SAFE DATA SHEET

PECORA P-200 PART B

PART I

1. PRODUCT IDENTIFICATION

IDENTIFICATION of the SUBSTANCE or PREPARATION

<table>
<thead>
<tr>
<th>TRADE NAME (AS LABELED):</th>
<th>PECORA P-200 Part B</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRODUCT DESCRIPTION:</td>
<td>Low Viscosity, Special Purpose Primer</td>
</tr>
<tr>
<td>CHEMICAL NAME/CLASS:</td>
<td>Solvent Polymer Mixture</td>
</tr>
<tr>
<td>SYNONYMS:</td>
<td>None</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>January 2004</td>
</tr>
<tr>
<td>REVISION DATE:</td>
<td>July 3, 2014</td>
</tr>
</tbody>
</table>

This product is sold for commercial use. This MSDS 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 Z400.1-2008 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. 2, Acute Oral Toxicity Cat. 4, Acute Inhalation Toxicity Cat. 4, Eye Damage Cat. 1, Skin Irritation Cat. 2, STOT (Inhalation-Central Nervous System, Respiratory Irritation) SE Cat. 3, Skin Sensitization Cat. 1B
- **Signal Word:** Danger
- **Hazard Statement Codes:** H225, H302 + H332, H318, H315, H335, H336, H317

Hazard Symbols/Pictograms: GHS02, GHS05, GHS08

EMERGENCY OVERVIEW:

- **PHYSICAL DESCRIPTION:** This product is a colorless, highly flammable liquid with a characteristic alcohol odor.
- **HEALTH HAZARDS:** DANGER! Flammable liquid. This product may cause moderate to severe respiratory, skin and eye irritation or burns, depending on duration and concentration of exposure. Harmful or fatal if swallowed. May cause toxic systemic effects by skin absorption. Exposure may cause adverse central nervous system effects. May cause skin sensitization and allergic reaction. Contains compounds that are suspect teratogens and carcinogens.
- **FLAMMABILITY HAZARD:** This product is flammable and can ignite if exposed to high temperature or direct flame.
- **REACTIVITY HAZARD:** Due to the amine compound component, this product may react with halons.
- **ENVIRONMENTAL HAZARD:** This product has not been tested for environmental impact. All release to the environment should be avoided.

Hazardous Materials Identification System (HMIS®)

<table>
<thead>
<tr>
<th>Health</th>
<th>Flammability</th>
<th>Physical Hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td>2*</td>
<td>3</td>
<td>1</td>
</tr>
</tbody>
</table>

See Section 16 for definitions of ratings

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

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

**Canadian WHMIS Classification:** Class E, Class D2B and Class B2. See Section 15 (Regulatory Information) for all classification details.

**U.S. OSHA Regulatory Status:** This material is classified as hazardous under OSHA regulations.
### 3. COMPOSITION AND INFORMATION ON INGREDIENTS (Continued)

<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>Isopropyl Alcohol</td>
<td>67-63-0</td>
<td>40.0-70.0</td>
<td>Classification: Flammable Liquid Cat. 2, Eye Irritation Cat. 2A, STOT (Inhalation-Central Nervous System) SE Cat. 3</td>
<td>Hazard Statement Codes: H225, H319, H36</td>
</tr>
<tr>
<td>Fatty Acids, C18-Uncarboxylated, Dimers, Reaction Products with Polyethylene polyamines</td>
<td>68410-23-1</td>
<td>20.0-30.0</td>
<td>SELF-CLASSIFICATION Classification: Eye Damage Cat. 2, Skin Irritation Cat. 2</td>
<td>Hazard Statement Codes: H318, H315</td>
</tr>
<tr>
<td>Xylene</td>
<td>1330-20-7</td>
<td>7.0-12.0</td>
<td>Classification: Flammable Liquid Cat. 2, Acute Inhalation Toxicity Cat. 4</td>
<td>Hazard Statement Codes: H225, H332</td>
</tr>
<tr>
<td>Tris-2,4,6-(dimethylaminomethyl) phenol</td>
<td>90-72-2</td>
<td>3.0-7.0</td>
<td>Classification: Acute Oral Toxicity Cat. 4, Eye Irritation Cat. 2A, Skin Irritation Cat. 2</td>
<td>Hazard Statement Codes: H302, H319, H315</td>
</tr>
<tr>
<td>Other Trace Ingredients</td>
<td></td>
<td></td>
<td>Classification: Not Applicable</td>
<td>Hazard Statement Codes: Not Applicable</td>
</tr>
</tbody>
</table>

See Section 16 for full text of Ingredient Hazard and Precautionary Statements

### PART II  
**What should I do if a hazardous situation occurs?**

### 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. Fire protective gear may be necessary.

**DESCRIPTION OF FIRST AID MEASURES:** Remove victim(s) to fresh air, as quickly as possible. Only trained personnel should attempt to retrieve victims of exposure to this material without proper protective equipment. Refer to appropriate medical personnel for medical attention. If necessary, seek medical attention. Use adequate personal protection.  

**Medical Conditions Aggravated by Exposure:** Acute or chronic respiratory conditions, and central nervous system conditions or skin problems may be aggravated by overexposure to this product.

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

### 5. FIRE-FIGHTING MEASURES

**FLASH POINT (TCC):** 1.11°C (34°F)

**AUTOIGNITION:** Not known for product. For Isopropyl Alcohol: 399°C (750°F)

**FLAMMABLE LIMITS IN AIR:** Not known for product. For Isopropyl Alcohol: LEL: 2.0% UEL @ 93°C: 12.7%

**EXTINGUISHING MEDIA:** Use materials appropriate for surrounding materials.

**UNSUITABLE EXTINGUISHING MEDIA:** Due to the presence of amine compounds, this product may be incompatible with halons.

**PROTECTION OF FIREFIGHTERS:** 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.
6. ACCIDENTAL RELEASE MEASURES (Continued)

PERSONAL PRECAUTIONS AND EMERGENCY PROCEDURES (continued): 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 polypads. Absorb spilled liquid with clay, sand, poly pads, or other suitable inert absorbent materials. 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. Monitor area for combustible vapor levels and confirm levels are below exposure limits given in Section 8 (Exposure Controls-Personal Protection), if applicable, and that levels are below applicable LELs (see Section 5 – Fire Fighting Measures) before non-response personnel are allowed into the spill area. Purge equipment with inert gas prior to reuse.

ENVIRONMENTAL PRECAUTIONS: Minimize use of water to prevent environmental contamination. Prevent spill or rinse 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 number phone 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.

PART III

How can I prevent hazardous situations from occurring?

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. Contaminated clothing needs to be laundered prior to reuse. Keep away from heat and flame. In the event of a spill, follow practices indicated in Section 6: ACCIDENTAL RELEASE MEASURES.

Empty containers may contain residual product; therefore, empty containers should be handled with care. Decontaminate empty containers by filling with water or a solution of ammonium hydroxide (0-10%), detergent (2-5%), isopropanol (0-20%): may create a fire or vapor hazard in some situations, e.g. confined spaces; if so, do not use), water (balance of solution). Heat and CO2 gas are released when isocyanates reacts with water or solution. Let stand uncovered or loosely covered for at least 24 hours. Decontaminate (using above solution) and clean isocyanate handling equipment after use. Stand upwind of all opening, pouring and mixing operations. Keeping work areas clean is essential. Use work surfaces that can be easily decontaminated. Maintain good personal hygiene.

CONDITIONS FOR SAFE STORAGE: Keep container tightly closed when not in use. Store containers in a cool, dry location, away from direct sunlight, sources of intense heat, or where freezing is possible. Material should be stored in secondary containers or in a diked area, as appropriate. Inspect all incoming containers before storage, to ensure containers are properly labeled and not damaged. Containers should be separated from oxidizing materials by a minimum distance of 20 ft. or by a barrier of non-combustible material at least 5 ft. high having a fire-resistance rating of at least 0.5 hours. Storage areas should be made of fire resistant materials. Local Fire Departments should be notified of the storage of this product on site. Storage and processing areas of this product should be identified with a NFPA 704 placard (diamond) large enough to be seen from a distance. Post warning and “NO SMOKING” signs in storage and use areas, as appropriate. Refer to NFPA 30, Flammable and Combustible Liquids Code, for additional information on storage. Have appropriate extinguishing equipment in the storage area (such as sprinkler systems or portable fire extinguishers). Inspect all incoming containers before storage to ensure containers are properly labeled and not damaged.

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

8. EXPOSURE CONTROLS - PERSONAL PROTECTION

EXPOSURE LIMITS/CONTROL PARAMETERS:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS #</th>
<th>Guideline</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fatty Acids, C18- Unsaturated, Dimers, Reaction Products with Polyethyleneamines</td>
<td>None</td>
<td>68410-23-1</td>
<td>None</td>
</tr>
</tbody>
</table>

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

EXPOSURE LIMITS/CONTROL PARAMETERS (continued):

OCPPATIONAL/WORKPLACE EXPOSURE LIMITS/GUIDELINES (continued):

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS #</th>
<th>Guideline</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isopropyl Alcohol</td>
<td>67-63-0</td>
<td>ACGIH TLV TWA</td>
<td>200 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OSHA REL TWA</td>
<td>150 ppm</td>
</tr>
<tr>
<td>Xylene</td>
<td>1330-20-7</td>
<td>ACGIH TLV TWA</td>
<td>100 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OSHA REL TWA</td>
<td>150 ppm</td>
</tr>
<tr>
<td>Tris-2,4,6-(dimethylaminomethyl) phenol</td>
<td>90-72-2</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

NE = Not Established. See Section 16 for Definitions of Terms Used.

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


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

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

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 of injury 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.

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. The following are NIOSH respiratory equipment guidelines are presented for additional assistance in respiratory protective equipment selection.

ISOPROPANOL

CONCENTRATION: Up to 2000 ppm:

RESPIRATORY PROTECTION: Any Supplied-Air Respirator (SAR) operated in a continuous-flow mode, or any Chemical Cartridge Respirator with a full facepiece and 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 Powered, Air-Purifying Respirator (PAPR) with organic vapor cartridge(s), or any Self-Contained Breathing Apparatus (SCBA) with a full facepiece, or any SAR 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.

XYLENES

CONCENTRATION: Up to 900 ppm:

RESPIRATORY PROTECTION: Any Chemical Cartridge Respirator with organic vapor cartridge(s), or any Powered, Air-Purifying Respirator (PAPR) with organic vapor cartridge(s), 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: Liquid.

Molecular Weight: Mixture.

odor: Sweet, aromatic.

Odor Threshold: For Isopropyl Alcohol: 3.3-610 ppm (detection); 7.6-49 ppm (recognition).

Vapor Density: (air = 1) > 1

Freezing/Melting Point: Not available.

Specific Gravity (water = 1): 0.84

Solubility in Water: Not available.

Evaporation Rate (nBuAc = 1): > 1

Pecora P-200 Part B  Page 4 of 11  July 3, 2014
9. PHYSICAL and CHEMICAL PROPERTIES (Continued)

VAPOR PRESSURE: Not available.
SPECIFIC VOLUME (ft³/lb): Not available.
COEFFICIENT WATER/OIL DISTRIBUTION: Not available.
VOC (less water and exempt): 425 g/L.

HOW TO DETECT THIS SUBSTANCE (WARNING PROPERTIES): The odor of this product may be a good warning property in the event of an accidental release, as the odor threshold of Isopropyl Alcohol is 10 times its TLV.

10. STABILITY and REACTIVITY

CHEMICAL STABILITY: Stable under normal circumstances of use and handling.

CONDITIONS TO AVOID: Avoid contact with incompatible chemicals and exposure to extreme temperatures.

INCOMPATIBLE MATERIALS: Based upon component incompatibility, this product may be incompatible with strong oxidizing agents, strong acids, acid anhydrides, alkali metals, alkaline earth metals, aluminum, crotonaldehyde or phosgene, potassium t-butoxide, trinitromethane, 1,3-dichloro-5,5-dimethyl-2,4-imidazolidinone (dichlorohydrantoin). This product may attack some plastics and metals.

HAZARDOUS DECOMPOSITION PRODUCTS: Combustion: Thermal decomposition of this product may generate carbon monoxide, carbon dioxide, reactive hydrocarbons, low molecular weight aldehydes (e.g. acetaldehyde) and unstable peroxides. Hydrolysis: None known.

POSSIBILITY OF HAZARDOUS REACTIONS: Not expected to occur.

PART IV  Is there any other useful information about this material?

11. TOXICOLOGICAL INFORMATION

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

CONTACT WITH SKIN or EYES: Depending on the duration of skin contact, skin exposures can cause reddening, discomfort or irritation. Prolonged contact may cause inflammation, redness, rash, swelling, blistering and moderate to severe irritation or burns. Repeated skin contact may cause dermal irritation and dermatitis. Skin contact may result in sensitization and allergic reaction. Brief contact with the liquid or vapors from this product and the eyes can cause irritation, redness and watering and disturbances to the vision. Eye contact will cause severe irritation, depending on the duration and concentration of exposure.

SKIN ABSORPTION: Prolonged skin contact may cause adverse systemic toxicity by skin absorption as described under ingestion or inhalation.

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

INHALATION: Inhalation of vapors, mists, or sprays of this product can moderately irritate the tissues of the nose, mouth, throat, and upper respiratory system. Symptoms of overexposure may include coughing, sneezing, and difficulty breathing. Inhalation can also lead to adverse central nervous system effects, including dizziness, incoordination, nausea and vomiting. High aerosol concentrations could cause severe irritation, inflammation of the lungs (chemical pneumonitis), chemical bronchitis with severe asthma-like wheezing, severe coughing spasm and accumulation of fluid in the lungs (pulmonary edema), which could prove fatal. Symptoms of pulmonary edema may not appear until several hours after exposure and are aggravated by physical exertion. In animal studies involving long-term ingestion or inhalation of the Isopropyl Alcohol component in mice and rats has caused decreased body weight, a reversible increase in motor activity, increased liver weight, and signs of central nervous system (CNS) depression. Kidney injury has been observed in rats (especially males) and mice exposed to high concentrations of Isopropyl Alcohol.

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, respiratory and central nervous system, kidneys.

TOXICITY DATA: There are currently no toxicity data available for this product; the following toxicology data are available for components greater than 1% in concentration. Due to the large amount of data, 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.

ISOPropYL ALCOHOL:

LDLo (Oral-Man) 14,432 mg/kg: Behavioral: coma; Vascular: BP lowering not characterized in autonomic section; Lungs, Thorax, or Respiration: dyspnea.
TLDLo (Oral-Human) 14,432 mg/kg: Behavioral: coma; Vascular: BP lowering not characterized in autonomic section; Lungs, Thorax, or Respiration: dyspnea.

Rabbit) 12,800 mg/kg: Behavioral: altered sleep time (including change in righting reflex), somnolence (general depressed activity).

LDLo (Rat) 5000 mg/kg: Behavioral: general anesthetic.

LDLo (Mouse) 3600 mg/kg: Behavioral: altered sleep time (including change in righting reflex), somnolence (general depressed activity).

LDLo (Rabbit) 12,800 mg/kg: Behavioral: somnolence (general depressed activity).

LDLo (Mouse) 2 mL/kg: Severe irritation, depending on the duration of skin contact, skin exposures can cause reddening, discomfort or irritation.

LDLo (Rabbit) 0.25 mL: Mild irritation, depending on the duration of skin contact, skin exposures can cause reddening, discomfort or irritation.

LDLo (Rabbit) 10 mg: Moderate irritation, depending on the duration of skin contact, skin exposures can cause reddening, discomfort or irritation.

LDLo (Rat) 0.025 mL: Mild irritation, depending on the duration of skin contact, skin exposures can cause reddening, discomfort or irritation.

LDLo (Rat) 5045 mg/kg: Behavioral: altered sleep time (including change in righting reflex), somnolence (general depressed activity).

LDLo (Rat) 10 mg: Moderate irritation, depending on the duration of skin contact, skin exposures can cause reddening, discomfort or irritation.

LDLo (Rabbit) 5000 mg/kg: Behavioral: general anesthetic.

LDLo (Mouse) 3600 mg/kg: Behavioral: altered sleep time (including change in righting reflex), somnolence (general depressed activity).

LDLo (Rabbit) 6410 mg/kg: Behavioral: altered sleep time (including change in righting reflex), somnolence (general depressed activity).

LDLo (Mouse) 5711 mg/kg: Severe irritation, depending on the duration of skin contact, skin exposures can cause reddening, discomfort or irritation.

LDLo (Rabbit) 100 mg/24 hours: Moderate irritation, depending on the duration of skin contact, skin exposures can cause reddening, discomfort or irritation.

LDLo (Rabbit) 500 mg/kg: Behavioral: general anesthetic.

LDLo (Mouse) 5711 mg/kg: Severe irritation, depending on the duration of skin contact, skin exposures can cause reddening, discomfort or irritation.

LDLo (Rabbit) 10 mg: Moderate irritation, depending on the duration of skin contact, skin exposures can cause reddening, discomfort or irritation.

LDLo (Mouse) 2 mL/kg: Severe irritation, depending on the duration of skin contact, skin exposures can cause reddening, discomfort or irritation.

LDLo (Rabbit) 0.25 mL: Mild irritation, depending on the duration of skin contact, skin exposures can cause reddening, discomfort or irritation.

LDLo (Mouse) 1375 mg/kg: Sense Organs and Special Senses (Eye): effect, not otherwise specified; Behavioral: somnolence (general depressed activity), hallucinations, distorted perceptions.

ISOPropYL ALCOHOL (continued):

TLDo (Inhalation-Human) 150 ppm/2 hours: Biochemical: Enzyme inhibition, induction, or change in blood or tissue levels; other Enzymes.
Standard Draize Test (Skin-Rabbit) 500 mg: Mild irritation, depending on the duration of skin contact, skin exposures can cause reddening, discomfort or irritation.
Standard Draize Test (Eye-Rabbit) 100 mg: Moderate irritation, depending on the duration of skin contact, skin exposures can cause reddening, discomfort or irritation.
Standard Draize Test (Eye-Rabbit) 10 mg: Moderate irritation, depending on the duration of skin contact, skin exposures can cause reddening, discomfort or irritation.
LDLo (Rat) 5000 mg/kg: Behavioral: general anesthetic.
LDLo (Mouse) 3600 mg/kg: Behavioral: altered sleep time (including change in righting reflex), somnolence (general depressed activity).
LDLo (Rabbit) 6410 mg/kg: Behavioral: altered sleep time (including change in righting reflex), somnolence (general depressed activity).
LDLo (Mouse) 12,800 mg/kg: Behavioral: altered sleep time (including change in righting reflex), somnolence (general depressed activity).
LDLo (Rabbit) 12,800 mg/kg: Behavioral: altered sleep time (including change in righting reflex), somnolence (general depressed activity).

TRIS-2,4,6-(DIMETHYLAMINOMETHYL) PHENOL:

Standard Draize Test (Skin-Rabbit) 2 mg/24 hours: Severe irritation, depending on the duration of skin contact, skin exposures can cause reddening, discomfort or irritation.
Standard Draize Test (Skin-Rat) 0.025 mL: Mild irritation, depending on the duration of skin contact, skin exposures can cause reddening, discomfort or irritation.
Standard Draize Test (Skin-Rat) 0.25 mL: Severe irritation, depending on the duration of skin contact, skin exposures can cause reddening, discomfort or irritation.
Standard Draize Test (Skin-Eye) 50 µg/24 hours: Severe irritation, depending on the duration of skin contact, skin exposures can cause reddening, discomfort or irritation.
11. TOXICOLOGICAL INFORMATION (Continued)

TOXICITY DATA (continued):

TRIS-2,4,6-(DIMETHYLAMINOMETHYL) PHENOL (continued):

- LD₅₀ (Oral-Rat) 1200 mg/kg: Peripheral Nerve and Sensation: flaccid paralysis without anesthesia (usually neuromuscular blockage); Lungs, Thorax, or Respiration: dyspnea
- LD₅₀ (Oral-Rat) 1673 mg/kg: Behavioral: tremor; Gastrointestinal: ulceration or bleeding from stomach; Liver: other changes
- LD₅₀ (Skin-Rat) 1280 mg/kg

XYLENE:
- Standard Draize Test (Eye-Human) 200 ppm
- LD₅₀ (Oral-Human) 50 mg/kg
- LC₅₀ (Inhalation-Human) 10,000 ppm/6 hours: Behavioral: general anesthetic; Lungs, Thorax, or Respiration: cyanosis; Blood: other changes

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>IARC</th>
<th>EPA</th>
<th>NTP</th>
<th>NIOSH</th>
<th>ACGIH</th>
<th>OSHA</th>
<th>PROP 65</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fatty Acids, C18-Unsaturated, Dimers, Reaction Products with Polyethylenepolyamines</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>Isopropyl Alcohol</td>
<td>3</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>A4</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Tris-2,4,6-(dimethylaminomethyl) phenol</td>
<td>3</td>
<td>II</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Xylene</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>

IARC-3: Unclassifiable as to Carcinogenicity in Humans. EPA-II: Inadequate Information to Assess Carcinogenic Potential. ACGIH TLV-A4: Not Classifiable as a Human Carcinogen.

IRRITANTY OF PRODUCT: This product is irritating by all routes of exposure.

SENSITIZATION TO THE PRODUCT: This product may cause skin sensitivity and allergic reaction in susceptible individuals.

Symptoms can include itching, redness, swelling, welts and rash.

TOXICOLOGICAL SYNERGISTIC PRODUCTS: Isopropyl Alcohol has enhanced the toxicity of carbon tetrachloride, 1,1,2-trichloroethane, chloroform, trichloroethylene, and dimethyl nitrosamine in rodents. There is also one case report of Isopropyl Alcohol workers becoming ill following exposure to carbon tetrachloride. The actual concentrations of 2-propanol and carbon tetrachloride were not measured. However, the authors felt that the workers were predisposed to carbon tetrachloride toxicity due to the historical and concurrent exposure to Isopropyl Alcohol. The elimination of Isopropyl Alcohol is prolonged when ethanol is ingested at the same time. 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: The information located does not suggest that Isopropyl Alcohol is mutagenic. No well-conducted studies in live animals using relevant routes of exposure were located. Negative results were obtained in short-term tests using mammalian cells and bacteria.

Embryotoxicity/Teratogenicity: Isopropyl Alcohol is not a developmental toxin in the absence of maternal toxicity; all embryotoxic and Teratogenic effects have also caused significant adverse effects in pregnant mothers.

Reproductive Toxicity: Reproductive effects have not been observed in the absence of significant parental toxicity.

BIOLOGICAL 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>Isopropyl Alcohol</td>
<td>• Acetone in Urine</td>
<td>• End of Shift at the End of Workweek</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.

ISOPROPYL ALCOHOL:
The Koc of this compound is estimated as 25, using a measured log Kow of 0.05 and a regression-derived equation. According to a classification scheme, this estimated Koc value suggests that this material is expected to have very high mobility in soil.

XYLENE:
Several experimental Koc values for this compound have been reported depending upon the pH and organic carbon content of the soil. Batch experiments conducted with five low organic carbon content (0.04-1.12%), field contaminated soils (5 silty clay and two sandy loams) yielded Koc values ranging from 39-365. This compound in Norwegian forest soil at pH 7.4 and organic carbon content of 2.2 percent has a reported experimental Koc of 289. Based on a recommended classification scheme and the experimentally determined Koc values, this material is expected to have moderate to high mobility in soils. Xylene isomers have been observed to pass through soil at a dune-infiltration site on the Rhine River and to leach into groundwater under a rapid infiltration site.

Pecora P-200 Part B  Page 6 of 11  July 3, 2014
12. ECOLOGICAL INFORMATION (Continued)

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

**ISOPROPANOL:**
Based on a classification scheme, an estimated Koc value of 25, determined from a log Kow of 0.05 and a regression-derived equation, indicates that this material is expected to have very high mobility in soil. Volatilization of this material from moist soil surfaces is expected to be an important fate process given a Henry's Law constant of 8.10X10^-6 atm-cm/mole. The potential for volatilization of this compound from dry soil surfaces may exist based upon a vapor pressure of 45.4 mmHg. This material is readily degraded in aerobic systems; the range of half-lives for aerobic degradation using a sewage sludge inoculum are < 1 day to 48 days. This compound has also been shown to be readily degraded under anaerobic conditions. Volatilization from water surfaces is expected based upon a Henry's Law constant of 7.0X10^7 atm-cm/mole. Using this Henry's Law constant and an estimation method, volatilization half-lives for a model river and model lake are 57 hours and 29 days, respectively. This material is readily degraded in aerobic systems; the range of half-lives for aerobic degradation using a sewage sludge inoculum are < 1 day to 48 days. This compound has also been shown to be readily degraded under anaerobic conditions. According to a model of gas/particle partitioning of semi-volatile organic compounds in the atmosphere, this material, which has a vapor pressure of 45.4 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; the half-life for this reaction in air is estimated to be 3.2 days, calculated from its rate constant of 5.07X10^-12 cm^2/molecule-sec at 25°C.

**XYLENE:**
Based upon an experimental vapor pressure of 7.99 mm Hg at 25°C, this compound is expected to exist entirely in the vapor phase in the ambient atmosphere. Vapor-phase material is degraded in the atmosphere by reaction with photochemically-produced hydroxyl radicals with an estimated atmospheric lifetime of about 2-12 days. This compound is expected to have moderate to high mobility in soils based upon experimental Koc values obtained with a variety of soils at differing pH values and organic carbon content. Volatilization from moist soil surfaces is expected based upon an experimental Henry's Law constant of 2.0X10^-6 atm-cm/mole. Biodegradation is an important environmental fate process for this compound. In general, it has been found that this material is biodegraded in soil and groundwater samples under aerobic conditions and may be degraded under anaerobic denitrifying conditions. In water, this compound is expected to adsorb somewhat to sediment or particulate matter based on its measured Koc values. This compound is expected to volatilize from water surfaces given its experimental Henry's Law constant. Estimated half-lives for a model river and model lake are 3 and 99 hours, respectively. Log Koc = 3.5-6.8.

**BIO-ACCUMULATION POTENTIAL:** This product has not been tested for bio-accumulation potential. The estimated BCF for Xylene is 20. The estimated value for Isopropyl Alcohol is 3. These values indicate low bioconcentration potential.

**ECOTOXICITY:** This product has not been tested for aquatic or animal toxicity. All release to terrestrial, atmospheric and aquatic environments should be avoided. The following aquatic toxicity data are available for some components. Only select data are given due to the large amount of data available. Contact Pecora for more information.

**ISOPROPANOL:**
EC50 (Microorganisms) 5 minutes = 22,800 mg/L
EC50 (Daphnia magna) 3.010 mg/L
EC50 (Porphyromonas putida) 16 hours = 1,050 mg/L
LC50 (Artemia salina) 24 hours = 16,700 mg/L
LC50 (Streptococcus mutans) 24 hours = 11,600 mg/L
LC50 (Daphnia magna) 24 hours = 9,500 mg/L
LC50 (Brachionus calyciflorus) 24 hours = 28,600 mg/L
LC50 (Crangon crangon brown shrimp) 24 hours = 1,400 mg/L
LC50 (Crangon crangon brown shrimp) 96 hours = 1,150 mg/L
LC50 (goldfish) 24 hours = >= 500 mg/L
LC50 (fathead minnow) 1 hour = 11,830 mg/L
LC50 (fathead minnow) 24 hours = 11,160 mg/L
LC50 (fathead minnow) 48 hours = 11,130 mg/L

**ISOPROPANOL (continued):**
LC50 (fathead minnow) 72 hours = 3,130 mg/L
LC50 (fathead minnow) 96 hours = 11,130 mg/L
LC50 (fathead minnow) 120 hours = 22,800 mg/L
LC50 (fathead minnow) 192 hours = 37,700 mg/L
LC50 (fathead minnow) 240 hours = 64,300 mg/L
LC50 (fathead minnow) 288 hours = 86,200 mg/L
LC50 (fathead minnow) 360 hours = 140,000 mg/L
LC50 (fathead minnow) 432 hours = 210,000 mg/L
LC50 (rainbow trout) 96 hours = 13.5 mg/L (conditions of bioassay not specified, no specific isomer)
LC50 (rainbow trout) 96 hours = 27.0 mg/L (conditions of bioassay not specified, no specific isomer)
LC50 (rainbow trout) 96 hours = 51.0 mg/L (conditions of bioassay not specified, no specific isomer)
LC50 (rainbow trout) 96 hours = 74.3 mg/L (conditions of bioassay not specified, no specific isomer)
LC50 (rainbow trout) 96 hours = 90.3 mg/L (conditions of bioassay not specified, no specific isomer)
LC50 (rainbow trout) 96 hours = 106 mg/L (conditions of bioassay not specified, no specific isomer)
LC50 (rainbow trout) 96 hours = 122 mg/L (conditions of bioassay not specified, no specific isomer)

**XYLENE:**
LDso (goldfish) 24 hours = 13 mg/L (conditions of bioassay not specified, no specific isomer)
LDso (rainbow trout) 96 hours = 13.5 mg/L (conditions of bioassay not specified, no specific isomer)
LDso (rainbow trout) 96 hours = 27.0 mg/L (conditions of bioassay not specified, no specific isomer)
LDso (rainbow trout) 96 hours = 51.0 mg/L (conditions of bioassay not specified, no specific isomer)
LDso (rainbow trout) 96 hours = 74.3 mg/L (conditions of bioassay not specified, no specific isomer)
LDso (rainbow trout) 96 hours = 90.3 mg/L (conditions of bioassay not specified, no specific isomer)
LDso (rainbow trout) 96 hours = 106 mg/L (conditions of bioassay not specified, no specific isomer)
LDso (rainbow trout) 96 hours = 122 mg/L (conditions of bioassay not specified, no specific isomer)

**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 be a hazardous waste as defined by U.S. federal regulation (40 CFR 261) if discarded or disposed. It has the characteristic of Ignitibility. 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: D002. Wastes of this product should be tested to see if they meet the criteria of D002 (Corrosivity).

14. TRANSPORTATION INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION: This product is classified as Dangerous Goods, per U.S. DOT regulations, under 49 CFR 172.101. UN IDENTIFICATION NUMBER: UN 1866
PROPER SHIPING NAME: Resin solution, flammable
HAZARD CLASS NUMBER and DESCRIPTION: 3 (Flammable)
PACKING GROUP: PG II
DOT LABEL(S) REQUIRED: Class 3 (Flammable)
NORTH AMERICAN EMERGENCY RESPONSE GUIDEBOOK NUMBER (2008): 127
MARINE POLLUTANT: The components of this product not classified by the DOT as a Marine Pollutant (as defined by 49 CFR 172.101).
TRANSPORT CANADA TRANSPORTATION OF DANGEROUS GOODS REGULATIONS: This product is classified as Dangerous Goods, per regulations of Transport Canada.
UN IDENTIFICATION NUMBER: UN 1866
PROPER SHIPING NAME: Resin solution, flammable
HAZARD CLASS NUMBER and DESCRIPTION: 3 (Flammable)
PACKING GROUP: PG II
HAZARD SHIPPING LABEL(S) REQUIRED: Class 3 (Flammable)
SPECIAL PROVISIONS: 83
EXPLOSIVE LIMIT & LIMITED QUANTITY INDEX: 5
ERAP INDEX: None
PASSENGER CARRYING SHIP INDEX: None
PASSENGER CARRYING ROAD OR RAIL VEHICLE INDEX: 60
**14. TRANSPORTATION INFORMATION (Continued)**

**INTERNATIONAL AIR TRANSPORT ASSOCIATION SHIPPING INFORMATION (IATA):** This product is classified as dangerous goods, per the International Air Transport Association.

**UN IDENTIFICATION NUMBER:** UN 1866

**PROPER SHIPPING NAME:** Resin solution, flammable

**HAZARD CLASS or DIVISION:** 3 (Flammable)

**HAZARD LABEL(S) REQUIRED:** Class 3 (Flammable)

**PACKING GROUP:** II

**EXCEPTED QUANTITIES:** E2

**PASSENGER and CARGO AIRCRAFT PACKING INSTRUCTION:** 353

**PASSENGER and CARGO AIRCRAFT MAXIMUM NET QUANTITY PER PKG:** 5 L

**PASSENGER and CARGO AIRCRAFT LIMITED QUANTITY PACKING INSTRUCTION:** Y341

**PASSENGER and CARGO AIRCRAFT LIMITED QUANTITY MAXIMUM NET QUANTITY PER PKG:** 1 L

**CARGO AIRCRAFT ONLY PACKING INSTRUCTION:** A3

**CARGO AIRCRAFT ONLY MAXIMUM NET QUANTITY PER PKG:** 60 L

**SPECIAL PROVISIONS:** A3

**ERG CODE:** 3L

**INTERNATIONAL MARITIME ORGANIZATION SHIPPING INFORMATION (IMO):** This product is classified as dangerous goods, per the International Maritime Organization.

**UN No.:** 1866

**PROPER SHIPPING NAME:** Resin solution, flammable

**HAZARD CLASS NUMBER:** 3 (Flammable)

**LABELS:** Class 3 (Flammable)

**PACKING GROUP:** II

**SPECIAL PROVISIONS:** None

**LIMITED QUANTITIES:** 5 L

**EXCEPTED QUANTITIES:** E2

**PACKING:**
- IBCs: Instructions: PO01; Provisions: PP1
- Instrucutons: IBC02; Provisions: None

**TANKS:**
- Instructions: T4; Provisions: T1, TP8

**EmS:**
- F-E, S-E

**STOWAGE CATEGORY:** Category B.

**MARINE POLLUTANT:** No component of this product is designated by the IMO to be a Marine Pollutant.

**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>Fatty Acids, C18-Unsaturated, Dimers, Reaction Products with Polyethylenepolyamines</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Isopropyl Alcohol</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Toluene</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Tris-2,4,6-(dimethylamino)methyl) phenol</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:** Yes; **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):** Xylene = 100 lb (45.4 kg)

**U.S. CLEAN AIR ACT (CA 112r) THRESHOLD QUANTITY (TQ):** The Xylene components are 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. This chemical is included on this list.

**U.S. CLEAN WATER ACT REQUIREMENTS:** Xylene (mixed) is designated as a hazardous substance under section 311(b)(2)(A) of the Federal Water Pollution Control Act and further regulated by the Clean Water Act Amendments of 1977 and 1978. These regulations apply to discharges of these substances.

**CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT (PROPOSITION 65):** No component is on the California Proposition 65 lists.

**ADDITIONAL CANADIAN REGULATIONS:**

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

**CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA) PRIORITIES SUBSTANCES LIST:** The Xylene component is on the CEPA Priority Substances 1 list, not considered as “TOXIC” under Section 64 of CEPA.

Isopropyl Alcohol is a Substance With Greatest Potential For Human Exposure Substance on Environment Canada/Health Canada Pilot Project List (CEPA 1999, Section 73). Meets the categorization criteria: *may present, to individuals in Canada, the greatest potential for exposure; or *are persistent or bio-accumulative in accordance with the regulations, and inherently toxic to human beings or to non-human organisms, as determined by laboratory or other studies.
15. REGULATORY INFORMATION (Continued)

ADDITIONAL CANADIAN REGULATIONS (continued):

CANADIAN WHMIS REGULATIONS: This product is classified as a Controlled Product, Hazard Classes B2 (Flammable Liquid); E (Corrosive);
D2A (Poisonous and Infectious Material, Other Effects, Very Toxic, Teratogenicity and Embryotoxicity), and D2B (Poisonous and Infectious Material, Other effects/Toxic: Eye Irritation, Skin Irritation, Skin Sensitization) as per the Controlled Product Regulations.

ADDITIONAL MEXICAN REGULATIONS:

MEXICAN WORKPLACE REGULATIONS (NOM-018-STPS-2000): This product is classified as hazardous.

16. OTHER INFORMATION

U.S. ANSI STANDARD LABELING (Precautionary Statements): DANGER! FLAMMABLE LIQUID. MAY BE HARMFUL IF INHALED OR INGESTED. MAY CAUSE EYE, SKIN AND RESPIRATORY IRRITATION; EYE IRRITATION MAY BE SEVERE. VAPORS MAY CAUSE CENTRAL NERVOUS SYSTEM EFFECTS. CONTAINS COMPOUNDS THAT ARE SUSPECT CARCINOGENS. MAY CAUSE SKIN SENSITIZATION. AVOID CONTACT WITH EYES, SKIN, AND CLOTHING. AVOID BREATHING MIST, VAPORS OR FUME. DO NOT TOUCH OR SWALLOW. WASH THOROUGHLY AFTER HANDLING. KEEP CONTAINER TIGHTLY CLOSED. USE ONLY WITH A LICENSE.

GLOBAL HARMONIZATION SYSTEM CLASSIFICATION:

Classification: Flammable Liquid Category 2, Acute Oral Toxicity Category 4, Acute Inhalation Toxicity Category 4, Eye Damage Category 1, Skin Irritation Category 2, Specific Target Organ Toxicity (Inhalation-Central Nervous System, Respiratory Irritation) Single Exposure Category 3, Skin Sensitization Category 1B

Signal Word: Danger


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

Hazard Symbols/Pictograms: GHS02, GHS05, GHS08

DISCLAIMER OF EXPRESSED 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 IS TO BE 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.

All materials may present hazards and should be used with caution. Because many factors may affect processing or application/use, we recommend that you make tests to determine the suitability of a product for your particular purpose prior to use. 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 addition, no authorization is given nor implied to practice any patented invention without a license.

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.

REVISION DETAILS: May 2012: Up-date and revise entire MSDS to include current GHS requirements; change in formulation.

DATE OF PRINTING: July 3, 2014
DEFINITIONS OF TERMS

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

KEY ACRONYMS:
CHEMTREC: Chemical Transportation Emergency Center, a 24-hour emergency information and/or emergency assistance to emergency responders.
CEILING LEVEL: The concentration that shall not be exceeded during any part of the working day.

DFG MAKs: 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 Subcategories: Categories: 1: Virtually noninert substances 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 indicated by in vivo genotoxic damage in germ cells of human animals, 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. 3B: Substances that are suspected of being germ cell mutagens because of their genotoxic action in somatic cells in vivo; in exceptional cases, substances for which there are no in vivo data, but that are clearly mutagenic in vitro and structurally related to known in vivo mutagens. 4: Not applicable (Category 4 carcinogenic substances are those with 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 with primary targets other than DNA [e.g. purely arenaceous substances] if research results make this seem sensible.); 5: Germ cell mutagens, the potency of which is considered to be so low that, provided the MAK value is observed, their contribution to genetic risk for humans is not significant to be.

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 (Biotolerance 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 damage to the developing embryo or fetus when MAK and BAT values are observed.

DFG MAK Toxicity Classification Proposed: Group D: Classification in one of the groups A-C is not yet possible, because 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.

LOQ: Limit of Quantitation.
NE: Not Established. When no exposure guidelines are established, an entry of NE is made for this parameter.
NIC: Notice of Intended Change.
NIOH Ceiling: The exposure that shall not be exceeded during any part of the workday. If instantaneous, it is not feasible, the ceiling shall be defined as a maximum of 8 hour TWA exposure (unless otherwise specified) that shall not be exceeded at any time during a workday.
NIOH RELs: NIOSH’s Recommended Exposure Limits.
PEA: OSHA Permissible Exposure Limits. The ceiling 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 current PEL by the Court Order.
Skin: Used when there is a danger of cutaneous absorption.
STEEL: 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 the 8 hour TWA is within the TWA-TWA, PEAt-WA or REL-TWA.
TLC: 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.

Workplace Occupational Exposure Limits from the AHA:

HAZARD RATINGS:
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 only.
1 Slight Hazard: Minor injury likely unless prompt action is taken and medical treatment is given; high level of toxicity; contact irritant. Severe irritation and/or corrosive; may be toxic; eye contact, dermal contact, skin burns, and dermal necrosis. PII or Draize > 25. Rat or Rabbit > 500-5000 mg/kg. Dermal Toxicity LD50 Rat or Rabbit > 1000-2000 mg/kg. Inhalation Toxicity LC50 4 hr Rat > 20 mg/L. Short-term exposure to a 1:1 perchloric acid (50%)/cellulose mixture may be fatal.
2 Moderate Hazard: Slight to moderately irritating, but reversible within 7 days. Dose > 25. Oral Toxicity LD50 Rat > 50-500 mg/kg. Dermal Toxicity LD50 Rat or Rabbit > 500-5000 mg/kg. Dermal Toxicity LD50 Rat or Rabbit > 1000-2000 mg/kg. Inhalation Toxicity LC50 4 hr Rat or Rabbit > 20 mg/L. Inhalation Toxicity LC50 4 hr Rat or Rabbit > 200-1000 mg/kg. Inhalation Toxicity LC50 4 hrs Rat > 0.5-5 mg/L. Minor irritation likely unless prompt action is taken and medical treatment is given; high level of toxicity; contact irritant. Slight to moderately irritating and/or corrosive; may be toxic. Eye contact, dermal contact, skin burns, and dermal necrosis. PII or Draize > 5-8, with destruction of tissue. Eye Irritation: Corrosive, irreversible destruction of ocular tissue; corneal involvement or irritation persists for more than 21 days; tissue destruction visible in 21 days. Oral Toxicity LD50 Rat or Rabbit > 1-50 mg/kg. Dermal Toxicity LD50 Rat or Rabbit > 20-200 mg/kg. Inhalation Toxicity LC50 4 hrs Rat > 0.05-0.5 mg/L. Oral Toxicity LD50 Rat or Rabbit > 20 mg/kg. Inhaled Toxicity LD50 Rat or Rabbit > 20 mg/L. Dermal Toxicity LD50 Rat or Rabbit > 50 mg/kg. Inhaled Toxicity LC50 4 hrs Rat > 0.05-0.5 mg/L.
3 Severe Hazard: Life-threatening, major or permanent damage may result from single or repeated exposures; extremely toxic; irreversible injury may result from brief contact. Skin Irritation: Corrosive, irreversible destruction of dermal tissue; severe, irreversible destruction of dermal tissue, skin burns, and dermal necrosis. PII or Draize > 2, with destruction of tissue. Severe eye irritation: Corrosive, irreversible destruction of ocular tissue; corneal involvement or irritation persists for more than 21 days; tissue destruction visible in 21 days. Oral Toxicity LD50 Rat or Rabbit > 1 mg/kg. Dermal Toxicity LD50 Rat or Rabbit > 50 mg/kg. Inhalation Toxicity LC50 4 hrs Rat > 0.05 mg/L.

Pecora P-200 Part B Page 10 of 11

July 3, 2014
Flammability Hazard: 4 Materials that will rapidly or completely vaporize at atmospheric pressure and normal ambient temperature or that are readily dispersed in air and will burn readily. Flammable gases. Flammable cryogenic materials. Any liquid or gaseous materials that readily undergo violent chemical change at elevated temperatures and pressures. Materials that have an explosive power density (product of heat of reaction and reaction rate) at 250°C (482°F) at or above 100 W/ml. Materials that exhibit an explosion certification at or above 816°C (1500°F) for a period of 5 minutes in accordance with Annex D of NFPA. Flammable dusts and mists whose LDo for acute inhalation toxicity greater than 2000 ppm but less than or equal to 5000 ppm. Flammable solids and semisolids having a flash point of the so-miscible solution or dispersion with a water non-miscible solvent. Flammable solids and semisolids having a flash point of the so-miscible solution or dispersion with a water non-miscible solvent. Flammable solids and semisolids having a flash point of the so-miscible solution or dispersion with a water non-miscible solvent. Flammable solids and semisolids having a flash point of the so-miscible solution or dispersion with a water non-miscible solvent. Flammable solids and semisolids having a flash point of the so-miscible solution or dispersion with a water non-miscible solvent.