down after fire and smoke exposure.

**FIRE FIGHTING EQUIPMENT:** Firemen and emergency responders: wear full turnout gear or Level A equipment, including positive-pressure, self-contained breathing apparatus (SCBA).

## Section 6 - Accidental Release Measures

**SPILL AND LEAK PROCEDURES:** Spill supervisor - Ensure cleanup personnel wear all appropriate Personal Protective Equipment (PPE), including respiratory protection. Remove all ignition sources. Keep nonessential personnel away from the contaminated area.

**SMALL SPILLS:** Ventilate the contaminated area. Using nonsparking tools, mix the appropriate sorbent into the spilled material. Use an absorbent like sawdust for aqueous, waterborne, and solvent-borne coatings.

Collect the saturated sorbent and transfer it into a covered container. Steel containers are acceptable for all wastes except wastes which contain acid. Use suitable plastic containers for acid-bearing wastes.

Dispose of the waste in compliance with all Federal, state, regional, and local regulations.

**LARGE SPILLS:** Prevent this material from entering sewers and watercourses by diking or impounding the spilled material. Advise authorities if the product has entered or may enter, sewers, watercourses, or extensive land areas.

Ventilate the contaminated area. Using nonsparking tools, mix the appropriate sorbent into the spilled material. Use an absorbent like sawdust for aqueous, waterborne, and solvent-borne coatings.

Collect the saturated sorbent and transfer it into a covered container. Steel containers are acceptable for all wastes except wastes which contain acid. Use suitable plastic containers for acid-bearing wastes.

Label the waste container. Dispose of the waste in compliance with all Federal, state, regional, and local regulations.

## Section 7 - Handling and Storage

**HANDLING PRECAUTIONS:** Wear all appropriate Personal Protective Equipment (PPE). Wear respiratory protection or ensure adequate ventilation at all times as vapors can accumulate in confined or poorly ventilated areas. Use the product in a manner which minimizes splashes and/or the creation of dust. Keep containers closed when not in use. Do not handle or store material near heat, sparks, open flames, or other sources of ignition. Store at room temperatures, i.e., 50 to 85 F (10 to 30 C).

**STORAGE:** Prevent from freezing. Do not store above 95 F (35 C).

Store only in original containers.

## Section 8 - Exposure Controls / Personal Protection

| Chemical Name / CAS No.                           | OSHA Exposure Limits                                           | ACGIH Exposure Limits                               | Other Exposure Limits |
|---------------------------------------------------|----------------------------------------------------------------|-----------------------------------------------------|-----------------------|
| Methyl Isobutyl Ketone<br>108-10-1                | TWA 100 ppm (Z-1)<br>TWA 50 ppm (P0)<br>STEL 75 ppm (P0)       | TLV 20 ppm - TWA<br>TLV 75 ppm - STEL               | Not Established       |
| n-Butyl Acetate<br>123-86-4                       | PEL 150 ppm - TWA<br>VPEL 150 ppm - TWA<br>VPEL 200 ppm - STEL | TLV 150 ppm - TWA<br>TLV 200 ppm - STEL             | Not Established       |
| Propylene Glycol Methyl Ether Acetate<br>108-65-6 | PEL N/A                                                        | TLV N/A                                             | Not Established       |
| n-Butanol<br>71-36-3                              | PEL 100 ppm - TWA<br>VPEL 50 ppm - Ceiling (skin)              | TLV 20 ppm - TWA                                    | Not Established       |
| Cyclohexanone<br>108-94-1                         | PEL 50 ppm - TWA<br>VPEL 25 ppm - TWA (skin)                   | TLV 20 ppm - TWA (skin)<br>TLV 50 ppm - STEL (skin) | Not Established       |
| Xylene (mixed isomers)<br>1330-20-7               | PEL 100 ppm - TWA<br>PEL 150 ppm - STEL                        | TLV 100 ppm - TWA<br>TLV 150 ppm - STEL             | Not Established       |

**ENGINEERING:** Provide general dilution of local exhaust ventilation in volume and pattern to keep concentration of ingredients listed in Section 2 below the lowest suggested exposure limits, the LEL below the stated limit, and to remove decomposition products during welding or flame cutting.

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/m<sup>3</sup> (total dust), 3 mg/m<sup>3</sup> (respirable fraction), OSHA PEL 15 mg/m<sup>3</sup> (total dust), 5 mg/m<sup>3</sup> (respirable fraction).

Ensure processing (curing) ovens are properly vented to prevent the introduction of processing fumes into the workplace. Use explosion-proof equipment and good manufacturing practice.

**VENTILATION:** Use only with adequate ventilation, i.e., ventilation in compliance with occupational exposure limits. Refer to OSHA standards 1910.94, 1910.107, 1910.108.

## PERSONAL PROTECTIVE EQUIPMENT

### EYES:

Wear splash goggles. If extra protection is required, wear a face shield over the splash goggles. Face shields are effective only if worn in addition to splash goggles.

### PROTECTIVE GLOVES:

Wear chemical-resistant gloves (butyl rubber or neoprene). Protective gloves should be inspected frequently and discarded when they exhibit cuts, tears, pinholes, or signs of excessive wear. If necessary, wear a chemical-resistant, butyl-rubber apron and other protective clothing, as deemed appropriate, to avoid skin contact with material.

### RESPIRATORY PROTECTION:

Respiratory protection may not be needed if the local exhaust is sufficient to maintain levels of hazardous ingredients below occupational exposure limits. Where ventilation is inadequate, use a NIOSH/MSHA-approved, air-purifying respirator equipped with the appropriate chemical cartridges or positive-pressure, air-supplied respirator. Read the respirator manufacturer's instructions and literature carefully to determine the type of airborne contaminants against which the respirator is effective, its limitations, and how it is to be properly fitted and used.

**CONTAMINATED EQUIPMENT:** Dispose of the waste in compliance with all Federal, state, regional, and local regulations.

## Section 9 - Physical and Chemical Properties

This mixture typically exhibits the following properties under normal circumstances:

|                                        |                                                          |
|----------------------------------------|----------------------------------------------------------|
| <b>Appearance</b> Gray Liquid          | <b>Odor</b> Solvent odor                                 |
| <b>Physical State</b> Liquid           | <b>Vapor Density</b> Heavier than air                    |
| <b>Vapor Pressure</b> 4.6 mm Hg @ 68 F | <b>Evaporation Rate</b> Slower than ether                |
| <b>Boiling Range</b> 116 to 156 °C     | <b>Specific Gravity (SG)</b> 1.229                       |
| <b>Lbs VOC/Gallon Solids</b> 10.4      | <b>Lbs VOC/Gallon Less Water and Exempt Solvent</b> 4.38 |

## Section 10 - Stability and Reactivity

### Stability:

STABLE

### Components of this mixture are incompatible with the following materials:

Alkali metals, Aluminum, Halogens, Lead, Strong mineral acids, Strong oxidizing agents  
Amines, copper, copper alloys, strong alkalis, strong mineral acids, strong oxidizing agents, strong reducing agents  
Strong oxidizing agents  
Strong oxidizing agents, strong acids, strong bases

### This mixture is likely to exhibit the following combustion products:

Carbon Dioxide, Carbon Monoxide  
Hazardous polymerization will not occur.

## Section 11 - Toxicological Information

### Component Toxicity

108-10-1 Methyl Isobutyl Ketone

|           |                                                                                                               |
|-----------|---------------------------------------------------------------------------------------------------------------|
|           | Oral LD50: 2,080 mg/kg (Rat) Inhalation LC50: 8 mg/L (Rat)                                                    |
| 123-86-4  | n-Butyl Acetate<br>Inhalation LC50: 21 mg/L (Rat)                                                             |
| 108-65-6  | Propylene Glycol Methyl Ether Acetate<br>Dermal LD50: 5,000 mg/kg (Rabbit)                                    |
| 71-36-3   | n-Butanol<br>Oral LD50: 790 mg/kg (Rat) Dermal LD50: 3,400 mg/kg (Rabbit)                                     |
| 108-94-1  | Cyclohexanone<br>Oral LD50: 1,534 mg/kg (Rat) Dermal LD50: 3,160 mg/kg (Rabbit) Inhalation LC50: 6 mg/L (Rat) |
| 1330-20-7 | Xylene (mixed isomers)<br>Oral LD50: 4,300 mg/kg (Rat) Dermal LD50: 2,000 mg/kg (Rabbit)                      |

Toxicological information: The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and classified for toxicological hazards accordingly. See Sections 3 and 15 for details.

Routes of Entry:

Inhalation      Skin Contact      Eye Contact      Ingestion

Exposure to this material may affect the following organs:

Blood    Kidneys    Liver      Lungs      Central Nervous System      Reproductive System

**Effects of Overexposure**

**108-10-1**

**Methyl Isobutyl Ketone**

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: mouth and throat irritation (soreness, dry or scratchy feeling. Cough), stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness).

Eye Contact      May cause mild irritation. Symptoms include stinging, tearing, and redness.

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.

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.

Skin Contact      May cause mild skin irritation. Prolonged or repeated contact may dry the skin. Symptoms include redness, burning, drying and cracking of skin, and skin burns. Passage of this material into the body through the skin is possible, but it is unlikely that this would result in harmful effects during safe handling and use.

**108-65-6**

**PM Acetate**

Moderate health hazard. Moderate eye irritant. Mucous membrane irritant. Slight inhalation hazard. Slight ingestion hazard. Slight skin absorption hazard.

Eye Contact      May cause moderate irritation, including burning sensation, tearing, redness or swelling.

Ingestion      Ingestion may cause gastrointestinal discomfort with any or all of the following symptoms: nausea, vomiting, lethargy, or diarrhea.

Inhalation Prolonged overexposure to either vapor or mist may cause coughing, shortness of breath, dizziness and drunkenness.

Skin Contact No significant signs or symptoms indicative of any health hazard are expected to occur as a result of skin contact. Possible systemic toxicity by skin absorption.

**108-88-3**

**Toluene**

Signs of symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: metallic taste, stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), 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, temporary changes in mood and behavior, muscle weakness, loss of coordination, confusion, irregular heartbeat, coma, and death.

Eye Contact May cause mild irritation. Symptoms include stinging, tearing, and redness.

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.

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.

Skin Contact May cause mild skin irritation. Symptoms may include redness and burning of skin. Passage of this material into the body through the skin is possible, but it is unlikely that this would result in harmful effects during safe handling and use.

**108-94-1**

**Cyclohexanone**

Signs of symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: mouth and throat irritation (soreness, dry or scratchy feeling, cough), stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness), respiratory depression (slowing of the breathing rate), respiratory failure.

Eye Contact Can cause severe eye irritation. Symptoms include stinging, tearing, and redness, and swelling of eyes. Can injure eye tissue.

Inhalation 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.

Skin Contact Can cause skin irritation. Prolonged or repeated contact may dry the skin. Symptoms include redness, burning, drying and cracking of skin, burns and other skin damage. Passage of this material into the body through the skin is possible, and may add to toxic effects from breathing or swallowing.

**123-86-4**

**n-Butyl Acetate**

Repeated skin exposure can produce local skin destruction or dermatitis. Repeated or prolonged exposure to the substance can produce lung damage. Repeated or prolonged contact with spray or mist may produce chronic eye irritation and severe skin irritation. Repeated or prolonged exposure to the substance can produce target organs damage.

Eye Contact May cause mild irritation. Symptoms include stinging, tearing, and redness.

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.

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.

Skin Contact May cause mild skin irritation. Symptoms may include redness and burning of skin. Passage of this material into the body through the skin is possible, but it is unlikely that this would result in harmful effects during safe handling and use.

**1330-20-7**

**Xylene (mixed)**

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: redness of the face and neck, mouth and throat irritation (soreness, dry or scratchy feeling, cough), stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), tight feeling in the chest, 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, effects on memory, respiratory depression (slowing of the breathing rate), shortness of breath, loss of coordination, confusion, irregular heartbeat, narcosis (dazed or sluggish feeling), coma.

Eye Contact May cause mild irritation. Symptoms include stinging, tearing, and redness.

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.

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.

Skin Contact Can cause skin irritation. Prolonged and repeated contact may dry the skin. Symptoms may include redness, burning, and drying and cracking of the skin, burns and other skin damage. Additional symptoms of skin contact may include: skin blistering. Passage of this material into the body through the skin is possible, but it is unlikely that this would result in harmful effects during safe handling and use.



71-36-3

**n-Butanol**

Signs of 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), blurred vision.

|              |                                                                                                                                                                                                                                                                                                               |
|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Eye Contact  | Can cause severe eye irritation. Symptoms include stinging tearing, and redness, and swelling of eyes. Can injure eye tissue.                                                                                                                                                                                 |
| 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.                                |
| 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.                                |
| Skin Contact | Can cause skin irritation. Prolonged or repeated contact may dry the skin. Symptoms may include redness, burning, drying and cracking of skin, burns, and other skin damage.. Passage of this material into the body through the skin is possible, and may add to toxic effects from breathing or swallowing. |

**Carcinogenicity:** The following chemicals comprise 0.1% or more of this mixture and are listed and/or classified as carcinogens or potential carcinogens by NTP, IARC, OSHA (mandatory listing), or ACGIH (optional listing). See Section 15 for carcinogenicity assessment.

| <u>CAS Number</u> | <u>Description</u>     | <u>% Weight</u> | <u>Carcinogen Rating</u> |
|-------------------|------------------------|-----------------|--------------------------|
| 108-10-1          | Methyl Isobutyl Ketone | 10 to 20%       | IARC (2B)                |

**Section 12 - Ecological Information**

**Component Ecotoxicity**

12.1 Toxicity

Toxicity to fish  
48 h LC0 - *Leuciscus idus melanotus* - 480 mg/l -

Toxicity to daphnia and  
3,623 mg/l - 24 h EC50 - *Daphnia magna* (Water flea) - 1,550 -  
other aquatic  
invertebrates

Toxicity to algae EC50 - *Desmodesmus subspicatus* (green algae)  
- 980 - 2,000 mg/l - 48 h

12.2 Persistence and degradability

Biodegradability Biotic/Aerobic - Exposure time 7 d

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

12.1 Toxicity

Toxicity to fish LC50 - Lepomis macrochirus (Bluegill) - 100 mg/l - 96 h

Toxicity to daphnia and - 24 h

other aquatic invertebrates

EC50 - Daphnia magna (Water flea) - 72.8 - 205.0 mg/l  
EC50 - Daphnia (water flea) - 44 mg/l - 48 h

Toxicity to algae EC50 - Desmodesmus subspicatus (Scenedesmus subspicatus) - 674.7 mg/l - 72 h

12.2 Persistence and degradability

Biodegradability Result: - Readily biodegradable

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

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Harmful to aquatic life.

No data available

Propylene Glycol Methyl Ether  
Acetate

#### 12.1 Toxicity

Toxicity to fish mortality LC50 - *Salmo gairdneri* - 100 - 180 mg/l - 96 h  
(OECD Test Guideline 203)

Toxicity to daphnia and other aquatic invertebrates  
48 h  
EC50 - *Daphnia magna* (Water flea) - > 500 mg/l -  
Immobilization  
(Tested according to Annex V of Directive 67/548/EEC.)

#### 12.2 Persistence and degradability

Biodegradability Biotic/Aerobic - Exposure time 8 d  
Result: 100 % - Readily biodegradable  
Biochemical Oxygen Demand (BOD) 0.36 mg/l  
Chemical Oxygen Demand (COD) 1.74 mg/g

#### 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

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.  
Harmful to aquatic life.

n-Butanol

12.1 Toxicity

Toxicity to fish LC50 - Pimephales promelas (fathead minnow) - 1,840 mg/l - 96 h

Toxicity to daphnia and other aquatic invertebrates EC50 - Daphnia magna (Water flea) - 1,983 mg/l - 48 h

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

Bioaccumulation Oncorhynchus mykiss (rainbow trout) - 24 h - 921 mg/l

Bioconcentration factor (BCF): 0.38

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

Cyclohexanone

12.1 Toxicity

Toxicity to daphnia and other aquatic invertebrates EC50 - Daphnia magna (Water flea) - 820 mg/l - 24 h

12.2 Persistence and degradability

Biodegradability Result: 90 - 100 % - Readily biodegradable

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

Xylene (mixed isomers)

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

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Toxic to aquatic life.

### Section 13 - Disposal Considerations

The provisions of Council Directive 91/689/EEC and subsequent Amendments and Decisions apply to wastes for the product as supplied.

Do not allow into drains or water courses.

Waste and emptied containers must be disposed of in accordance with:

- Control of Pollution Act of 1974,
- Special Waste Regulations 1996,
- Duty of Care Regulations 1992.

Waste should be recycled or disposed of through a licensed waste management facility .

### Section 14 - Transport Information

This material is classified for transport as follows:

| <u>Agency</u> | <u>Proper Shipping Name</u> | <u>UN Number</u> | <u>Packing Group</u> | <u>Hazard Class</u> |
|---------------|-----------------------------|------------------|----------------------|---------------------|
| DOT           | Paint                       | 1263             | III                  | 3                   |

### Section 15 - Regulatory Information

According to the Directive (1999/45/EC), relating to the classification packaging and labelling of dangerous substances and preparations, the product is labelled as follows:

**State of California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): WARNING!**

This product contains the following chemicals which are listed by the State of California as carcinogenic or a reproductive toxin:

108-10-1 Methyl Isobutyl Ketone 10 to 20 %

**Carcinogenicity:**

**IARC:** Group 2B: Possibly carcinogenic to humans

**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.

**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.

**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.

Methyl Isobutyl Ketone 108-10-1

**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.

**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.

**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.

Xylene (mixed isomers) 1330-20-7

Cyclohexanone 108-94-1

n-Butanol 71-36-3

Propylene Glycol Methyl Ether Acetate 108-65-6

n-Butyl Acetate 123-86-4

**Commonwealth of Massachusetts "Right to Know":** This product contains the following toxic or hazardous substances which appear on the Massachusetts Substance List:

Xylene (mixed) 1 to 5 %

Cyclohexanone 1 to 5 %

n-Butanol 1 to 5 %

n-Butyl Acetate 5 to 10 %

Methyl Isobutyl Ketone 10 to 20 %

**New Jersey Worker and Community Right To Know Hazardous Substance List:** The following substances appear on the New Jersey Right To Know Hazardous Substance List.

Xylene (mixed) 1 to 5 %

Cyclohexanone 1 to 5 %

n-Butanol 1 to 5 %

Propylene Glycol Methyl Ether Acetate 5 to 10 %

n-Butyl Acetate 5 to 10 %

Methyl Isobutyl Ketone 10 to 20 %

**Commonwealth of Pennsylvania Worker and Community Right-To-Know Act:** This product contains the following chemicals which appear on the Pennsylvania Hazardous Substance List:

1330-20-7

108-94-1

71-36-3

108-65-6

123-86-4

108-10-1

WHMIS Classification B2 Flammable Liquid

**Country**

**Regulation**

**All Components Listed**

**Toxic Substances Control Act (TSCA):** All chemicals except those listed below appear in the Toxic Substances Control Act Chemical Substance Inventory:

- None

**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 40 of the Code of Federal Regulations, part 372.

## Section 16 - Other Information

### Hazardous Material Information System (HMIS)

|                     |   |
|---------------------|---|
| HEALTH              | 2 |
| FLAMMABILITY        | 3 |
| PHYSICAL HAZARD     | 0 |
| PERSONAL PROTECTION | B |

#### HMIS & NFPA Hazard Rating

##### Legend

\* = Chronic Health Hazard

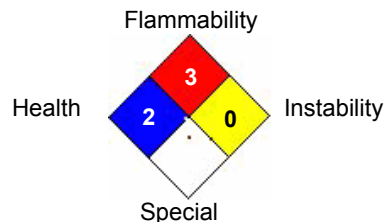
0 = INSIGNIFICANT

1 = SLIGHT

2 = MODERATE

3 = HIGH

### National Fire Protection Association (NFPA)



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Reviewer Revision

Date Prepared: 6/3/2015