Material Name: Kerapoxy - Part A

**Section 1 - Chemical Product and Company Identification**

**Material Name:** Kerapoxy - Part A  
**Product Use:** Epoxy Mortar and Grout  
**Manufacturer Information**  
USA and Puerto Rico  
MAPEI  
1144 East Newport Center Drive  
Deerfield Beach, FL 33442  
Phone: 1-954-246-8888  
Canada  
MAPEI  
2900 Francis-Hughes Avenue  
Laval, QC H7L 3J5  
Phone: 1-450-662-1212

IN THE EVENT OF A CHEMICAL EMERGENCY INVOLVING A SPILL, LEAK, FIRE, EXPLOSION, EXPOSURE OR ACCIDENT, CONTACT THE FOLLOWING NUMBERS:

Emergency 24 hour numbers:  
(USA) CHEMTREC 1-800-424-9300  
(Canada) CANUTEC 1-631-996-6666

**Section 2 - Hazards Identification**

**Emergency Overview**  
This product has been evaluated using criteria specified in 29CFR 1910.1200 (Hazard Communication Standard). This product is irritating to the eyes and skin. This product may cause sensitization by skin contact. This product may be harmful or fatal if swallowed.

**Hazard Statements**  
CAUTION! IRRITANT. ALLERGEN. Irritating to eyes, respiratory system and skin. May cause sensitization by skin contact. May be harmful or fatal if swallowed. Chronic lung disease (silicosis) and/or lung cancer may result from prolonged/repeated breathing of the dust of this material. Wear suitable gloves, eye/face protection, and respiratory protection. Keep out of the reach of children.

**Potential Health Effects: Eyes**  
This product is irritating to the eyes. Symptoms can include irritation, redness, scratching of the cornea, and tearing.

**Potential Health Effects: Skin**  
This product is irritating to the skin. Mechanical rubbing may increase skin irritation. Prolonged contact with this product may cause allergic skin sensitization reactions.

**Potential Health Effects: Ingestion**  
This product may be harmful or fatal if swallowed. Ingestion of this product may cause nausea, vomiting and diarrhea.

**Potential Health Effects: Inhalation**  
This product is irritating to the respiratory system. Chronic lung disease (silicosis) and/or lung cancer may result from prolonged/repeated breathing of the dust of this material. Inhalation of dusts produced during cutting, grinding or sanding of this product may cause irritation of the respiratory tract.

**Medical Conditions Aggravated by Exposure**  
Hypersensitivity to product, allergies, and skin or respiratory disorders

**Potential Environmental Effects**  
None identified.

**HMIS Ratings: Health:** 2* Fire: 1 Reactivity: 0  
Pers. Prot.: Safety glasses, gloves, NIOSH respirator if dust exposure exceeds TLV values  
Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe  * = Chronic hazard
*** Section 3 - Composition / Information on Ingredients ***

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Component</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>14808-60-7</td>
<td>Silica Sand</td>
<td>60-100</td>
</tr>
<tr>
<td>25085-99-8</td>
<td>Epoxy Resin</td>
<td>7-13</td>
</tr>
<tr>
<td>68609-97-2</td>
<td>Alkyl Epoxy Resin</td>
<td>3-7</td>
</tr>
<tr>
<td>28064-14-4</td>
<td>Epoxy Resin</td>
<td>1-5</td>
</tr>
<tr>
<td>13463-67-7</td>
<td>Titanium dioxide</td>
<td>1-5</td>
</tr>
<tr>
<td>67762-90-7</td>
<td>Dimethyl silicone polymer with silica</td>
<td>1-5</td>
</tr>
</tbody>
</table>

Component Related Regulatory Information
This product may be regulated, have exposure limits or other information identified as the following: Silica, crystalline (general form), Glycidyl ethers.

*** Section 4 - First Aid Measures ***

First Aid: Eyes
Immediately flush eyes with plenty of water for at least 15 minutes. If irritation persists get medical attention.

First Aid: Skin
For skin contact, wash immediately with soap and water. If irritation persists, get medical attention.

First Aid: Ingestion
For ingestion, flush out mouth with water. If ingestion of a large amount does occur, seek medical attention. Do not induce vomiting.

First Aid: Inhalation
If inhaled, immediately remove the affected person to fresh air. If the affected person is not breathing, apply artificial respiration. If symptoms persist, get medical attention.

First Aid: Notes to Physician
Provide general supportive measures and treat symptomatically.

*** Section 5 - Fire Fighting Measures ***

General Fire Hazards
See Section 9 for Flammability Properties.
This product is an aqueous mixture which will not burn. If evaporated to dryness, the solid residue may pose a moderate fire hazard.

Hazardous Combustion Products
Irritating and toxic gases or fumes may be released during a fire. Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

Extinguishing Media
Dry chemical (preferred), foam, water.

Fire Fighting Equipment/Instructions
Firefighters should wear full protective clothing including self contained breathing apparatus.

NFPA Ratings: Health: 2 Fire: 1 Reactivity: 0
Hazard Scale: 0 = Minimal  1 = Slight  2 = Moderate  3 = Serious  4 = Severe

*** Section 6 - Accidental Release Measures ***

Personal Precautions
Wear appropriate protective equipment and clothing during clean-up.

Containment Procedures
Dike the spilled material, where this is possible. Absorb with inert absorbent such as dry clay, sand or diatomaceous earth, commercial sorbents, or recover using pumps. Scoop up used absorbent into drums or other appropriate container.

Environmental Precautions
Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.
Clean-Up Procedures

Attempt to reclaim the free product, if this is possible. Shovel the material into waste container. Thoroughly wash the area with water after a spill or leak clean-up. Keep out of the reach of children.

Evacuation Procedures

None identified.

Special Procedures

Regulations vary. Consult local authorities before disposal.

*** Section 7 - Handling and Storage ***

Handling Procedures

Avoid getting this material into contact with your skin and eyes. Avoid breathing vapors or mists of this product. Wash hands after handling and before eating. Keep out of the reach of children.

Storage Procedures

Store in a cool, dry, well-ventilated area. Store at ambient temperature and atmospheric pressure. Keep out of sun.

*** Section 8 - Exposure Controls / Personal Protection ***

A: Component Exposure Limits

<table>
<thead>
<tr>
<th>Material</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>Alberta</th>
<th>British Columbia</th>
<th>Manitoba</th>
<th>New Brunswick</th>
<th>NW Territories</th>
<th>Nova Scotia</th>
<th>Nunavut</th>
<th>Ontario</th>
<th>Quebec</th>
<th>Saskatchewan</th>
<th>Yukon</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silica Sand (14808-60-7)</td>
<td>0.025 mg/m^3 TWA (respirable fraction)</td>
<td>0.05 mg/m^3 TWA (respirable dust)</td>
<td>Designated substance - requires code of practice (respirable) (related to Silica-crystalline)</td>
<td>ACGIH Category A2 - Suspected Human Carcinogen; IARC Category 1 - Human Carcinogen</td>
<td>0.025 mg/m^3 TWA (respirable)</td>
<td>0.1 mg/m^3 TWA (respirable fraction)</td>
<td>0.1 mg/m^3 TWA (respirable mass); 0.3 mg/m^3 TWA (total mass)</td>
<td>0.025 mg/m^3 TWA (respirable fraction)</td>
<td>0.1 mg/m^3 TWA (respirable mass); 0.3 mg/m^3 TWA (total mass)</td>
<td>0.1 mg/m^3 TWA (respirable fraction)</td>
<td>0.1 mg/m^3 TWA (respirable dust)</td>
<td>Present (related to Silica crystalline (respirable size))</td>
<td>0.05 mg/m^3 TWA (respirable fraction)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Material</th>
<th>ACGIH</th>
<th>OSHA (Final)</th>
<th>Alberta</th>
<th>British Columbia</th>
<th>Manitoba</th>
<th>New Brunswick</th>
<th>NW Territories</th>
<th>Nova Scotia</th>
<th>Nunavut</th>
<th>Ontario</th>
<th>Quebec</th>
<th>Saskatchewan</th>
<th>Yukon</th>
</tr>
</thead>
<tbody>
<tr>
<td>Titanium dioxide (13463-67-7)</td>
<td>10 mg/m^3 TWA</td>
<td>15 mg/m^3 TWA (total dust)</td>
<td>10 mg/m^3 TWA</td>
<td>IARC Category 2B - Possible Human Carcinogen</td>
<td>10 mg/m^3 TWA (total dust); 3 mg/m^3 TWA (respirable fraction)</td>
<td>10 mg/m^3 TWA (total dust)</td>
<td>5 mg/m^3 TWA (respirable mass); 10 mg/m^3 TWA (total mass)</td>
<td>10 mg/m^3 TWA (total dust)</td>
<td>10 mg/m^3 TWA (respirable mass); 10 mg/m^3 TWA (total mass)</td>
<td>10 mg/m^3 TWA (total dust)</td>
<td>10 mg/m^3 TWA (total dust, containing no asbestos and less than 1% crystalline silica)</td>
<td>10 mg/m^3 TWA (total dust)</td>
<td>10 mg/m^3 TWA (total dust)</td>
</tr>
</tbody>
</table>

Engineering Controls

Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits. Local exhaust is suggested for use, where possible, in enclosed or confined spaces.
PERSONAL PROTECTIVE EQUIPMENT

Personal Protective Equipment: Eyes/Face
Wear safety glasses with side shields.

Personal Protective Equipment: Skin
The use of nitrile-latex gloves is recommended.

Personal Protective Equipment: Respiratory
If airborne concentrations are above the applicable exposure limits, use NIOSH approved respiratory protection.

Personal Protective Equipment: General
Launder contaminated clothing before reuse. Use good industrial hygiene practices in handling this material.

*** Section 9 - Physical & Chemical Properties ***

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Beige Paste</td>
</tr>
<tr>
<td>Odor</td>
<td>Slight latex odor</td>
</tr>
<tr>
<td>Physical State</td>
<td>Paste</td>
</tr>
<tr>
<td>pH</td>
<td>N/A</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>N/A</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>N/A</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>N/A</td>
</tr>
<tr>
<td>Melting Point</td>
<td>N/A</td>
</tr>
<tr>
<td>Solubility (H2O)</td>
<td>Insoluble</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.3 - 1.6</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>N/A</td>
</tr>
<tr>
<td>VOC</td>
<td>7 g/L (mixture)</td>
</tr>
<tr>
<td>Octanol/H2O Coeff.</td>
<td>N/A</td>
</tr>
<tr>
<td>Flash Point Method</td>
<td>CC</td>
</tr>
<tr>
<td>Upper Flammability Limit (UFL)</td>
<td>N/A</td>
</tr>
<tr>
<td>Lower Flammability Limit (LFL)</td>
<td>N/A</td>
</tr>
<tr>
<td>Burning Rate</td>
<td>N/A</td>
</tr>
<tr>
<td>Auto Ignition</td>
<td>N/A</td>
</tr>
</tbody>
</table>

*** Section 10 - Chemical Stability & Reactivity Information ***

Chemical Stability
Stable under normal conditions.

Chemical Stability: Conditions to Avoid
Do not freeze.

Incompatibility
This product may react with strong acids, bases and oxidizing agents.

Hazardous Decomposition
Irritating and/or toxic fumes and gases may be emitted upon the product's decomposition. Upon decomposition, this product may emit fumes of carbon monoxide, carbon dioxide, oxides of nitrogen, and other organic compounds.

Possibility of Hazardous Reactions
Will not occur.

*** Section 11 - Toxicological Information ***

Acute Dose Effects
A: General Product Information
No information available for the product.

B: Component Analysis - LD50/LC50
- Silica Sand (14808-60-7)
  Oral LD50 Rat: 500 mg/kg
- Alkyl Epoxy Resin (68609-97-2)
  Oral LD50 Rat: 17100 mg/kg
- Titanium dioxide (13463-67-7)
  Oral LD50 Rat: >10000 mg/kg
Carcinogenicity
A: General Product Information
Exposure to quartz (the most stable and common form of crystalline silica) is responsible for the majority of clinically diagnosed silicosis. Silicosis is a fibronodular lung disease that occurs after occupational exposure to crystalline silica for 5 years or longer. Inhalation of quartz dusts may cause shortness of breath, limitation of chest expansion, dry cough, and a lessened capacity for work. Individuals with a pre-existing disease in, or a history of ailments involving the skin or respiratory tract, are at a greater risk of developing adverse health effects when exposed to this material. There may be a relationship between silicosis and certain cancers.

B: Component Carcinogenicity
Silica Sand (14808-60-7)
- **ACGIH:** A2 - Suspected Human Carcinogen
- **NIOSH:** potential occupational carcinogen
- **NTP:** Known Human Carcinogen (Select Carcinogen)
- **IARC:** Monograph 68 [1997] (listed under Crystalline silica inhaled in the form of quartz or cristobalite from occupational sources) (Group 1 (carcinogenic to humans))

Titanium dioxide (13463-67-7)
- **ACGIH:** A4 - Not Classifiable as a Human Carcinogen
- **NIOSH:** potential occupational carcinogen
- **IARC:** Monograph 93 [in preparation], Monograph 47 [1989] (Group 2B (possibly carcinogenic to humans))

Sensitization
This product may be sensitizing by prolonged skin contact.

*** Section 12 - Ecological Information ***

Ecotoxicity
A: General Product Information
No information available for the product.

B: Component Analysis - Ecotoxicity - Aquatic Toxicity
No ecotoxicity data are available for this product's components.

*** Section 13 - Disposal Considerations ***

US EPA Waste Number & Descriptions
A: General Product Information
No additional information available.

B: Component Waste Numbers
No EPA Waste Numbers are applicable for this product's components.

Disposal Instructions
Waste must be handled in accordance with all federal, state, provincial, and local regulations. Consult authorities before disposal.
See Section 7 for Handling Procedures. See Section 8 for Personal Protective Equipment recommendations.

*** Section 14 - Transportation Information ***

International Transportation Regulations
Not regulated as dangerous goods.

*** Section 15 - Regulatory Information ***

US Federal Regulations
A: General Product Information
All components are on the U.S. EPA TSCA Inventory List. All components of this product are included, or are exempt from inclusion, in the Canadian Domestic Substance List unless otherwise noted.

B: Component Analysis
None of this product's components are listed under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), or CERCLA (40 CFR 302.4).
State Regulations
A: General Product Information
   Other state regulations may apply. Check individual state requirements.

B: Component Analysis - State
   The following components appear on one or more of the following state hazardous substances lists:

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS</th>
<th>CA</th>
<th>MA</th>
<th>MN</th>
<th>NJ</th>
<th>PA</th>
<th>RI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silica Sand</td>
<td>14808-60-7</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Epoxy Resin (related to Glycidyl ethers)</td>
<td>28064-14-4</td>
<td>No</td>
<td>No</td>
<td>Yes'</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Titanium dioxide</td>
<td>13463-67-7</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):
WARNING! This product contains a chemical known to the state of California to cause cancer.

Canadian WHMIS Information
A: General Product Information

B: Component Analysis - WHMIS IDL
   The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS #</th>
<th>Minimum Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silica Sand</td>
<td>14808-60-7</td>
<td>1 %</td>
</tr>
</tbody>
</table>

Additional Regulatory Information
A: General Product Information
   Supplier(s) of proprietary component(s) state that these components are contained on the TSCA inventory.

B: Component Analysis - Inventory

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS #</th>
<th>TSCA</th>
<th>CAN</th>
<th>EEC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silica Sand</td>
<td>14808-60-7</td>
<td>Yes</td>
<td>DSL</td>
<td>EINECS</td>
</tr>
<tr>
<td>Epoxy Resin</td>
<td>25085-99-8</td>
<td>Yes</td>
<td>DSL</td>
<td>No</td>
</tr>
<tr>
<td>Alkyl Epoxy Resin</td>
<td>68609-97-2</td>
<td>Yes</td>
<td>DSL</td>
<td>EINECS</td>
</tr>
<tr>
<td>Epoxy Resin</td>
<td>28064-14-4</td>
<td>Yes</td>
<td>DSL</td>
<td>No</td>
</tr>
<tr>
<td>Titanium dioxide</td>
<td>13463-67-7</td>
<td>Yes</td>
<td>DSL</td>
<td>EINECS</td>
</tr>
<tr>
<td>Dimethyl silicone polymer with silica</td>
<td>67762-90-7</td>
<td>Yes</td>
<td>DSL</td>
<td>No</td>
</tr>
</tbody>
</table>

*** Section 16 - Other Information ***

Reference Version (internal)
1861-52

Other Information
Reasonable care has been taken in the preparation of this information, but the manufacturer makes no warranty of merchantability or any other warranty, expressed or implied, with respect to this information. The manufacturer makes no representations and assumes no liability for any direct, incidental or consequential damages resulting from its use. The information herein is presented in good faith and believed to be accurate as of the effective date given. It is the buyer's responsibility to ensure that its activities comply with Federal, State or provincial, and local laws.

Key/Legend
NA = Not available or Not Applicable. ACGIH = American Conference of Governmental Industrial Hygienists. NFPA = National Fire Protection Association. EPA = Environmental Protection Agency; TSCA = Toxic Substance Control Act; ACGIH = American Conference of Governmental Industrial Hygienists; IARC = International Agency for Research on Cancer; NIOSH = National Institute for Occupational Safety and Health; NTP = National Toxicology Program; OSHA = Occupational Safety and Health Administration., NJTSR = New Jersey Trade Secret Registry.

Contact: Product Safety Specialist
Contact Phone: 1-954-246-8888

End of Sheet SAH00071
Material Safety Data Sheet

Material Name: Kerapoxy - Part B

*** Section 1 - Chemical Product and Company Identification ***

Material Name: Kerapoxy - Part B

Product Use
Epoxy Mortar and Grout

Manufacturer Information

<table>
<thead>
<tr>
<th>USA and Puerto Rico</th>
<th>Canada</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAPEI</td>
<td>MAPEI</td>
</tr>
<tr>
<td>1144 East Newport Center Drive</td>
<td>2900 Francis-Hughes Avenue</td>
</tr>
<tr>
<td>Deerfield Beach, FL 33442</td>
<td>Laval, QC H7L 3J5</td>
</tr>
<tr>
<td>Phone: 1-954-246-8888</td>
<td>Phone: 1-450-662-1212</td>
</tr>
</tbody>
</table>

IN THE EVENT OF A CHEMICAL EMERGENCY INVOLVING A SPILL, LEAK, FIRE, EXPLOSION, EXPOSURE OR ACCIDENT, CONTACT THE FOLLOWING NUMBERS:

Emergency 24 hour numbers:
(USA) CHEMTREC 1-800-424-9300
(Canada) CANUTEC 1-631-996-6666

*** Section 2 - Hazards Identification ***

Emergency Overview
This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication). Contact with this material will cause irritation and burns to the skin and eyes. This product is irritating to the respiratory system. This product may cause sensitization by skin contact.

Hazard Statements
DANGER! CORROSIVE. ALLERGEN. Contact with this material will cause irritation and burns to the skin and eyes. Irritating to respiratory system. May cause sensitization by skin contact. Wear suitable gloves, eye/face protection, and respiratory protection. Keep out of the reach of children.

Potential Health Effects: Eyes
This product is severely irritating to the eyes and may cause eye burns.

Potential Health Effects: Skin
This product is severely irritating to the skin and may cause burns. Prolonged contact with this product may cause allergic skin sensitization reactions.

Potential Health Effects: Ingestion
Ingestion of this product may cause nausea, vomiting and diarrhea.

Potential Health Effects: Inhalation
This product is irritating to the respiratory system.

Medical Conditions Aggravated by Exposure
Hypersensitivity to product, allergies, and skin or respiratory disorders

Potential Environmental Effects
None identified.

HMIS Ratings:  Health: 3 Fire: 1 Reactivity: 1 Pers. Prot.: Safety glasses, gloves, synthetic apron, vapor respirator
Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe  * = Chronic hazard

*** Section 3 - Composition / Information on Ingredients ***

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Component</th>
</tr>
</thead>
<tbody>
<tr>
<td>68951-85-9</td>
<td>Fatty acids, tall-oil, polymers with bisphenol A, diethylenetriamine, epichlorohydrin and tetraethylenepentamine</td>
</tr>
<tr>
<td>2855-13-2</td>
<td>Isophorone diamine</td>
</tr>
<tr>
<td></td>
<td>Percent: 60-100</td>
</tr>
<tr>
<td></td>
<td>Percent: 5-10</td>
</tr>
</tbody>
</table>
**Material Safety Data Sheet**

**Material Name:** Kerapoxy - Part B

**ID:** SAH00072

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Chemical Name</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>100-51-6</td>
<td>Benzyl alcohol</td>
<td>5-10</td>
</tr>
<tr>
<td>109-55-7</td>
<td>3-(Dimethylamino)-propylamine</td>
<td>1-5</td>
</tr>
<tr>
<td>79-33-4</td>
<td>Propanoic acid, 2-hydroxy-, (S)-</td>
<td>1-5</td>
</tr>
</tbody>
</table>

**Component Related Regulatory Information**

This product may be regulated, have exposure limits or other information identified as the following: L-Lactic acid (1715-99-7).

---

**Section 4 - First Aid Measures**

**First Aid: Eyes**

This product is severely irritating to the eyes and may cause eye burns. In case of contact, immediately flush eyes with large amounts of water, continuing to flush for 15 minutes. If irritation persists get medical attention.

**First Aid: Skin**

This product is severely irritating to the skin and may cause burns. For skin contact, wash immediately with soap and water. If irritation persists, get medical attention.

**First Aid: Ingestion**

For ingestion, flush out mouth with water. Get medical attention or advice. Do not induce vomiting.

**First Aid: Inhalation**

If inhaled, immediately remove the affected person to fresh air. If the affected person is not breathing, apply artificial respiration. If symptoms persist, get medical attention.

**First Aid: Notes to Physician**

Provide general supportive measures and treat symptomatically.

---

**Section 5 - Fire Fighting Measures**

**General Fire Hazards**

See Section 9 for Flammability Properties. This product is an aqueous mixture which will not burn. If evaporated to dryness, the solid residue may pose a moderate fire hazard.

**Hazardous Combustion Products**

Irritating and toxic gases or fumes may be released during a fire. Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

**Extinguishing Media**

Dry chemical (preferred), foam, water.

**Fire Fighting Equipment/Instructions**

Firefighters should wear full protective gear.

**NFPA Ratings:**

Health: 3  Fire: 1  Reactivity: 1

Hazard Scale: 0 = Minimal  1 = Slight  2 = Moderate  3 = Serious  4 = Severe

---

**Section 6 - Accidental Release Measures**

**Containment Procedures**

Dike the spilled material, where this is possible. Absorb with inert absorbent such as dry clay, sand or diatomaceous earth, commercial sorbents, or recover using pumps. Scoop up used absorbent into drums or other appropriate container.

**Personal Precautions**

Wear appropriate protective equipment and clothing during clean-up.

**Clean-Up Procedures**

Attempt to reclaim the free product, if this is possible. Shovel the material into waste container. Thoroughly wash the area with water after a spill or leak clean-up. Keep out of the reach of children.

**Environmental Precautions**

Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.

**Evacuation Procedures**

None identified.
Special Procedures
Regulations vary. Consult local authorities before disposal.

*** Section 7 - Handling and Storage ***

Handling Procedures
Avoid getting this material into contact with your skin and eyes. Avoid breathing vapors or mists of this product. Wash hands after handling and before eating. Keep out of the reach of children.

Storage Procedures
Store in a cool, dry, well-ventilated area. Store at ambient temperature and atmospheric pressure. Store away from strong oxidizers.

*** Section 8 - Exposure Controls / Personal Protection ***

A: Component Exposure Limits
3-(Dimethylamino)-propylamine (109-55-7)

<table>
<thead>
<tr>
<th>Region</th>
<th>Exposure Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ontario</td>
<td>0.5 ppm TWAEV; 2 mg/m3 TWAEV</td>
</tr>
</tbody>
</table>

Engineering Controls
Use general ventilation.

PERSONAL PROTECTIVE EQUIPMENT

Personal Protective Equipment: Eyes/face
Wear safety glasses with side shields.

Personal Protective Equipment: Skin
The use of nitrile-latex gloves is recommended.

Personal Protective Equipment: Respiratory
If airborne concentrations are above the applicable exposure limits, use NIOSH approved respiratory protection.

Personal Protective Equipment: General
Launder contaminated clothing before reuse. Use good industrial hygiene practices in handling this material.

*** Section 9 - Physical & Chemical Properties ***

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Liquid</td>
</tr>
<tr>
<td>Odor</td>
<td>Amine odor</td>
</tr>
<tr>
<td>Physical State</td>
<td>Liquid</td>
</tr>
<tr>
<td>pH</td>
<td>N/A</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>N/A</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>N/A</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>N/A</td>
</tr>
<tr>
<td>Melting Point</td>
<td>N/A</td>
</tr>
<tr>
<td>Solubility (H2O)</td>
<td>Negligible</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>0.98</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>N/A</td>
</tr>
<tr>
<td>VOC</td>
<td>7 g/L (mixture)</td>
</tr>
<tr>
<td>Octanol/H2O Coeff.</td>
<td>N/A</td>
</tr>
<tr>
<td>Flash Point</td>
<td>N/A</td>
</tr>
<tr>
<td>Flash Point Method</td>
<td>N/A</td>
</tr>
<tr>
<td>Upper Flammability Limit (UFL)</td>
<td>N/A</td>
</tr>
<tr>
<td>Lower Flammability Limit (LFL)</td>
<td>N/A</td>
</tr>
<tr>
<td>Burning Rate</td>
<td>N/A</td>
</tr>
<tr>
<td>Auto Ignition</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Physical Properties: Additional Information
The data provided in this section is to be used for product safety handling purposes. Please refer to Product Data Sheets, Certificates of Conformity or Certificates of Analysis for chemical and physical data for determinations of quality and for formulation purposes.

*** Section 10 - Chemical Stability & Reactivity Information ***

Chemical Stability
Stable under normal conditions.

Chemical Stability: Conditions to Avoid
Do not freeze.
Incompatibility
This product may react with strong acids, bases and oxidizing agents.

Hazardous Decomposition
Irritating and/or toxic fumes and gases may be emitted upon the product's decomposition. Upon decomposition, this product may emit fumes of carbon monoxide, carbon dioxide, oxides of nitrogen, and other organic compounds.

Possibility of Hazardous Reactions
Will not occur.

*** Section 11 - Toxicological Information ***

Acute Dose Effects

A: General Product Information
No information available for the product.

B: Component Analysis - LD50/LC50
- Isophorone diamine (2855-13-2)
  Oral LD50 Rat: 1030 mg/kg

- Benzyl alcohol (100-51-6)
  Inhalation LC50 Rat: 8.8 mg/L/4H; Oral LD50 Rat: 1230 mg/kg; Dermal LD50 Rabbit: 2000 mg/kg

- 3-(Dimethylamino)-propylamine (109-55-7)
  Inhalation LC50 Rat: >4.31 mg/L/4H; Oral LD50 Rat: 922 mg/kg; Dermal LD50 Rabbit: 600 µL/kg

- Propanoic acid, 2-hydroxy-, (S)- (79-33-4)
  Oral LD50 Rat: 3730 mg/kg; Dermal LD50 Rabbit: >2000 mg/kg

Carcinogenicity

A: General Product Information
No information available for the product.

B: Component Carcinogenicity
None of this product's components are listed by ACGIH, IARC, OSHA, NIOSH, or NTP.

Sensitization
This product may be sensitizing by prolonged skin contact.

*** Section 12 - Ecological Information ***

Ecotoxicity

A: General Product Information
No information available for the product.

B: Component Analysis - Ecotoxicity - Aquatic Toxicity

<p>| Isophorone diamine (2855-13-2) |</p>
<table>
<thead>
<tr>
<th>Test &amp; Species</th>
<th>Conditions</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>96 Hr LC50 Leuciscus idus</td>
<td>110 mg/L</td>
<td>[semi-static]</td>
</tr>
<tr>
<td>72 Hr EC50 Scenedesmus subspicatus</td>
<td>37 mg/L</td>
<td></td>
</tr>
<tr>
<td>24 Hr EC50 Daphnia magna</td>
<td>42 mg/L</td>
<td></td>
</tr>
</tbody>
</table>

<p>| Benzyl alcohol (100-51-6) |</p>
<table>
<thead>
<tr>
<th>Test &amp; Species</th>
<th>Conditions</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>96 Hr LC50 Pimephales promelas</td>
<td>460 mg/L</td>
<td>[static]</td>
</tr>
<tr>
<td>96 Hr LC50 Lepomis macrochirus</td>
<td>10 mg/L</td>
<td>[static]</td>
</tr>
<tr>
<td>3 Hr EC50 Anabaena variabilis</td>
<td>35 mg/L</td>
<td></td>
</tr>
<tr>
<td>48 Hr EC50 water flea</td>
<td>23 mg/L</td>
<td></td>
</tr>
</tbody>
</table>

<p>| 3-(Dimethylamino)-propylamine (109-55-7) |</p>
<table>
<thead>
<tr>
<th>Test &amp; Species</th>
<th>Conditions</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>96 Hr LC50 Leuciscus idus</td>
<td>122 mg/L</td>
<td>[static]</td>
</tr>
<tr>
<td>72 Hr EC50 Scenedesmus subspicatus</td>
<td>56.2 mg/L</td>
<td></td>
</tr>
<tr>
<td>96 Hr EC50 Scenedesmus subspicatus</td>
<td>57.5 mg/L</td>
<td></td>
</tr>
<tr>
<td>48 Hr EC50 Daphnia magna</td>
<td>59.5 mg/L</td>
<td></td>
</tr>
</tbody>
</table>
Propanoic acid, 2-hydroxy-, (S)- (79-33-4)

<table>
<thead>
<tr>
<th>Test &amp; Species</th>
<th>Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>96 Hr LC50 Brachydanio rerio</td>
<td>320 mg/L</td>
</tr>
<tr>
<td>96 Hr LC50 Lepomis macrochirus</td>
<td>100-180 mg/L</td>
</tr>
<tr>
<td>96 Hr LC50 Oncorhynchus mykiss</td>
<td>100-180 mg/L</td>
</tr>
<tr>
<td>70 Hr EC50 Selenastrum capricornutum</td>
<td>3.5 mg/L</td>
</tr>
<tr>
<td>48 Hr EC50 Daphnia magna</td>
<td>240 mg/L</td>
</tr>
</tbody>
</table>

*** Section 13 - Disposal Considerations ***

US EPA Waste Number & Descriptions
A: General Product Information
   No additional information available.

B: Component Waste Numbers
   No EPA Waste Numbers are applicable for this product's components.

Disposal Instructions
   Waste must be handled in accordance with all federal, state, provincial, and local regulations. Consult authorities before disposal.
   See Section 7 for Handling Procedures. See Section 8 for Personal Protective Equipment recommendations.

*** Section 14 - Transportation Information ***

US DOT Information
   Shipping Name: Amines, liquid, corrosive, n.o.s. (Isophorone diamine)
   UN/NA #: UN2735 Hazard Class: 8 Packing Group: III

IATA Information
   Shipping Name: Amines, liquid, corrosive, n.o.s. (Isophorone diamine)
   UN #: UN2735 Hazard Class: 8 Packing Group: III

TDG Information
   Shipping Name: Amines, liquid, corrosive, n.o.s. (Isophorone diamine)
   UN/NA #: UN2735 Hazard Class: 8 Packing Group: III

*** Section 15 - Regulatory Information ***

US Federal Regulations
A: General Product Information
   All components are on the U.S. EPA TSCA Inventory List. All components of this product are included, or are exempt from inclusion, in the Canadian Domestic Substance List unless otherwise noted.

B: Component Analysis
   None of this products components are listed under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), or CERCLA (40 CFR 302.4).

State Regulations
A: General Product Information
   Other state regulations may apply. Check individual state requirements.

B: Component Analysis - State
   The following components appear on one or more of the following state hazardous substances lists:

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS</th>
<th>CA</th>
<th>MA</th>
<th>MN</th>
<th>NJ</th>
<th>PA</th>
<th>RI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isophorone diamine</td>
<td>2855-13-2</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Benzyl alcohol</td>
<td>100-51-6</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>3-(Dimethylamino)-propylamine</td>
<td>109-55-7</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>
Material Safety Data Sheet

Material Name: Kerapoxy - Part B

ID: SAH00072

Canadian WHMIS Information
A: General Product Information

B: Component Analysis - WHMIS IDL
The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS #</th>
<th>Minimum Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isophorone diamine</td>
<td>2855-13-2</td>
<td>1 %</td>
</tr>
<tr>
<td>Benzyl alcohol</td>
<td>100-51-6</td>
<td>1 %</td>
</tr>
</tbody>
</table>

Additional Regulatory Information
A: General Product Information
Supplier(s) of proprietary component(s) state that these components are contained on the TSCA inventory.

B: Component Analysis - Inventory

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS #</th>
<th>TSCA</th>
<th>CAN</th>
<th>EEC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fatty acids, tall-oil, polymers with bisphenol A, diethylenetriamine,</td>
<td>68951-85-9</td>
<td>Yes</td>
<td>DSL</td>
<td>No</td>
</tr>
<tr>
<td>epichlorohydrin and tetraethylenepentamine</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Isophorone diamine</td>
<td>2855-13-2</td>
<td>Yes</td>
<td>DSL</td>
<td>EINECS</td>
</tr>
<tr>
<td>Benzyl alcohol</td>
<td>100-51-6</td>
<td>Yes</td>
<td>DSL</td>
<td>EINECS</td>
</tr>
<tr>
<td>3-(Dimethylamino)-propylamine</td>
<td>109-55-7</td>
<td>Yes</td>
<td>DSL</td>
<td>EINECS</td>
</tr>
<tr>
<td>Propanoic acid, 2-hydroxy-, (S)-</td>
<td>79-33-4</td>
<td>Yes</td>
<td>DSL</td>
<td>EINECS</td>
</tr>
</tbody>
</table>

*** Section 16 - Other Information ***

Reference Version (internal)
1949-03

Other Information
Reasonable care has been taken in the preparation of this information, but the manufacturer makes no warranty of merchantability or any other warranty, expressed or implied, with respect to this information. The manufacturer makes no representations and assumes no liability for any direct, incidental or consequential damages resulting from its use.

Key/Legend
NA = Not available or Not Applicable. ACGIH = American Conference of Governmental Industrial Hygienists. NFPA = National Fire Protection Association. EPA = Environmental Protection Agency. TSCA = Toxic Substances Control Act. ACGIH = American Conference of Governmental Industrial Hygienists; IARC = International Agency for Research on Cancer; NIOSH = National Institute for Occupational Safety and Health; NTP = National Toxicology Program; OSHA = Occupational Safety and Health Administration; NJTSR = New Jersey Trade Secret Registry.

Contact: Product Safety Specialist
Contact Phone: 1-954-246-8888

End of Sheet SAH00072