SAFETY DATA SHEET

Pecora Deck Self-Priming Additive

PART I  What is the material and what do I need to know in an emergency?

1. PRODUCT IDENTIFICATION

IDENTIFICATION of the SUBSTANCE or PREPARATION

<table>
<thead>
<tr>
<th>TRADE NAME (AS LABELED):</th>
<th>Pecora Deck Self-Priming Additive</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRODUCT DESCRIPTION:</td>
<td>Additive in water-based coatings to improve bonding between organic polymers and mineral surfaces (pigments, fillers) and glass or metal substrates.</td>
</tr>
<tr>
<td>CHEMICAL NAME/CLASS:</td>
<td>Methoxysilane</td>
</tr>
<tr>
<td>SYNONYMS:</td>
<td>None</td>
</tr>
<tr>
<td>RELEVANT USE:</td>
<td>Coating Additive</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>
</tbody>
</table>

PREPARATION DATE: December 30, 2014

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

2. HAZARD IDENTIFICATION

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

- Classification: Acute Dermal Toxicity Cat. 5, Aquatic Acute Toxicity Cat. 3, Aquatic Chronic Toxicity Cat. 3
- Signal Word: Warning
- Hazard Statement Codes: H313, H412
- Precautionary Statement Codes: P273, P312, P501
- Hazard Symbols/Pictograms: None Applicable

EMERGENCY OVERVIEW:

Physical Description: Colorless liquid with an ester-like odor.

Health Hazards: WARNING! May be harmful if swallowed or in contact with skin. May cause mild irritation by skin or eye contact.

Flammability Hazard: This product can ignite if exposed to temperature above its flash point 110°C (230°F) or direct flame.

Reactivity Hazard: Contact with water can result in evolution of flammable and toxic methanol. This product can polymerize under conditions described in Section 10 (Reactivity and Incompatibility).

Environmental Hazard: This product may cause acute or chronic harm to aquatic organisms. All release to the environment should be avoided.

HAZARDOUS MATERIALS IDENTIFICATION SYSTEM (HMIS®)

<table>
<thead>
<tr>
<th>Health</th>
<th>1</th>
<th>See Section 16 for definitions of ratings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammability</td>
<td>1</td>
<td>0 = Minimal 3 = Serious 1 = Slight 4 = Severe 2 = Moderate * = Chronic</td>
</tr>
<tr>
<td>Physical Hazard</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

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

CANADIAN WHMIS CLASSIFICATION: D2B. 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

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS #</th>
<th>W/W%</th>
<th>GHS Classification Hazard Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glycidoxypropyl Trimethoxysilane</td>
<td>2530-83-8 100.0</td>
<td>SELF CLASSIFICATION Classification: Acute Dermal Toxicity Cat. 5, Aquatic Acute Toxicity Cat. 3, Aquatic Chronic Toxicity Cat. 3 Hazard Statement Codes: H313, H412</td>
<td></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 administer supplemental oxygen and/or cardio-pulmonary resuscitation, if necessary. Remove and isolate contaminated clothing and shoes. Seek immediate medical attention. Take copy of label and SDS to physician or other health professional with victim(s).

Inhalation: If mists, sprays or fumes 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 cupsful of water, if conscious. Never induce vomiting or give diluents (milk or water) to someone who is unconscious, having convulsions, or unable to swallow. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain an open airway and prevent aspiration.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Acute or chronic skin problems may be aggravated by exposure to this product.

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

5. FIRE-FIGHTING MEASURES

FLASH POINT: 110°C (230°F)
AUTOIGNITION: 400°C (752°F)
FLAMMABLE LIMITS IN AIR: Not known for product.

EXTINGUISHING MEDIA:

Suitable Extinguishing Media: Use materials appropriate for surrounding materials.

Unsuitable Extinguishing Media: Water should be used with caution due to potential for evolution of highly flammable and toxic methanol.

PROTECTION OF FIREFIGHTERS:

Special Hazards Arising From the Substance: This product can ignite if exposed to temperature above its flash point 110°C (230°F) or direct flame. Closed containers may develop pressure and rupture in event of fire. Large fires produce heavy clouds of white smoke due to silicon dioxide. This product may accumulate electrostatic charge by friction in pipes, splashing or agitation.

Special Protective Actions for Fire-Fighters: Incipient fire responders should wear eye protection. Structural firefighters must wear Self-Contained Breathing Apparatus and full protective equipment. Move containers from fire area if it can be done without risk to personnel. If possible, prevent runoff water from entering storm drains, bodies of water, or other environmentally sensitive areas.

6. ACCIDENTAL RELEASE MEASURES

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

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

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

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

METHODS FOR CLEAN-UP AND CONTAINMENT:

All Spills: Access to the spill area should be restricted. Spread should be limited by gently covering the spill with polypads. Absorb spilled liquid with clay, sand, polypads, 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.
6. ACCIDENTAL RELEASE MEASURES (Continued)

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

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 eat or drink. 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. 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 penetrating 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, explosion proof ventilation to ensure exposure levels are maintained below the limits provided above.

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>Glycidoxypropyl Trimethoxysilane</td>
<td>2530-83-8</td>
<td>NE</td>
<td>NE</td>
</tr>
</tbody>
</table>

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

PERSONAL PROTECTIVE EQUIPMENT (PPE):


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 self-contained air supply is required under appropriate regulations.

9. PHYSICAL and CHEMICAL PROPERTIES

FORM: Liquid.

MOLECULAR WEIGHT: 236.34

Molecular Formula: C₁₂H₂₀O₂Si

ODOR: Esters-like.

VAPOR DENSITY: 8.1 (calc.): 8.1

BOILING POINT: 262°C (504°F)

COLOR: Clear, colorless.

Freezing Point: < -70°C (< -94°F)

Flammable and Combustible Material at 20°C (68°F): Not available.
9. PHYSICAL and CHEMICAL PROPERTIES (Continued)

**ELECTRICAL CONDUCTIVITY:** Expected to be between 50 and 1 x 10 ps/m.

**FLASH POINT:** 110°C (230°F)  
**DECOMPOSITION TEMPERATURE:** > 300°C (> 572°F)  
**SPECIFIC GRAVITY (water = 1) @ 25°C:** 1.07

**SATURATION VAPOR CONCENTRATION @ 25°C (calc.):** 0.02%  
**EVAPORATION RATE (nBuAc = 1):** < 1

**SOLUBILITY IN WATER:** Not applicable; reacts with neutral water (pH = 7) within few hours at 25°C. It reacts in less than an hour when the pH is slightly acidic (pH = 6) or slightly basic (pH = 8).

**OTHER SOLUBILITIES:** Soluble in acetone, ether, and benzene. Expected to be soluble in most non-polar organic solvents such as chlorohydrocarbon solvents (e.g. methylene chloride, carbon tetrachloride), ethers (e.g. tetrahydrofuran), aromatic hydrocarbons (e.g. benzene, xylene) and petroleum ether.

**COEFFICIENT WATER/OIL DISTRIBUTION:** Log Pow: -0.854

**HOW TO DETECT THIS SUBSTANCE (WARNING PROPERTIES):** There odor and appearance of this product may be characteristic to identify it in the event of accidental release.

10. STABILITY and REACTIVITY

**CHEMICAL STABILITY:** Stable under normal circumstances of use and handling. See below for information on possible polymerization.

**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. Contact with peroxides may cause an exothermic reaction.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Combustion: Thermal decomposition of this product can generate silicon, dimethyl ether, methane, hydrogen gas, carbon, carbon monoxide, formaldehyde and other low molecular weight hydrocarbons. Thermal decomposition in presence of air produces products such as carbon monoxide, carbon dioxide, formaldehyde, formic acid, silicon, silicon oxides (e.g. amorphous silica), and polysiloxanes. Hydrolysis: Methanol.

**POSSIBILITY OF HAZARDOUS REACTIONS/POLYMERIZATION:** This product polymerizes rapidly in alkaline and acidic water or above 50°C in neutral water. Decomposes rapidly in air above 300°C.

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

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:** Depending on the duration of skin contact, skin exposure can cause reddening, discomfort or irritation. Brief contact with the liquid or vapors from this product and the eyes can cause irritation, reddening and watering and disturbances to the vision. Eye contact may cause more severe irritation, depending on the duration and concentration of exposure.
- **Skin Absorption:** This product may be harmful by skin contact; no specific details are available.
- **Ingestion:** If the product is swallowed, irritation of the mouth, throat, and other tissues of the gastrointestinal system may occur and may cause nausea, vomiting, and diarrhea.
- **Inhalation:** Inhalation of vapors, mists, or sprays of this product may cause irritation of the respiratory system, depending on concentration and duration of exposure. Symptoms of exposure may include coughing, sneezing, and difficulty breathing.
- **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 systems.

**TOXICITY DATA:** Currently the following toxicity data is available for this product.

**GLYCIDOXYPROPYL TRIMETHOXYSILANE:**

- Open Irritation Test (Skin-Rabbit) 500 mg: Mild
- Standard Draize Test (Eye-Rabbit) 100 mg: Mild
- LD₅₀ (Oral-Rat) 22,600 µL/kg
- LD₅₀ (Oral-Rat) 7.01 gm/kg: Behavioral: somnolence (general depression activity), coma
- LD₅₀ (Skin-Rabbit) 3970 µL/kg
- LC₅₀ (Inhalation-Rat) > 5300 mg/m³/4 hours: Sense Organs and Special Senses (Eye): lacrimation, Lungs, Thorax, or Respiration: other changes
- LC₅₀ (Inhalation-Rat) 5300 mg/m³/4 hours: Sense Organs and Special Senses (Eye): lacrimation; Nutritional and Gross Metabolic: weight loss or decreased weight gain
- TCLo (Inhalation-Rat) 119 mg/m³/6 hours:4 weeks-intermittent: Nutritional and Gross Metabolic: weight loss or decreased weight gain

**GLYCIDOXYPROPYL TRIMETHOXYSILANE (continued):**

- TCLo (Inhalation-Rat) 734 mg/m³/6 hours:9 days-intermittent: Nutritional and Gross Metabolic: weight loss or decreased weight gain; Biochemical: Enzyme inhibition, induction, or change in blood or tissue levels: transaminases; Related to Chronic Data: death
- TCLo (Oral-Rat) 30 gm/kg: female 6-15 day(s) after conception: Reproductive: Maternal Effects: other effects; Reproductive: Specific Developmental Abnormalities: musculoskeletal system
- Mutation in Microorganisms (Bacteria-Salmonella typhimurium) 100 µg/plate
- Mutation in Microorganisms (Bacteria-Salmonella typhimurium) 1 µL/plate;72 hours

**CARCINOCGENIC 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>Glycidoxypolytrimethoxyosilane</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

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

**SENSITIZATION TO THE PRODUCT:** This product is not expected to cause sensitization effects.

**TOXICOLOGICAL SYNERGISTIC PRODUCTS:** None known.

**REPRODUCTIVE TOXICITY INFORMATION:** This product has not been tested for reproductive toxicity.

**BIOLOGICAL EXPOSURE INDICES (BEIs):** Currently, no BEI’s have been established for components.
12. ECOLOGICAL INFORMATION
ALL WORK PRACTICES MUST BE AIMED AT ELIMINATING ENVIRONMENTAL CONTAMINATION.
MOBILITY: This product has demonstrated low mobility in soil.
PERSISTENCE AND BIODEGRADABILITY: Not readily biodegradable (37%) after 28 days. Physico-chemical removability half-life period: 6.5 hrs
BIO-ACCUMULATION POTENTIAL: This product has minimal bio-accumulation potential.
ECOTOXICITY: This product may cause acute or chronic harm to aquatic organisms. All release to terrestrial, atmospheric and aquatic environments should be avoided. The following aquatic toxicity data are available.
GLYCIDOXYPROPYL TRIMETHOXYSILANE: 
LC50 (Cyprinus carpio) 96 hours = 30 mg/L
LC50 (Cyprinus carpio) 96 hours = 55 mg/L
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 regulations (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: Wastes of this product should be tested to see if they meet the criteria of D001 (Ignitability characteristic).

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. NOTE:
TRANSPORT CANADA TRANSPORTATION OF DANGEROUS GOODS REGULATIONS: This product is NOT classified as Dangerous Goods, per regulations of Transport Canada.
INTERNATIONAL AIR TRANSPORT ASSOCIATION SHIPPING INFORMATION (IATA): This product is NOT classified as dangerous goods, per the International Air Transport Association.
INTERNATIONAL MARITIME ORGANIZATION SHIPPING INFORMATION (IMO): This product is NOT classified as dangerous goods, per the International Maritime Organization.

15. REGULATORY INFORMATION
ADDITIONAL U.S. REGULATIONS:
U.S. SARA Reporting Requirements: No 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.
U.S. SARA 302 Extremely Hazardous Threshold Planning Quantity (TPO): Not applicable.
U.S. SARA 304 Extremely Hazardous Reportable Quantity (RQ): Not applicable.
U.S. SARA Hazard Categories (Section 311/312, 40 CFR 370-21): ACUTE: Yes; CHRONIC: No; 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): Not applicable.
U.S. Clean Air Act (CA 112r) Threshold Quantity (TQ): Not applicable.
California Safe Drinking Water and Toxic Enforcement Act (Proposition 65): No component of this product is on the Proposition 65 List.
ADDITIONAL CANADIAN REGULATIONS:
Canadian DSL/NDSL Inventory Status: The components of this product are on the DSL Inventory.
Canadian Environmental Protection Act (CEPA) Priorities Substances Lists: Not applicable.
Canadian WHMIS Regulations: This product is classified as a Controlled Product, Hazard Class D2B (Poisonous and Infectious Material, Other effects/Toxic: Eye, Respiratory, Skin Irritation) as per the Controlled Product Regulations.

ADDITIONAL MEXICAN REGULATIONS:
Mexican Workplace Regulations (NOM-018-STPS-2000): This product is classified as hazardous.
U.S. ANSI STANDARD LABELING (Precautionary Statements): CAUTION! MAY BE HARMFUL IF INGESTED OR BY SKIN CONTACT. MAY CAUSE EYE, SKIN AND RESPIRATORY IRRITATION. MAY BE ACUTELY OR CHRONICALLY HARMFUL TO AQUATIC ORGANISMS. Avoid contact with eyes, skin, and clothing. Avoid breathing mist, vapors or fume. Do not taste or swallow. Wash thoroughly after handling. Keep container tightly closed. Use only with adequate ventilation. Keep away from heat and flame. Wear gloves, eye protection, respiratory protection, and appropriate body protection. FIRST-AID: In case of contact, immediately flush skin and eyes with plenty of water. Remove contaminated clothing and shoes. Get medical attention if irritation develops or persists. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. If swallowed, do not induce vomiting. Get medical attention. IN CASE OF FIRE: Use water fog, foam, dry chemical, or CO2. IN CASE OF SPILL: Absorb spilled product with polypropylene or other suitable absorbing material. Place all spill residue in an appropriate container and seal. Dispose of in accordance with U.S. Federal, State, and local hazardous waste disposal regulations and those of Canada.
Hazardous Materials Identification System Hazard Ratings (continued):

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

Key Acronyms:

CHEMTREC: Chemical Transportation Emergency Center, a 24-hour emergency information and/or emergency assistance service operated to answer questions about hazardous materials.

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

DFG MAK Germ Cell Mutagen Categories: I: Germ cell mutants that have been shown to increase the mutant frequency in the progeny of exposed humans. 2: Germ cell mutants that have been shown to increase the mutant frequency in the progeny of exposed mammals. 3A: Substances that have been shown to induce genetic damage in germ cells of humans or animals, which produce mutagenic effects in somatic cells of mammals in vivo and have been shown to induce somatic DNAdamages. a: 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 is 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 mutants are genotoxic. Therefore, a Category 4 germ cell mutants cannot apply. At some time in the future, it is conceivable that a Category 4 could be established for genotoxic substances with primary targets other than DNA (e.g. purely aneugenic substances) if research results make this seem sensible.) 5: Germ cell mutants, the potency of which is considered to be so low that, provided the MAK value is observed, this contribution to genetic risk for humans is considered to be negligible.

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 may be assumed 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.

DFG MAK Pregnancy Risk Group Classification (continued): 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.

LOQ: Limit of Quantitation.

Misc: Not Established: Any on-the-exposure guidelines are established, an entry of NE is made for reference.

NICE: Notice of Intended Change.

Niosh PeLs: NIOSH’s Recommended Exposure Limits.

PEL: OSHA Permissible Exposure Limits. This exposure value means exactly the same as a TEL, except that it is enforceable by OSHA. The OSHA Permissible Exposure Limits are based in the 1897 PELs and the June, 1993 Hazardous Materials Register (Cincinnati, OH). Both current PELs and the vacated PELs are indicated. The phrase, “Vacated 1989 PEL,” is placed next to the PEL that was vacated by Court Order.

Skin: Used in a skin refers to a danger of cutaneous absorption.

Stel: Short Term Exposure Limit, usually a 15-minute time-weighted average (TWA) exposure that should not be exceeded at any time during a workday.

Oral PeLs: NIOSH’s Recommended Exposure Limits.

PEL: OSHA Permissible Exposure Limits. This exposure value means exactly the same as a TEL, except that it is enforceable by OSHA. The OSHA Permissible Exposure Limits are based in the 1897 PELs and the June, 1993 Hazardous Materials Register (Cincinnati, OH). Both current PELs and the vacated PELs are indicated. The phrase, “Vacated 1989 PEL,” is placed next to the PEL that was vacated by Court Order.

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

WEEL: Workplace Environmental Exposure Limits from the AHA.

HAZARDOUS MATERIALS IDENTIFICATION SYSTEM HAZARD RATINGS:

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

Health Hazards:

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

Skin Irritation: Essentially non-irritating. Mechanical irritation may occur. PEL or Dose = 0. Eye Irritation: Essentially non-irritating. Mechanical irritation may occur. PEL or Dose = 0.

Oral LD50: > 5000 mg/kg. Oral Toxicity LD50 Rat or Rabbit: > 2000 mg/kg.

Inhalation Toxicity LC50: > 200 mg/L.

3A: Minor irritation: Minimal effects clearing in < 24 hours. Mechanical irritation may occur; minimal effects clearing in < 24 hours. Mechanical irritation may occur. PEL or Dose = 0.

50: Slight Hazard: Minor reversible injury may occur; may irritate the stomach of some individuals. May cause the skin and excreteive existing dermatitis. Skin Irritation: Slightly or mildly irritating. PEL or Dose > 50.

500: Severe Hazard: Danger to life or death. High level of irreversible injury may result from single or repeated exposure. Extremely toxic. PEL or Dose > 500.

5000: Extremely Hazardous: Death or serious injury: Immediate, high level of irreversible injury may result from single or repeated exposure. Extremely toxic. PEL or Dose > 5000.

Medical Emergency:

0 Medical Emergency: Not applicable. None.

1 No special medical treatment. Immediate medical treatment is not required.

2 Immediate medical treatment is required.

3 Specialized medical treatment is required.

4 Emergency medical treatment is required. spanish is recommended.

5 OSHA requires emergency medical treatment. spanish is required.

6 Immediate emergency response is indicated.

Q Acute Oral LD50 value is greater than 5000 mg/kg.

50: Slight Hazard: Minor reversible injury may occur; may irritate the stomach of some individuals. May cause the skin and excreteive existing dermatitis. Skin Irritation: Slightly or mildly irritating. PEL or Dose > 50.

500: Severe Hazard: Danger to life or death. High level of irreversible injury may result from single or repeated exposure. Extremely toxic. PEL or Dose > 500.

5000: Extremely Hazardous: Death or serious injury: Immediate, high level of irreversible injury may result from single or repeated exposure. Extremely toxic. PEL or Dose > 5000.

Medical Emergency:

0 Medical Emergency: Not applicable. None.

1 No special medical treatment. Immediate medical treatment is not required.

2 Immediate medical treatment is required.

3 Specialized medical treatment is required.

4 Emergency medical treatment is required. spanish is recommended.

5 OSHA requires emergency medical treatment. spanish is required.

6 Immediate emergency response is indicated.

OSHA Safe Work Practices when dealing with Hazardous Materials include:

- Training employees on the dangers of hazardous materials.
- Providing personal protective equipment (PPE) such as gloves, respirators, and safety glasses.
- Establishing proper storage and handling procedures.
- Conducting regular safety inspections and audits.
- Developing emergency response plans.

As a result of the incident, the plant was closed for a week for a thorough investigation and cleanup. The incident raised concerns about the company’s safety practices and the adequacy of the facility’s safety procedures. The regulatory agency conducted an inspection and found violations of the Hazard Communication Standard.

Based on the investigation, the company was cited for failing to provide employees with proper training, failing to maintain adequate emergency response plans, and failing to properly label and store hazardous materials. The violations resulted in a significant fine and a requirement to develop a corrective action plan and undergo additional training.

The company took steps to address the deficiencies and implemented changes to improve safety practices. These changes included enhancing their training programs, revising their emergency response plans, and implementing more stringent storage and handling procedures. The regulatory agency conducted follow-up inspections to ensure compliance with the corrective action plan.

The incident highlighted the importance of maintaining a strong safety culture and adhering to regulatory requirements to protect workers and the surrounding community.
Hazardous Materials Identification System Hazard Ratings (Continued):

**FLAMMABILITY HAZARD** (continued): Materials that must not be moderately heated or exposed to relatively high temperatures before ignition can occur. Materials in this degree would not under ordinary conditions be heated above the flash point with any sustained burning. In the event of moderate heating, however, they could lose volatile material that would burn with a flash point less than or equal to the mean burning time of a 2.3 potassium bromate/cellulose mixture. Div 1.4 explosives. Explosive substances where the explosive effects are largely confined to the package and no fragmentation of appreciable size or shape are expected. An external fire must not cause instantaneous or complete vaporization of the entire contents. Solutions which contain more than 40% of an LD50 for acute oral toxicity greater than 5,000 mg/kg or an LC50 for acute inhalation toxicity greater than 10,000 ppm. Liquids that burn rapidly but do not generally form explosive mixtures. 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. Materials that, in themselves are normally stable, but that can become unstable at elevated temperatures and pressures. Materials that have an instantaneously power density (product of heat of reaction and reaction rate) at 250°C (482°F) below 10 W/ml. Materials that, in themselves are capable of detonation or explosive decomposition or explosive reaction, but that require a strong initiating source or that must be heated under confinement before initiation. Materials that have an instantaneously power density (product of heat of reaction and reaction rate) at 250°C (482°F) below 1000 W/ml. Materials that are sensitive to thermal or mechanical shock at elevated temperatures and pressures. Materials in which the criteria that they are readily capable of detonation or explosive decomposition or explosive reaction are met. Materials that, in themselves are capable of detonation or explosive decomposition or explosive reaction, and meet OSHA definition but < 514.7 psi absolute at 21.1°C (70°F) [500 psig]. Materials that, in themselves are capable of detonation or explosive decomposition or explosive reaction, but that require a strong initiating source or that must be heated under confinement before initiation. Materials that, in themselves are capable of detonation or explosive decomposition or explosive reaction, but that require a strong initiating source or that must be heated under confinement before initiation. Materials that, in themselves are capable of detonation or explosive decomposition or explosive reaction, but that require a strong initiating source or that must be heated under confinement before initiation.