SAFETY DATA SHEET

Pecora-Deck™ 806 Top Coat

1. PRODUCT IDENTIFICATION

IDENTIFICATION of the SUBSTANCE or PREPARATION

<table>
<thead>
<tr>
<th>TRADE NAME (AS LABELED):</th>
<th>Pecora-Deck™ 806 Top Coat</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRODUCT DESCRIPTION:</td>
<td>Urethane</td>
</tr>
<tr>
<td>CHEMICAL NAME/CLASS:</td>
<td>Urethane Based Coatings</td>
</tr>
<tr>
<td>SYNONYMS:</td>
<td>Pecora-Deck™ 806</td>
</tr>
<tr>
<td>RELEVANT USE:</td>
<td>General Polyurethane Sealants</td>
</tr>
<tr>
<td>USES ADVISED AGAINST:</td>
<td>Other Than Relevant Use</td>
</tr>
</tbody>
</table>

COMPANY/UNDERTAKING IDENTIFICATION:

<table>
<thead>
<tr>
<th>SUPPLIER/MANUFACTURER’S NAME:</th>
<th>Pecora Corporation</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADDRESS:</td>
<td>165 Wambold Road, Harleysville, PA 19438</td>
</tr>
<tr>
<td>EMERGENCY PHONE:</td>
<td>800-424-9300 (CHEMTREC, 24-hours)</td>
</tr>
<tr>
<td>BUSINESS PHONE:</td>
<td>215-723-6051 (Mon–Fri, 8 AM–5 PM ET)</td>
</tr>
<tr>
<td>PREPARATION DATE:</td>
<td>January 2004</td>
</tr>
<tr>
<td>REVISION DATE:</td>
<td>February 22, 2017</td>
</tr>
</tbody>
</table>

This product is sold for commercial use. This SDS has been developed to address safety concerns of those individuals working with bulk quantities of this 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, Canadian WHMIS 2015 and the Global Harmonization required information is included in appropriate sections based on the Global Harmonization Standard format. This product has been classified in accordance with the hazard criteria of the countries listed above and the SDS contains all the information required by the Canadian WHMIS 2015 [HPR-GHS], the Global Harmonization Standard and OSHA 1910.120.

2. HAZARD IDENTIFICATION


<table>
<thead>
<tr>
<th>Classification:</th>
<th>Flammable Liquid Cat. 3, Acute Inhalation Toxicity Cat. 2, Eye Irritation Cat. 2, STOT (Inhalation-Respiratory Irritation) SE Cat. 3, Skin Irritation Cat. 2, Respiratory Sensitizer Cat. 1, Skin Sensitization Cat. 1, Aquatic Chronic Toxicity Cat. 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazard Symbols/Pictograms:</td>
<td>GHS02, GHS06, GHS08, GHS09</td>
</tr>
</tbody>
</table>

EMERGENCY OVERVIEW:

Physical Description: This product is a flammable, clear to colored, viscous liquid with an odor characteristic of isocyanates.

Health Hazards: DANGER! Inhalation of vapors may be harmful or fatal. Harmful or fatal if swallowed. This product can cause irritation by all routes of exposure. Eye irritation may be severe. Chronic inhalation may cause lung damage. May cause toxic systemic effects by skin absorption. Can cause skin and respiratory sensitization and allergic reaction. Contains trace compounds that are suspect carcinogens.

Flammability Hazard: This product is flammable and can ignite if exposed to high temperature or direct flame.

Reactivity Hazard: Contact with water produces heat, carbon dioxide and urea polymers; reaction can be vigorous. Closed containers can rupture violently if contaminated with water or if involved in a fire. Due to the polyether Diol component, this product may form unstable or flammable peroxides on prolonged exposure to air if stabilizer is depleted.

Environmental Hazard: This product has not been tested for environmental impact. All release to the environment should be avoided. Contains compounds that can cause harm to aquatic organisms.

Hazardous Materials Identification System (HMIS®)

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

See Section 16 for definitions of ratings

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

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

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

U.S. OSHA Regulatory Status: This material has a classification under the Global Harmonization Standard, as applied under OSHA regulations, as given earlier in this Section.
### 3. COMPOSITION AND INFORMATION ON INGREDIENTS

This SDS is a composite formulation of 806 colors of the product, including Clear. Components given may not be present in all products.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS #</th>
<th>W/W%</th>
<th>LABEL ELEMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proprietary Polyester Polys</td>
<td>5.0-35.0</td>
<td>Classification: Not Applicable</td>
<td></td>
</tr>
<tr>
<td>Proprietary Glycol Ether</td>
<td>5.0-25.0</td>
<td>HARMONISED CLASSIFICATION - ANNEX VI OF REGULATION (EC) NO 1272/2008 (CLP REGULATION)</td>
<td></td>
</tr>
<tr>
<td>Proprietary Solvent Naphtha (contains less than 0.1% benzene)</td>
<td>5.0-25.0</td>
<td>Contains the following compound</td>
<td></td>
</tr>
<tr>
<td>Proprietary Benzene</td>
<td>5.0-25.0</td>
<td>HARMONISED CLASSIFICATION - ANNEX VI OF REGULATION (EC) NO 1272/2008 (CLP REGULATION)</td>
<td></td>
</tr>
<tr>
<td>Dicyclohexylmethane-4,4’-diisocyanate</td>
<td>5124-30-1</td>
<td>0.0-25.0</td>
<td>HARMONISED CLASSIFICATION - ANNEX VI OF REGULATION (EC) NO 1272/2008 (CLP REGULATION)</td>
</tr>
<tr>
<td>Isophorone Diisocyanate</td>
<td>4096-71-9</td>
<td>0.0-20.0</td>
<td>HARMONISED CLASSIFICATION - ANNEX VI OF REGULATION (EC) NO 1272/2008 (CLP REGULATION)</td>
</tr>
<tr>
<td>Proprietary Polyether Diol</td>
<td>0.0-15.0</td>
<td>Classification: Not Applicable</td>
<td></td>
</tr>
<tr>
<td>Proprietary Carbonate Ester</td>
<td>0.0-15.0</td>
<td>HARMONISED CLASSIFICATION - ANNEX VI OF REGULATION (EC) NO 1272/2008 (CLP REGULATION)</td>
<td></td>
</tr>
<tr>
<td>Proprietary Hydroxy Terminated Saturated Linear Polyester</td>
<td>0.0-10.0</td>
<td>Classification: Not Applicable</td>
<td></td>
</tr>
<tr>
<td>Proprietary Polyol</td>
<td>0.0-10.0</td>
<td>Classification: Not Applicable</td>
<td></td>
</tr>
<tr>
<td>2,4-Toluene Diisocyanate, 2,6-Toluene Diisocyanate</td>
<td>584-84-9, 91-08-7</td>
<td>0.0-5.0</td>
<td>HARMONISED CLASSIFICATION - ANNEX VI OF REGULATION (EC) NO 1272/2008 (CLP REGULATION)</td>
</tr>
<tr>
<td>Proprietary Cyclohexanemethylamine</td>
<td>0.0-1.0</td>
<td>NOTIFIED CLASSIFICATION</td>
<td></td>
</tr>
<tr>
<td>Proprietary Alkyl Benzene</td>
<td>0.0-0.8</td>
<td>HARMONISED CLASSIFICATION - ANNEX VI OF REGULATION (EC) NO 1272/2008 (CLP REGULATION)</td>
<td></td>
</tr>
<tr>
<td>Ethyl Benzene</td>
<td>100-41-4</td>
<td>0.0-0.2</td>
<td>HARMONISED CLASSIFICATION - ANNEX VI OF REGULATION (EC) NO 1272/2008 (CLP REGULATION)</td>
</tr>
</tbody>
</table>

The following is component information for individual pigmented colors of this product:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS #</th>
<th>W/W%</th>
<th>LABEL ELEMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proprietary Silicate</td>
<td>0.0-20.0</td>
<td>Classification: Not Applicable</td>
<td></td>
</tr>
<tr>
<td>Proprietary Iron Oxide Pigment</td>
<td>0.0-3.0</td>
<td>NOTIFIED CLASSIFICATION</td>
<td></td>
</tr>
<tr>
<td>Titanium Dioxide</td>
<td>13463-67-7</td>
<td>0.0-5.0</td>
<td>SELF-CLASSIFICATION</td>
</tr>
<tr>
<td>Carbon Black</td>
<td>1333-86-4</td>
<td>0.0-0.2</td>
<td>NOTIFIED CLASSIFICATION</td>
</tr>
</tbody>
</table>

Other proprietary and trace components. Each of the other components is present in less than 1 percent concentration (0.1% concentration for potential carcinogens, reproductive toxins, respiratory tract sensitisers, and mutagens). **Balance** Classification: Not Applicable

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

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

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 cups 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 respiratory conditions, including asthma, or other long-standing respiratory conditions such as chronic bronchitis, emphysema, etc., and skin and respiratory allergies may be aggravated by overexposure to this product.

INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT IF NEEDED: Treat symptoms and eliminate overexposure. Be observant for pulmonary edema. Copiously irrigate contaminated skin and eyes with saline. Non-cardiogenic pulmonary edema and bronchospasm are the most immediate serious clinical consequences of isocyanate exposure. Markedly symptomatic patients should receive oxygen, ventilatory support, and an intravenous line. Treatment for asthma includes inhaled sympathomimetics (salbutamol, metaproterenol), intravenous theophylline, parenteral sympathomimetics (epinephrine, terbutaline), and steroids.

5. FIRE-FIGHTING MEASURES

FLASH POINT: 43.3°C (110°F)

AUTOIGNITION: Not determined.

FLAMMABLE LIMITS IN AIR: LEL: Not determined.

EXTINGUISHING MEDIA:

Suitable Extinguishing Media: Use materials appropriate for surrounding materials. Water should be used for cooling of containers only due to reaction with water.

Unsuitable Extinguishing Media: Water and halogenated media.

PROTECTION OF FIREFIGHTERS:

Special Hazards Arising From the Product: This is a flammable liquid which is also harmful by inhalation and skin contact, and so presents a contact hazard to fire-fighters. This compound reacts with water to form urea polymers, heat and carbon dioxide. Products of thermal decomposition are highly toxic (refer to Section 10 Stability and Reactivity). This reaction can be vigorous. Not sensitive to mechanical impact under normal conditions. Close containers may develop pressure and rupture in event of fire or if contaminated with water and when exposed to the heat of a fire.

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

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS AND EMERGENCY PROCEDURES: An accidental release may 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. Avoid contact with water.

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% is 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 polyponds. Absorb spilled liquid with clay, sand, polyponds, or other suitable inert absorbent materials.
6. ACCIDENTAL RELEASE MEASURES (Continued)

METHODS FOR CLEAN-UP AND CONTAINMENT (continued):
All Spills (continued): 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 phone number for the US Coast Guard National Response Center is 1-800-424-8802.

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

7. HANDLING and STORAGE

PRECAUTIONS FOR SAFE HANDLING: As with all chemicals, avoid getting this product ON YOU or IN YOU. Wash thoroughly after handling this product. Do not eat or drink while handling this material. Avoid contact with eyes, skin, and clothing. Avoid breathing fumes, vapors or mist. Do not taste or swallow. Use only with adequate ventilation. Wash hands after handling this product. 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.

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. Empty containers may contain residual product; therefore, empty containers should be handled with care. Store container below 27°C (80°F) to avoid possible reactions related to heat and overpressure of containers.

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

8. EXPOSURE CONTROLS - PERSONAL PROTECTION

EXPOSURE LIMITS/CONTROL PARAMETERS:

Ventilation and Engineering Controls: Use with adequate ventilation to ensure exposure levels are maintained below the limits provided below.

Occupational/Workplace Exposure Limits/Guidelines:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS #</th>
<th>Guideline</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon Black</td>
<td>1333-86-4</td>
<td>ACGIH TLV TWA</td>
<td>3.5 mg/m³ (inhalable fraction)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OSHA PEL TWA</td>
<td>3.5 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NIOSH REL TWA</td>
<td>3.5 mg/m³ (0.1 in the presence of PAHs, as PAHs: 10-hr TWA)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>DFG MAK TWA</td>
<td>As inhalable dust</td>
</tr>
<tr>
<td>Dicyclohexylmethane-4,4’-diisocyanate</td>
<td>5124-30-1</td>
<td>ACGIH TLV TWA</td>
<td>0.054 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NIOSH REL STEL</td>
<td>0.01 mg/m³ (ceiling)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>DFG MAK</td>
<td>Danger of Skin Sensitization</td>
</tr>
<tr>
<td>Ethyl Benzene</td>
<td>100-41-4</td>
<td>ACGIH TLV TWA</td>
<td>87 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ACGIH TLV STEL</td>
<td>543 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OSHA PEL TWA</td>
<td>435 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OSHA PEL STEL</td>
<td>545 mg/m³ (vacated 1989 PEL)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NIOSH REL TWA</td>
<td>435 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NIOSH REL STEL</td>
<td>545 ppm</td>
</tr>
<tr>
<td>Isophorone Disocyanate</td>
<td>4098-71-9</td>
<td>ACGIH TLV TWA</td>
<td>0.005 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OSHA PEL TWA</td>
<td>0.005 ppm (vacated 1989 PEL)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OSHA PEL STEL</td>
<td>0.02 ppm [skin] (vacated 1989 PEL)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NIOSH REL TWA</td>
<td>0.005 ppm [skin]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NIOSH REL STEL</td>
<td>0.02 ppm [skin]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>DFG MAK TWA</td>
<td>1×MAK 15 minute average value, 1-hr interval, 4 per shift</td>
</tr>
<tr>
<td></td>
<td></td>
<td>DFG MAK PEAK</td>
<td>1×MAK 15 minute average value, 1-hr interval 4 per shift</td>
</tr>
<tr>
<td>Proprietary Alkyl Benzene</td>
<td></td>
<td>ACGIH TLV TWA</td>
<td>100 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ACGIH TLV STEL</td>
<td>150 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OSHA PEL TWA</td>
<td>100 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OSHA PEL STEL</td>
<td>150 ppm (vacated 1989 PEL)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NIOSH REL TWA</td>
<td>100 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NIOSH REL STEL</td>
<td>150</td>
</tr>
<tr>
<td></td>
<td></td>
<td>DFG MAK TWA</td>
<td>100 (skin)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>DFG MAK PEAK</td>
<td>1×MAK 15 minute average value, 1-hr interval 4 per shift</td>
</tr>
</tbody>
</table>

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

EXPOSURE LIMITS/CONTROL PARAMETERS (continued):
Ventilation and Engineering Controls: Use with adequate ventilation to ensure exposure levels are maintained below the limits provided below.
Occupational/Workplace Exposure Limits/Guidelines:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS#</th>
<th>Guideline</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proprietary Benzene</td>
<td></td>
<td>ACGIH TLV TWA</td>
<td>25 ppm (mixed isomers)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OSHA PEL TWA</td>
<td>25 ppm (vacated 1989 PEL)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NIOSH REL TWA</td>
<td>25 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>DFG MAK TWA</td>
<td>20 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>DFG MAK PEAK</td>
<td>2×MAK 15 minute average value, 1-hr interval 4 per shift</td>
</tr>
<tr>
<td>Proprietary Carbonate Ester</td>
<td>NE</td>
<td>NE</td>
<td>NE</td>
</tr>
<tr>
<td>Proprietary Cyclohexanemethylamine</td>
<td>NE</td>
<td>NE</td>
<td>NE</td>
</tr>
<tr>
<td>Proprietary Glycol Ether</td>
<td>DFG MAK TWA</td>
<td>50 ppm</td>
<td></td>
</tr>
<tr>
<td></td>
<td>DFG MAK PEAK</td>
<td>1×MAK 1-hr interval, 5 min. average value, 4 per shift</td>
<td></td>
</tr>
<tr>
<td></td>
<td>AIHA WEEL TWA</td>
<td>50 ppm</td>
<td></td>
</tr>
<tr>
<td>Proprietary Hydroxy Terminated Saturated Liner Polyester</td>
<td>NE</td>
<td>NE</td>
<td>NE</td>
</tr>
<tr>
<td>Proprietary Iron Oxide Pigment</td>
<td>ACGIH TLV TWA</td>
<td>5 mg/m³ respirable fraction</td>
<td></td>
</tr>
<tr>
<td></td>
<td>OSHA PEL TWA</td>
<td>10 mg/m³ fume</td>
<td></td>
</tr>
<tr>
<td></td>
<td>NIOSH REL TWA</td>
<td>5 mg/m³ dust and fume, as Fe</td>
<td></td>
</tr>
<tr>
<td></td>
<td>NIOSH IDLH</td>
<td>2500 mg/m³, as Fe</td>
<td></td>
</tr>
<tr>
<td></td>
<td>DFG MAK TWA</td>
<td>With the exception of iron oxides which are not biologically available</td>
<td></td>
</tr>
<tr>
<td>Proprietary Polyether Diol</td>
<td>NE</td>
<td>NE</td>
<td>NE</td>
</tr>
<tr>
<td>Proprietary Polyether Resin</td>
<td>NE</td>
<td>NE</td>
<td>NE</td>
</tr>
<tr>
<td>Proprietary Polyether Polyols</td>
<td>NE</td>
<td>NE</td>
<td>NE</td>
</tr>
<tr>
<td>Proprietary Polyurethane</td>
<td>NE</td>
<td>NE</td>
<td>NE</td>
</tr>
<tr>
<td>Proprietary Silicate</td>
<td>ACGIH TLV TWA</td>
<td>2 mg/m³ respirable fraction</td>
<td></td>
</tr>
<tr>
<td></td>
<td>OSHA PEL TWA</td>
<td>20 mppcf (containing &lt; 1% quartz)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>NIOSH REL</td>
<td>2 mg/m³ and &lt; 1% quartz respirable fraction</td>
<td></td>
</tr>
<tr>
<td></td>
<td>DFG MAK TWA</td>
<td>1.5 mg/m³ respirable fraction</td>
<td></td>
</tr>
<tr>
<td>Proprietary Solvent Naphtha</td>
<td>NE</td>
<td>NE</td>
<td>NE</td>
</tr>
<tr>
<td>Titanium Dioxide</td>
<td>13463-67-7</td>
<td>ACGIH TLV TWA</td>
<td>10 mg/m³ NIE: 1 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OSHA PEL TWA</td>
<td>15 mg/m³ total dust</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NIOSH REL</td>
<td>Lowest feasible concentration (LOQ 0.2 mg/m³)</td>
</tr>
<tr>
<td>Toluene-2,4-Disocyanate</td>
<td>584-84-9</td>
<td>ACGIH TLV TWA</td>
<td>0.005 ppm (NIC: 0.001), Sensitizer</td>
</tr>
<tr>
<td></td>
<td>91-08-7</td>
<td>ACGIH TLV STEL</td>
<td>0.02 ppm (NIC: 0.003), Sensitizer</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OSHA PEL STEL</td>
<td>0.02 ppm (ceiling) (CAS# 584-84-9)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>DFG MAK TWA</td>
<td>Danger of Sensitization of the airways</td>
</tr>
</tbody>
</table>

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

EXPOSURE LIMITS/CONTROL PARAMETERS (continued):

Biological Exposures Indices (BEIs): Currently, the following BEI’s have been established for some components of this product.

<table>
<thead>
<tr>
<th>CHEMICAL: DETERMINANT</th>
<th>SAMPLING TIME</th>
<th>BEI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl Benzene</td>
<td>End of shift at end of workweek</td>
<td>0.7 g/g creatine</td>
</tr>
<tr>
<td>• Sum of mandelic acid in urine and phenylglyoxlylic acid in urine</td>
<td>Not critical</td>
<td>----</td>
</tr>
<tr>
<td>• Ethyl benzene in end-exhaled air</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proprietary Alky Benzene</td>
<td>End of Shift</td>
<td>1.5 g/g Creatinene</td>
</tr>
<tr>
<td>• Methylhippuric Acid in Urine</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


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). Full-body chemical protection may be necessary. 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 NIOSH respiratory equipment guidelines for components that present an inhalation hazard are presented for additional assistance in respiratory protective equipment selection.

ISOPHORONE DIISOCYANATE

<table>
<thead>
<tr>
<th>CONCENTRATION</th>
<th>RESPIRATORY PROTECTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 0.05 ppm:</td>
<td>Any Supplied-Air Respirator (SAR).</td>
</tr>
<tr>
<td>Up to 0.125 ppm:</td>
<td>Any SAR operated in a continuous-flow mode.</td>
</tr>
<tr>
<td>Up to 0.25 ppm:</td>
<td>Any Self-Contained Breathing Apparatus (SCBA) with a full facepiece, or any SAR with a full facepiece.</td>
</tr>
</tbody>
</table>
8. EXPOSURE CONTROLS - PERSONAL PROTECTION (Continued)

PERSONAL PROTECTIVE EQUIPMENT (continued):

Respiratory Protection (continued):

**ISOPHORONE DIISOCYANATE (continued)**

<table>
<thead>
<tr>
<th>CONCENTRATION</th>
<th>RESPIRATOR PROTECTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 1 ppm:</td>
<td>Any SAR that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode.</td>
</tr>
</tbody>
</table>

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.

**2,4-TOLUENE DIISOCYANATE**

<table>
<thead>
<tr>
<th>CONCENTRATION</th>
<th>RESPIRATORY PROTECTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Based on NIOSH REL at Concentrations Above the NIOSH REL, or Where There is No REL, at Any Detectable Concentration:</td>
<td>Any Self-Contained Breathing Apparatus (SCBA) that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode, or any Supplied-Air Respirator (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.</td>
</tr>
</tbody>
</table>

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

**COLOR:** Clear to colored.

**MOLECULAR FORMULA:** Mixture.

**ODOR:** Characteristic of solvent based polyurethanes.

**SPECIFIC GRAVITY:** 1.1 – 1.2

**pH:** Not available.

**WPG:** 9.3 – 9.9 lb/gal

**VOLATILE ORGANIC CONTENT (VOC):** < 250 g/L

**FLASH POINT:** 43.3°C (110°F)

**WATER SOLUBILITY:** Negligible, may react.

**OTHER SOLUBILITIES:** Not available.

**COEFFICIENT WATER/OIL DISTRIBUTION:** Not available.

**VAPOR PRESSURE @ 20°C:** 3.7 mmHg

**EVAPORATION RATE (nBuAe = 1):** Not available.

**HOW TO DETECT THIS SUBSTANCE (WARNING PROPERTIES):** The appearance and odor of this product may act as warning properties in the event of an accidental release.

10. STABILITY and REACTIVITY

**CHEMICAL STABILITY:** Stable under normal circumstances of use and handling. May become unstable if stabilizer becomes depleted. At high temperatures the diisocyanate components of this product can form carbodiimides with the release of carbon dioxide, which can cause pressure build up in closed containers.

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

**INCOMPATIBLE MATERIALS:** Based on components, this product may be incompatible with amines, water, strong bases, alcohols, copper alloys, zinc, tin and aluminum compounds.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Combustion: Thermal decomposition of this product can generate formaldehyde, 1-methoxy-2-methylethylene (vinyl ether), acetic acid, hydrogen gas, formaldehyde, acetaldehyde, methylglyoxal, barium, carbon, calcium, iron, phosphorous, zirconium, silicon, titanium and nitrogen oxides, hydrogen cyanide, isocyanates and isocyanic acid. Hydrolysis: Carbon dioxide, heat and urea polymers.

**POSSIBILITY OF HAZARDOUS REACTIONS:** This product may undergo hazardous polymerization in contact with water or materials to which it is incompatible. The reaction may produce heat, carbon dioxide and urea polymers; reaction may be vigorous. Containers may rupture.

11. TOXICOLOGICAL INFORMATION

**POTENTIAL HEALTH EFFECTS:** The most significant routes of occupational exposure are inhalation and contact with skin and eyes.

The following describes expected symptoms of exposure by route of exposure, based on components.

**Contact with Skin or Eyes:** Depending on the duration of skin contact, skin overexposures can cause reddening, discomfort and moderate to severe irritation. Prolonged or further contact can cause severe inflammation, redness, rash, swelling and blistering. Repeated skin exposure to low concentration can cause dermatitis. Skin contact can cause allergic reaction. Brief contact with the liquid or vapors from this product and the eyes can cause irritation, reddening and watering. Direct eye contact may cause severe eye irritation. The diisocyanate components are very strong sensitizing agents in humans. This product also contains a trace ethylenamine compound, which can cause sensitization. Skin sensitization may occur after only one contact with. Brief contact with the liquid or vapors from this product and the eyes can cause irritation, reddening and watering. Permanent eye injury, including blindness, could result from direct contact with the liquid.

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

**Ingestion:** If the product is swallowed, it can irritate the mouth, throat, and other tissues of the gastro-intestinal system or cause burns and may cause nausea, vomiting, and diarrhea. Symptoms can include dizziness, vomiting and incoordination. Ingestion of large amounts may be harmful and cause systemic toxicity. Aspiration into the lungs after ingestion can pose a serious hazard of chemical and pulmonary edema. Ingestion may be fatal.

**Inhalation:** Inhalation of vapors, mists, or sprays of this product can moderately to severely irritate the tissues of the nose, mouth, throat, and upper respiratory system. Symptoms of overexposure may include coughing, sneezing, and difficulty breathing. Severe overexposure via inhalation may result in a potentially fatal respiratory disorder (e.g., pulmonary edema, chemical pneumonitis); symptoms may be delayed by hours or even days.
11. TOXICOLOGICAL INFORMATION (Continued)

INHALATION (continued): Inhalation of high concentrations of this product (as may occur in a poorly ventilated area) may be fatal. Repeated inhalation of mists of this product may cause respiratory disorders (e.g., bronchitis). Inhalation can also lead to adverse central nervous system effects, including dizziness, incoordination, nausea and vomiting. Chronic inhalation of low concentration may cause permanent damage to the lungs and reduced lung function. Effects such as euphoria, muscle incoordination and loss of consciousness have been reported after severe exposure to toluene diisocyanate. Inhalation can cause respiratory sensitization and allergic reaction as described further in this Section. This product contains a trace ethyleneamine compound, which can also cause respiratory sensitization. There may be susceptible individuals who develop long-term hyper-reactive airways, asthma and other respiratory injury following exposure to extremely low concentrations of ethyleneamines, even below the irritation threshold. Other respiratory irritants may produce a reaction in individuals whose airways have become hyper-reactive. Respiratory sensitization and lung damage may be permanent.

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 system.

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.

DICYCLOHEXYLMETHANE-4,4'-DISOYCINATE:
Standard Draize Test (Skin-Rabbit) 1/4% 24 hours: Moderate
Standard Draize Test (Eye-Rabbit) 100 µL: Mild
Standard Draize Test (Eye-Rabbit) 100 µL 24 hours: Severe
LD₅₀ (Oral-Rat) 9900 mg/kg: Behavioral: coma
LD₅₀ (Oral-Mouse) > 5000 mg/kg: Behavioral: coma
LD₅₀ (Skin-Rabbit) 50 mg/kg: LD₅₀ (Intraperitoneal-Mouse) 750 mg/kg
LD₅₀ (Intraperitoneal-Mouse) > 1500 mg/kg: Behavioral: coma
TC₅₀ (Inhalation-Rat) 1105 mg/m³/4 hours: Behavioral: alteration of classical conditioning
TC₅₀ (Inhalation-Rat) 237 mg/m³/30 days-intervention: Behavioral: alteration of classical conditioning

PROPRIETARY GYCOL Ether:
LD₅₀ (Oral-Rat) 8532 mg/kg
LD₅₀ (Oral-Rat) 9000 mg/kg: Behavioral: coma
LD₅₀ (Oral-Mouse) > 5000 mg/kg: Behavioral: coma
LD₅₀ (Skin-Rabbit) > 10 g/kg: LD₅₀ (Intraperitoneal-Mouse) 750 mg/kg
LD₅₀ (Intraperitoneal-Mouse) > 1500 mg/kg: Behavioral: coma
TC₅₀ (Inhalation-Rat) 237 mg/m³/30 days-intervention: Behavioral: alteration of classical conditioning

PROPRIETARY CARBONATE ESTER:
Standard Draize Test (Skin-Rabbit) 5 mg/kg 3 days-intervention: Moderate
Standard Draize Test (Skin-Rabbit) 50 mg: Moderate
Standard Draize Test (Eye-Rabbit) 60 mg: Moderate
LD₅₀ (Oral-Rat) 20 mg/kg: LD₅₀ (Intraperitoneal-Mouse) > 1500 mg/kg
LD₅₀ (Oral-Mouse) 20, 700 mg/kg: LD₅₀ (Intraperitoneal-Mouse) > 1500 mg/kg
LD₅₀ (Skin-Rabbit) > 2000 mg/kg

PROPRIETARY BENZENE:
LD₅₀ (Oral-Rat) 5 mg/kg
LD₅₀ (Oral-Rat) 6900 mg/kg
LD₅₀ (Intraperitoneal-Mouse) > 5 ml/kg: LD₅₀ (Intraperitoneal-Mouse) > 5 mg/kg
LD₅₀ (Oral-Mouse) > 5000 mg/kg: LD₅₀ (Oral-Mouse) > 10 mg/kg: LD₅₀ (Oral-Mouse) > 5000 mg/kg
LD₅₀ (Rabbit) > 10 mg/kg: LD₅₀ (Intraperitoneal-Mouse) > 1500 mg/kg

TALC:
Standard Draize Test (Skin-Human) 300 µg/3 days-intervention: Mild
TC₅₀ (Oral-Rat) 17 mg/m³/6 hours/26 days-intervention: LD₅₀ (Oral-Rat) > 10 mg/kg: LD₅₀ (Oral-Mouse) > 5000 mg/kg
TC₅₀ (Oral-Rat) > 10 mg/kg/1 hour: TC₅₀ (Oral-Mouse) > 5000 mg/kg
TC₅₀ (Rabbit) > 10 mg/kg/1 hour: TC₅₀ (Rabbit) > 10 mg/kg
TC₅₀ (Human) 9000 mg/kg: TC₅₀ (Human) 9000 mg/kg:

TITANIUM DIOXIDE:
Standard Draize Test (Skin-Human) 300 µg/3 days-intervention: Mild
TC₅₀ (Oral-Rat) 17 mg/m³/6 hours/26 days-intervention: LD₅₀ (Oral-Rat) > 10 mg/kg: LD₅₀ (Oral-Mouse) > 5000 mg/kg
TC₅₀ (Oral-Rat) > 10 mg/kg/1 hour: TC₅₀ (Oral-Mouse) > 5000 mg/kg
TC₅₀ (Rabbit) > 10 mg/kg/1 hour: TC₅₀ (Rabbit) > 10 mg/kg
TC₅₀ (Human) 9000 mg/kg: TC₅₀ (Human) 9000 mg/kg:

TITANIUM DIOXIDE:
Standard Draize Test (Skin-Human) 300 µg/3 days-intervention: Mild
TC₅₀ (Oral-Rat) 17 mg/m³/6 hours/26 days-intervention: LD₅₀ (Oral-Rat) > 10 mg/kg: LD₅₀ (Oral-Mouse) > 5000 mg/kg
TC₅₀ (Oral-Rat) > 10 mg/kg/1 hour: TC₅₀ (Oral-Mouse) > 5000 mg/kg
TC₅₀ (Rabbit) > 10 mg/kg/1 hour: TC₅₀ (Rabbit) > 10 mg/kg
TC₅₀ (Human) 9000 mg/kg: TC₅₀ (Human) 9000 mg/kg:

TITANIUM DIOXIDE:
Standard Draize Test (Skin-Human) 300 µg/3 days-intervention: Mild
TC₅₀ (Oral-Rat) 17 mg/m³/6 hours/26 days-intervention: LD₅₀ (Oral-Rat) > 10 mg/kg: LD₅₀ (Oral-Mouse) > 5000 mg/kg
TC₅₀ (Oral-Rat) > 10 mg/kg/1 hour: TC₅₀ (Oral-Mouse) > 5000 mg/kg
TC₅₀ (Rabbit) > 10 mg/kg/1 hour: TC₅₀ (Rabbit) > 10 mg/kg
TC₅₀ (Human) 9000 mg/kg: TC₅₀ (Human) 9000 mg/kg:

TITANIUM DIOXIDE:
Standard Draize Test (Skin-Human) 300 µg/3 days-intervention: Mild
TC₅₀ (Oral-Rat) 17 mg/m³/6 hours/26 days-intervention: LD₅₀ (Oral-Rat) > 10 mg/kg: LD₅₀ (Oral-Mouse) > 5000 mg/kg
TC₅₀ (Oral-Rat) > 10 mg/kg/1 hour: TC₅₀ (Oral-Mouse) > 5000 mg/kg
TC₅₀ (Rabbit) > 10 mg/kg/1 hour: TC₅₀ (Rabbit) > 10 mg/kg
TC₅₀ (Human) 9000 mg/kg: TC₅₀ (Human) 9000 mg/kg:

TITANIUM DIOXIDE:
Standard Draize Test (Skin-Human) 300 µg/3 days-intervention: Mild
TC₅₀ (Oral-Rat) 17 mg/m³/6 hours/26 days-intervention: LD₅₀ (Oral-Rat) > 10 mg/kg: LD₅₀ (Oral-Mouse) > 5000 mg/kg
TC₅₀ (Oral-Rat) > 10 mg/kg/1 hour: TC₅₀ (Oral-Mouse) > 5000 mg/kg
TC₅₀ (Rabbit) > 10 mg/kg/1 hour: TC₅₀ (Rabbit) > 10 mg/kg
TC₅₀ (Human) 9000 mg/kg: TC₅₀ (Human) 9000 mg/kg:
TOXICITY DATA (continued):

TITANIUM DIOXIDE (continued):
TClo (Intratracheal-Mouse) 100 mg/kg: Tumorogenic: increased incidence of tumors in susceptible strains
TClo (Intratracheal-Rat) 1 mg/kg: Lungs, Thorax, or Respiration; other changes; Biochemical: Metabolism (Intermediary): effect on inflammation or mediation of inflammation
TClo (Intratracheal-Rat) 10 mg/m³/6 hours/13 weeks intermittent: Lungs, Thorax, or Respiration; structural or functional change in trachea or bronchi
TCLo (Inhalation-Rat) 10 mg/m³/6 hours/13 weeks intermittent: Lungs, Thorax, or Respiration; fibrosis (interstitial); other changes; Biochemical: Metabolism (Intermediary): effect on inflammation or mediation of inflammation
TClo (Inhalation-Rat) 10 mg/m³/13 weeks intermittent: Lungs, Thorax, or Respiration; other changes; Biochemical: Metabolism (Intermediary): effect on inflammation or mediation of inflammation
TCLo (Inhalation-Rat) 50 mg/m³/13 weeks intermittent: Lungs, Thorax, or Respiration: sputum; Blood: changes in cell count (unspecified); Biochemical: Enzyme inhibition, induction, or change in blood or tissue levels; multiple enzyme effects, Metabolism (Intermediary): effect on inflammation or mediation of inflammation
TCLo (Inhalation-Rat) 274 mg/m³/7 days intermittent: Lungs, Thorax, or Respiration: changes in lung weight; Biochemical: Enzyme inhibition, induction, or change in blood or tissue levels; multiple enzyme effects, Metabolism (Intermediary): effect on inflammation or mediation of inflammation
TCLo (Inhalation-Rat) 250 mg/m³/6 hours/2 years intermittent: Tumorogenic: carcinogenic by RTECS criteria; Lungs, Thorax, or Respiration: tumors
TClo (Inhalation-Mouse) 10 mg/m³/6 hours/13 weeks intermittent: Lungs, Thorax, or Respiration; other changes; Biochemical: Metabolism (Intermediary): effect on inflammation or mediation of inflammation
TClo (Inhalation-Mouse) 10 mg/m³/6 hours/13 weeks intermittent: Lungs, Thorax, or Respiration; structural or functional change in trachea or bronchi
TCLo (Inhalation-Mouse) 10 mg/m³/13 weeks intermittent: Lungs, Thorax, or Respiration; other changes; Biochemical: Metabolism (Intermediary): effect on inflammation or mediation of inflammation
TCLo (Inhalation-Mouse) 50 mg/m³/13 weeks intermittent: Lungs, Thorax, or Respiration: sputum; Biochemical: Enzyme inhibition, induction, or change in blood or tissue levels; dehydrogenases
TCLo (Inhalation-Mouse) 250 mg/m³/113 weeks intermittent: Lungs, Thorax, or Respiration; sputum; Blood: changes in cell count (unspecified); Biochemical: Enzyme inhibition, induction, or change in blood or tissue levels; dehydrogenases
TCLo (Inhalation-Hamster) 250 mg/m³/113 weeks intermittent: Lungs, Thorax, or Respiration; sputum; Blood: changes in cell count (unspecified); Biochemical: Enzyme inhibition, induction, or change in blood or tissue levels; dehydrogenases
TCLo (Inhalation-Hamster) 250 mg/m³/6 hours/13 weeks intermittent: Lungs, Thorax, or Respiration; structural or functional change in trachea or bronchi
DNA Damage (Human Lung) 1 µg/plate
DNA Damage (Human Lung) 20 µg/disk/6 hours
Sister Chromatid Exchange (Human Lymphocytes) 2 µmol/L/24 hours
Morphological Transformation (Mouse Fibroblasts) 10 µg/ml/24 hours
Morphological Transformation (Mouse Fibroblasts) 25 µg/ml/24 hours
Morphological Transformation (Mouse Fibroblasts) 40 µg/ml/24 hours
Sister Chromatid Exchange (Human Lymphocytes) 300 mg/L
Specific Locus Test (Mouse Lymphocyte) 25 mg/L
Specific Locus Test (Mouse Lymphocyte) 75 mg/L
Sister Chromatid Exchange (Human Lymphocytes) 300 mg/L
Specific Locus Test (Mouse Lymphocyte) 75 mg/L
Specific Locus Test (Mouse Lymphocyte) 150 mg/L
Specific Locus Test (Mouse Lymphocyte) 300 mg/L
Specific Locus Test (Mouse Lymphocyte) 100 mg/L
Specific Locus Test (Mouse Lymphocyte) 500 mg/L
Sister Chromatid Exchange (Human Lymphocytes) 600 mg/L
Specific Locus Test (Mouse Lymphocyte) 25 mg/L
Cytogenetic Analysis (Hamster Ovary) 600 mg/L
Sister Chromatid Exchange (Hamster Ovary) 300 mg/L

2,4-TOLUENE DISOCYANATE (continued):
TClo (Inhalation-Rat) 102 ppb/24 hours 7 days/continuously: Lungs, Thorax, or Respiration: structural or functional change in trachea or bronchi
TClo (Inhalation-Rat) 0.004 gm/m³/4 hours: Liver: hepatitis (hepatocellular necrosis), zonal
to zonal
TClo (Inhalation-Rat) 204 µg/m³/24 hours/84 days-continuous: Behavioral: muscle contraction or spasticity; Biochemical: Enzyme inhibition, induction, or change in blood or tissue levels: true cholesteroleser, Metabolism (Intermediate): lipids including transport
TClo (Inhalation-Rat) 26 ppm/6 hours/5 weeks intermittent: Lungs, Thorax, or Respiration: structural or functional change in trachea or bronchi, chronic pulmonary edema; Related to Chronic Data: death
TClo (Inhalation-Mouse) 990 ppb/6 hours/14 days intermittent: Sense Organs and Special Senses (Olfaction): effect, not otherwise specified
TClo (Inhalation-Mouse) 1500 ppb/71 days intermittent: Lungs, Thorax, or Respiration: structural or functional change in trachea or bronchi; Related to Chronic Data: death
TDL0 (Oral-Rat) 15 gm/kg/10 days intermittent: Gastrointestinal: other changes; Liver: other changes; Related to Chronic Data: death
TDL0 (Skin-Mouse) 800 mg/kg/4 days intermittent: Immunoological Including Allergic: increased immune response; Biochemical: Metabolism (Intermediate): effect on inflammation or mediation of inflammation
TDL0 (Skin-Mouse) 15 mg/kg/3 days intermittent: Skin and Appendages: cutaneous sensitization, experimental (after topical exposure)
TDL0 (Skin-Mouse) 1.8 µL/kg/3 days intermittent: Skin and Appendages: cutaneous sensitization, experimental (after topical exposure)
TDL0 (Skin-Mouse) 18 µL/kg/17 days intermittent: Skin and Appendages: cutaneous sensitization, experimental (after topical exposure)
TDL0 (Skin-Mouse) 18.5 µL/kg/21 days intermittent: Skin and Appendages: cutaneous sensitization, experimental (after topical exposure); Immunoological Including Allergic: increased immune response
TDL0 (Skin-Mouse) 1.7 mg/kg/17 days intermittent: Immunoological Including Allergic: increase in cellular immune response, increase in humoral immune response
TDL0 (Skin-Mouse) 90 mg/kg/3 days intermittent: Immunoological Including Allergic: increase in humoral immune response; Biochemical: Metabolism (Intermediate): other proteins, effect on inflammation or mediation of inflammation
TDL0 (Skin-Mouse) 7.2 mg/kg/6 days intermittent: Skin and Appendages: cutaneous sensitization, experimental (after topical exposure)
TDL0 (Skin-Mouse) 4.8 mg/kg/8 days intermittent: Lungs, Thorax, or Respiration: other changes; Biochemical: Metabolism (Intermediate): effect on inflammation or mediation of inflammation
TDL0 (Skin-Mouse) 1 µg/3 days intermittent: Immunoological Including Allergic: increased immune response; Biochemical: Metabolism (Intermediate): other proteins, effect on inflammation or mediation of inflammation
TDL0 (Skin-Mouse) 90 mg/kg/3 days intermittent: Skin and Appendages: dermatitis, allergic (inflammation, unspecified); Biochemical: Metabolism (Intermediate): other proteins, effect on inflammation or mediation of inflammation
TDL0 (Skin-Mouse) 50 mg/kg/3 days intermittent: Cutaneous sensitization, experimental (after topical exposure)
TDL0 (Intradermal-Mouse) 500 mg/kg/3 days intermittent: Skin and Appendages: cutaneous sensitization, experimental (after topical exposure)
TDL0 (Intradermal-Mouse) 48.48 µL/kg/21 days intermittent: Skin and Appendages: cutaneous sensitization, experimental (after topical exposure)
TDL0 (Intradermal-Mouse) 0.3 µL/kg/21 days intermittent: Skin and Appendages: dermatitis, allergic (inflammation, unspecified); Biochemical: Metabolism (Intermediate): other proteins, effect on inflammation or mediation of inflammation
TDL0 (Multiple Routes-Mouse) 0.3 µg/kg/3 days intermittent: Lungs, Thorax, or Respiration: bronchial constriction; Lungs, Thorax, or Respiration: acute pulmonary edema, changes in lung weight
TDL0 (Intradermal-Mouse) 500 mg/kg/3 days intermittent: Skin and Appendages: dermatitis, allergic (inflammation, unspecified); Biochemical: Metabolism (Intermediate): other proteins, effect on inflammation or mediation of inflammation
2,6-TOLUENE DISOCYANATE:
TClo (Inhalation-Human) 50 ppb: Sense Organs and Special Senses (Olfaction): effect, not otherwise specified; Sense Organs and Special Senses (Eye): effect, not otherwise specified; Lungs, Thorax, or Respiration: other changes
LD50 (Oral-Wild Bird Species) 100 mg/kg
TClo (Inhalation-Mouse) 7.5 mg/m³/71 days intermittent: Immunoological Including Allergic: increased immune response; Biochemical: Metabolism (Intermediate): other proteins, effect on inflammation or mediation of inflammation
Mutation in Microorganisms (Bacteria-Salmonella typhimurium) 100 µg/plate
Mutation in Microorganisms (Bacteria-Salmonella typhimurium) 0.033 mg/plate
Specific Locus Test (Mouse Lymphocyte) 75 µg/L
Sister Chromatid Exchange (Hamster Ovary) 300 mg/L
Morphological Transformation (Mouse Fibroblasts) 0.2 mg/L/21 days

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

<table>
<thead>
<tr>
<th>CHEMICAL</th>
<th>IARC</th>
<th>EPA</th>
<th>NTP</th>
<th>NOISH</th>
<th>ACGIH</th>
<th>OSHA</th>
<th>PROP 65</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon Black</td>
<td>2B</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>A3</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Ethyl Benzene</td>
<td>2B</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>A3</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Isophorone Diisocyanate</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>A4</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Proprietary Alkyl Benzene</td>
<td>3</td>
<td>I</td>
<td>No</td>
<td>No</td>
<td>A4</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Proprietary Benzene</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>

“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.
11. TOXICOLOGICAL INFORMATION (Continued):

<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>Proprietary Carbonate Ester</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>Proprietary Cyclohexanemethylamine</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>Proprietary Glycol Ether</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>Proprietary Hydroxy Saturated Polyester Resin</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>Proprietary Iron Oxide Pigment</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>A4</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Proprietary Polyether Diol</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>Proprietary Polyols</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>Proprietary Silicate</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>Titanium Dioxide</td>
<td>2B</td>
<td>No</td>
<td>No</td>
<td>Ca</td>
<td>A4</td>
<td>No</td>
<td>Yes (airborne unbound particles of respirable size)</td>
</tr>
<tr>
<td>Toluene 2,4 &amp; 2,6-Diisocyanates</td>
<td>2B</td>
<td>No</td>
<td>No</td>
<td>Ca</td>
<td>A3</td>
<td>No</td>
<td>Tolene Diisocyanate Mixture (CAS# 24671-62-5)</td>
</tr>
</tbody>
</table>

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

SENSITIZATION TO THE PRODUCT: This product contains diisocyanate compounds, which are known human skin and respiratory sensitizers. Exposure can cause allergic reactions. Cross-sensitization between different isocyanates may occur. Onset of symptoms is usually delayed. Symptoms include a rash on the hands, arms, neck, face, chest or abdomen, even when contact occurs with a small amount of product. Other effects such as coughing, a burning sensation in the throat or redness and swelling of the eyes might also occur.

Respiratory Sensitization: Initial symptoms of respiratory reactions may appear to be a cold or mild hay fever. However, severe asthmatic symptoms can develop and include wheezing, chest tightness, shortness of breath, difficulty breathing and/or coughing. Fever, chills, general feelings of discomfort, headache, and fatigue can also occur. Symptoms may occur immediately upon exposure (within an hour), several hours after exposure or both, and/or at night. Typically, the asthma improves with removal from exposure (e.g., weekends or vacations) and returns, in some cases, in the form of an “acute attack” on renewed exposure. Sensitized people who continue to work with diisocyanates may develop symptoms sooner after each exposure. The number and severity of symptoms may increase. Death has occurred in sensitized individuals accidentally exposed to relatively low concentrations of some diisocyanates. Following removal from exposure, some sensitized workers may continue to show a slow decline in lung function and have persistent respiratory problems such as asthmatic symptoms, chronic bronchitis and hypersensitivity for months or years. Exposure to isocyanates is likely to aggravate existing respiratory disease, such as chronic bronchitis, and emphysema.

Skin Sensitization: Repeated skin contact with diisocyanates has caused skin sensitization in humans, although the condition is not common. Once a person is sensitized, contact with even a small amount can cause outbreaks of dermatitis with symptoms such as redness, rash, itching and swelling. This can spread from the hands or arms to the face and body. Some people who have inhaled some diisocyanates developed extensive skin rashes that can last weeks.

TOXICOLOGICAL SYNERGISTIC PRODUCTS: There have been several studies in humans and animals on the interaction of alkylbenzenes with drugs, alcohol and other solvents. Alkylbenzenes have 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 these compounds from the body, thus enhancing its toxic effects.

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

Mutagenicity: The components of this product are not reported to produce mutagenic effects in humans. Animal or microorganism data for components are as follows: Titanium dioxide was not mutagenic to Salmonella typhimurium TA1535, TA1537, TA1538, TA97, TA98 or TA100 or to Escherichia coli WP2, either in the presence or absence of an exogenous metabolic system from the livers of uninduced and Aroclor-induced rats, mice and Syrian hamsters. Negative results were obtained in studies involving the Propylene Carbonate component.

Embryotoxicity/Teratogenicity: Mixed isomers of alkylbenzenes are considered fetotoxic in humans, based on observations of reduced fetal weight, delayed ossification and persistent behavioral effects in animal studies in the absence of maternal toxicity. Other developmental effects have been observed in animal studies in the presence of maternal toxicity. Several human population studies have suggested a link between exposure to organic solvents (including alkylbenzenes) and increased occurrence of miscarriages or birth defects in children. However, in the majority of cases, there was exposure to a variety of solvents at the same time, exposures were ill-defined, and the number of cases examined was small.

Reproductive Toxicity: No information available.

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 some components.

PROPRIETARY CARBONATE ESTER: The Koc of this compound is estimated at 14, using a log Kow of -0.41 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.

PROPRIETARY BENZENE: A sorption constant of 0.31 mL/g was measured in a Eustis soil (fine sand, organic carbon=0.39%). Using a structure estimation method based on molecular connectivity indices, the Koc for this compound can be estimated to be about 720. According to a recommended classification scheme, this estimated Koc value suggests that this material has low mobility in soil. This compound was measured in soil leachate samples following the addition of crude oil to the surface of a soil column filled with sand. Soil columns were constructed with saturated zone material contaminated with this material; over 160 pore volumes were required for complete removal of this compound.

2,4-TOLUENE DIISOCYANATE: 2,4-Toluene Diisocyanate hydrolyzes rapidly in aqueous solution; therefore, leaching and adsorption to sediment will not be environmentally important.

2,6-TOLUENE DIISOCYANATE: 2,6-Toluene Diisocyanate reacts readily with water; therefore, leaching of 2,6-toluene diisocyanate in soil should not be important.

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

PROPRIETARY CARBONATE ESTER: If released to air, a vapor pressure of 0.045 mm Hg at 25°C indicates this compound will exist solely as a vapor in the ambient atmosphere. Vapor-phase material will be degraded in the atmosphere by reaction with photochemically-produced hydroxyl radicals; the half-life for this reaction in air is estimated to be 4 days. This compound may also undergo direct photolysis since this compound contains a functional group that can absorb light greater than 290 nm, but the kinetics of this reaction are unknown. If released to soil, this material is expected to have very high mobility based upon an estimated Koc of 14. Volatilization from moist soil surfaces is not expected to be an important fate process based upon an estimated Henry's Law constant of 3.4X10^-8 atm-cm/mole. Volatilization from dry soil surfaces is not expected to be an important fate process based upon this compound's estimated Henry's Law constant. This compound may undergo hydrolysis in the environment since this compound has functional groups susceptible to hydrolysis.
12. ECOLOGICAL INFORMATION (Continued)

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

PROPRIETARY GLYCOL ETHER: This compound is readily biodegradable in activated sludge (OECD 301F, 99 % by DOC and OECD 301C, 87 % by BOD, after 28 days and in soil (DT50 < 1 day).

This chemical is stable to chemical hydrolysis in water at pH 4 and 7, whereas it is hydrolyzed at pH 9 with half-life of 8.10 days at 25°C. Direct photo-degradation is not expected because the material has no absorbing bands in the UV and VIS region, whereas indirect photo-degradation may occur as a result of reactions with photochemically generated hydroxy radicals, with the half-life of 3.1 hours. Although direct photo-degradation is not expected, this compound in air decomposes and disappears by photolytic reactions with photochemically generated hydroxy radicals. The indirect photochemical hydroxyl radical photolysis has an estimated half-life of 32 hours with an estimated constant of 1.19x10^-11 cm3/mole sec and an assumed hydroxy radical concentration 0.5x106 OH/sec. For these reasons, there is little potential for accumulation of the compound in air phase.

PROPRIETARY BENZENE: If released to the atmosphere, this material will exist solely in the vapor phase in the ambient atmosphere, based on a measured vapor pressure of 2.1 mm Hg at 25°C. Vapor-phase this compound is degraded in the atmosphere by reaction with photochemically-produced hydroxy radicals and nitrate radicals with half-lives of about 12 hours and 6-30 days, respectively. An estimated Koc value of 720 suggests that this compound will have low mobility in soil. Volatilization from moist and dry soil surfaces is expected to occur based on a measured Henry's Law constant of 6.16x104 atm·cm3/mole and the vapor pressure of this compound, respectively. This material is expected to aerobically biodegrade in both soil and water. Anaerobic aquifer microcosms did not show significant biodegradation in comparison to poisoned controls. In water, this compound may adsorb to sediment or particulate matter based on its Koc value. This compound is expected to volatilize from water surfaces given its Henry's Law constant. Estimated half-lives for a model river and model lake are 3 hours and 4 days, respectively. Bioconcentration in aquatic organisms is moderate to high based on BCF values of 31-275, measured in carp. This compound is expected to photodegrade in natural waters.

PROPRIETARY SOLVENT NAPHTHA: Expected to be readily biodegradable. Transformation due to hydrolysis not expected to be significant. Transformation due to photolysis not expected to be significant. Expected to degrade rapidly in air.

2,4-TOULENE DIISOCYANATE: If released to air, a vapor pressure of 8x10-3 mm Hg at 25°C indicates 2,4-toluene Diisocyanate will exist solely as a vapor in the ambient atmosphere. Vapor-phase 2,4-toluene Diisocyanate will be degraded in the atmosphere by reaction with photochemically-produced hydroxy radicals; the half-life for this reaction in air is estimated to be 1.7 days. Atmospheric degradiation may also occur through contact with clouds, fog or rain. If released to water or moist soil, 2,4-toluene Diisocyanate is not expected to leach or adsorb to solids due to its rapid degradation reaction with water. 2,4-Toluene Diisocyanate is not expected to volatilize from dry soil surfaces based upon its vapor pressure. If spilled on wet land, TDI is rapidly degraded. If released into water, a crust forms around the liquid TDI and <0.5% of the original material remains after 35 days. Low concentrations of TDI hydrolyze in the aqueous environment in approximately a day. Vapor-phase 2,4-Toluene Diisocyanate will be degraded in the atmosphere by reaction with photochemically-produced hydroxy radicals; the half-life for this reaction in air is estimated to be 2.5 days. Atmospheric degradation may also occur through contact with clouds, fog or rain. If released to moist soil, 2,4-Toluene Diisocyanate is not expected to leach or adsorb to solids due to its rapid degradation reaction with water. In one experiment simulating a spill, 5.5% of the original material remained after 24 hours and in a field situation; the concentration of TDI had declined to the ppm level in 12 weeks. If released to water, 2,6-Toluene Diisocyanate is not expected to leach or adsorb to solids due to its rapid degradation reaction with water. If released into water in a spill situation, a crust forms around the liquid TDI mixture and <0.5% of the original material remains after 35 days. Low concentrations of TDI hydrolyze in the aqueous environment in approximately a day.

BIO-ACCUMULATION POTENTIAL: This product has not been tested for bio-accumulation potential. The following information is available for some components.

PROPRIETARY GLYCOL ETHER: Bioconcentration: This compound has low bio-accumulative potential based on Log Pow 0.36 (25°C).

PSEUDOCUMENE: BCF values of 33-275 and 31-207 were measured in carp for concentrations of 0.2 and 0.02 mg/L, respectively. An BCF value of 132 was measured in fish. According to a classification scheme, these BCF values suggest that bioconcentration in aquatic organisms ranges from moderate to high. This compound is classified as moderately accumulative in carp.

2,4-TOULENE DIISOCYANATE: 2,4-Toluene Diisocyanate hydrolyzes rapidly in aqueous solution; therefore, bioconcentration will not be environmentally important.

2,6-TOLUENE DIISOCYANATE: 2,6-Toluene Diisocyanate decomposes in water; therefore, bioconcentration in aquatic organisms is not expected to be an important environmental fate process.

ECOTOXICITY: This product has not been tested for aquatic or animal toxicity. The following aquatic toxicity data are available for some components.

DICYCLOXYLIMETHANE-4,4'-DIISOCYANATE: LC50 (Brachydanio rirsto zebrafish) 96 hours = 1.2 mg/L.

EC10 (Activated sludge (test for inhibition of oxygen consumption) 3 hours) = 19 mg/L.

PROPYLENE CARBONATE: EC50 (Daphnia magna Water flea) 48 hours = 500 mg/L.

EC10 (Drosomades subpicta green algae) 72 hours = 500 mg/L.

LC50 (Bacteria) 72 hours = 10,000 mg/L.

LC50 (Leuciscus idus Golden eel) 96 hours = 5,300 mg/L.

PROPRIETARY BENZENE: LC50 (Pimephales promelas fathead minnow) 96 hours = 7.7 mg/L.

LC50 (scud) 96 hours = 4.35 mg/L.

LC50 (Dongness or edible crab) 96 hours = 5.1 mg/L.

PROPRIETARY GLYCOL ETHER: EC50 (Phytoplankton Phaeodactylum) 15 minutes = 5625 mg/L.

EC50 (Daphnia magna Water flea) 48 hours = 373 mg/L. open system, static.

LC50 (Pimephales promelas Fathead Minnow) 96 hours = 161 mg/L, static.

LC50 (Bloodfin Sunfish) 96 hours = 1000 mg/L. Static bioassay.

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: Wastes of this product should be tested to see if they meet the criteria of Waste Characteristic Flammability (D001).

14. TRANSPORTATION INFORMATION

UN Identification Number: UN 1263.

Proper Shipping Name: Paint, flammable liquid.

Hazard Class Number and Description: 3 (Flammable).

Packing Group: PG III.

DOT Label(s) Required: Class 3 (Flammable).


Marine Pollutant: The Dicycloxylimethane-4,4'-diisocyanate, Solvent Naphtha (petroleum) Light Aromatic, and Pseudocumene components meet the criteria of Marine Pollutant by the DOT (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 1263  
**Proper Shipping Name:** Paint, flammable liquid  
**Hazard Class Number and Description:** 3 (Flammable)  
**Packing Group:** PG III  
**Hazard Shipping Label(s) Required:** Class 3 (Flammable)  
**Special Provisions:** 59, 142  
**Explosive Limit & Limited Quantity Index:** 5 L  
**Excepted Quantities:** E1  
**ERAP Index:** None  
**Passenger Carrying Ship Index:** None  
**Passenger Carrying Road or Rail Vehicle Index:** 60 L

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

**UN Identification Number:** UN 1263  
**Proper Shipping Name:** Paint, flammable liquid  
**Hazard Class Number:** 3 (Flammable)  
**Packing Group:** III  
**Excepted Quantities:** E1  
**Passenger and Cargo Aircraft Only Packing Instruction:** 355  
**Passenger and Cargo Aircraft Maximum Net Quantity per Pkg.:** 60 L  
**Passenger and Cargo Aircraft Limited Quantity Packing Instruction:** Y344  
**Passenger and Cargo Aircraft Limited Quantity Maximum Net Quantity per Pkg.:** 10 L  
**Cargo Aircraft Only Packing Instruction:** 366  
**Cargo Aircraft Only Maximum Net Quantity per Pkg.:** 220 L  
**Special Provisions:** A3, A72, A192  
**ERG Code:** 3L

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

**UN No.:** UN 1263  
**Proper Shipping Name:** Paint, flammable liquid  
**Hazard Class Number:** 3 (Flammable)  
**Labels:** Class 3 (Flammable)  
**Packing Group:** III  
**Excepted Quantities:** E1  
**Packing:** Instructions: P001, LP01; Provisions: PP1  
**IBCs:** Instructions: IBC03; Provisions: None  
**EmS:** F-E, S-E  
**Stowage Category:** Category A.  
**Segregation:** None.  
**Marine Pollutant:** The Dicyclohexylmethane-4,4’-diisocyanate, Solvent Naphtha (petroleum) Light Aromatic, and Pseudocumene components meet of this product is designated by the IMO to be a Marine Pollutant.

15. REGULATORY INFORMATION

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)</th>
<th>SECTION 304 RQ</th>
<th>SECTION 313 TRI (threshold)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon Black</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Dicyclohexylmethane-4,4’-Diisocyanate</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Ethyl Benzene</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Isophorone Diisocyanate</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Proprietary Glycol Ether</td>
<td>No</td>
<td>No</td>
<td>Yes (N230)</td>
</tr>
<tr>
<td>Proprietary Benzene</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>2,4-Toluene Diisocyanate</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>2,6-Toluene Diisocyanate</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Proprietary Alkyl Benzene</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>
15. REGULATORY INFORMATION (Continued)

U.S. REGULATIONS (continued):

U.S. SARA 302 Extremely Hazardous Threshold Planning Quantity (TPQ): Isophorone Diisocyanate = 500 lb (227 kg); 2,4-Toluene Diisocyanate = 500 lb (227 kg); 2,6-Toluene Diisocyanate = 100 lb (454 kg)

U.S. SARA 304 Extremely Hazardous Reportable Quantity (RO): Ethyl Benzene = 1000 (454 kg); Isophorone Diisocyanate = 500 lb (227 kg); 2,4-Toluene Diisocyanate = 100 lb (454 kg); 2,6-Toluene Diisocyanate = 100 lb (454 kg)

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

U.S. CERCLA Reportable Quantity (RO): 2,4-Toluene Diisocyanate = 100 lb (45.4 kg); 2,6-Toluene Diisocyanate = 100 lb (45.4 kg). The Proprietary Glycol Ether does not have a specific CERCLA RO, although it is a CERCLA Hazardous Substance.

U.S. TSCA Inventory Status: The components of this product listed by CAS# in Section 3 are in compliance with the inventory listing requirements of the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

U.S. Clean Air Act (CA 112r) Threshold Quantity (TO): 2,4-Toluene Diisocyanate = 10,000 lb (4540 kg); 2,6-Toluene Diisocyanate = 10,000 lb (4540 kg). The Proprietary Alkyl Benzene component is a Hazardous Air Pollutant (HAP) generally known or suspected to cause serious health problems. Under the Clean Air Act Section 112 (b), Glycol Ethers are listed as Hazardous Air Pollutants, although not TQs are applicable. As a Polycyclic Organic Matter that includes organic compounds with more than one benzene ring, and which have a boiling point greater than or equal to 100°C (212°F), the Proprietary Benzene component is a Hazardous Air Pollutant under Section 112b of the Clean Air Act.

U.S. Clean Water Act Requirements: The Proprietary Alkyl Benzene 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.

California Safe Drinking Water and Toxic Enforcement Act (Proposition 65): This product contains Titanium Dioxide, a suspect carcinogen which is on the list. Due to the form of the product, the Proposition 65 warning is not applicable to these compounds in this product. However, this product also contains trace amounts of Ethyl Benzene, which is on the list as a cancer hazard. WARNING. This product can expose you to chemicals including Ethyl Benzene, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

In addition, to the warning text provided above, the following symbol must be displayed. Where the sign, label or shelf tag for the product is not printed using the color yellow, the symbol may be printed in black and white. The symbol shall be placed to the left of the text of the warning, in a size no smaller than the height of the word “WARNING”. The symbol and new warning text are required to be included by August 2018.

CANADIAN REGULATIONS:

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

Canadian Environmental Protection Act (CEPA) Priorities Substances Lists: The Proprietary Alkyl Benzene component is on the CEPA Priority Substances 1 list, not considered as “TOXIC” under Section 64 of CEPA.

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

MEXICAN REGULATIONS:

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

16. OTHER INFORMATION

U.S. ANSI STANDARD LABELING (Precautionary Statements): DANGER! FLAMMABLE LIQUID. TOXIC BY INHALATION. MAY CAUSE EYE, SKIN AND RESPIRATORY IRRITATION. CAN CAUSE SKIN AND RESPIRATORY SENSITIZATION AND ALLERGIC REACTION. CONTAINS COMPOUNDS THAT ARE SUSPECT CARCINOGENS. CONTAINS COMPOUNDS THAT CAN CAUSE HARM 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 polypads or other suitable absorbing material. Place all spill residue in an appropriate container and seal. Dispose of in accordance with U.S. Federal, State, and local hazardous waste disposal regulations and those of Canada.


Classification: Flammable Liquid Category 3, Acute Inhalation Toxicity Category 2, Skin Irritation Category 2, Eye Irritation Category 2, STOT (Inhalation-Respiratory Irritation) Single Exposure Category 3, Respiratory Sensitizer Category 1, Skin Sensitization Category 1, Aquatic Chronic Toxicity Category 3

Signal Word: Danger


Precautionary Statements:


Response: P370 + P378: In case of fire: Use water with care, due to potential reaction to diisocyanate component. Otherwise, use materials appropriate for surrounding fire for extinction.
16. OTHER INFORMATION (Continued)

Precautionary Statements (continued):


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

Hazard Symbols/Pictograms: GHS02, GHS06, GHS08, GHS09

Prevention: P201: Obtain special instructions before use. P202: Do not handle until all safety precautions have been read and understood. P206:

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 DESCRIPTION, INFORMATION, DATA OR DESIGN CONSTITUTE OR BE CONSIDERED AS THE COMPLETE OR EXCLUSIVE GUIDE FOR THE USER. 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, in no case shall the description, information, data or design constitute or be considered as the exclusive guide for the user. If the material does not contain information that may be required by law, it is the responsibility of the user to seek such information from the material supplier.

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:

January 2013: Up-date SDS for new formulation and addition of GHS compliance to whole SDS. February 2017: Up-date entire SDS due to up-date of formulation.

DATE OF PRINTING

March 1, 2017

DEFINITIONS OF TERMS

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

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 exposure.

DFG MAKs: Federal Republic of Germany Maximum Concentration Values. Exposures limited to 8 hrs as a TWA (Time-Weighted Average) or PEAK (short-term exposure) values.

DFG MAK Germ Cell Mutagen Categories: 1: Germ cell mutagens that have been shown to increase the mutant frequency in the progeny of exposed humans. 2: Germ cell mutagens that have been shown to increase the mutant frequency in the progeny of exposed mammals. 3A: Substances that have been observed to cause genetic 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 effect on germ cells in vitro. 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 aneugenic 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 expected not to be significant.

DFG MAK Pregnancy Risk Group Classification: Group A: A risk to damage of the developing embryo or fetus has been unequivocally demonstrated. Exposure of pregnant women can lead to damage of the developing organism, even when MAK and BAT (Biological Tolerance Value for Working Materials) values are observed. Group B: Currently available information indicates a risk of damage to the developing embryo or fetus must be considered to be probable. Damage to the developing organism cannot be excluded when pregnant women are exposed, even when MAK and BAT values are observed. Group C: There is no reason to fear a damage of the developing embryo or fetus if MAK or BAT values are observed. Group D: Classification in one of the groups A-C is not yet possible because, although the data available may indicate a trend, they are not sufficient for final evaluation.

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

LOQ: Limit of Quantitation

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

NIC: Notice of Intended Change.

NIOSH Ceiling: Measurements of the concentration of a substance under which it is generally believed that nearly all workers exposed should not be expected to exceed at any time during a workday, even if the 8-hr TWA is in the ceiling range. PEL-TWA or REL-TWA.

TWA: Time Weighted Average Exposure concentration for a conventional 8-hr (TWA), PEK or up to a 10-hr (REL) workday and an 8-hour reference period.

WEEL: Workplace Environmental Exposure Limits from the AIHA.

Hazardous Materials Identification System Hazard Ratings:

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

HEALTH HAZARD: 0 Minimal Hazard. No significant health risk, irritation of skin or eyes not to be expected. 1 Slight Hazard. Moderate irritation or minor injury may occur. 2 Moderate Hazard. Temporary or transitory injury may occur; prolonged exposure may affect the CNS. Skin irritation: Moderately irritating; primary irritant; sensitizer. PII or Draize ≤ 5, with no destruction of dental tissue. Eye irritation: Moderately to severely irritating; reversible corneal opacity; corneal involvement or irritation irritating in 8-21 days. Draize = 60-100, with reversible effects. 3 Severe Hazard. Major injury likely unless prompt action is taken and medical treatment is given; high level of toxicity; corrosive. Skin irritation: Severely irritating and/or corrosive; may cause destruction of dental tissue, 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 persisting for more than 21 days. Draize > 80 with effects irreversible in 21 days. Oral Toxicity LD₅₀: > 1000 mg/kg. Dermal Toxicity LD₅₀ or Rat or Rabbit: > 200-1000 mg/kg. Inhalation Toxicity LC₅₀: 4hrs Rat: > 20 mg/L. 2 Moderate Hazard. Temporary or transitory injury may occur; prolonged exposure may affect the CNS. Skin irritation: Moderately irritating; primary irritant; sensitizer. PII or Draize ≤ 5, with no destruction of dental tissue. Eye irritation: Moderately to severely irritating; irreversible corneal opacity; corneal involvement or irritation irritating in 8-21 days. Draize = 60-100, with reversible effects. PII or Draize ≤ 5, with no destruction of dental tissue. Eye irritation: Moderately to severely irritating; irreversible corneal opacity; corneal involvement or irritation irritating in 8-21 days. Draize = 60-100, with reversible effects. PII or Draize ≤ 5, with no destruction of dental tissue. Eye irritation: Moderately to severely irritating; irreversible corneal opacity; corneal involvement or irritation irritating in 8-21 days. Draize = 60-100, with reversible effects.

Class A:

1: Not a Health Hazard. No health hazard is anticipated; the material does not give off flammable vapors. 2: Slight Health Hazard. May give off flammable vapors. Materials in a fibrous or shredded form that may burn rapidly and create flash fire hazards (e.g. course dusts that may burn rapidly but that generally do not give off flammable vapors). See also Section 16 for genotoxic substances with primary targets other than DNA [e.g. purely aneugenic substances] if research results make this seem sensible.) 3: Slight Health Hazard. May give off flammable vapors. 4: Moderate Health Hazard. Major injury likely unless prompt action is taken and medical treatment is given; high level of toxicity; corrosive. 5: Severe Health Hazard. Major injury likely unless prompt action is taken and medical treatment is given; high level of toxicity; corrosive.
Hazardous Materials Identification System Hazard Ratings (continued):

Physical Water Reactivity: Materials that do not react with water. Organic Peroxides: Materials that are normally stable, but can become unstable at high temperatures.

Explosives: Substances that are Non-Explosive. Compressed Gases: No Rating. Pyrophorics: No Rating. Oxidizers: No Rating. Unstable Reactives: 2.1 Oxidants: Packing Group I or II oxidizers. Solids: Unstable Reactives: Substances that may decompose, condense, or self-react at ambient temperature and/or pressure and have a high potential (or high risk) to cause significant heat generation or explosion. 

Div. 2.1 Explosives: Division 1.1 & 1.2 explosives. Division 1.3 explosives. Substances that are sensitive to localized thermal or mechanical shock at normal temperatures and pressures. Division 1.4 explosives. Substances that are capable of detonation or explosion at normal temperatures and pressures.

Unstable Reactives: Substances that may decompose, condense, or self-react at ambient temperature and/or pressure and have a high potential (or high risk) to cause significant heat generation or explosion. 

Water Reactivity: Materials that readily give off flammable vapors. Water Reactivity: Substances that are capable of detonation or explosion at normal temperatures and pressures. 

Solvability: Materials that contain solvents for which no solubility data are available. Flammability: Materials that are normally stable, but that can become unstable at elevated temperatures and pressures.

Explosives: Division 2.1 Explosives: Substances that are sensitive to localized thermal or mechanical shock at normal temperatures and pressures. Division 2.2 Explosives: Substances that are capable of detonation or explosion at normal temperatures and pressures.

Flammability: Materials that contain solvents for which no solubility data are available. 

Health Hazards: Materials that are corrosive to the eyes or cause irreversible corneal opacity. Materials that are corrosive to the eyes or cause irreversible corneal opacity. Materials that are corrosive to the eyes or cause irreversible corneal opacity. 

Fire Protection: Association Hazard Ratings (continued):

Health Hazard: 1. Materials that have a potential 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 30°C (86°F) when tested by differential scanning calorimetry. 

Material that when heated to a temperature below 100°C (212°F) may react explosively, but that will not continue to react at elevated temperatures and pressures. Materials that have an instantaneous power density (product of heat of reaction and reaction rate) at 250°C (482°F) at or above 0.01 W/mL and below 0.1 W/mL. Materials that readily undergo violent chemical change at elevated temperatures and pressures. 

Material that has an instantaneous power density (product of heat of reaction and reaction rate) at 250°C (482°F) at or above 0.1 W/mL and below 1 W/mL. Materials that may be detonated by shock or mechanical means at elevated temperatures and pressures. 

Flammability Limits in Air:

Much of the information related to fire and explosion is derived from the National Fire Protection Association (NFPA) 704, which includes the following categories:

1. Flash Point: The temperature at which a liquid is flash flammable, or the temperature at which a liquid is flashing. 

2. Explosion Limit: The range of concentrations of a flammable mixture that can be ignited and burned with a flame. 

3. Combustible Limits: The range of concentrations of a flammable mixture that can be ignited and burned with an explosion.

4. Flammable Limits: The range of concentrations of a flammable mixture that can be ignited and burned with a flash. 

5. Flammable Atmospheres: The range of concentrations of a flammable mixture that can be ignited and burned with an explosion.
DEFINITIONS OF TERMS (Continued)

TOXICOLOGICAL INFORMATION:
Human and Animal Toxicology: Possible health hazards as derived from human data, animal studies, or from the results of studies with similar compounds are presented. LD₅₀: Lethal Dose (solids & liquids) that kills 50% of the exposed animals. LC₅₀: Lethal Concentration (gases) that kills 50% of the exposed animals. ppm: Concentration expressed in parts of material per million parts of air or water. mg/kg: Quantity of material, by weight, administered to a test subject, based on their body weight in kg. TDLo: Lowest dose to cause a symptom. TC₅₀: Lowest concentration to cause a symptom. TDLo, TC₅₀, and LD₅₀ or TC, TC₅₀, LC₅₀, and LC₅₀: Lowest dose (or concentration) to cause lethal or toxic effects. Cancer Information: IARC: International Agency for Research on Cancer. NTP: National Toxicology Program. RTECS: Registry of Toxic Effects of Chemical Substances. IARC and NTP rate chemicals on a scale of decreasing potential to cause human cancer with rankings from 1 to 4. Subrankings (2A, 2B, etc.) are also used. Other Information: BEI: ACGIH Biological Exposure Indices, represent the levels of determinants which are most likely to be observed in specimens collected from a healthy worker who has been exposed to chemicals to the same extent as a worker with inhalation exposure to the TLV.

REPRODUCTIVE TOXICITY INFORMATION: A mutagen is a chemical that causes permanent changes to genetic material (DNA) such that the changes will propagate through generational lines. An embryotoxin is a chemical that causes damage to a developing embryo (i.e. within the first eight weeks of pregnancy in humans), but the damage does not propagate across generational lines. A teratogen is a chemical that causes damage to a developing fetus, but the damage does not propagate across generational lines. A reproductive toxin is any substance that interferes in any way with the reproductive process.

ECOLOGICAL INFORMATION:
EC₅₀: Effect concentration in water. BCF: Bioconcentration Factor, which is used to determine if a substance will concentrate in life forms that consume contaminated plant or animal matter. TLM: Median threshold limit. log Kₐ and log Kₐq: Coefficient of Oil/Water Distribution is used to assess a substance’s behavior in the environment.

REGULATORY INFORMATION: This section explains the impact of various laws and regulations on the material. U.S.: EPA: U.S. Environmental Protection Agency. ACGIH: American Conference of Governmental Industrial Hygienists, a professional association that establishes exposure limits. OSHA: U.S. Occupational Safety and Health Administration. NIOSH: National Institute of Occupational Safety and Health, which is the research arm of OSHA. DOT: U.S. Department of Transportation. TC: Transport Canada. SARA: Superfund Amendments and Reauthorization Act. TSCA: U.S. Toxic Substance Control Act. CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act. Marine Pollutant status according to the DOT; CERCLA or Superfund; and various state regulations. This section also includes information on the precautionary warnings that appear on the material’s package label. CANADA: WHMIS: Canadian Workplace Hazardous Materials Information System. TC: Transport Canada. DSL/NDSL: Canadian Domestic/Non-Domestic Substances List.