SAFETY DATA SHEET

DynaPoxy™ Low Mod Epoxy Part A

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

TRADE NAME (AS LABELED): DynaPoxy™ Low Mod Epoxy Part A

PRODUCT DESCRIPTION: Part A of Two-Part Epoxy Sealant

CHEMICAL NAME/CLASS: Bisphenol A Polymer/Solvent Mixture

SYNONYMS: None

RELEVANT USE: Part A for Low Modulus, Low Viscosity Epoxy Bonding Agent

USES ADVISED AGAINST: Other Than Relevant Use

COMPANY/UNDERTAKING IDENTIFICATION:

SUPPLIER/MANUFACTURER'S NAME: Pecora Corporation

ADDRESS: 165 Wambold Road, Harleysville, PA 19438

EMERGENCY PHONE: 800-424-9300 (CHEMTREC, 24-hours)

BUSINESS PHONE: 215-723-6051 (Mon–Fri, 8 AM–5 PM ET)

PREPARATION DATE: October 2009

REVISION DATE: September 19, 2012

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

2. HAZARD IDENTIFICATION

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

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

Signal Word: Warning

Hazard Statement Codes: H227, H361fd, H302, H315, H319, H335, H317, H400


Hazard Symbols/Pictograms: GHS07, GHS08, GHS09

EMERGENCY OVERVIEW:

PHYSICAL DESCRIPTION: This product is a clear to light amber, somewhat viscous liquid with a mild epoxy odor.

HEALTH HAZARDS: This product may cause respiratory, skin and eye irritation. May be harmful by ingestion or inhalation. Inhalation or ingestion may cause adverse central nervous system effects. Can cause skin sensitization and allergic reaction in susceptible individuals. Limited evidence of reproductive toxicity for the 4-Nonylphenol Branched Mixed Isomers component.

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

REACTIVITY HAZARD: This product may have some sensitivity to water. Closed containers may develop pressure and rupture on prolonged exposure to heat.

ENVIRONMENTAL HAZARD: This product is harmful to marine organisms. All release to the environment should be avoided.

HAZARDOUS MATERIALS IDENTIFICATION SYSTEM (HMIS®)

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

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

CANADIAN WHMIS CLASSIFICATION: B3 and D2B. See Section 15 (Regulatory Information) for all classification details.

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

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Chemical Name | CAS #   | W/W% | GHS Classification Hazard Statements
Bisphenol A/Epichlorohydrin Based Epoxy Resin | 25068-38-6 | 70.0-80.0 | Classification: Eye Irritation Cat. 2, Skin Irritation Cat. 2, Skin Sensitization Cat. 1, Aquatic Chronic Toxicity Cat. 2 | Hazard Statement Codes: H319, H315, H317, H411

See Section 16 for full text of Ingredient Hazard and Precautionary Statements
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 be present. Administer supplemental oxygen and/or cardio-pulmonary resuscitation, if necessary. Remove and isolate contaminated clothing and shoes. Seek immediate medical attention. Take copy of label and MSDS to physician or other health professional with victim(s).

- **INHALATION:** If mists, sprays or fumes of this material are inhaled, remove victim to fresh air. If necessary, use artificial respiration to support vital functions. Administer supplemental oxygen and/or cardio-pulmonary resuscitation, if necessary. Do not interrupt flushing. Remove exposed or contaminated clothing, taking care not to contaminate eyes. Victim must seek immediate medical attention.
- **SKIN EXPOSURE:** If the material contaminates the skin, immediately begin decontamination with running water. Minimum flushing is for 20 minutes. Do not interrupt flushing. Remove exposed or contaminated clothing, taking care not to contaminate eyes. Victim must seek immediate medical attention.
- **EYE EXPOSURE:** If this product enters the eyes, open victim's eyes while under gently running water. Use sufficient force to open eyelids. Have victim "roll" eyes. Minimum flushing is for 20 minutes. Do not interrupt flushing.
- **INGESTION:** If this material is swallowed, CALL PHYSICIAN OR POISON CONTROL CENTER FOR MOST CURRENT INFORMATION. DO NOT INDUCE VOMITING, unless directly by medical personnel. Have victim rinse mouth with water or give several cupfuls of water, if conscious. Never induce vomiting or give diluents (milk or water) to someone who is unconscious, having convulsions, or unable to swallow. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain an open airway and prevent aspiration.
- **MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:** Acute or chronic respiratory conditions or skin problems may be aggravated by overexposure to this product.

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

5. FIRE-FIGHTING MEASURES

- **FLASH POINT (COC):** > 60°C (> 140°F) **AUTOIGNITION:** Not known.
- **FLAMMABLE LIMITS IN AIR:** Not known.
- **EXTINGUISHING MEDIA:** Use materials appropriate for surrounding materials.
- **UNSUITABLE EXTINGUISHING MEDIA:** Do not use water jet; water used directly on burning product may cause frothing and spread fire.
- **PROTECTION OF FIREFIGHTERS:** Incipient fire responders should wear eye protection. Structural firefighters must wear Self-Contained Breathing Apparatus and full protective equipment. Move containers from fire area if it can be done without risk to personnel. If possible, prevent runoff water from entering storm drains, bodies of water, or other environmentally sensitive areas.

6. ACCIDENTAL RELEASE MEASURES

**PERSONAL PRECAUTIONS AND EMERGENCY PROCEDURES:** An accidental release can result in a fire. Uncontrolled releases should be responded to by trained personnel using pre-planned procedures. Proper protective equipment should be used. Eliminate any possible sources of ignition, and provide maximum explosion-proof ventilation. 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.
6. ACCIDENTAL RELEASE MEASURES (Continued)

PERSONAL PROTECTIVE EQUIPMENT (continued):

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.

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

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

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

PART III

How can I prevent hazardous situations from occurring?

7. HANDLING and STORAGE

PRECAUTIONS FOR SAFE HANDLING: As with all chemicals, avoid getting this product ON YOU or IN YOU. Wash thoroughly after handling this product. Do not eat or drink while handling this material. Avoid contact with eyes, skin, and clothing. Avoid breathing fumes, dusts, vapors or mist. Do not taste or swallow. Use only with adequate ventilation. Contaminated clothing needs to be laundered prior to reuse. Keep away from heat and flame. In the event of a spill, follow practices indicated in Section 6: ACCIDENTAL RELEASE MEASURES. Empty containers may contain residual product; therefore, empty containers should be handled with care. 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. The recommended storage life is 12 months at 15-32°C (40-90°F).

PRODUCT USE: This product is Part A of a two part resin system. 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 in this section.

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>Modified Bisphenol A Resin</td>
<td>25068-38-6</td>
<td>DFG MAK TWA</td>
<td>5 mg/m³ (inhalable fraction)</td>
</tr>
<tr>
<td>Exposure limits given are for Bisphenol A (CAS# 80-05-7)</td>
<td></td>
<td>DFG MAK PEAK</td>
<td></td>
</tr>
<tr>
<td>4-Nonylphenol Branched Mixed Isomers</td>
<td>NE</td>
<td>NE</td>
<td>NE</td>
</tr>
</tbody>
</table>

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


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

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 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.

9. PHYSICAL and CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>PROPERTY</th>
<th>VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>FORM</td>
<td>Somewhat viscous liquid.</td>
</tr>
<tr>
<td>MOLECULAR WEIGHT</td>
<td>Mixture.</td>
</tr>
<tr>
<td>ODOR</td>
<td>Mild epoxy.</td>
</tr>
<tr>
<td>VAPOR DENSITY</td>
<td>(air = 1) &gt; 1</td>
</tr>
<tr>
<td>FREEZING/MELTING POINT</td>
<td>Not available.</td>
</tr>
<tr>
<td>SPECIFIC GRAVITY</td>
<td>(water = 1): 1.19</td>
</tr>
<tr>
<td>SOLUBILITY IN WATER</td>
<td>Not available.</td>
</tr>
<tr>
<td>VAPOR PRESSURE</td>
<td>Not available.</td>
</tr>
<tr>
<td>VISCOSITY</td>
<td>Not available.</td>
</tr>
<tr>
<td>VOC (less water and time)</td>
<td>&lt;50 g/L</td>
</tr>
</tbody>
</table>

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

10. STABILITY and REACTIVITY

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

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

INCOMPATIBLE MATERIALS: Based upon component incompatibility, this product may be incompatible with oxidizers, strong mineral acids, Lewis acids and amines.

HAZARDOUS DECOMPOSITION PRODUCTS: Combustion: Thermal decomposition of this product can generate carbon and nitrogen oxides, reactive hydrocarbons, low molecular weight aldehydes. Hydrolysis: None known.

POSSIBILITY OF HAZARDOUS REACTIONS: This product may undergo uncontrolled exothermic polymerization upon contact with amines or if heated. The resulting pressure build-up could rupture closed containers.

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

11. TOXICOLOGICAL INFORMATION

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

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

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

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

INHALATION: Inhalation of vapors, mists, or sprays of this product can moderately irritate the tissues of the nose, mouth, throat, and upper respiratory system. Symptoms of overexposure may include coughing, sneezing, and difficulty breathing. Inhalation of high concentrations of this product (as may occur in a poorly ventilated area) may be fatal. Inhalation can also lead to adverse central nervous system effects, including dizziness, incoordination, nausea and vomiting. High aerosol concentrations could cause inflammation of the lungs (chemical pnemonitis), chemical bronchitis with severe asthma-like wheezing, severe coughing spasms and accumulation of fluid in the lungs (pulmonary edema), which could prove fatal. Symptoms of pulmonary edema may not appear until several hours after exposure and are aggravated by physical exertion.

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.
11. TOXICOLOGICAL INFORMATION (Continued)

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.

MODIFIED BISPHENOL A POLYMER:
Standard Draize Test (Eye-Rabbit) 100 mg: Severe
Standard Draize Test (Skin-Rabbit) 500 mg/24 hours: Severe

BIOLOGICAL EXPOSURES INDICES (BEIs)
SENSITIZATION TO THE PRODUCT

4-NONYLPHENOL BRANCHED MIXED ISOMERS:
Standard Draize Test (Skin-Rabbit) 500 mg/24 hours: Severe
Standard Draize Test (Skin-Guinea Pig) 2750 mg/35 days-intermittent

REPRODUCTIVE TOXICITY INFORMATION

MOBILITY:

ALL WORK PRACTICES MUST BE AIMED AT ELIMINATING ENVIRONMENTAL CONTAMINATION.

12. ECOLOGICAL INFORMATION

4-NONYLPHENOL BRANCHED MIXED ISOMERS: The Koc of this compound is estimated as 31,000, using a log Kow of 5.71 (1) and a regression-derived equation. According to a classification scheme, this estimated Koc value suggests that this material is expected to be immobile in soil. This compound has been found to strongly absorb to sewage sludge and stream and pond sediment.

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>NIOSH</th>
<th>ACGIH</th>
<th>OSHA</th>
<th>PROP 65</th>
</tr>
</thead>
<tbody>
<tr>
<td></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>

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

SENSITIZATION TO THE PRODUCT: This product may cause skin sensitivity and allergic reaction in susceptible individuals. Symptoms can include itching, redness, swelling, welts and rash. A sensitized person who contacts even a small amount of material can develop severe dermatitis with symptoms such as skin redness, itching, rashes and swelling. Once sensitized, exposure to very small concentration can trigger allergic reaction.

TOXICOLOGICAL SYNERGISTIC PRODUCTS: No information available

REPRODUCTIVE TOXICITY INFORMATION: This product has not been tested for reproductive toxicity. Animal data indicate possible embryotoxic or teratogenic effects from compounds related to the 4-Nonylphenol Branched Mixed Isomers component, as well as data indicating possible endocrine system effects. No data are specific to this compound.

BIOLICAL EXPOSURES INDICES (BEIs): Currently, no BEI’s have been established for components.
12. ECOLOGICAL INFORMATION (Continued):

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

4-NONYLPHENOL BRANCHED MIXED ISOMERS: If released to air, a vapor pressure of 2.36X10^-5 mm Hg at 25°C indicates this compound will exist in both the vapor and particulate phases 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 7.5 hours. Particulate-phase material will be removed from the atmosphere by wet and dry deposition. If released to soil, this compound is expected to be immobile based upon an estimated Koc of 31,000. Volatilization is expected to be important from moist soil surfaces given an estimated Henry's Law constant of 1.1X10^-6 atm-cu m/mole, derived from its vapor pressure and water solubility of 6.35 mg/L. However, adsorption to soil is expected to attenuate volatilization. If released to water, this compound is expected to adsorb strongly to suspended solids and sediment. Volatilization from water surfaces is expected to be an important fate process based upon this compound's Henry's Law constant. Estimated volatilization half-lives for a model river and model lake are 1.1 and 17 days, respectively. However, volatilization from water surfaces is expected to be attenuated by adsorption to suspended solids and sediment in the water column. Limited data from sludge-amended soil studies indicate that this material may undergo aerobic biodegradation. After a 5-day lag period, 100 mg/kg of this material applied to a sewage sludge-amended soil decreased to approximately 10% of its original concentration during a 40-day incubation. In the upper layers of surface water, this compound may undergo sensitized photolysis.

BIO-ACCUMULATION POTENTIAL: This product has not been tested for bio-accumulation potential. The 4-Nonylphenol Branched Mixed Isomers component has BCf's ranging from approx 2 to 350 suggest the potential for bioconcentration in aquatic organisms ranges from low to high; however, under most conditions, depuration in fish will be rapid and indicating that Nonylphenol uptake is readily reversible which suggest that long-term bioconcentration will be low if exposure to the material ceases. Available information for the other components does not indicate a hazard of bioconcentration.

ECOTOXICITY: This product is harmful to aquatic organisms and may cause both acute and long-lasting adverse effects. All release to terrestrial, atmospheric and aquatic environments should be avoided. This product has not been tested for aquatic toxicity; however, the 4-Nonylphenol Branched Mixed Isomers component is toxic to aquatic organisms. The following aquatic toxicity data are available for components.

MODIFIED-BIPHENOL A POLYMER:
LC50 (rainbow trout) 96 hours = 1.5 mg/L
LC50 (zebra fish) 96 hours = 2.4 mg/L
EC50 (Daphnia) 24 hours = 3.6 mg/L

Nonylphenol Mixed Isomers:
LC50 (Bay Mussel) 96 hours = 3.9 mg/L/Conditions of bioassay not specified
LC50 (Leuciscus idus Golden Orfe) 48 hours = 0.95 mg/L/Conditions of bioassay not specified
LC50 (Salmo gairdneri Rainbow trout) 96 hours = 0.56-0.92 mg/L/Conditions of bioassay not specified

LC50 (Pimephales promelas fathead minnow) 48 hours = 0.164 (0.145-0.186) mg/L, wt 220 mg, flow-through bioassay, dissolved oxygen 7.4 (4.6-8.8) mg/L, water hardness 44.9 (42.4-46.6) mg/L as calcium carbonate, pH 6.9-7.7, alkalinity 42.9 (39.6-61.4) mg/L calcium carbonate, temp: 26.4 + or - 1.4 deg C, Purity 91% 4-nonylphenol, 4% 2-nonylphenol, 2% Nonylphenol

Nonylphenol Mixed Isomers:
LC50 (Pimephales promelas fathead minnow) 72 hours = 0.137 (0.34-0.140) mg/L, wt 220 mg, flow-through bioassay, dissolved oxygen 7.4 (4.6-8.8) mg/L, water hardness 44.9 (42.4-46.6) mg/L as calcium carbonate, pH 6.9-7.7, alkalinity 42.9 (39.6-61.4) mg/L calcium carbonate, temp: 26.4 + or - 1.4 deg C, Purity 91% 4-nonylphenol, 4% 2-nonylphenol, 2% Nonylphenol

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

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

13. DISPOSAL CONSIDERATIONS

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

U.S. EPA WASTE NUMBER: Wastes of this product should be test to see if they meet the criteria of D001 (Ignitability characteristic).

14. TRANSPORTATION INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION: This product is classified as Dangerous Goods, per U.S. DOT regulations, under 49 CFR 172.101.

UN IDENTIFICATION NUMBER: UN 3082
PROPER SHIPPING NAME: Environmentally hazardous substances, liquid, n.o.s.
HAZARD CLASS NUMBER and DESCRIPTION: 9 (Miscellaneous Hazard)
Packing Group: PG III
DOT LABEL(S) REQUIRED: Class 9 (Miscellaneous Hazard)
NORTH AMERICAN EMERGENCY RESPONSE GUIDEBOOK NUMBER (2010): 171
MARINE POLLUTANT: This product meets the criteria of a Marine Pollutant (as defined by 49 CFR 172.101).

TRANSPORT CANADA TRANSPORTATION OF DANGEROUS GOODS REGULATIONS: This product is classified as Dangerous Goods, per regulations of Transport Canada.

UN IDENTIFICATION NUMBER: UN 3082
PROPER SHIPPING NAME: Environmentally hazardous substances, liquid, n.o.s.
HAZARD CLASS NUMBER and DESCRIPTION: 9 (Miscellaneous Hazard)
Packing Group: PG III
HAZARD SHIPPING LABEL(S) REQUIRED: Class 9 (Miscellaneous Hazard)
SPECIAL PROVISIONS: 16
EXPLOSIVE LIMIT & LIMITED QUANTITY INDEX: 5
ERAP INDEX: None
PASSENGER CARRYING SHIP INDEX: None
PASSENGER CARRYING ROAD OR RAIL VEHICLE INDEX: None

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

UN IDENTIFICATION NUMBER: UN 3082
PROPER SHIPPING NAME: Environmentally hazardous substances, liquid, n.o.s.
HAZARD CLASS NUMBER and DESCRIPTION: 9 (Miscellaneous Hazard)
Packing Group: PG III
HAZARD SHIPPING LABEL(S) REQUIRED: Class 9 (Miscellaneous Hazard)
SPECIAL PROVISIONS: 16
EXPLOSIVE LIMIT & LIMITED QUANTITY INDEX: 5
ERAP INDEX: None
PASSENGER CARRYING SHIP INDEX: None
PASSENGER CARRYING ROAD OR RAIL VEHICLE INDEX: None

DynaPoxy™ Low Mod Epoxy (Part A) Page 6 of 10 September 19, 2012
### 14. TRANSPORTATION INFORMATION (Continued)

**HAZARD CLASS or DIVISION:** 9 (Miscellaneous Hazard)

**HAZARD LABEL(S) REQUIRED:** Class 9 (Miscellaneous Hazard)

**PACKING GROUP:** III

**EXCEPTED QUANTITIES:** E1

**PASSENGER and CARGO AIRCRAFT PACKING INSTRUCTION:** 964

**PASSENGER and CARGO AIRCRAFT MAXIMUM NET QUANTITY PER PKG:** 450 L

**PASSENGER and CARGO AIRCRAFT LIMITED QUANTITY PACKING INSTRUCTION:** Y964

**PASSENGER and CARGO AIRCRAFT LIMITED QUANTITY MAXIMUM NET QUANTITY PER PKG:** 30 kg G

**CARGO AIRCRAFT ONLY PACKING INSTRUCTION:** 964

**CARGO AIRCRAFT ONLY MAXIMUM NET QUANTITY PER PKG:** 450 L

**SPECIAL PROVISIONS:** A97, A158

**ERG CODE:** 9L

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

<table>
<thead>
<tr>
<th>UN No.</th>
<th>3082</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROPER SHIPPING NAME:</td>
<td>Environmentally hazardous substances, liquid, n.o.s. (Modified bisphenol A polymer, Nonylphenol Mixed Isomers)</td>
</tr>
<tr>
<td>HAZARD CLASS NUMBER:</td>
<td>9 (Miscellaneous Hazard)</td>
</tr>
<tr>
<td>LABELS:</td>
<td>Class 9 (Miscellaneous Hazard)</td>
</tr>
<tr>
<td>PACKING GROUP:</td>
<td>III</td>
</tr>
<tr>
<td>SPECIAL PROVISIONS:</td>
<td>179, 274, 335, 909</td>
</tr>
<tr>
<td>LIMITED QUANTITIES:</td>
<td>5 L</td>
</tr>
<tr>
<td>EXCEPTED QUANTITIES:</td>
<td>E1</td>
</tr>
<tr>
<td>PACKING:</td>
<td>Instructions: P001; Provisions: LP01</td>
</tr>
<tr>
<td>IBCs:</td>
<td>Instructions: IBC03; Provisions: None</td>
</tr>
<tr>
<td>TANKS:</td>
<td>Instructions: T4; Provisions: TP2, TP20</td>
</tr>
<tr>
<td>EmS:</td>
<td>F-a, S-F</td>
</tr>
<tr>
<td>STOWAGE CATEGORY:</td>
<td>Category A</td>
</tr>
</tbody>
</table>

**MARINE POLLUTANT:** This product meets the criteria of a marine pollutant.

### 15. REGULATORY INFORMATION

#### ADDITIONAL U.S. REGULATIONS:

**U.S. SARA REPORTING REQUIREMENTS:** The components of this product are not subject to the reporting requirements of Sections 302, 304, and 313 of Title III of the Superfund Amendments and Reauthorization Act.

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

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

**U.S. CERCLA REPORTABLE QUANTITY (RQ):** Not applicable.

**U.S. CLEAN AIR ACT (CA 112r) THRESHOLD QUANTITY (TQ):** Not applicable.

**U.S. CLEAN WATER ACT REQUIREMENTS:** Not applicable.

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

#### 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 Classes B3 (Combustible Liquid); and D2B (Poisonous and Infectious Material, Other effects/Toxic: Eye Irritation, Skin Irritation, Skin Sensitization, limited evidence of reproductive effects) as per the Controlled Product Regulations.

#### ADDITIONAL MEXICAN REGULATIONS:

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

### 16. OTHER INFORMATION

**U.S. ANSI STANDARD LABELING (Precautionary Statements):** WARNING! MAY CAUSE EYE, SKIN AND RESPIRATORY IRRITATION. MAY BE HARMFUL IF INGESTED OR INHALED. CAN CAUSE SKIN SENSITIZATION. COMBUSTIBLE LIQUID; CAN IGNITE IF EXPOSED TO DIRECT FLAME OR IF EXPOSED TO HIGH TEMPERATURE. CONTAINS COMPOUND WITH LIMITED EVIDENCE OF REPRODUCTIVE EFFECTS. CONTAINS COMPOUND 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 polypads or other suitable absorbing material. Place all spill residue in an appropriate container and seal. Dispose of in accordance with U.S. Federal, State, and local hazardous waste disposal regulations and those of Canada.
GLOBAL HARMONIZATION SYSTEM CLASSIFICATION:

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

Signal Word: Warning


Precautionary Statements:

Precautionary Label P201: Obtain special instructions before use. P202: Do not handle until all safety precautions have been read and understood. P264: Wash contaminated tissues after handling. P270: Do not eat, drink or smoke when using this product. P271: Use only outdoors or in a well-ventilated area. P272: Contaminated work clothing should not be allowed out of the workplace. P273: Avoid release to the environment. P280: Wear protective gloves, clothing, eye protection and face protection.


Hazard Symbols/PEI: GH807, GH808, GH809

DISCLAIMER OF EXRESSED AND IMPLIED WARRANTIES

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

All materials may present hazards and should be used with caution. Because many factors may affect processing or application/use, we recommend that you make tests to determine the suitability of a product for your particular purpose prior to use. No responsibility is assumed for any damage or injury resulting from abnormal use or from any failure to adhere to recommended practices or applicable federal, state, or local laws or regulations. The information provided above, and the product, are furnished on the condition that the person receiving them shall make their own determination as to the suitability of the product for their particular purpose and on the condition that they assume the risk of their use. In addition, no authorization is given nor implied to practice any patented invention without a license.

REFERENCES AND DATA SOURCES: Contact the supplier for information.

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

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

DATE OF PRINTING: March 27, 2013

DEFINITIONS OF TERMS

A large number of abbreviations and acronyms appear on a MSDS. 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 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 in the workplace. Exposure limits are given as TWA (Time-Weighted Average) or PEAK (short-term exposure) values.

DFG MAK Germ Cell Mutagen Categories: 1: Germ cell mutations that have been shown to increase the mutant frequency in the progeny of exposed humans. 2: Germ cell mutations 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 human or animals, 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 effects in mammalian somatic cell in vivo; in exceptional cases, substances for which there are no in vivo data 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 4-1 could be established for genotoxic substances with primary targets other than DNA [e.g. purely aneugenic substances] if research results make this seem sensible.) 8: Germ cell mutations, 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 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 Exposure Threshold Value for Working Materials) values are observed. Group B: Currently available information indicates a risk of damage to the developing embryo or fetus must be considered to be probable. Damage to the developing organism cannot be excluded when pregnant women are exposed, even when MAK and BAT values are observed. Group C: There is no reason to fear a damage to the developing embryo or fetus when MAK and BAT values are observed.

DFG MAK 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.

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

NIC: Notice of Intended Change.

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

NIOSH RELs: NIOSH’s Recommended Exposure Limits.

KEY ACRONYMS (continued)

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

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

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

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

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

WEEL: Workplace Environmental Exposure Limits from the AIHA.
DEFINITIONS OF TERMS (Continued)

Hazardous Materials Identification System Hazard Ratings (continued):

Health Hazard:

1. Slight Hazard: Materials that, under emergency conditions, could cause minor or temporary skin irritation or eye irritation, but will not cause permanent injury. Gases with an LD₅₀ for acute oral toxicity greater than 50 mg/kg but less than or equal to 2,000 mg/kg. Dusts and mists with an LC₅₀ for acute inhalation toxicity greater than 5 mg/L but less than or equal to 75 mg/L. Materials that contain substances such as concrete, stone, and sand. Materials that burn in air when exposed to a temperature of 815.5°C (1500°F) for a period of 5 minutes.

2. Moderate Hazard: Materials whose LD₅₀ for acute oral toxicity is less than or equal to 200 mg/kg. Materials whose LC₅₀ for acute inhalation toxicity is less than or equal to 30 mg/L. Materials that are corrosive to the eyes or cause irreversible corneal opacity. Materials corrosive to the skin.

3. Severe Hazard: Materials that may cause serious or permanent injury. Gases with an LD₅₀ for acute oral toxicity greater than 0.01 mg/kg but less than or equal to 0.1 mg/kg. Materials with an LC₅₀ for acute inhalation toxicity greater than 1,000 ppm but less than or equal to 10,000 ppm. Dusts and mists with an LC₅₀ for acute inhalation toxicity greater than 0.5 mg/L but less than or equal to 2 mg/L. Materials with an LD₅₀ for acute dermal toxicity greater than 40 mg/kg but less than or equal to 200 mg/kg. Materials that are irritant dusts or mists with an LC₅₀ for acute inhalation toxicity greater than 10 mg/L but less than or equal to 100 mg/L. Materials with an LD₅₀ for acute dermal toxicity greater than 1,000 mg/kg but less than or equal to 2,000 mg/kg. Materials with an LC₅₀ for acute inhalation toxicity greater than 0.5 mg/L but less than or equal to 2 mg/L. Materials with an LD₅₀ for acute dermal toxicity greater than 40 mg/kg but less than or equal to 200 mg/kg. Materials that are irritant dusts or mists with an LC₅₀ for acute inhalation toxicity greater than 10 mg/L but less than or equal to 100 mg/L. Materials with an LD₅₀ for acute dermal toxicity greater than 1,000 mg/kg but less than or equal to 2,000 mg/kg.

4. Extreme Hazard: Materials that, under emergency conditions, cause severe burns, severe irritation to the eyes or are lacrimary. Materials that are primary skin irritants or sensitizers. Materials whose LD₅₀ for acute oral toxicity is greater than 50 mg/kg but less than or equal to 500 mg/kg. Materials whose LC₅₀ for acute inhalation toxicity is greater than 5 mg/L but less than or equal to 50 mg/L. Materials whose LC₅₀ for acute inhalation toxicity is greater than 10 mg/L but less than or equal to 100 mg/L. Materials whose LD₅₀ for acute dermal toxicity is greater than 100 mg/kg but less than or equal to 1,000 mg/kg. Dusts and mists with an LC₅₀ for acute inhalation toxicity greater than 5 mg/L but less than or equal to 50 mg/L. Materials that contain substances that may be highly irritating to the skin or eyes.

Physical Hazard:

1. Slight Hazard: Materials that do not react with water. Organic Peroxides: Materials that are normally stable, even under fire conditions and will not react with water. Explosives: No Rating.

2. Moderate Hazard: Materials that are easily polymerized or degradable in the presence of water or other substances. Organic Peroxides: Materials that are normally stable but may be polymerized in the presence of water. Explosives: Division 1.4 explosives. Explosives include dynamite and other explosives that are used for civil and military purposes. Materials that are easily polymerized or degradable in the presence of water or other substances.

3. Severe Hazard: Materials that are highly reactive in the presence of water. Organic Peroxides: Materials that are highly reactive in the presence of water. Explosives: Division 1.6 explosives. Materials that are highly reactive in the presence of water.

4. Extreme Hazard: Materials that are extremely reactive in the presence of water. Organic Peroxides: Materials that are extremely reactive in the presence of water. Explosives: Division 1.6 explosives. Materials that are extremely reactive in the presence of water.
DEFINITIONS OF TERMS (Continued)

NATIONAL FIRE PROTECTION ASSOCIATION HAZARD RATINGS (continued):

INSTABILITY HAZARD (continued): 2 Materials that readily undergo violent chemical change at elevated temperatures and pressures. Materials that have an instantaneous power density (product of heat of reaction and reaction rate) at 250°C (482°F) at or above 10 W/mL and below 100 W/mL. 3 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 estimated instantaneous power density (product of heat of reaction and reaction rate) at 250°C (482°F) at or above 100 W/mL and below 1000 W/mL. Materials that are sensitive to thermal or mechanical shock at elevated temperatures and pressures. Materials that in themselves are readily capable of detonation or explosive decomposition or explosive reaction at normal temperatures and pressures. Materials that are sensitive to localized thermal or mechanical shock at normal temperatures and pressures. Materials that have an estimated instantaneous power density (product of heat of reaction and reaction rate) at 250°C (482°F) of 1000 W/mL or greater.

FLAMMABILITY LIMITS IN AIR:

Much of the information related to fire and explosion is derived from the National Fire Protection Association (NFPA). Flash Point: Minimum temperature at which a liquid gives off sufficient vapor to form an ignitable mixture with air near the surface of the liquid or within the test vessel used. Autoignition Temperature: Minimum temperature of a solid, liquid, or gas required to initiate or cause self-sustained combustion in air with no other source of ignition. LEI: Lowest concentration of a flammable vapor or gas/air mixture that will ignite and burn with a flame. LEL: Lowest concentration of a flammable vapor or gas/air mixture that will ignite and burn with a flame.

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: Concentration expressed in weight of substance per volume of air. mg/kg: Quantity of material, by weight, administered to a test subject, based on their body weight in kg. ITI: Instantaneous power density (product of heat of reaction and reaction rate) at 250°C (482°F) at or above 100 W/mL and below 1000 W/mL. Materials that are sensitive to thermal or mechanical shock at normal temperatures and pressures. Materials that have an estimated instantaneous power density (product of heat of reaction and reaction rate) at 250°C (482°F) of 1000 W/mL or greater.

TOXICOLOGICAL INFORMATION (continued):

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: Concentration expressed in weight of substance per volume of air. mg/kg: Quantity of material, by weight, administered to a test subject, based on their body weight in kg. ITI: Instantaneous power density (product of heat of reaction and reaction rate) at 250°C (482°F) at or above 100 W/mL and below 1000 W/mL. Materials that are sensitive to thermal or mechanical shock at normal temperatures and pressures. Materials that have an estimated instantaneous power density (product of heat of reaction and reaction rate) at 250°C (482°F) of 1000 W/mL or greater.

REPRODUCTIVE 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:

EC: 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. Tlmg: Median threshold limit. log K OC or log K OW: 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: