1. PRODUCT IDENTIFICATION

IDENTIFICATION of the SUBSTANCE or PREPARATION

<table>
<thead>
<tr>
<th>TRADE NAME (AS LABELED):</th>
<th>Pecora ProPerm VP</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRODUCT DESCRIPTION:</td>
<td>Acrylic Polymer Sealant</td>
</tr>
<tr>
<td>CHEMICAL NAME/CLASS:</td>
<td>Acrylic Polymer and Metal Oxide Mixture</td>
</tr>
<tr>
<td>OTHER MEANS OF IDENTIFICATION/SYNONYMS</td>
<td>None</td>
</tr>
<tr>
<td>RELEVANT USE:</td>
<td>Sealant</td>
</tr>
<tr>
<td>USES ADVISED AGAINST:</td>
<td>Other Than Relevant Use</td>
</tr>
</tbody>
</table>

COMPANY/UNDERTAKING IDENTIFICATION:

<table>
<thead>
<tr>
<th>SUPPLIER/MANUFACTURER’S NAME:</th>
<th>Pecora Corporation</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADDRESS:</td>
<td>165 Wambold Road, Harleysville, PA 19438</td>
</tr>
<tr>
<td>EMERGENCY PHONE:</td>
<td>800-424-9300 (CHEMTREC, 24-hours)</td>
</tr>
<tr>
<td>BUSINESS PHONE:</td>
<td>215-723-6051 (Mon–Fri, 8 AM–5 PM ET)</td>
</tr>
<tr>
<td>PREPARATION DATE:</td>
<td>August 31, 2018</td>
</tr>
<tr>
<td>REVISION DATE:</td>
<td>New</td>
</tr>
</tbody>
</table>

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 product, 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, Canadian WHMIS 2015 and the Global Harmonization-required information is included in appropriate sections based on the Global Harmonization Standard format. This product has been classified in accordance with the hazard criteria of the countries listed above and the SDS contains all the information required by the Canadian WHMIS 2015 [HPR-GHS], the Global Harmonization Standard and OSHA 1910.120.

2. HAZARD IDENTIFICATION


Classification: Carcinogenic Cat. 1, Acute Oral Toxicity Cat. 4, Acute Inhalation Toxicity Cat. 4, Skin Irritation Cat. 2, Eye Irritation Cat. 2A, STOT (Inhalation-Respiratory Irritation) SE Cat. 3, STOT (Lungs) RE Cat. 2, Aquatic Chronic Toxicity Cat. 3

Signal Word: Danger

Hazard Statement Codes: H351, H302 + H332, H315, H319, H335, H373, H412


Hazard Symbols/Pictogram: GHS07, GHS08

EMERGENCY OVERVIEW:

Physical Description: This product is a smooth paste with an acrylic odor that comes in a variety of colors.

Health Hazards: DANGER! May cause eye, skin and respiratory irritation, especially if exposure is prolonged. May be harmful if ingested or inhaled. The Fibrous Glass Oxide component may cause cancer by inhalation. Inhalation of dusts or fibers from this compound can cause damage to the lungs. Contains a trace compound (Crystalline Silica), a known human carcinogen by inhalation of particles. Contains a trace amount of Carbon Black, a suspect carcinogen by inhalation of particles. If dried product produces dusts or particulates through use or handling, carcinogenic and reproductive toxicity hazards may be present. Trace compounds in several pigment mixtures are known human skin sensitizers. Sensitive persons may experience skin sensitization and allergic skin reactions.

Flammability Hazards: This product has not been tested, but is not expected to be flammable. Due to the high level of polymers, dried product may ignite if exposed to direct flame for a prolonged period.

Reactivity Hazards: 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, 1 = Slight, 2 = Moderate, 3 = Serious, 4 = Severe, 5 = Neartoxic, 6 = Toxic, 7 = Very Toxic, 8 = Chronic

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

CANADIAN WHMIS (HPR-GHS) 2015 CLASSIFICATION AND SYMBOLS: See Section 16 for in Classification and Symbols under HPR-GHS 2015.

U.S. OSHA REGULATORY STATUS: This product has a classification under the Global Harmonization Standard, as applied under OSHA regulations, as given earlier in this Section. See Section 16 for full classification details.

Pecora ProPerm VP  Page 1 of 9  August 31, 2018
3. COMPOSITION and INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS #</th>
<th>W/W%</th>
<th>LABEL ELEMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proprietary Acrylic-Based Polymer &amp; Emulsion Mixture</td>
<td>13463-67-7</td>
<td>50.0-65.0</td>
<td>MPG SELF CLASSIFICATION Classification: Not Applicable</td>
</tr>
<tr>
<td>Calcium Carbonate</td>
<td>1317-65-3</td>
<td>10.0-15.0</td>
<td>NOTIFIED EU ECHA CLASSIFICATION Classification: Skin Irritation Cat. 2 Hazard Statement Codes: H315</td>
</tr>
<tr>
<td>Fibrous Glass Oxide</td>
<td>65997-17-3</td>
<td>3.0-7.0</td>
<td>NOTIFIED EU ECHA CLASSIFICATION Classification: Skin Sensitization Cat. 1B Hazard Statement Codes: H315, H335, H336, H410</td>
</tr>
<tr>
<td>Proprietary Aluminum Hydrate</td>
<td></td>
<td>2.0-5.0</td>
<td>NOTIFIED EU ECHA CLASSIFICATION Classification: STOT (Inhalation-Respiratory Irritation) SE Cat. 3 Hazard Statement Codes: H335</td>
</tr>
<tr>
<td>Proprietary Benzoxe Esteres</td>
<td></td>
<td>1.0-4.0</td>
<td>MPG SELF CLASSIFICATION Classification: Not Applicable</td>
</tr>
<tr>
<td>Proprietary Mineral Spirits (contains less than 0.1% benzene)</td>
<td></td>
<td>1.0-3.0</td>
<td>HARMONISED CLASSIFICATION - ANNEX VI OF REGULATION (EC) NO 1272/2008 (CLP REGULATION) Classification: Flammable Liquid Cat. 3, Skin Irritation Cat. 2, STOT (Central Nervous System) SE Cat. 3, Aquatic Chronic Cat. 2 Hazard Statement Codes: H226, H315, H336, H411</td>
</tr>
<tr>
<td>Proprietary Ethylene Glycol</td>
<td></td>
<td>1.0-3.0</td>
<td>HARMONISED CLASSIFICATION - ANNEX VI OF REGULATION (EC) NO 1272/2008 (CLP REGULATION) Classification: Acute Oral Toxicity Cat. 4 Hazard Statement Codes: H302 ADDITIONAL NOTIFIED EU ECHA CLASSIFICATION Classification: STOT (Ocular) Cat. 2 Hazard Statement Codes: H373</td>
</tr>
<tr>
<td>Quartz</td>
<td>14808-60-7</td>
<td>0.1-0.5</td>
<td>INTENDED HARMONISED CLASSIFICATION - ANNEX VI OF REGULATION (EC) NO 1272/2008 (CLP REGULATION) Classification: Carcinogenic Cat. 1B Hazard Statement Codes: H350i ADDITIONAL NOTIFIED EU ECHA CLASSIFICATION Classification: STOT (Various) SE Cat. 2 Hazard Statement Codes: H372</td>
</tr>
</tbody>
</table>

The following are pigments that can be in the product, depending on coloration:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS #</th>
<th>W/W%</th>
<th>LABEL ELEMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Titanium Dioxide</td>
<td>13463-67-7</td>
<td>1.0-4.0</td>
<td>NOTIFIED EU ECHA CLASSIFICATION Classification: Carcinogenic Cat. 2 Hazard Statement Codes: H351i</td>
</tr>
<tr>
<td>Carbon Black Pigment Mixture</td>
<td></td>
<td>0.1-0.5</td>
<td>MPG CLASSIFICATION Classification: Carcinogenic Cat. 2, Eye Damage Cat. 1B Hazard Statement Codes: H351i, H318</td>
</tr>
<tr>
<td>Proprietary Yellow Iron Oxide Pigment Mixture</td>
<td></td>
<td>0.1-0.5%</td>
<td>MPG CLASSIFICATION Classification: Skin Sensitization Cat. 1B, Eye Irritation Cat. 2A Hazard Statement Codes: H317, H319</td>
</tr>
<tr>
<td>Proprietary Red Iron Oxide Pigment Mixture</td>
<td></td>
<td>0.01-0.05%</td>
<td>MPG CLASSIFICATION Classification: Not Applicable</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>Balance</td>
<td>Classification: Not Applicable</td>
<td></td>
</tr>
</tbody>
</table>

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

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 MSDS 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 diurents (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. Persons suffering allergic reactions must seek immediate medical attention.
5. FIRE-FIGHTING MEASURES

**FLASH POINT:** Not applicable.
**AUTOIGNITION:** Not applicable.
**FLAMMABLE LIMITS IN AIR:** Not applicable.

**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 Product: Although not tested, this product is not expected to be flammable. Dried product may ignite if subjected to flame or if highly heated for a prolonged period. 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:** 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. 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.
8. EXPOSURE CONTROLS - PERSONAL PROTECTION (Continued)

EXPOSURE LIMITS/CONTROL PARAMETERS (continued):

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>Acrylic Based-Polymer &amp; Emulsion</td>
<td>Proprietary</td>
<td>NIOSH REL TWA</td>
<td>5 mg/m³ inhalable fraction</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OSHA PEL TWA</td>
<td>15 mg/m³ total dust; 5 mg/m³ respirable fraction</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NIOSH REL TWA</td>
<td>10 mg/m³ total dust; 5 mg/m³ respirable fraction</td>
</tr>
<tr>
<td>Calcium Carbonate</td>
<td>1317-65-3</td>
<td>DFG MAK TWA</td>
<td>15 mg/m³ total dust; 5 mg/m³ respirable fraction</td>
</tr>
<tr>
<td>Carbon Black</td>
<td>1333-86-4</td>
<td>DFG MAK TWA</td>
<td>4 mg/m³ inhalable fraction; 1.5 mg/m³ respirable fraction</td>
</tr>
<tr>
<td>Crystalline Silica/Quartz</td>
<td>14808-60-7</td>
<td>OSHA PEL TWA</td>
<td>3 mg/m³ (inhalable fraction)</td>
</tr>
<tr>
<td>Glycol Ether</td>
<td>Proprietary</td>
<td>NIOSH REL TWA</td>
<td>10 mg/m³ total dust; 5 mg/m³ respirable fraction</td>
</tr>
<tr>
<td>Fibrous Glass Oxides</td>
<td>65997-17-3</td>
<td>OSHA PEL TWA</td>
<td>0.25 mg/m³ respirable fraction</td>
</tr>
<tr>
<td>Iron Oxides</td>
<td>Proprietary</td>
<td>NIOSH REL TWA</td>
<td>30 mg/m³ / % SiO₂ + 2 respirable fraction</td>
</tr>
<tr>
<td>Mineral Spirits</td>
<td>Proprietary</td>
<td>NIOSH REL TWA</td>
<td>2 respirable fraction</td>
</tr>
<tr>
<td>Titanium Dioxide</td>
<td>13463-67-7</td>
<td>OSHA PEL TWA</td>
<td>0.05 mg/m³ respirable dust; See Pocket Guide Appendix A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NIOSH REL &amp; NIOSH STEL</td>
<td>As inhalable dust</td>
</tr>
</tbody>
</table>

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.

Persons who may be exposed to this material should consult the appropriate regulations and standards for further information.

NE = Not Established. (F): Respirable Fibers

9. PHYSICAL and CHEMICAL PROPERTIES

FORM: Smooth paste.
MOLECULAR WEIGHT: Mixture.
ODOR: Acrylic
SPECIFIC GRAVITY (DENSITY): 9.741
RELATIVE VAPOR DENSITY (air = 1): Heavier than air.
THEORETICAL VOL. SOLUBLE: 66.15%
MELTING/FREEZING POINT: < 0°C (< 32°F)
THEORETICAL VOC: 17.53 g/L

COLOR: Variety of colors.
MOLECULAR FORMULA: Mixture.
ODOR THRESHOLD: Not available.
VAPOR PRESSURE, mm Hg @ 20°C: Not established.
EVAPORATION RATE (BuAc = 1): Not determined.
OTHER SOLUBILITIES: Not available.
BOILING POINT: Not established.
THEORETICAL VOC (WATER): 21.39
9. PHYSICAL and CHEMICAL PROPERTIES (Continued)
THEORETICAL PERCENT SOLIDS: 71%
FLASH POINT: Not determined.  
AUTOIGNITION TEMPERATURE: Not established.
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. Product cues upon contact with air.
CONDITIONS TO AVOID: Avoid contact with incompatible chemicals and exposure to extreme temperatures.
INCOMPATIBLE MATERIALS: This product is not compatible with strong acids.
HAZARDOUS DECOMPOSITION PRODUCTS: Combustion: Thermal decomposition of this product can generate dusts, irritating fumes, and toxic gases (e.g., aluminum, calcium, carbon, iron, titanium and metal oxides, hydrocarbons, and acrylic compounds depending on formulation). Hydrolysis: None known.
POSSIBILITY OF HAZARDOUS REACTIONS/POLYMERIZATION: This product is not expected to undergo hazardous polymerization, decomposition, condensation, or self-reactivity. Product slowly cues upon contact with air.

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 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 Absorption: Some of the trace components of this product may be absorbed through intact skin, however, skin absorption is not expected to be a significant route of exposure for this product.
Ingestion: If the product is swallowed, the mouth, throat, and other tissues of the gastro-intestinal system may occur. Ingestion may be harmful and may cause nausea, vomiting, and diarrhea and other systemic effects.
Inhalation: Exposure to vapors of this product generated during curing, or dusts of this product generated during use after curing may mildly irritate the respiratory tract and cause coughing and sneezing. Inhalation may also be harmful and may cause systemic effects. In the event that use or handling produces dusts or particulates, prolonged inhalation may cause reduced lung function.
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 system. Chronic: Skin, blood, reproductive system.
Chronic Effects: Prolonged or repeated skin contact may cause dermatitis (dry, red skin). The Glass Oxide component has shown carcinogenic and reproductive effects and possible adverse effects to the blood due to heavy metal oxides in its composition.

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 large amount of data for components, only Human data, Irritancy data, LD50 Oral-Rat, LD50 Oral-Mouse, LD50 Skin-Rat, LD50 Skin-Rabbit, LC50 Inhalation-Rat, LC50 Inhalation-Mouse and select reproductive toxicity data are provided in this SDS. Contact Pecora for information on additional data.

ACRYLIC POLYMER:
Patch test on human volunteers did not demonstrate sensitization properties.

ALUMINUM HYDRATE:
LDLo (Oral-Child): 79 gm/kg/24 hours: Behavioral: changes in motor activity (specific assay), muscle contraction or spasticity; Musculoskeletal: osteomalacia
LDLo (Oral-Child) 122 gm/kg/4 days: Gastrointestinal: other changes; Nutritional and Gross Metabolism: body temperature increase
LDLo (Oral-Infant) 68040 mg/kg/24 weeks:intermittent: Musculoskeletal: osteoporosis; Nutritional and Gross Metabolic: weight loss or decreased weight gain, changes in phosphorus
LDLo (Oral-Woman) 73912.5 mg/kg/26 weeks:intermittent: Blood: changes in serum composition (e.g. TP, bilirubin, cholesterol); Musculoskeletal: osteoporosis; Nutritional and Gross: Metabolic: changes in phosphorus
LDLo (Oral-Woman) 84 mg/kg: female 1-40 week(s) after conception: Reproductive: Effects on Newborn: physical
LDLo (Unreported-Infant) 39 mg/kg/24 hours:intermittent: Musculoskeletal: osteomalacia
CALCIUM CARBONATE:
Skin Irritancy (rabbit) = 500 mg/24 hours; moderate
Eye Irritancy (rabbit) = 750 µg/24 hours; severe
LDLo (oral, rat) = 6450 mg/kg

PROPRIETARY GLYCOL ETHER:
Standard Draize Test (Eye-Rabbit) 0.012%/3 days
Standard Draize Test (Eye-Rabbit) 500 µg/24 hours: Mild
Standard Draize Test (Eye-Rabbit) 100 mg/1 hour: Mild
Standard Draize Test (Eye-Rabbit) 0.012 ppm/3 days
Standard Draize Test (Eye-Rabbit) 1440 mg/6 hours: Moderate
Open Irritation Test (Skin-Rabbit) 555 mg: Mild
LDLo (Oral-Man) 24 mg/kg: Brain and Coverings: recordings from specific areas of CNS; Sense Organs and Special Senses (Eye): mydriasis (pupillary dilation); Lungs, Thorax, or Respiration: other changes
LDLo (Oral-Man) 15 gm/kg: Peripheral Nerve and Sensation: sensory change involving peripheral nerve; Gastrointestinal: ulceration or bleeding from small intestine; Kidney/Urinary/Bladder: renal function tests depressed
LDLo (Oral-Man) 1195 mg/kg: Peripheral Nerve and Sensation: sensory change involving peripheral nerve; Kidney/Urinary/Bladder: renal function tests depressed

PROPRIETARY GLYCOL ETHER (continued):
LDLo (Oral-Man) 24 gm/kg: Brain and Coverings: recordings from specific areas of CNS; Brain and Coverings: other degenerative changes
LDLo (Oral-Man) 24 gm/kg: Brain and Coverings: other degenerative changes; Behavioral: ataxia, coma
LDLo (Oral-Man) 16 gm/kg: Behavioral: coma; Kidney/Urinary/Bladder: renal function tests depressed; Nutritional and Gross Metabolic: metabolic acidosis
LDLo (Oral-Child) 5500 mg/kg: Behavioral: general anesthetic; Lungs, Thorax, or Respiration: respiratory stimulation; Kidney/Urinary/Bladder: other changes
LDLo (Oral-Human) 786 mg/kg: Behavioral: convulsions or effect on seizure threshold, coma; Gastrointestinal: hypermotility, diarrhea
LDLo (Oral-Human) 398 mg/kg: Behavioral: headache; Gastrointestinal: nausea or vomiting; Liver: other changes
LDLo (Oral-Human) 1.43 mL/kg
LDLo (Unreported-Man) 1637 mg/kg
LDLo (Unreported-Human) 70 mg/kg: Cardiac: change in rate; Lungs, Thorax, or Respiration: acute pulmonary edema; Liver: other changes
TCLo (Inhalation-Human) 140 mg/m³/30 days:intermittent: Lungs, Thorax, or Respiration: cough
TCLo (Inhalation-Human) 22 mg/m³: Kidney/Urinary/Bladder: proteinuria
TCLo (Inhalation-Human) 10,000 mg/m³: Sense Organs and Special Senses (Eye): lacrimation; Lungs, Thorax, or Respiration: cough, other changes
DNA Inhibition (Human Lymphocyte) 320 mmol/L
LDLo (Oral-Rat): 4700 mg/kg
LDLo (Oral-Mouse) 5500 mg/kg
LDLo (Oral-Dog) 5500 mg/kg; Kidney/Urinary/Bladder: other changes
LDLo (Oral-Cat) 1650 mg/kg; Kidney/Urinary/Bladder: other changes
LDLo (Oral-Cat) 2000 mg/kg
LDLo (Oral-Guinea Pig) 6610 mg/kg: Behavioral: somnolence (general depressed activity); Gastrointestinal: other changes; Kidney/Urinary/Bladder: other changes
LDLo (Oral-Guinea Pig) 6600 mg/kg
LDLo (Skin-Rabbit) 9530 µL/kg
FIBROUS GLASS OXIDE:
ICLo In Vitro (Human-Skin) 0.25 cm²/cm²/4 days: In Vitro Toxicity Studies: other assays
11. TOXICOLOGICAL INFORMATION (Continued):

TOXICITY DATA (continued):

FIBROUS GLASS OXIDE (continued):
ICLo In Vitro (Human-Endothelium) 0.25 cm²/cm²/7 days: In Vitro Toxicity Studies: other assays
ICLo In Vitro (Human-Lung Tumor) 5 mg/L/72 hours: In Vitro Toxicity Studies: cell viability (mitochondrial reductase assays): MTT, XTT, MTS, WSTs assays etc., other assays
Mutation Test Systems-Not Otherwise Specified (Human-Fibroblast) 10 mg/L
Mutation Test Systems-Not Otherwise Specified (Hamster Ovary) 10 mg/L
Micronucleus Test (Hamster Ovary) 2 µg/cm²
DNA Damage (Human-Lung) 5 mg/L/72 hours

MINERAL SPIRITS:
Standard Draize Test (Eye-Human) 100 ppm: Mild
Standard Draize Test (Eye-Rabbit) 500 mg/24 hours: Moderate
LC50 (Inhalation-Rat) > 1400 ppm/8 hours

TITANIUM DIOXIDE:
Standard Draize Test (Skin-Human) 300 µg/3 days-intermittent: Mild
DNA Damage (Human Lung) 100 µg/ml: Yes (airborne unbound particles of respirable size)
DNA Damage (Human Lung) 20 µg/ml/disk/4 hours
DNA Damage (Hamster Lung) 200 mg/ml/4 hours
DNA Inhibition (Hamster Lung) 500 mg/L

TOXICITY DATA (continued):
Be a Human Carcinogen.
One of the Other Categories. Further studies are required before a final classification can be made.

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>ACGIH</th>
<th>EPA</th>
<th>IARC</th>
<th>DFG MAK</th>
<th>NTP</th>
<th>NIOSH</th>
<th>OSHA</th>
<th>PROP 65</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon Black</td>
<td>A3</td>
<td>No</td>
<td>2B</td>
<td>MAK-3B</td>
<td>No</td>
<td>Ca</td>
<td>No</td>
<td>Yes (airborne unbound particles of respirable size)</td>
</tr>
<tr>
<td>Crystalline Silica/Quartz</td>
<td>A2</td>
<td>No</td>
<td>1</td>
<td>MAK-1 (resp. fraction)</td>
<td>K (resp. fraction)</td>
<td>Ca</td>
<td>No</td>
<td>Yes (airborne unbound particles of respirable size)</td>
</tr>
<tr>
<td>Fibrous Glass Oxide</td>
<td>Glass Fibers: A3 Refractory Glass Fibers: A2</td>
<td>No</td>
<td>No</td>
<td>Insulation glass wool, continuous glass filament, rock (stone) wool and slag wool: 3</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes (inhalable &amp; bio-persistent)</td>
</tr>
<tr>
<td>Glycol Ether</td>
<td>A4</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Iron Oxides</td>
<td>A4</td>
<td>No</td>
<td>3</td>
<td>3B</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Titanium Dioxide</td>
<td>A4</td>
<td>No</td>
<td>2B</td>
<td>No</td>
<td>No</td>
<td>Ca</td>
<td>No</td>
<td>Yes (airborne unbound particles of respirable size)</td>
</tr>
</tbody>
</table>

The remaining components are not currently listed by any agency tracking carcinogenic potential of chemical compounds

IARC: 1: Carcinogenic to Humans. IARC Group 2B: Possibly Carcinogenic to Humans. MAK-1: Substances that Cause Cancer in Man and Can Be Assumed to Make a Significant Contribution to Cancer Risk. MAK-3B: Substances for Which in vitro or Animal Tests or Animal Studies Have Yields Evidence of Carcinogenic Effects that it is Not Sufficient for Classification of the Substance in One of the Other Categories. Further studies are required before a final classification can be made. NIOSH: Ca: Potential Occupational Carcinogenic, with No Further Categorization. NTP-K: Known to Be a Human Carcinogen.

IRRITANT OF PRODUCT: This product may irritate contaminated tissue, especially if contact is prolonged.

SENSITIZATION TO THE PRODUCT: Some trace components of this product are known to be human skin sensitizers.

TOXICOLOGICAL SYNERGISTIC PRODUCTS: None known.

REPRODUCTIVE TOXICITY INFORMATION: This product has not been tested for reproductive toxicity. The Fibrous Glass Oxide component has a notified classification as a reproductive toxin, with potential adverse effects on fertility under EU ECHA; however no data are available regarding this classification.

Mutagenicity: The components of this product are not reported to produce mutagenic effects in humans. Animal or microorganism data for components are as follows: Titanium dioxide was not mutagenic to Salmonella typhimurium TA1535, TA1537, TA1538, TA97, TA98 or TA100 or to Escherichia coli WP2, either in the presence or absence of an exogenous metabolic system from the livers of uninduced and Aroclor-induced rats, mice and Syrian hamsters. Positive results for Carbon Black have been obtained in somatic cells following live animal inhalation exposure. Structural chromosome alterations, but not sister chromatid exchange, were demonstrated in mammalian cells with glass fiber. This glass fibers (average diameter 0.13 µm) were 20 times more potent in producing preneoplastic morphologic changes in cultured Syrian hamster embryo cells than thicker diameter fibers. The genotoxic potential of glass fibers in V79 cells may be related to their size.

12. ECOLOGICAL INFORMATION

ALL WORK PRACTICES MUST BE AIMED AT ELIMINATING ENVIRONMENTAL CONTAMINATION.

MOBILITY: This product has not been tested for mobility in soil.

PERSISTENCE AND BIODEGRADABILITY: This product has not been tested for persistence or biodegradability.

BIODEGRADATION POTENTIAL: This product has not been tested for bio-accumulation potential.

ECOTOXICITY: This product has not been tested for aquatic or animal toxicity. All release to terrestrial, atmospheric and aquatic environments should be avoided.

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

U.S. REGULATIONS:

U.S. SARA Reporting Requirements: The following component of this product is 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)</th>
<th>SECTION 304 RQ</th>
<th>SECTION 313 TRI (threshold)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glycol Ether</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): The Glycol Ether: 5000 lb (2070 kg)

U.S. Clean Air Act (CA 112r) Threshold Quantity (TQ): Not applicable.

Other U.S. Federal Regulations: The Glycol Ether is listed as a hazardous air pollutant (HAP) generally known or suspected to cause serious health problems. The Clean Air Act, as amended in 1990, directs EPA to set standards requiring major sources to sharply reduce routine emissions of toxic pollutants. EPA is required to establish and phase in specific performance-based standards for all air emission sources that emit one or more of the listed pollutants. The Glycol Ether is included on this list.

California Safe Drinking Water and Toxic Enforcement Act (Proposition 65): The Titanium Dioxide and trace Quartz and Carbon Black components (airborne, unbound particles of respirable size) is found on the Proposition 65 List of chemicals known to the state to cause cancer. In addition, the Fibrous Glass Oxide component is listed (as inhalable & bio-persistent). Due to the form of the product, the Proposition 65 warning for these compounds is not applicable to this compound in this product. However, if use or handling of this product creates inhalable dusts or particulates, the Proposition 65 Warning may be applicable.

CANADIAN REGULATIONS:

Canadian DSL/NDSL Inventory Status: The components of this product listed by CAS# in Section 3 (MATERIAL IDENTIFICATION) are listed on the DSL Inventory.

Canadian Environmental Protection Act (CEPA) Priorities Substances Lists: Not applicable.

Canadian WHMIS (HPR-GHS) 2015 Classification and Symbols: See Section 16 for in Classification and Symbols under HPR-GHS 2015.

MEXICAN REGULATIONS:

Mexican Workplace Regulations (NOM-018-STPS-2000): This product is not classified as hazardous.

16. OTHER INFORMATION

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

Classification: Carcinogenic Category 1, Acute Oral Toxicity Category 4, Acute Inhalation Toxicity Category 4, Skin Irritation Category 2, Eye Irritation Category 2A, Specific Target Organ Toxicity (Inhalation-Respiratory Irritation) Single Exposure Category 3, Specific Target Organ Toxicity (Lungs) Repeated Exposure Category 2, Aquatic Chronic Toxicity Category 3

Signal Word: Danger


Response: P308 + P313: IF exposed or concerned: Get medical advice/attention. P301 + P312: If swallowed, Call a POISON CENTER or doctor if you feel unwell. P303: Rinse mouth. P304 + 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. P302 + P352: IF ON SKIN: Wash with plenty of soap and water. P313 + P314: IF skin irritation occurs, get medical attention. P362 + P364: Take off contaminated clothing and wash it before reuse. P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. P337 + P313: If eye irritation persists: Get medical advice/attention. P331: 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.

Storage: P403 + P233: Store in a well-ventilated place. Keep container tightly closed.

Disposal: P501: Dispose of contents/container in accordance with all local, regional, national and international regulations.

Disclaimers and Implied Warranties: The information presented in this Material Safety Data Sheet is presented in good faith based on data believed to be accurate as of the date this Material Safety Data Sheet was prepared. HOWEVER, NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR ANY OTHER WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OR COMPLETENESS OF THE INFORMATION PROVIDED ABOVE, THE RESULTS TO BE OBTAINED FROM THE USE OF THIS INFORMATION OR THE PRODUCT, THE SAFETY OF THIS PRODUCT, OR THE HAZARDS RELATED TO ITS USE. In no case shall the descriptions, information, data or designs provided be considered a part of our terms and conditions of sale.

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DEFINITIONS OF TERMS

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

KEY ACRONYMS:

CHEMTRECE: Chemical Transportation Emergency Center, a 24-hour emergency information and/or emergency response service.

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

DGF MaK: Federal Republic of Germany Maximum Concentration Values in the workplace. Exposure limits are given as TWA (Time-Weighted Average) or PEAK (short-term exposure) values.

DFG MAK Germ Cell Mutagen Categories: 1: Germ cell mutagens that have been shown to increase the mutation frequency in the progeny of exposed humans. 2: Germ cell mutagens that have been shown to increase the mutation frequency in the progeny of exposed mammals. 3A: Substances that have been shown to induce genetic damage in germ cells of human or animals, which produce mutagenic effects in somatic cells of mammals in vivo and have been shown to react with the germ cells in an active form. 3B: Substances that are suspected of being germ cell mutagens because of their genotoxic effects in mammalian somatic cell in vivo; in exceptional cases, substances for which there are in vivo data, but that are clearly mutagenic in vitro and structurally related to known in vivo mutagens. 4: Not applicable (Category 4 concerns carcinogenic substances that are not non-genotoxic mechanisms of action. By definition, germ cell mutagens 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 that are genotoxic to DNA but are not genotoxic mechanisms of action.)

DFG MAK Pregnancy Risk Group Classification: Group A: 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 B: 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 D: Classification in one of the groups A–C is not yet possible because, although the data available may indicate a trend, they are not sufficient for final evaluation.

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

LOI: Limit of Quantitation.

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

NIC: Notice of Intended Change.

NIOSH CH3: The exposure that shall not be exceeded during any part of the workday. If instantaneous monitoring is not feasible, the ceiling shall be assumed as a 15-minute TWA exposure (unless otherwise specified) that shall not be exceeded at any time during a workday.

NIOSH RELs: NIOSH’s Recommended Exposure Limits.

PELs: Permissible Exposure Limits. These values are identical in all respects to the TWA values for which an 8-hour exposure of 40% of the value is not expected to result in any sense of irritation, except that it is enforceable by OSHA. The OSHA Permissible Exposure Limits are based in the 1989 NIOSH RELs.

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 TWA-TWA, PEL-TWA, or STEL-TWA limits.

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 (TWA) PEL or up to a 10-hour (REL) workday and a 40-hour workweek.

WEEL: Workplace Environmental Exposure Limits from the ABA.

HAZARDOUS MATERIALS IDENTIFICATION SYSTEM HAZARD RATINGS (continued):

HEALTH HAZARD: Minimal Hazard; No significant health risk, irritation of skin or eyes not anticipated. Skin Irritation: Essentially non-irritating. Mechanical irritation may occur. PEL or OSHA = Maximum allowable concentration (MAC). Skin irritation may occur. Draize = 0. Oral Toxicity LD50, Rat > 5000 mg/kg. Dermal Toxicity LD50, Rat or Rabbit: > 2000 mg/kg. Inhalation Toxicity LD50 4-hrs LD50, Rat > 20 mg/L. Slight Hazard: Minor reversible injury may occur; dermatitis may occur. The stomach if swallowed; may defat the skin and irritate existing dermatitis. Skin Irritation: Slightly or mildly irritating. PEL or Draize > 0.5. Eye Irritation: Slightly to mildly irritating, but reversible within 7 days. Draize < 0.25. Oral Toxicity LD50, Rat > 500–5000 mg/kg. Dermal Toxicity LD50, Rat or Rabbit; > 200–1000 mg/kg. Inhalation Toxicity LD50 4-hrs LD50, Rat > 0.5–2 mg/L. Serious Hazard: Major injury likely unless prompt action is taken. Effects are potentially irreversible or fatal, and immediate assistance for an emergency room must be obtained. Skin Irritation and/or corrosive; may cause destruction of dental tissue, skin burns, and dermal necrosis. PEL or Draize > 5–8, with destruction of tissue.

Revised 4/9/88

REFERENCES AND DATA SOURCES: Contact the supplier for information.

METHODS OF EVALUATING INFORMATION FOR THE PURPOSE OF CLASSIFICATION: Bridging principles were used to classify this product.

16. OTHER INFORMATION (Continued)

DISCLAIMER OF EXpressed AND IMPLIED WARRANTIES (continued)

All materials may present hazards and should be used with caution. Because many factors may affect processing or application/use, we recommend that you test materials for the suitability of their use for your particular application. No express or implied warranty of any kind to the user is given. No responsibility is assumed for any damage or injury resulting from abnormal use or from any failure to adhere to recommended practices or applicable federal, state, or local laws or regulations. The information provided above, and the product, are furnished on the condition that the person receiving them shall make their own determination as to the suitability of the product for their particular purpose and on the condition that they assume the risk of their use. In no event, however, shall Brown & Sharpe Manufacturing Company be responsible for any loss or damage, direct or indirect, whether or not due to negligence, to the user, or to others, resulting from the use, misuse, or inability to use of the information contained herein.

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FLAMMABILITY HAZARD (continued): 3 Liquids and solids that can be ignited under almost all ambient temperature conditions. Materials in this degree produce hazardous atmospheres with air under almost all ambient temperatures or, though unaffected by ambient temperature, are readily ignited. Materials that ignite under normal room temperatures while holding a boiling point at or above 78°C (170°F) or a boiling point at or above 73°C (163°F). Liquids and solids that have a flash point at or above 37.8°C (100°F) and those liquids having a flash point at or above 22.8°C (73°F) and below 37.8°C (100°F) (i.e. Class IB and IC liquids). Materials that on account of their physical form or reaction rate can form explosive mixtures with air and are readily dispersed as flammable or combustible dusts with representative diameter less than or equal to 300 microns (40 mesh). Materials that have a boiling point below 37.8°C (100°F) and a boiling point below 22.8°C (73°F) and a boiling point below 30°C (86°F) (i.e. Class IA liquids). Materials that ignite when exposed to air, Solids containing greater than 0.5% by weight of a flammable or combustible solvent are rated by the closed cup flash point of the solvent.

INSTABILITY HAZARD: 0 Materials that in themselves are normally stable, even under fire conditions. Materials that have an instantaneous power density (product of heat of reaction and reaction rate) at 250°C (482°F) below 0.01 W/mL. Materials that do not exhibit an exotherm at temperatures less than or equal to 500°C (932°F) when tested by differential scanning calorimetry. 1 Materials that in themselves are stable, but that can become unstable at elevated temperatures and pressures. Materials that have an instantaneous power density (product of heat of reaction and reaction rate) at 250°C (482°F) at or above 0.01 W/mL, and below 100W/mL. 2 Materials that readily undergo violent change at elevated temperatures and pressures. Materials that have an instantaneous power density (product of heat of reaction and reaction rate) at 250°C (482°F) at or above 10 W/mL, and below 100W/mL. 3 Materials that in themselves are capable of detonation or explosive deflagration, or explosive reaction, but that require a strong initiating source or that must be heated under confinement before initiation. Materials that have an estimated instantaneous power density (product of heat of reaction and reaction rate) at 250°C (482°F) at or above 100 W/mL, and below 1000W/mL. 4 Materials that are sensitive to thermal or mechanical shock at elevated temperatures and pressures. Materials that have an estimated instantaneous power density (product of heat of reaction and reaction rate) at 250°C (482°F) of 1000 W/mL or greater.

FLAMMABILITY LIMITS IN AIR: 3 The vapor is highly combustible in air in the absence of an ignitable source. The upper or lower flammable limits are based upon experiments designed to produce the most widely spaced flammable or explosive mixture. Solvents that are highly flammable at room temperature but that will not burn in air. Materials that are highly flammable in a nitrogen or other inert atmosphere. The flammable limits are based upon experiments designed to produce the most widely spaced flammable or explosive mixture. 2 Materials that are combusted in air in the absence of an ignitable source. The upper or lower flammable limits are based upon experiments designed to produce the most widely spaced flammable or explosive mixture. The flammable limits are based upon experiments designed to produce the most widely spaced flammable or explosive mixture. 1 Materials that are highly flammable in air in the absence of an ignitable source. The upper or lower flammable limits are based upon experiments designed to produce the most widely spaced flammable or explosive mixture. 0 Materials that are not combustible in air in the absence of an ignitable source. The upper or lower flammable limits are based upon experiments designed to produce the most widely spaced flammable or explosive mixture.

DEFINITIONS OF TERMS (Continued)