SAFETY DATA SHEET

AVB Silicone Sealant

1. PRODUCT IDENTIFICATION

IDENTIFICATION of the SUBSTANCE or PREPARATION

<table>
<thead>
<tr>
<th>TRADE NAME (AS LABELED):</th>
<th>AVB Silicone Sealant</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRODUCT DESCRIPTION:</td>
<td>Polydimethylsiloxane-Based Sealant</td>
</tr>
<tr>
<td>CHEMICAL NAME/CLASS:</td>
<td>Polydimethylsiloxane Silicone</td>
</tr>
<tr>
<td>SYNONYMS:</td>
<td>Air Vapor Barrier Silicone</td>
</tr>
<tr>
<td>RELEVANT USE:</td>
<td>Silicone Sealant</td>
</tr>
<tr>
<td>USES ADVISED AGAINST:</td>
<td>Other Than Relevant Use</td>
</tr>
</tbody>
</table>

COMPANY/UNDERTAKING IDENTIFICATION:

| SUPPLIER/MANUFACTURER'S NAME: | Pecora Corporation |
| ADDRESS:                      | 165 Wambold Road, Harleysville, PA 19438 |
| EMERGENCY PHONE:              | 800-424-9300 (CHEMTREC, 24-hours) |
| BUSINESS PHONE:               | 215-723-6051 (Mon–Fri, 8 AM–5 PM ET) |

PREPARATION DATE: February 26, 2013

REVISION DATE: May 2, 2013

This product is sold for commercial use. This SDS has been developed to address safety concerns of those individuals working with bulk quantities of this material, as well as those of potential users of this product in industrial/occupational settings. ALL United States Occupational Safety and Health Administration Standard (29 CFR 1910.1200), U.S. State equivalent Standards, and Canadian WHMIS (Controlled Products Regulations) and the Global Harmonization Standard required information is included in appropriate sections based on the U.S. ANSI Z400.1-2010 format. This product has been classified in accordance with the hazard criteria of the countries listed above.

2. HAZARD IDENTIFICATION

GLOBAL HARMONIZATION LABELING AND CLASSIFICATION: This product has been classified per GHS Standards.

Classification: Flammable Liquid Cat. 4, Reproductive Toxicity Cat. 2, Acute Oral Toxicity Cat. 5, Skin Irritation Cat. 3, Eye Irritation Cat. 2B, STOT (Inhalation-Respiratory Irritation) SE Cat. 3, Skin Sensitization Cat. 1, Aquatic Chronic Toxicity Cat. 4

Signal Word: Warning

Hazard Statement Codes: H227, H361fd, H303, H316, H320, H335, H317, H413


Hazard Symbols/Pictogram: GHS07, GHS08

EMERGENCY OVERVIEW:

PHYSICAL DESCRIPTION: This product is a smooth paste with a mild, slightly solvent odor that comes in various colors.

HEALTH HAZARDS: CAUTION! May cause eye, skin, and respiratory tract irritation, especially if exposure is prolonged. May be harmful if ingested. May cause skin sensitization in susceptible individuals. If fumes are generated and inhaled, adverse central nervous system effects may occur. Contain compounds that are suspect carcinogens and a compound that is a suspect reproductive toxin. Contains trace amounts of crystalline silica, a known human carcinogen by inhalation.

FLAMMABILITY HAZARD: This product is combustible and can ignite if exposed to high temperature or direct flame.

REACTIVITY HAZARD: This product is not reactive.

ENVIRONMENTAL HAZARD: This product has not been tested for environmental impact. This product contains a compound that can cause chronic aquatic toxicity.

HAZARDOUS MATERIALS IDENTIFICATION SYSTEM (HMIS®)

<table>
<thead>
<tr>
<th>Health</th>
<th>2*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammability</td>
<td>1</td>
</tr>
<tr>
<td>Physical Hazard</td>
<td>0</td>
</tr>
</tbody>
</table>

See Section 16 for definitions of ratings

0 = Minimal          3 = Serious
1 = Slight           4 = Severe
2 = Moderate          = Chronic

HMIS® is a registered trademark of the National Paint and Coatings Association.

CANADIAN WHMIS CLASSIFICATION: Class D2B. See Section 15 (Regulatory Information) for all classification details.

U.S. OSHA REGULATORY STATUS: This material has a classification under the Global Harmonization Standard, as applied under OSHA regulations, as given earlier in this Section.
3. MATERIAL IDENTIFICATION

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS #</th>
<th>W/W%</th>
<th>GHS Classification</th>
<th>Hazard Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polydimethyl Siloxane Diol</td>
<td>70131-67-8</td>
<td>20.0-40.0</td>
<td>SELF CLASSIFICATION</td>
<td>Classification: Not Applicable</td>
</tr>
<tr>
<td>Synthetic Calcium Carbonate</td>
<td>1317-65-3</td>
<td>10.0-40.0</td>
<td>SELF CLASSIFICATION</td>
<td>Classification: Not Applicable</td>
</tr>
<tr>
<td>Precipitated Limestone</td>
<td>471-34-1</td>
<td>10.0-40.0</td>
<td>SELF CLASSIFICATION</td>
<td>Classification: Not Applicable</td>
</tr>
<tr>
<td>Proprietary Resin</td>
<td></td>
<td>2.0-6.0</td>
<td>Classification:</td>
<td>STOT RE Cat. 2, Skin Sensitization Cat. 1, Aquatic Chronic Toxicity Cat. 3</td>
</tr>
<tr>
<td>Proprietary Crosslinker</td>
<td></td>
<td>1.0–5.0</td>
<td>Classification:</td>
<td>Flammability Cat. 2, Reproductive Toxicity Cat. 2, Aspiration Hazard Cat. 1, STOT (Inhalation-Central Nervous System) SE Cat. 3</td>
</tr>
<tr>
<td>Toluene</td>
<td>108-88-3</td>
<td>1.0–5.0</td>
<td>Classification:</td>
<td>Flammability Cat. 2, Reproductive Toxicity Cat. 2, Aspiration Hazard Cat. 1, STOT (Inhalation-Central Nervous System) SE Cat. 3</td>
</tr>
<tr>
<td>Quartz</td>
<td>14808-60-7</td>
<td>Trace</td>
<td>SELF CLASSIFICATION</td>
<td>Carcinogenic Cat. 1B Hazard Statement Code: H350</td>
</tr>
<tr>
<td>Water and other components. Each of the other components is present in less than 1 percent concentration (0.1% concentration for potential carcinogens, reproductive toxins, respiratory tract sensitizers, and mutagens).</td>
<td></td>
<td></td>
<td>Balance Classification: Not Applicable</td>
<td></td>
</tr>
</tbody>
</table>

4. FIRST-AID MEASURES

PROTECTION OF FIRST AID RESPONDERS: Rescuers should not attempt to retrieve victims of exposure to this material without adequate personal protective equipment. Rescuers should be taken for medical attention, if necessary.

DESCRIPTION OF FIRST AID MEASURES: Remove victim(s) to fresh air, as quickly as possible. Only trained personnel should administer supplemental oxygen and/or cardio-pulmonary resuscitation, if necessary. Remove and isolate contaminated clothing and shoes. Seek immediate medical attention. Take copy of label and SDS to physician or other health professional with victim(s).

INHALATION: If dusts of this material are inhaled, remove victim to fresh air. If necessary, use artificial respiration to support vital functions.

SKIN EXPOSURE: If the material contaminates the skin, immediately begin decontamination with running water. Minimum flushing is for 20 minutes. Do not interrupt flushing. Remove exposed or contaminated clothing, taking care not to contaminate eyes. Victim must seek immediate medical attention.

EYE EXPOSURE: If this product enters the eyes, open victim's eyes while under gently running water. Use sufficient force to open eyelids. Have victim "roll" eyes. Minimum flushing is for 20 minutes. Do not interrupt flushing.

INGESTION: If this material is swallowed, CALL PHYSICIAN OR POISON CONTROL CENTER FOR MOST CURRENT INFORMATION. DO NOT INDUCE VOMITING, unless directly by medical personnel. Have victim rinse mouth with water or give several cupfuls of water, if conscious. Never induce vomiting or give diluents (milk or water) to someone who is unconscious, having convulsions, or unable to swallow. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain an open airway and prevent aspiration.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Dermatitis or other pre-existing skin disorders may be aggravated by exposure to this product.

INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT IF NEEDED: Treat symptoms and eliminate exposure.

5. FIRE-FIGHTING MEASURES

FLASH POINT: > 104°C (> 220°F) AUTOIGNITION: Unknown.

FLAMMABLE LIMITS IN AIR: Unknown.

EXTINGUISHING MEDIA:

- SUITABLE EXTINGUISHING MEDIA: Use extinguishing material suitable to the surrounding fire, including foam, halon, carbon dioxide and dry chemical.

- UNSUITABLE EXTINGUISHING MEDIA: None known.

PROTECTION OF FIREFIGHTERS:

- SPECIAL HAZARDS ARISING FROM THE SUBSTANCE: This product is combustible and can be ignited when exposed to its flashpoint. This product contains methylpolysiloxanes which will likely generate formaldehyde at approximately 150°C (300°F) and above, in atmospheres which contain oxygen. Not sensitive to mechanical impact under normal conditions. Not sensitive to static discharge under normal conditions. Closed containers may develop pressure and rupture in event of fire.

- SPECIAL PROTECTIVE ACTIONS FOR FIRE-FIGHTERS: Incipient fire responders should wear eye protection. Structural firefighters must wear Self-Contained Breathing Apparatus and full protective equipment. Move containers from fire area if it can be done without risk to personnel. If possible, prevent runoff water from entering storm drains, bodies of water, or other environmentally sensitive areas.
6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS AND EMERGENCY PROCEDURES: An accidental release can result in a fire. Uncontrolled releases should be responded to by trained personnel using pre-planned procedures. Proper protective equipment should be used. Eliminate any possible sources of ignition, and provide maximum explosion-proof ventilation. Use only non-sparking tools and equipment during the response. The atmosphere must at least 19.5 percent Oxygen before non-emergency personnel can be allowed in the area without Self-Contained Breathing Apparatus and fire protection.

PERSONAL PROTECTIVE EQUIPMENT: Responders should wear the level of protection appropriate to the type of chemical released, the amount of the material spilled, and the location where the incident has occurred.

Small Spills: For releases of 1 drum or less, Level D Protective Equipment (gloves, chemical resistant apron, boots, and eye protection) should be worn.

Large Spills: Minimum Personal Protective Equipment should be rubber gloves, rubber boots, face shield, and Tyvek suit. Minimum level of personal protective equipment for releases in which the level of oxygen is less than 19.5% or is unknown must be Level B: triple-gloves (rubber gloves and nitrile gloves over latex gloves), chemical resistant suit, fire-retardant clothing and boots, hard hat, and Self-Contained Breathing Apparatus.

METHODS FOR CLEAN-UP AND CONTAINMENT:

All Spills: Access to the spill area should be restricted. Spread should be limited by gently covering the spill with poly pads. Scrape up or pick-up spilled material, placing in suitable containers. Absorb any residual on appropriate material, such as sand. All contaminated absorbents and other materials should be placed in an appropriate container and seal. Do not mix with wastes from other materials. Dispose of in accordance with applicable Federal, State, and local procedures (see Section 13, Disposal Considerations). Dispose of recovered material and report spill per regulatory requirements. Remove all residue before decontamination of spill area. Clean spill area with soap and copious amounts of water.

ENVIRONMENTAL PRECAUTIONS: Minimize use of water to prevent environmental contamination. Prevent spill or rinsate from contaminating storm drains, sewers, soil or groundwater. Place all spill residues in a suitable container and seal. Do not discharge effluent containing this product into streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA.

OTHER INFORMATION: U.S. regulations may require reporting of spills of this material that reach surface waters if a sheen is formed. If necessary, the toll-free phone number for the US Coast Guard National Response Center is 1-800-424-8802.

REFERENCE TO OTHER SECTIONS: See information in Section 8 (Exposure Controls – Personal Protection) and Section 13 (Disposal Considerations) for additional information.

7. HANDLING and STORAGE

PRECAUTIONS FOR SAFE HANDLING: As with all chemicals, avoid getting this product ON YOU or IN YOU. Wash thoroughly after handling this product. Do not eat or drink while handling this material. Avoid contact with eyes, skin, and clothing. Avoid breathing fumes, dusts, vapors or mist. Do not taste or swallow. Use only with adequate ventilation. Keep away from heat and flame. In the event of a spill, follow practices indicated in Section 6: ACCIDENTAL RELEASE MEASURES.

CONDITIONS FOR SAFE STORAGE: This product is stable under ordinary conditions of handling, use and storage. Store containers in a cool, dry location, away from direct sunlight, sources of intense heat, or where freezing is possible. Store away from incompatible materials (see Section 10: STABILITY AND REACTIVITY). Keep container tightly closed when not in use. Inspect all incoming containers before storage, to ensure containers are properly labeled and not damaged. To prolong shelf life, store at temperatures below 26°C (80°F).

PRODUCT END USE: This product is used as a sealant. Follow all industry standards for use of this product.

8. EXPOSURE CONTROLS - PERSONAL PROTECTION

EXPOSURE LIMITS/CONTROL PARAMETERS:

VENTILATION AND ENGINEERING CONTROLS: Use with adequate ventilation to ensure exposure levels are maintained below the limits provided below.

OCCUPATIONAL/WORKPLACE EXPOSURE LIMITS/GUIDELINES:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS #</th>
<th>Guideline</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proprietary Crosslinker</td>
<td></td>
<td>ABHA WEEL TWA</td>
<td>10 ppm (Dermal Sensitizer)</td>
</tr>
<tr>
<td>Exposure limits given are for decomposition product methyl ethyl ketoxime</td>
<td></td>
<td>DFG MAK</td>
<td>Skin, Danger of Sensitization of the skin.</td>
</tr>
<tr>
<td>Calcium Carbonate, Natural &amp; Synthetic</td>
<td>1317-65-3</td>
<td>OSHA PEL TWA</td>
<td>15 mg/m³ total dust</td>
</tr>
<tr>
<td></td>
<td>471-34-1</td>
<td>NIOSH REL TWA</td>
<td>5 mg/m³ respirable fraction</td>
</tr>
<tr>
<td>Proprietary Resin</td>
<td></td>
<td>NE</td>
<td>NE</td>
</tr>
<tr>
<td>Polydimethyl Siloxane Diol</td>
<td>70131-67-8</td>
<td>NE</td>
<td>NE</td>
</tr>
<tr>
<td>Toluene</td>
<td>108-88-3</td>
<td>ACGIH TLV TWA</td>
<td>20 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OSHA PEL TWA</td>
<td>200 ppm; 100 ppm (vacated 1989 PEL)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OSHA PEL STEL</td>
<td>300 ppm (ceiling) 10 minute peak per 8-hr shift; 150 (vacated 1989 PEL)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NIOSH REL TWA</td>
<td>100 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NIOSH REL STEL</td>
<td>150 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>DFG MAK TWA</td>
<td>50 (skin)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>DFG MAK PEAK</td>
<td>4× MAK 15 minute average value, 1-hr interval 4 per shift</td>
</tr>
<tr>
<td>Quartz</td>
<td>14464-46-1</td>
<td>ACGIH TLV TWA</td>
<td>0.025 mg/m³ Respirable Fraction</td>
</tr>
<tr>
<td></td>
<td>14464-46-1</td>
<td>OSHA PEL TWA</td>
<td>30 mg/m³ / % Sio2 + 2 Total Dust; 10 mg/m³ / % Sio2 + 2 Respirable Fraction</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NIOSH REL TWA</td>
<td>0.05 mg/m³ (Respirable Dust)</td>
</tr>
</tbody>
</table>

NE = Not Established. See Section 16 for Definitions of Terms Used.
8. EXPOSURE CONTROLS - PERSONAL PROTECTION (Continued)


EYE/FACE PROTECTION: Use approved safety goggles or safety glasses. If necessary, refer to appropriate regulations and standards.

SKIN PROTECTION: Wear chemical impervious gloves (e.g., Nitrile or Neoprene). Use triple gloves for spill response. If necessary, refer to appropriate regulations and standards.

BODY PROTECTION: Use body protection appropriate for task (e.g., lab coat, coveralls, Tyvek suit). If necessary, refer to the OSHA Technical Manual (Section VII: Personal Protective Equipment) or appropriate Standards of Canada. If a hazard to the feet exists due to falling objects, rolling objects, where objects may pierce the soles of the feet or where employee’s feet may be exposed to electrical hazards, use foot protection, as described in appropriate regulations and standards.

RESPIRATORY PROTECTION: If mists or sprays from this product are created during use, use appropriate respiratory protection. If necessary, use only respiratory protection authorized in appropriate regulations. Oxygen levels below 19.5% are considered IDLH by OSHA. In such atmospheres, use of a full-facepiece pressure-demand SCBA or a full facepiece, supplied air respirator with auxiliary self-contained air supply is required under appropriate regulations and standards. The following are NIOSH Respiratory Protective equipment guidelines for the Toluene component, which can reach exposure limits in this product.

TOLUENE CONCENTRATION: Any Chemical Cartridge Respirator with organic vapor cartridge(s), or any Powered, Air-Purifying Respirator (PAPR) with organic vapor cartridge(s), or any Air-Purifying, Full-Facepiece Respirator (gas mask) with a chin-style, front- or back-mounted organic vapor canister, or any Supplied-Air Respirator (SAR), or any Self-Contained Breathing Apparatus (SCBA) with a full facepiece.

Emergency or Planned entry into Unknown concentrations or IDLH Conditions: Any SCBA that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode, or any SAR that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary SCBA operated in pressure-demand or other positive-pressure mode.

Escape: Any Air-Purifying, Full-Facepiece Respirator (gas mask) with a chin-style, front- or back-mounted organic vapor canister, or any appropriate escape-type, SCBA.

9. PHYSICAL and CHEMICAL PROPERTIES

FORM: Smooth paste.
MOLECULAR WEIGHT: Mixture.
ODOR: Mildly solvent-like.
SPECIFIC GRAVITY: 1.3
RELATIVE VAPOR DENSITY (air = 1): Heavier than air.
SOLUBILITY IN WATER: Insoluble.
MELTING/FREEZING POINT: Not available.
VOC (less water and exempt): 98 g/L
FLASH POINT: > 104°C (> 220°F)
PH: Not available.
FLAMMABLE LIMITS (in air by volume, %): Lower: Not established; Upper: Not established.
COEFFICIENT OF OIL/WATER DISTRIBUTION (PARTITION COEFFICIENT): Not established.

HOW TO DETECT THIS SUBSTANCE (IDENTIFYING PROPERTIES): The appearance of this product may act as an identifying property in the event of an accidental release.

10. STABILITY and REACTIVITY

CHEMICAL STABILITY: Stable under normal circumstances of use and handling. Methylethyl Ketoxime is generated during curing.
CONDITIONS TO AVOID: Avoid contact with incompatible chemicals and exposure to extreme temperatures.
INCOMPATIBLE MATERIALS: This product is not compatible with strong acids and oxidizers and may have some compatibility with aluminum, ammonium salts and mercury/hydrogen mixtures, potassium chlorate, nitrogen tetroxide, tetranitromethane, silver perchlorate, sulfur dichloride, sulfuric acid, uranium hexafluoride.
HAZARDOUS DECOMPOSITION PRODUCTS: Combustion: Thermal decomposition of this product can generate dusts, irritating fumes, and toxic gases (e.g., carbon, nitrogen and silicone oxides, aldehydes, formaldehyde, various hydrocarbons). Hydrolysis: Methylethyl ketoxime.
Possibility of Hazardous Reactions/Polymerization: This product is not expected to undergo hazardous polymerization, decomposition, condensation, or self-reactivity.

11. TOXICOLOGICAL INFORMATION

POTENTIAL HEALTH EFFECTS: The most significant routes of occupational exposure are inhalation and contact with skin and eyes. The symptoms of exposure to this product are as follows:

CONTACT WITH SKIN or EYES: Contact may mildly irritate the skin and cause redness and discomfort. Prolonged or repeated skin contact may cause dermatitis (dry, red skin). Eye contact may cause redness, pain, and tearing. Skin contact may cause sensitization and allergic reaction in susceptible individuals. Symptoms may include redness, itching and rash.
11. TOXICOLOGICAL INFORMATION (Continued)

SKIN ABSORPTION: Prolonged skin contact may cause adverse systemic toxicity by skin absorption as described under ingestion or inhalation, as well as sensitization and allergic reaction to the skin.

INGESTION: If the product is swallowed, it can irritate the mouth, throat, and other tissues of the gastro-intestinal system or cause burns and may cause nausea, vomiting, and diarrhea as well as adverse effects on the central nervous system. Symptoms may include dizziness, vomiting and incoordination. Ingestion of large amounts may be harmful and cause systemic toxicity.

INHALATION: Exposure to vapors of this product generated during curing, or dusts of this product generated during use may mildly irritate the respiratory tract and cause coughing and sneezing. Vapors or fumes when used in an enclosed space, if heated or during curing may cause irritation of the respiratory system and adverse central nervous system effects. Symptoms include nose irritation, dry or sore or burning throat, runny nose, shortness of breath, dizziness, incoordination. Liver and kidney damage as well as disturbances to the heart have been reported from over-exposure to high concentration of vapors of Toluene.

INJECTION: Accidental injection of this product (e.g. puncture with a contaminated object) may cause burning, redness, and swelling in addition to the wound.

TARGET ORGANS: Acute: Skin, eyes, respiratory and central nervous systems. Chronic: Skin, respiratory system, liver and kidneys.

CHRONIC EFFECTS: Prolonged or repeated skin contact may cause dermatitis (dry, red skin), sensitization to the skin or adverse liver or kidney effects.

TOXICITY DATA: There are currently no toxicity data available for this product; the following toxicology information is available for components greater than 1% in concentration. Due to the large amount of data for the Toluene component, only human data, LD50 Oral-Rat or Mouse, LD50 Skin-Rat or Mouse, LC50 Inhalation-Rat or Mouse and skin irritation data are provided in this SDS. Contact Pecora for more information.

CALCIUM CARBONATE, NATURAL:

- TCLo (Inhalation-Rat) = 84 mg/m³/4 hours/40 weeks- intermittent: Lungs, Thorax, or Respiration: fibrosis (interstitial); Liver: other changes; Kidney/Urinary Bladder: other changes
- TCLo (Inhalation-Rat) = 250 mg/m³/2 hours/24 weeks- intermittent: Lungs, Thorax, or Respiration: fibrosis, focal (pneumoconiosis)

CALCIUM CARBONATE, SYNTHETIC:

- Standard Draize Test (Skin-Rabbit) 500 mg/24 hours: Moderate
- Standard Draize Test (Eye-Rabbit) 750 µg/24 hours: Severe

TOLUENE:

- LC50 (Inhalation-Rat) > 8000 mg/m³, 4 hours
- LD50 (Dermal-Rat) > 4000 mg/kg
- LD50 (Oral-Rat) > 8000 mg/kg

PROPRIETARY CROSSLINKER:

- TLDLo (Oral-Rat) = 7280 mg/kg/female 6–19 days after conception; Reproductive: Effects on Embryo or Fetus: fetotoxicity (except death, e.g., stunted fetus)
- TCLo (Inhalation, rat) = 1000 mg/m³/24 hours/female 1–8 days after conception; Reproductive: Specific Developmental Abnormalities: musculoskeletal system
- TLo (Injection, rat) = 2000 ppm/6 hours/female 7–17 days after conception; Reproductive: Maternal Effects: other effects Reproductive: Effects on Newborn: physical

CARCINOGENIC POTENTIAL: The following table summarizes the carcinogenicity listing for the components of this product.

“NO” indicates that the substance is not considered to be or suspected to be a carcinogen by the listed agency, see section 16 for definitions of other ratings.

<table>
<thead>
<tr>
<th>CHEMICAL</th>
<th>EPA</th>
<th>IARC</th>
<th>NTP</th>
<th>NIOSH</th>
<th>ACGIH</th>
<th>OSHA</th>
<th>PROP 65</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proprietary Crosslinker</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Calcium Carbonate (Natural &amp; Synthetic)</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Proprietary Resin</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Polydimethyl Disiloxane</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Quartz</td>
<td>No</td>
<td>1</td>
<td>K</td>
<td>Ca</td>
<td>A2</td>
<td>No</td>
<td>Yes (airborne, unbound particles of respirable size)</td>
</tr>
<tr>
<td>Toluene</td>
<td>3</td>
<td>II</td>
<td>No</td>
<td>No</td>
<td>A4</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>


IRRITANCY OF PRODUCT: This product may mildly irritate contaminated tissue, especially if contact is prolonged. Eye irritation may be more pronounced. Inhalation of fumes can cause irritation of the respiratory system.

SENSITIZATION TO THE PRODUCT: This product may cause skin sensitization and allergic reaction in susceptible individuals due to the Proprietary Crosslinker component.

TOXICOLOGICAL SYNERGISTIC PRODUCTS: Combined exposure to toluene and noise, Toluene and n-hexane, Toluene and aspirin or toluene, ethyl benzene and noise has caused a synergistic loss of hearing in animal studies. Increased hearing loss has also been observed in workers in some studies following long-term exposure to Toluene and noise. There have been several studies in humans and animals on the interaction of Xylenes with drugs, alcohol and other solvents. Xylene has a high potential to interact with other compounds because it increases metabolic enzymes in the liver and decreases metabolic enzymes in the lungs. In general, exposure to related solvents, such as benzene, toluene and ethanol (alcohol) slows the rate of clearance of Xylenes from the body, thus enhancing its toxic effects.

REPRODUCTIVE TOXICITY INFORMATION: This product has not been tested for reproductive toxicity. The following information is available for some components.

Mutagenicity: Both positive and negative results have been obtained in studies for various mutagenic effects in peripheral blood lymphocytes of workers exposed to Toluene; mutagenicity cannot be determined.
11. TOXICOLOGICAL INFORMATION (Continued)

REPRODUCTIVE TOXICITY INFORMATION (continued):
Embryotoxicity/Teratogenicity: Toluene is a developmental toxicity hazard, based on information obtained from animal studies. Fetotoxicity (reduced fetal weight), behavioral effects (effects on learning and memory) and hearing loss (in males) have been observed in the offspring of rats exposed by inhalation to 1200 or 1800 ppm toluene. These effects were observed in the absence of maternal toxicity. Xylene (mixed isomers) are considered fetotoxic in humans, based on observations of reduced fetal weight, delayed ossification and persistent behavioral effects in animal studies in the absence of maternal toxicity. Other developmental effects have been observed in animal studies in the presence of maternal toxicity. Several human population studies have suggested a link between exposure to organic solvents (including xylene) and increased occurrence of miscarriages or birth defects in children. However, in the majority of cases, there was exposure to a variety of solvents at the same time, exposures were ill-defined, and the number of cases examined was small.

Reproductive Toxicity: No information is available.

BIOLICAL EXPOSURES INDICES (BEIs): Currently, the following BEI’s have been established for some components.

<table>
<thead>
<tr>
<th>CHEMICAL:</th>
<th>SAMPLING TIME</th>
<th>BEI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toluene</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Toluene in Blood</td>
<td>Prior to Last Shift of Workweek</td>
<td>0.02 mg/L</td>
</tr>
<tr>
<td>• Toluene in Urine</td>
<td>End of shift</td>
<td>0.03 mg/L</td>
</tr>
<tr>
<td>• o-Cresol in urine</td>
<td>End of shift</td>
<td>0.3 mg/L/creatin</td>
</tr>
</tbody>
</table>

12. ECOLOGICAL INFORMATION

ALL WORK PRACTICES MUST BE AIMED AT ELIMINATING ENVIRONMENTAL CONTAMINATION.

MOBILITY: This product has not been tested for mobility in soil. The following information is available for the main solvent components.

TOLUENE: In association with clay minerals, Toluene's adsorption is inversely proportional to the pH of the soil. The reported Koc's are 178 in a sandy soil and as 37 (Wendover silty loam), 160 (Grimsby silt loam), 160 (Vaudreuil sandy loam) and 46 (sandy soil), 166 in lake sediment. According to a classification scheme, this Koc data suggests that Toluene is expected to have high to moderate mobility in soil. Also, based on a classification scheme, Koc values of 37-178 measured in soil indicates that Toluene is expected to have high to moderate mobility in soil.

PERSISTENCE AND BIODEGRADABILITY: This product has not been tested for persistence or biodegradability. The following information is available for the main solvent components.

TOLUENE: Volatilization of Toluene from moist soil surfaces is expected to be an important fate process given a Henry's Law constant of 6.64X10-3 atm-cu m/mole. This compound may volatilize from dry soil surfaces based on a vapor pressure of 28.4 mm Hg at 25°C. Complete biodegradation of Toluene was observed in lab microcosm tests during a 40 hour incubation period using soils previously exposed to this material. The biodegradation half-life in various soils was reported as several hours to 71 days. Volatilization from water surfaces is expected based upon a Henry's Law constant of 6.64X10-3 atm-cu m/mole. Using this Henry's Law constant and an estimation method, volatilization half-lives for a model river and model lake are 1 hour and 4 days, respectively. The half-life of Toluene in this material in aerobic and anaerobic water was reported as 4 and 56 days, respectively. According to a model of gas/particle partitioning of semi-volatile organic compounds in the atmosphere, Toluene, which has a vapor pressure of 28.4 mm Hg at 25°C, is expected to exist solely as a vapor in the ambient atmosphere. Vapor-phase material is degraded in the atmosphere by reaction with photochemically-produced hydroxyl radicals, nitrate radicals and ozone molecules. The half-life for the reaction with hydroxyl radicals is estimated to be 3 days, calculated from its rate constant of 5.96X10-12 cu cm/molecule-sec at 25°C. The half-life for the nighttime reaction with nitrate radicals is estimated as 491 days calculated from its rate constant of 6.8X10-17 cu cm/molecule-sec at 25°C. The half-life for the reaction with ozone is estimated as 27,950 days calculated from its rate constant of 4.1X10-22 cu cm/molecule-sec at 25°C.

BIO-ACCUMULATION POTENTIAL: This product has not been tested for bio-accumulation potential. The BCF of the Toluene component in eels is 13 and in golden ide 90. The calculated BCF for Stearic Acid is 1.1x10+6 is quite high, indicating bio-concentration potential for this compound.

ECOTOXICITY: This product has not been tested for aquatic or animal toxicity. Although no data is available, under the Global Harmonization Standard, the Proprietary Crosslinker component is classified as having chronic aquatic toxicity. The following data are for the Toluene component. Only select data are given due to the large amount of data available. Contact Pecora for more information.

TOLUENE: EC50 (Daphnia magna) 48 hours = 11.5 mg/L
LC50 (Myciophorus baukii) 96 hours = 86 mg/L
LC50 (goldfish) 24 hours = 58 mg/L
LC50 (fathead) 24-96 hours = 24-56 mg/L
LC50 (Pimephales promelas 30 days) 96 hours = 34-42 mg/L
LC50 (Lepomis macrochirus) 96 hours = 13 mg/L

TOLUENE (continued): EC50 (Oncorhyncus kisutch) 96 hours = 5.5 mg/L
EC50 (Daphnia magna) 24 hours = 270 mg/L
EC50 (Daphnia magna) 48 hours = 15 mg/L
EC50 (Pimephales promelas) 32 days = 6 mg/L (growth inhibition)
EC50 (Oncorhyncus kisutch) 40 days = 2.8 mg/L (growth inhibition)

OTHER ADVERSE EFFECTS: This material is not expected to have any ozone depletion potential.

ENVIRONMENTAL EXPOSURE CONTROLS: Controls should be engineered to prevent release to the environment, including procedures to prevent spills, atmospheric release and release to waterways.

13. DISPOSAL CONSIDERATIONS

PREPARING WASTES FOR DISPOSAL: As supplied, this product would not be a hazardous waste as defined by U.S. federal regulation (40 CFR 261) if discarded or disposed. State and local regulations may differ from federal regulations. The generator of the waste is responsible for proper waste determination and management.

U.S. EPA WASTE NUMBER: Not applicable.

14. TRANSPORTATION INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION: This product is NOT classified as Dangerous Goods, per U.S. DOT regulations, under 49 CFR 172.101.

TRANSPORT CANADA TRANSPORTATION OF DANGEROUS GOODS REGULATIONS: This product is NOT classified as Dangerous Goods, per regulations of Transport Canada.

INTERNATIONAL AIR TRANSPORT ASSOCIATION SHIPPING INFORMATION (IATA): This product is NOT classified as dangerous goods, per the International Air Transport Association.

INTERNATIONAL MARITIME ORGANIZATION SHIPPING INFORMATION (IMO): This product is not classified as dangerous goods, per the International Maritime Organization.
15. REGULATORY INFORMATION

ADDITIONAL U.S. REGULATIONS:

U.S. SARA REPORTING REQUIREMENTS: The following components of this product are subject to the reporting requirements of Sections 302, 304, and 313 of Title III of the Superfund Amendments and Reauthorization Act.

<table>
<thead>
<tr>
<th>CHEMICAL</th>
<th>SECTION 302 EHS (TPQ) (40 CFR 355; Appendix A)</th>
<th>SECTION 304 RQ (40 CFR Table 302.4)</th>
<th>SECTION 313 TRI (threshold) (40 CFR 372.65)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toluene</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

U.S. SARA HAZARD CATEGORIES (SECTION 311/312, 40 CFR 370-21): ACUTE: Yes; CHRONIC: Yes; FIRE: No; REACTIVE: No; SUDDEN RELEASE: No

U.S. TSCA INVENTORY STATUS: All components of this product are in compliance with the inventory listing requirements of the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

U.S. CERCLA REPORTABLE QUANTITY (RQ): Toluene = 1000 lb (454 kg);
U.S. CLEAN AIR ACT (CA 112r) THRESHOLD QUANTITY (TQ): Not applicable.

OTHER U.S. FEDERAL REGULATIONS: Not applicable.

CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT (PROPOSITION 65): The Toluene component is on the California Proposition 65 lists. WARNING: This product contains a chemical known to the State of California to cause developmental harm. The trace Quartz component (airborne, unbound particles of respirable size) is found on the Proposition 65 List of chemicals known to the state to cause cancer. Due to the form of the product, the Proposition 65 warning is not applicable to the Quartz in this product.

ADDITIONAL CANADIAN REGULATIONS:

CANADIAN DSL/NDSL INVENTORY STATUS: The components of this product are listed on the DSL Inventory.

CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA) PRIORITIES SUBSTANCES LISTS: The Toluene component is on the CEPA Priority Substances 1 list, not considered as "TOXIC" under Section 64 of CEPA.

CANADIAN WHMIS REGULATIONS: This product is classified as a Controlled Product, Hazard Class D2B (Immediate Acute Toxicity/Irritation & Sensitization, Reproductive Toxin) as per the Controlled Product Regulations.

ADDITIONAL MEXICAN WORKPLACE REGULATIONS: MEXICAN WORKPLACE REGULATIONS (NOM-018-STPS-2000): This product is not classified as hazardous.

16. OTHER INFORMATION

WARNINGS (per ANSI Z129.1): WARNING! COMBUSTIBLE LIQUID. MAY CAUSE EYE, SKIN, AND RESPIRATORY TRACT IRRITATION, INHALATION OF FUMES MAY CAUSE ADVERSE EFFECTS ON THE CENTRAL NERVOUS SYSTEM, ESPECIALLY IF EXPOSURE IS PROLONGED. MAY CAUSE SKIN SENSITIZATION AND ALLERGIC REACTION IN SUSCEPTIBLE INDIVIDUALS. CONTAINS COMPOUNDS THAT ARE SUSPECT CARCINOGENS AND A COMPOUND THAT IS A REPRODUCTIVE TOXIN. CONTAINS COMPOUND THAT MAY CAUSE CHRONIC AQUATIC ADVERSE EFFECTS. Avoid contact with eyes, skin, and clothing. Avoid breathing fumes, dusts, vapors or mist. Do not taste or swallow. Wash thoroughly after handling. Keep container tightly closed. Use only with adequate ventilation. Keep away from heat and flame. Wear gloves, eye protection, respiratory protection, and appropriate body protection. FIRST-AID: In case of contact, immediately flush skin and eyes with plenty of water. Remove contaminated clothing and shoes. Get medical attention if irritation develops or persists. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. If swallowed, do not induce vomiting. Get medical attention. IN CASE OF FIRE: Use water fog, foam, dry chemical, or CO₂. IN CASE OF SPILL: Absorb spilled product with polypads or other suitable absorbing material. Place all spill residue in an appropriate container and seal. Dispose of in accordance with U.S. Federal, State, and local hazardous waste disposal regulations and those of Canada.

GLOBAL HARMONIZATION LABELING AND CLASSIFICATION: Classified in accordance with the Global Harmonization Standard.

Classification: Flammable Liquid Category 4, Reproductive Toxicity Category 2, Acute Oral Toxicity Category 5, Skin Irritation Category 3, Eye Irritation Category 2B, Specific Target Organ Toxicity (Inhalation-Respiratory Irritation) Single Exposure Category 3, Skin Sensitization Category 1, Aquatic Chronic Toxicity Category 4

Signal Word: Warning


Precautionary Statements:


Response: P370 + P378: In case of fire: Use materials appropriate for surrounding fire for extinction. P308 + P313: If exposed or concerned: Get medical advice/attention. P332 + P313: If skin irritation occurs, get medical attention. P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. P330 + P340: If inhaled, remove victim to fresh air and keep at rest in a position comfortable for breathing.

P312: Call a POISON CENTER or doctor if you feel unwell. P321: Specific treatment (remove from exposure and treat symptoms). Refer to other portions of precautionary text on this label, SDS or other product information sheets, as appropriate.
DEFINITIONS OF TERMS

A large number of abbreviations and acronyms appear on a SDS. Some of these, which are commonly used, include:

KEY ACRONYMS:

CEILING LEVEL: The concentration that shall not be exceeded during any part of the working exposure.

DFG MAKs: Federal Republic of Germany Maximum Concentration Values in the workplace. Exposure limits are given as TWA (Time Weighted Average) and IDLH (Immediately Dangerous to Life and Health) values.

DFG MAK Germ Cell Mutagen Categories: Category 1: Germ cell mutations that have been shown to increase the mutation frequency in the progeny of exposed humans. Category 2: Germ cell mutations that have been shown to increase the mutation frequency in male germ cells of species that have been shown to induce genetic damage in germ cells of human, or which produce mutagenic effects in somatic cells of mammals in vivo and have been shown to reach the germ cells in an active form. Substances that are suspected of being germ cell mutagens because of their genotoxic effects in mammalian somatic cell in vivo, in exceptional cases, for substances for which there is no in vivo data, but that are clearly mutagenic in vitro and structurally related to known in vitro mutagens. Category 4: Carcinogenic substances that are those with non-genotoxic mechanisms of action. Definition, germ cell mutations are genotoxic. Therefore, a Category 4 for germ cell mutagens cannot apply. At some time in the future, it is conceivable that a Category 4 could be established for genotoxic substances with primary targets other than DNA (e.g. purely aneugenic substances) if research results make this seem sensible.

IDLH: Immediately Dangerous to Life and Health. This level represents a concentration from which one can escape within 30 minutes without suffering a disabling or permanent injury.

LOQ: Limit of Quantitation.

NE: Not Established. When no exposure guidelines are established, an entry of NE is made for reference.

NIOSH CEC: The exposure that shall not be exceeded during any part of the working day. If instantaneous monitoring is not feasible, the ceiling shall be assumed as a 15-minute TWA exposure (unless otherwise specified by other TWA criteria) and kept at or below the TWA value.

NIOSH RELs: NIOSH’s Recommended Exposure Limits.

PEL: OSHA’s Permissible Exposure Limits. This exposure value means exactly the same as a TLV, except that it is enforceable by OSHA. The OSHA Permissible Exposure Limits are based in the 1989 PELs and the June, 1993 Air Contaminants Rule (Federal Register: 58: 35338-35351 and 58: 40191). Both the current PELs and the vacated PELs are indicated. The phrase, “Vacated 1989 PEL” is placed next to the PEL that was vacated.

PPE: Personal Protective Equipment.

Pyrophorics: Materials that ignite spontaneously when exposed to air at a temperature of 54.4°C (130°F) or below OSHA definition.

Risk Group Classification: A: Risk of damage to the developing embryo or fetus has been unequivocally demonstrated. Exposure of pregnant women can lead to damage of the developing organism, even when MAK and BAT (Biological Tolerance Value for Working Materials) values are observed. Group 2: Currently available information indicates a risk of damage to the developing embryo or fetus must be considered to be probable. Damage to the developing organism cannot be excluded when pregnant women are exposed, even when MAK and BAT values are observed. Group C: There is no reason to fear a risk of damage to the developing embryo or fetus when MAK and BAT values are observed. Group 3: This rating is given to substances that cause damage to the developing embryo or fetus when MAK and BAT values are observed.

Risk Group Classification: Group A: Germ cell mutagens cannot apply. At some time in the future, it is conceivable that a Category 4 could be established for genotoxic substances with primary targets other than DNA (e.g. purely aneugenic substances) if research results make this seem sensible. Group B: Germ cell mutations are genotoxic. Therefore, a Category 4 for germ cell mutagens cannot apply. At some time in the future, it is conceivable that a Category 4 could be established for genotoxic substances with primary targets other than DNA (e.g. purely aneugenic substances) if research results make this seem sensible.

SILK: Skin Irritation

SKIN: Use when there is a danger of cutaneous absorption.

STEL: Short Term Exposure Limit, usually a 15-minute time-weighted average (TWA) exposure that should not be exceeded at any time during a workday, even if the 8-hour TWA is within the TLV-TWA, REL-TWA or REL-TWA.

TLV: Threshold Limit Value. An airborne concentration of a substance that represents conditions under which it is generally believed that nearly all workers may be repeatedly exposed without adverse effect. The duration must be considered, including the 8-hour.

TWA: Time Weighted Average, exposure concentration for a conventional 8-hour (TLV, PEL) or up to a 10-hour (REL) workday and a 40-hour workweek.

WEL: Workplace Environmental Exposure Limits from the ACGIH.

HAZARDOUS MATERIALS IDENTIFICATION SYSTEM HAZARD RATINGS:

This rating system was developed by the National Paint and Coating Association and has been adopted by industry to identify the degree of chemical hazards.

HEALTH HAZARD. 0 Minimal Hazard: No significant health risk, irritation of skin or eyes not anticipated.

1a) Type A Irritation: Minor eye or skin irritation. No more than 10% of the workforce may be affected. Minor eye irritation may occur, irritation of the eyes or skin may cause temporary malfunction by interfering with vision or ability to perform tasks that requires or involves the use of vision.

1b) Type B Irritation: Essentially non-irritating, minimal effects clearing in <24 hours. Mechanical irritation may occur. Dose = 0. Oral Toxicity LD₅₀ Rat = > 5000 mg/kg; Dermal Toxicity LD₅₀ Rat or Rabbit > 2000 mg/kg; Inhalation Toxicity 4-hr Rat or Rabbit > 2000 ppm.

2) Severe Irritation: Slightly irritating, but recoverable within 24 hours. Minor eye irritation may occur, irritation of the eyes or skin may cause temporary malfunction by interfering with vision or ability to perform tasks that requires or involves the use of vision. Dose = 0. Oral Toxicity LD₅₀ Rat = > 5000 mg/kg; Dermal Toxicity LD₅₀ Rat or Rabbit > 1000– 2000 mg/kg; Inhalation Toxicity 4-hr Rat or Rabbit > 20–200 mg/kg.

2A) Moderate Irritation: Temporary or transitory irritation may affect the CNS; Skin Irritation: Slightly irritating, irritant, sensitizing. Dose = 0. Oral Toxicity LD₅₀ Rat = > 20–200 mg/kg; Dermal Toxicity LD₅₀ Rat or Rabbit > 50–500 mg/kg; Inhalation Toxicity 4-hr Rat or Rabbit > 5–50 mg/L.

3) Severe Irritation: Irritants that cause irreversible damages to ocular or respiratory tissues; corneal involvement or irritation persisting for more than 21 days. Dose = 0. Oral Toxicity LD₅₀ Rat or Rabbit > 5–50 mg/kg; Dermal Toxicity LD₅₀ Rat or Rabbit > 20–200 mg/kg; Inhalation Toxicity 4-hr Rat or Rabbit > 20–200 mg/kg.

3A) Moderate Ocular Irritation: Slightly irritating, but recoverable within 24 hours. Minor eye irritation may occur, irritation of the eyes or skin may cause temporary malfunction by interfering with vision or ability to perform tasks that requires or involves the use of vision. Dose = 0. Oral Toxicity LD₅₀ Rat = > 20–200 mg/kg; Dermal Toxicity LD₅₀ Rat or Rabbit = > 50–500 mg/kg; Inhalation Toxicity 4-hr Rat or Rabbit > 5–50 mg/L.

Hazardous Materials Identification System HAZARD RATINGS: (continued)

1b) Type B Irritation: Essentially non-irritating, minimal effects clearing in <24 hours. Mechanical irritation may occur. Dose = 0. Oral Toxicity LD₅₀ Rat = > 5000 mg/kg; Dermal Toxicity LD₅₀ Rat or Rabbit > 2000 mg/kg; Inhalation Toxicity 4-hr Rat or Rabbit > 2000 ppm.

2) Severe Irritation: Slightly irritating, but recoverable within 24 hours. Minor eye irritation may occur, irritation of the eyes or skin may cause temporary malfunction by interfering with vision or ability to perform tasks that requires or involves the use of vision. Dose = 0. Oral Toxicity LD₅₀ Rat = > 20–200 mg/kg; Dermal Toxicity LD₅₀ Rat or Rabbit > 50–500 mg/kg; Inhalation Toxicity 4-hr Rat or Rabbit > 5–50 mg/L.

3) Severe Irritation: Irritants that cause irreversible damages to ocular or respiratory tissues; corneal involvement or irritation persisting for more than 21 days. Dose = 0. Oral Toxicity LD₅₀ Rat or Rabbit > 5–50 mg/kg; Dermal Toxicity LD₅₀ Rat or Rabbit > 20–200 mg/kg; Inhalation Toxicity 4-hr Rat or Rabbit > 20–200 mg/kg.

3A) Moderate Ocular Irritation: Slightly irritating, but recoverable within 24 hours. Minor eye irritation may occur, irritation of the eyes or skin may cause temporary malfunction by interfering with vision or ability to perform tasks that requires or involves the use of vision. Dose = 0. Oral Toxicity LD₅₀ Rat = > 20–200 mg/kg; Dermal Toxicity LD₅₀ Rat or Rabbit = > 50–500 mg/kg; Inhalation Toxicity 4-hr Rat or Rabbit > 5–50 mg/L.

4) Severe Irritation: Slightly irritating, but recoverable within 24 hours. Minor eye irritation may occur, irritation of the eyes or skin may cause temporary malfunction by interfering with vision or ability to perform tasks that requires or involves the use of vision.

4A) Moderate Ocular Irritation: Slightly irritating, but recoverable within 24 hours. Minor eye irritation may occur, irritation of the eyes or skin may cause temporary malfunction by interfering with vision or ability to perform tasks that requires or involves the use of vision.

5) Severe Irritation: Irritants that cause irreversible damages to ocular or respiratory tissues; corneal involvement or irritation persisting for more than 21 days. Dose = 0. Oral Toxicity LD₅₀ Rat or Rabbit > 5–50 mg/kg; Dermal Toxicity LD₅₀ Rat or Rabbit > 20–200 mg/kg; Inhalation Toxicity 4-hr Rat or Rabbit > 20–200 mg/kg.

6) Severe Irritation: Irritants that cause irreversible damages to ocular or respiratory tissues; corneal involvement or irritation persisting for more than 21 days. Dose = 0. Oral Toxicity LD₅₀ Rat or Rabbit > 5–50 mg/kg; Dermal Toxicity LD₅₀ Rat or Rabbit > 20–200 mg/kg; Inhalation Toxicity 4-hr Rat or Rabbit > 20–200 mg/kg.
HAZARDOUS MATERIALS IDENTIFICATION SYSTEM HAZARD RATINGS (continued):

PHYSICAL HAZARD: continued (2): Oxidizers. Group II oxidizers. Solids: any material that, either in combination tested, exhibits a mean burning time of less than or equal to the mean burning time of a 1.3 sodium chloride solution (40%) and a cellulose mixture and the criteria for Packing Group II are not met. Liquid oxidizers: substances that, either in combination tested, exhibit an explosion pressure of less than or equal to 2 psig at the minimum pressure, but have a low potential (or low risk) for significant heat generation or explosion. Substances that readily form peroxides upon exposure to air or oxygen at room temperature. Water Reactivity: Materials that may form explosive peroxides upon exposure to water. Organic Peroxides: Substances that may decompose, self-react or undergo exothermic or explosive reaction, but require a strong initiating source or must be heated under confinement before initiation; or materials that react explosively with water. Explosives: Division 1.3 explosives. Explosive substances that have a fire or heat hazard but not a mass hazard, or a mass hazard of less than 1 kg and may form explosive peroxides upon exposure to air or oxygen at room temperature; such that any liquid oxidizer that will polymerize, decompose, condense, or self-react at ambient temperature and/or pressure and have a moderate potential (or moderate risk) to cause significant heat generation or explosion. Unstable Reactives: Substances that may polymerize, decompose, condense, or self-react at ambient temperature and/or pressure and have a moderate potential (or moderate risk) to cause significant heat generation or explosion. Oxidizers: Materials that are readily capable of detonation or explosive decomposition at normal temperature and pressure. Explosives: Division 1.1 & 1.2 explosives. Explosive substances that are capable of detonation or explosive decomposition at normal temperature and pressure, but have a low potential (or low risk) to cause significant heat generation or explosion. Unstable Reactives: Substances that may polymerize, decompose, condense, or self-react at ambient temperature and/or pressure and have a moderate potential (or moderate risk) to cause significant heat generation or explosion. Oxidizers: Materials that are readily capable of detonation or explosive decomposition at normal temperature and pressure. Explosives: Division 1.1 & 1.2 explosives. Explosive substances that are capable of detonation or explosive decomposition at normal temperature and pressure, but have a low potential (or low risk) to cause significant heat generation or explosion. Unstable Reactives: Substances that may polymerize, decompose, condense, or self-react at ambient temperature and/or pressure and have a moderate potential (or moderate risk) to cause significant heat generation or explosion.

NATIONAL FIRE PROTECTION ASSOCIATION HAZARD RATINGS:

HEALTH HAZARD: Ratings for health concerns would offer less hazardous than that of ordinary combustible materials. Gases and vapors with an LC50 for acute inhalation toxicity greater than 10,000 ppm. Dusts and mists with an LC50 for acute inhalation toxicity greater than 200 mg/L but less than or equal to 1000 mg/L. For LC50 less than or equal to 10 ppm. Dusts and mists with an LC50 for acute inhalation toxicity greater than 4 mg/L but less than or equal to 20 mg/L. Materials that in themselves are capable of detonation or explosive decomposition at normal temperature and pressure and have a moderate potential (or moderate risk) to cause significant heat generation or explosion. Oxidizers: Materials that are readily capable of detonation or explosive decomposition at normal temperature and pressure. Explosives: Division 1.1 & 1.2 explosives. Explosive substances that are capable of detonation or explosive decomposition at normal temperature and pressure, but have a low potential (or low risk) to cause significant heat generation or explosion. Unstable Reactives: Substances that may polymerize, decompose, condense, or self-react at ambient temperature and/or pressure and have a moderate potential (or moderate risk) to cause significant heat generation or explosion.

DEFINITIONS OF TERMS (Continued):

NATIONAL FIRE PROTECTION ASSOCIATION HAZARD RATINGS (continued):

FLAMMABILITY HAZARD: continued: (2): Oxidizers. Group II oxidizers. Solids: any material that, either in combination tested, exhibits a mean burning time of less than or equal to the mean burning time of a 1.3 sodium chloride solution (40%) and a cellulose mixture and the criteria for Packing Group II are not met. Liquid oxidizers: substances that, either in combination tested, exhibit an explosion pressure of less than or equal to 2 psig at the minimum pressure, but have a low potential (or low risk) for significant heat generation or explosion. Substances that readily form peroxides upon exposure to air or oxygen at room temperature. Water Reactivity: Materials that may form explosive peroxides upon exposure to water. Organic Peroxides: Substances that may decompose, self-react or undergo exothermic or explosive reaction, but require a strong initiating source or must be heated under confinement before initiation; or materials that react explosively with water. Explosives: Division 1.3 explosives. Explosive substances that have a fire or heat hazard but not a mass hazard, or a mass hazard of less than 1 kg and may form explosive peroxides upon exposure to air or oxygen at room temperature; such that any liquid oxidizer that will polymerize, decompose, condense, or self-react at ambient temperature and/or pressure and have a moderate potential (or moderate risk) to cause significant heat generation or explosion. Unstable Reactives: Substances that may polymerize, decompose, condense, or self-react at ambient temperature and/or pressure and have a moderate potential (or moderate risk) to cause significant heat generation or explosion. Oxidizers: Materials that are readily capable of detonation or explosive decomposition at normal temperature and pressure. Explosives: Division 1.1 & 1.2 explosives. Explosive substances that are capable of detonation or explosive decomposition at normal temperature and pressure, but have a low potential (or low risk) to cause significant heat generation or explosion. Unstable Reactives: Substances that may polymerize, decompose, condense, or self-react at ambient temperature and/or pressure and have a moderate potential (or moderate risk) to cause significant heat generation or explosion. Oxidizers: Materials that are readily capable of detonation or explosive decomposition at normal temperature and pressure. Explosives: Division 1.1 & 1.2 explosives. Explosive substances that are capable of detonation or explosive decomposition at normal temperature and pressure, but have a low potential (or low risk) to cause significant heat generation or explosion. Unstable Reactives: Substances that may polymerize, decompose, condense, or self-react at ambient temperature and/or pressure and have a moderate potential (or moderate risk) to cause significant heat generation or explosion.

NATIONAL REGULATORY HAZARD RATINGS:

This section explains the limits of various laws and regulations on the material.