1. IDENTIFICATION

Product Identifier

Product Name PC-11 Heavy Duty Epoxy Paste, Part A

Other means of identification

SDS # 130205-22C-CA
UPC Code 054983 01011, 054983 02011, 054983 08011, 054983 16011, 054983 64011, 054983 12811
Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Multi-purpose epoxy paste
Uses Advised Against No information available

Details of the supplier of the safety data sheet

Initial Supplier Identifier THIS SAFETY DATA SHEET IS NOT COMPLIANT UNLESS CANADIAN ADDRESS IS USED
Manufacturer Address Protective Coatings Co.
221 S Third St.
Allentown, PA 18102 USA
610-432-3543 / 800-220-2103

Emergency Telephone Number

Emergency Telephone (24 hr) INFOTRAC 1-352-323-3500 (International)
1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Appearance White paste
Physical state Paste
Odour None

Classification

<table>
<thead>
<tr>
<th>Hazard Class</th>
<th>Description</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin corrosion/irritation</td>
<td></td>
<td>Category 2</td>
</tr>
<tr>
<td>Serious eye damage/eye irritation</td>
<td></td>
<td>Category 2</td>
</tr>
<tr>
<td>Skin sensitisation</td>
<td></td>
<td>Category 1</td>
</tr>
</tbody>
</table>
Label Elements

Signal word
Warning

Hazard statements
Causes skin irritation
Causes serious eye irritation
May cause an allergic skin reaction

Precautionary Statements - Prevention
Wash face, hands and any exposed skin thoroughly after handling
Wear protective gloves/protective clothing/eye protection/face protection
Avoid breathing dust/fume/gas/mist/vapours/spray
Contaminated work clothing should not be allowed out of the workplace

Precautionary Statements - Response
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
If eye irritation persists: Get medical advice/attention
IF ON SKIN: Wash with plenty of water and soap
Take off all contaminated clothing and wash it before reuse
If skin irritation or rash occurs: Get medical advice/attention

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

Other Information
Toxic to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No</th>
<th>Weight-%</th>
<th>Hazardous Material Information Review Act registry number (HMIRA registry #)</th>
<th>Date HMIRA filed and date exemption granted (if applicable)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bisphenol A - Epichlorohydrin polymer</td>
<td>25068-38-6</td>
<td>53</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Kaolin</td>
<td>1332-58-7</td>
<td>17</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Talc</td>
<td>14807-96-6</td>
<td>12</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Titanium dioxide</td>
<td>13463-67-7</td>
<td>7</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Soda lime borosilicate glass</td>
<td>65997-17-3</td>
<td>2.5</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Ceramic Fiber</td>
<td>142844-00-6</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
4. FIRST AID MEASURES

First Aid Measures

General advice
Provide this SDS to medical personnel for treatment.

Eye contact
Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. If eye irritation persists: Get medical advice/attention.

Skin contact
Wash with soap and water. Remove and wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention.

Inhalation
Remove to fresh air. If breathing is difficult, give oxygen. If breathing has stopped, give artificial respiration. Get medical attention immediately.

Ingestion
Do NOT induce vomiting. Rinse mouth thoroughly with water. Never give anything by mouth to an unconscious person. Get medical attention if necessary.

Most important symptoms and effects

Symptoms
Causes eye and skin irritation. Direct contact may cause temporary redness and discomfort. May cause an allergic skin reaction.

Indication of any immediate medical attention and special treatment needed

Note to doctors
Skin and eye conditions may be aggravated by long term exposure.

5. FIREFIGHTING MEASURES

Suitable Extinguishing Media
Dry chemical, CO2 or water spray.

Unsuitable extinguishing media
Not determined.

Specific hazards arising from the chemical
No information available.

Hazardous Combustion Products
Carbon monoxide. Carbon dioxide (CO2). Aldehydes.

Explosion Data
Sensitivity to Mechanical Impact
None.
Sensitivity to Static Discharge
None.

Special protective equipment for fire-fighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Wear positive pressure self-contained breathing apparatus (SCBA). NFPA Class III B.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions
Wear protective gloves/protective clothing and eye/face protection. Avoid breathing vapors, mist or gas. Remove any contaminated clothing and wash thoroughly before reuse.
Environmental precautions

See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Prevent further leakage or spillage if safe to do so.
Dispose of contents/container to an approved waste disposal plant.
Clean contaminated objects and areas thoroughly observing environmental regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling
Handle in accordance with good industrial hygiene and safety practice. Wear appropriate personal protective equipment. Do not eat, drink or smoke when using this product. Wash face, hands and any exposed skin thoroughly after handling. Avoid breathing dust/fume/gas/mist/vapours/spray. Contaminated work clothing should not be allowed out of the workplace.

Conditions for safe storage, including any incompatibilities

Storage Conditions
Keep containers tightly closed in a dry, cool and well-ventilated place. Store contents under <90F (32C). NFPA Class IIIB storage.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Canada - Alberta - Occupational Exposure Limits - Ceilings</th>
<th>Canada - British Columbia - Occupational Exposure Limits - Ceilings</th>
<th>Canada - Ontario - Occupational Exposure Limits - Ceilings</th>
<th>Quebec</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kaolin</td>
<td>TWA: 2 mg/m³</td>
<td>TWA: 2 mg/m³</td>
<td>TWA: 2 mg/m³</td>
<td>TWA: 5 mg/m³</td>
</tr>
<tr>
<td>Talc</td>
<td>TWA: 2 mg/m³</td>
<td>TWA: 2 mg/m³</td>
<td>TWA: 2 mg/m³</td>
<td>TWA: 3 mg/m³</td>
</tr>
<tr>
<td>Titanium dioxide</td>
<td>TWA: 10 mg/m³</td>
<td>TWA: 3 mg/m³</td>
<td>TWA: 10 mg/m³</td>
<td>TWA: 10 mg/m³</td>
</tr>
<tr>
<td>Soda lime borosilicate glass</td>
<td>TWA: 5 mg/m³ TWA: 1 fibre/cm³</td>
<td>TWA: 1 fibre/cm³ TWA: 5 mg/m³</td>
<td>TWA: 10 mg/m³</td>
<td>TWA: 1 fibre/cm³</td>
</tr>
<tr>
<td>Ceramic Fiber</td>
<td>TWA: 0.2 fibre/cm³</td>
<td>TWA: 0.2 fibre/cm³</td>
<td>TWA: 0.5 fibre/cm3</td>
<td>TWA: 1 fibre/cm3</td>
</tr>
</tbody>
</table>

Other Information

If product is sanded, appropriate respirator should be worn to avoid breathing dust. Pre-existing respiratory disorders may be aggravated by exposure. If sanded, this material may generate silica / titanium dust. Inhaled silica / titanium has been classified by IARC as a human carcinogen (see section 11).
Appropriate engineering controls

Engineering controls
Provide general or local exhaust ventilation if product is sanded or ground. Maintain eye wash fountain and quick-drench facilities in work area.

Individual protection measures, such as personal protective equipment

Eye/face protection
Chemical safety goggles/faceshield. If necessary, refer to appropriate regulations and standards.

Skin and body protection
Wear protective gloves and protective clothing. If necessary, refer to appropriate regulations and standards.

Respiratory protection
Ensure adequate ventilation, especially in confined areas. If engineering controls do not keep airborne concentrations below acceptable levels, wear a NIOSH-approved respirator. If necessary, refer to appropriate regulations and standards.

General hygiene considerations
Avoid contact with skin, eyes and clothing. After handling this product, wash hands before eating, drinking, or smoking. If contact occurs, remove contaminated clothing. If needed, take first aid action shown on section 4 of this SDS. Launder contaminated clothing before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Physical state</th>
<th>Paste</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>White paste</td>
</tr>
<tr>
<td>Colour</td>
<td>White</td>
</tr>
<tr>
<td>Odour</td>
<td>None</td>
</tr>
<tr>
<td>Odour Threshold</td>
<td>No information available</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks • Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>&gt; 2.0 - &lt; 12.0</td>
<td></td>
</tr>
<tr>
<td>Melting Point/Freezing Point</td>
<td>Not available</td>
<td></td>
</tr>
<tr>
<td>Boiling Point/Boiling Range</td>
<td>Not available</td>
<td></td>
</tr>
<tr>
<td>Flash Point</td>
<td>248.88 °C / 480 °F</td>
<td></td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Flammability (Solid, Gas)</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Flammability Limits in Air</td>
<td>Not available</td>
<td></td>
</tr>
<tr>
<td>Vapour Pressure</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Vapour Density</td>
<td>Not available</td>
<td></td>
</tr>
<tr>
<td>Relative Density</td>
<td>1.03</td>
<td>(1=Water)</td>
</tr>
<tr>
<td>Water Solubility</td>
<td>Insoluble in water</td>
<td></td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Partition Coefficient</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Auto-ignition Temperature</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Kinematic Viscosity</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Dynamic Viscosity</td>
<td>5-10 million cps</td>
<td></td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No information available.</td>
<td></td>
</tr>
<tr>
<td>Oxidising properties</td>
<td>No information available.</td>
<td></td>
</tr>
</tbody>
</table>

Other Information

| Softening Point                      | No information available |
| Molecular weight                     | No information available |
| VOC Content (%)                      | No information available |
| Density                              | 8.6 lbs/gal               |
| Bulk Density                         | No information available |
10. STABILITY AND REACTIVITY

Reactivity
Not reactive under normal conditions.

Chemical Stability
Stable under normal conditions.

Possibility of Hazardous Reactions
None under normal processing.

Conditions to Avoid
Keep out of reach of children.

Incompatible Materials
None known based on information supplied.

Hazardous Decomposition Products
None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye contact
Causes serious eye irritation.

Skin contact
Causes skin irritation. May cause an allergic skin reaction.

Inhalation
May cause irritation of respiratory tract.

Ingestion
May cause discom for if swallowed.

Information on physical, chemical and toxicological effects

Symptoms
Please see section 4 of this SDS for symptoms.

Numerical measures of toxicity

Acute Toxicity

The following values are calculated based on chapter 3.1 of the GHS document.

ATEmix (oral) 11,312.00 mg/kg

Unknown acute toxicity
No information available

Component Information

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bisphenol A - Epichlorohydrin polymer 25068-38-6</td>
<td>= 11400 mg/kg (Rat)</td>
<td>20000 mg/kg (rabbit)</td>
<td>-</td>
</tr>
<tr>
<td>Kaolin 1332-58-7</td>
<td>&gt; 5000 mg/kg (Rat)</td>
<td>&gt; 5000 mg/kg (Rat)</td>
<td>-</td>
</tr>
<tr>
<td>Titanium dioxide 13463-67-7</td>
<td>&gt; 10000 mg/kg (Rat)</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
Delayed and immediate effects as well as chronic effects from short and long-term exposure

Respiratory or skin sensitisation  May cause an allergic skin reaction.

Carcinogenicity  Titanium dioxide is a possible carcinogen when it appears as a respirable dust. Ceramic Fiber is a possible carcinogen when it appears as a respirable dust.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Talc 14807-96-6</td>
<td>-</td>
<td>Group 3</td>
<td>-</td>
<td>X</td>
</tr>
<tr>
<td>Titanium dioxide 13463-67-7</td>
<td>-</td>
<td>Group 2B</td>
<td>-</td>
<td>X</td>
</tr>
<tr>
<td>Soda lime borosilicate glass 65997-17-3</td>
<td>-</td>
<td>Group 3</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Ceramic Fiber 142844-00-6</td>
<td>A2</td>
<td>Group 2B</td>
<td>Reasonably Anticipated</td>
<td>X</td>
</tr>
</tbody>
</table>

Legend
ACGIH (American Conference of Governmental Industrial Hygienists)
A2 - Suspected Human Carcinogen
IARC (International Agency for Research on Cancer)
Group 2B - Possibly Carcinogenic to Humans
Group 3 IARC components are "not classifiable as human carcinogens"
NTP (National Toxicology Program)
Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen
OSHA (Occupational Safety and Health Administration of the US Department of Labour)
X - Present

12. ECOLOGICAL INFORMATION

Ecotoxicity  Toxic to aquatic life with long lasting effects.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Algae/aquatic plants</th>
<th>Fish</th>
<th>Toxicity to microorganisms</th>
<th>Crustacea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Talc 14807-96-6</td>
<td>-</td>
<td>100: 96 h Brachydanio rerio g/L LC50 semi-static</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Persistence/Degradability  No information available.

Bioaccumulation  No information available.

Mobility  Not determined.

Other Adverse Effects  No information available.

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods
Waste from residues/unused products  Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging  Do not reuse empty containers.
14. TRANSPORT INFORMATION

Note
Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances

DOT
Not regulated

TDG
Not regulated

IATA
Not regulated

IMDG
Not regulated

15. REGULATORY INFORMATION

REGULATORY INFORMATION

International Regulations

Ozone-depleting substances (ODS) Not applicable

Persistent Organic Pollutants Not applicable

Export Notification requirements Not applicable

International Inventories

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>TSCA</th>
<th>DSL/NDSL</th>
<th>EINECS/ELINCS</th>
<th>ENCS</th>
<th>IECSC</th>
<th>KECL</th>
<th>PICCS</th>
<th>AICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bisphenol A - Epichlorohydrin polymer</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Present</td>
<td>X</td>
<td>Present</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Kaolin</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Present</td>
<td>X</td>
<td>Present</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Talc</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Present</td>
<td>X</td>
<td>Present</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Titanium dioxide</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Present</td>
<td>X</td>
<td>Present</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Soda lime borosilicate glass</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Present</td>
<td>X</td>
<td>Present</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Ceramic Fiber</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCs - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances
16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health Hazards</th>
<th>Flammability</th>
<th>Instability</th>
<th>Special Hazards</th>
<th>Personal Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>Not determined</td>
<td>Not determined</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HMIS</th>
<th>Health Hazards</th>
<th>Flammability</th>
<th>Physical hazards</th>
<th>Personal Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>Not determined</td>
</tr>
</tbody>
</table>

Legend  Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION
TWA   TWA (time-weighted average)
STEL  STEL (Short Term Exposure Limit)
Ceiling Maximum limit value
Skin designation

Issue Date: 02-Jan-2013

Revision Date: 25-Oct-2017

Revision Note: New format.

Disclaimer
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet
1. IDENTIFICATION

Product Identifier

Product Name PC-11 Heavy Duty Epoxy Paste, part B

Other means of identification

SDS # 130205-21C- CA
UPC Code 054983 01011, 054983 02011, 054983 08011, 054983 16011, 054983 64011, 054983 12811
Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Multi-purpose epoxy paste
Uses Advised Against No information available

Details of the supplier of the safety data sheet

Initial Supplier Identifier MANUFACTURER ADDRESS
THIS SAFETY DATA SHEET Protective Coatings Co.
IS NOT COMPLIANT UNLESS 221 S Third St.
CANADIAN ADDRESS IS USED Allentown, PA 18102 USA
610-432-3543 / 800-220-2103

Emergency Telephone Number

Emergency Telephone (24 hr) INFOTRAC 1-352-323-3500 (International)
1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Appearance Light blue paste Physical state Paste Odour Slight amine

Classification

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity - Oral</td>
<td>Category 4</td>
</tr>
<tr>
<td>Acute toxicity - Dermal</td>
<td>Category 4</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>Category 2</td>
</tr>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>Category 2</td>
</tr>
<tr>
<td>Skin sensitisation</td>
<td>Category 1</td>
</tr>
</tbody>
</table>
Label Elements

Signal word
Warning

Hazard statements
Harmful if swallowed
Harmful in contact with skin
Causes skin irritation
Causes serious eye irritation
May cause an allergic skin reaction

Precautionary Statements - Prevention
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Wear protective gloves/protective clothing/eye protection/face protection
Avoid breathing dust/fume/gas/mist/vapours/spray
Contaminated work clothing should not be allowed out of the workplace

Precautionary Statements - Response
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
If eye irritation persists: Get medical advice/attention
IF ON SKIN: Wash with plenty of water and soap
Call a POISON CENTRE or doctor if you feel unwell
Take off all contaminated clothing and wash it before reuse
If skin irritation or rash occurs: Get medical advice/attention
IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell
Rinse mouth

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No</th>
<th>Weight-%</th>
<th>Hazardous Material Information Review Act registry number (HMIRA registry #)</th>
<th>Date HMIRA filed and date exemption granted (if applicable)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Styrenated phenol</td>
<td>61788-44-1</td>
<td>29.6</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Talc</td>
<td>14807-96-6</td>
<td>28</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Formaldehyde, polymer with 1,3, dimethylbenzene</td>
<td>26139-75-3</td>
<td>9.5</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Kaolin</td>
<td>1332-58-7</td>
<td>7.2</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1-(2-Aminoethyl) piperazine</td>
<td>140-31-8</td>
<td>6.4</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Soda lime borosilicate glass</td>
<td>65997-17-3</td>
<td>2.4</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Polyethylene</td>
<td>9002-88-4</td>
<td>1.5</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Ceramic Fiber</td>
<td>142844-00-6</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
4. FIRST AID MEASURES

First Aid Measures

Eye contact
Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Skin contact
Wash with soap and water. Remove and wash contaminated clothing before reuse. Call a physician if you feel unwell. If skin irritation or rash occurs: Get medical advice/attention.

Inhalation
Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical advice/attention if necessary.

Ingestion
Do NOT induce vomiting. Rinse mouth thoroughly with water. Never give anything by mouth to an unconscious person. Call a POISON CENTRE/doctor/physician if you feel unwell.

Most important symptoms and effects

Symptoms
Harmful in contact with skin. Harmful if swallowed. Causes eye and skin irritation. May cause respiratory irritation. May cause an allergic skin reaction.

Indication of any immediate medical attention and special treatment needed

Note to doctors
Skin and eye conditions may be aggravated by long term exposure.

5. FIREFIGHTING MEASURES

Suitable Extinguishing Media
Dry chemical, CO2 or water spray.

Unsuitable extinguishing media
Not determined.

Specific hazards arising from the chemical
No information available.

Hazardous Combustion Products

Explosion Data
   Sensitivity to Mechanical Impact
None.
   Sensitivity to Static Discharge
None.

Special protective equipment for fire-fighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Do not release runoff from fire control methods to sewers or waterways. NFPA Class IIIB.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions
Wear protective gloves/protective clothing and eye/face protection. Remove any contaminated clothing and wash thoroughly before reuse.

Environmental precautions

Environmental precautions
See Section 12 for additional Ecological Information.
Methods and material for containment and cleaning up

Methods for containment
Prevent further leakage or spillage if safe to do so.

Methods for cleaning up
Dispose of contents/container to an approved waste disposal plant.

Prevention of secondary hazards
Clean contaminated objects and areas thoroughly observing environmental regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling
Handle in accordance with good industrial hygiene and safety practice. Wear appropriate personal protective equipment. Wash face, hands and any exposed skin thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when handling this product. Avoid breathing dust/fume/gas/mist/vapours/spray.

Conditions for safe storage, including any incompatibilities

Storage Conditions
Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible materials
Strong oxidising agents

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Canada - Alberta - Occupational Exposure Limits - Ceilings</th>
<th>Canada - British Columbia - Occupational Exposure Limits - Ceilings</th>
<th>Canada - Ontario - Occupational Exposure Limits - Ceilings</th>
<th>Quebec</th>
</tr>
</thead>
<tbody>
<tr>
<td>Talc 14807-96-6</td>
<td>TWA: 2 mg/m³</td>
<td>TWA: 2 mg/m³</td>
<td>TWA: 2 mg/m³</td>
<td>TWA: 3 mg/m³</td>
</tr>
<tr>
<td>Kaolin 1332-58-7</td>
<td>TWA: 2 mg/m³</td>
<td>TWA: 2 mg/m³</td>
<td>TWA: 2 mg/m³</td>
<td>TWA: 5 mg/m³</td>
</tr>
<tr>
<td>Soda lime borosilicate glass 65997-17-3</td>
<td>TWA: 5 mg/m³</td>
<td>TWA: 1 fibre/cm³</td>
<td>TWA: 5 mg/m³</td>
<td>TWA: 1 fibre/cm³</td>
</tr>
<tr>
<td>Ceramic Fiber 142844-00-6</td>
<td>TWA: 0.2 fibre/cm³</td>
<td>TWA: 0.2 fibre/cm³</td>
<td>TWA: 0.5 fibre/cm³</td>
<td>TWA: 1 fibre/cm³</td>
</tr>
</tbody>
</table>

Other Information
If product is sanded, appropriate respirator should be worn to avoid breathing dust. Pre-existing respiratory disorders may be aggravated by exposure. If sanded, this material may generate Ceramic fiber dust. Inhaled fibers have been classified by IARC as a human carcinogen (see section 11).

Appropriate engineering controls

Engineering controls
Maintain eye wash fountain and quick-drench facilities in work area. Provide general or local exhaust ventilation if product is sanded or ground.

Individual protection measures, such as personal protective equipment

Eye/face protection
Chemical safety goggles/faceshield. If necessary, refer to appropriate regulations and standards.
Skin and body protection  Wear protective gloves and protective clothing. If necessary, refer to appropriate regulations and standards.

Respiratory protection  Ensure adequate ventilation, especially in confined areas. If engineering controls do not maintain airborne concentrations below recommended exposure limits, a NIOSH/MSHA approved respirator must be worn. If necessary, refer to appropriate regulations and standards.

General hygiene considerations  Avoid contact with skin, eyes and clothing. After handling this product, wash hands before eating, drinking, or smoking. If contact occurs, remove contaminated clothing. If needed, take first aid action shown on section 4 of this SDS. Launder contaminated clothing before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks • Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Paste</td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td>Light blue paste</td>
<td></td>
</tr>
<tr>
<td>Colour</td>
<td>Light blue</td>
<td></td>
</tr>
<tr>
<td>Odour</td>
<td>Slight amine</td>
<td></td>
</tr>
<tr>
<td>Odour Threshold</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>$&gt; / = 2.0 - &lt; / = 12.0$</td>
<td></td>
</tr>
<tr>
<td>Melting Point/Freezing Point</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Boiling Point/Boiling Range</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Flash Point</td>
<td>$&gt; 110 , ^\circ C \ / \ 230 , ^\circ F$</td>
<td></td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Flammability (Solid, Gas)</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Flammability Limits in Air</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Upper Flammability Limits</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Lower Flammability Limit</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Vapour Pressure</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Vapour Density</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Relative Density</td>
<td>1.01</td>
<td></td>
</tr>
<tr>
<td>Water Solubility</td>
<td>Insoluble in water</td>
<td></td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Partition Coefficient</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Auto-ignition Temperature</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Kinematic Viscosity</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Dynamic Viscosity</td>
<td>5-10 million cps</td>
<td></td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Oxidising properties</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Other Information</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Softening Point</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Molecular weight</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>VOC Content (%)</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Density</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Bulk Density</td>
<td>No information available</td>
<td></td>
</tr>
</tbody>
</table>
10. STABILITY AND REACTIVITY

Reactivity  
Not reactive under normal conditions.

Chemical Stability  
Stable under normal conditions.

Possibility of Hazardous Reactions  
None under normal processing.

Hazardous Polymerisation  
Hazardous polymerisation does not occur.

Conditions to Avoid  
Keep out of reach of children.

Incompatible Materials  
Strong oxidising agents.

Hazardous Decomposition Products  
None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye contact  
Causes serious eye irritation.

Skin contact  
Harmful in contact with skin. Causes skin irritation.

Inhalation  
May cause irritation to the mucous membranes and upper respiratory tract.

Ingestion  
Harmful if swallowed. Ingestion may cause irritation to mucous membranes.

Information on physical, chemical and toxicological effects

Symptoms  
Please see section 4 of this SDS for symptoms.

Numerical measures of toxicity

Acute Toxicity

The following values are calculated based on chapter 3.1 of the GHS document.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Styrenated phenol 61788-44-1</td>
<td>2100 - 6700 mg/kg ( Rat )</td>
<td>&gt; 7940 mg/kg ( Rabbit )</td>
<td>&gt; 2.5 mg/L ( Rat ) 6 h</td>
</tr>
<tr>
<td>Formaldehyde, polymer with 1,3, dimethylbenzene 26139-75-3</td>
<td>&gt; 2000 mg/kg (rabbit)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Kaolin 1332-58-7</td>
<td>&gt; 5000 mg/kg ( Rat )</td>
<td>&gt; 5000 mg/kg ( Rat )</td>
<td>-</td>
</tr>
</tbody>
</table>

Unknown acute toxicity  
No information available.
12. ECOLOGICAL INFORMATION

**Ecotoxicity**
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Algae/aquatic plants</th>
<th>Fish</th>
<th>Toxicity to microorganisms</th>
<th>Crustacea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Talc</td>
<td>-</td>
<td>100: 96 h Brachydanio rerio g/L LC50 semi-static</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1-(2-Aminoethyl) piperazine</td>
<td>495: 72 h</td>
<td>1950 - 2460: 96 h Pimephales promelas mg/L LC50 flow-through 1000: 96 h Poecilia reticulata mg/L LC50 semi-static 100: 96 h Oncorhynchus mykiss mg/L LC50 semi-static</td>
<td>EC50 &gt; 10000 mg/L 17 h</td>
<td>32: 48 h Daphnia magna mg/L EC50</td>
</tr>
</tbody>
</table>

**Persistence/Degradability**
No information available.

**Bioaccumulation**
No information available.
Mobility

Component Information

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Partition Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Styrenated phenol</td>
<td>&gt;4</td>
</tr>
<tr>
<td>61788-44-1</td>
<td></td>
</tr>
<tr>
<td>1-(2-Aminoethyl) piperazine</td>
<td>-1.48</td>
</tr>
<tr>
<td>140-31-8</td>
<td></td>
</tr>
</tbody>
</table>

Other Adverse Effects  No information available.

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Waste from residues/unused products  Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging  Do not reuse empty containers.

14. TRANSPORT INFORMATION

Note  Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances

DOT  Not regulated

TDG  Not regulated

IATA  Not regulated

IMDG  Not regulated

15. REGULATORY INFORMATION

REGULATORY INFORMATION

International Regulations

Ozone-depleting substances (ODS)  Not applicable

Persistent Organic Pollutants  Not applicable

Export Notification requirements  Not applicable

International Inventories

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>TSCA</th>
<th>DSL/NDSL</th>
<th>EINECS/ELINCS</th>
<th>ENCS</th>
<th>IECSC</th>
<th>KECL</th>
<th>PICCS</th>
<th>AICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Styrenated phenol</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Present</td>
<td>X</td>
<td>Present</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Talc</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Present</td>
<td>X</td>
<td>Present</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Formaldehyde, polymer with 1,3, dimethyl/benzene</td>
<td>X</td>
<td>X</td>
<td>Present</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Legend:

- **TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory
- **DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List
- **EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
- **ENCS** - Japan Existing and New Chemical Substances
- **IECSC** - China Inventory of Existing Chemical Substances
- **KECL** - Korean Existing and Evaluated Chemical Substances
- **PICCS** - Philippines Inventory of Chemicals and Chemical Substances
- **AICS** - Australian Inventory of Chemical Substances

### 16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

<table>
<thead>
<tr>
<th>NFPA Health Hazards</th>
<th>Flammability</th>
<th>Instability</th>
<th>Special Hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>1</td>
<td>0</td>
<td>Not determined</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HMIS Health Hazards</th>
<th>Flammability</th>
<th>Physical hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

**Legend**

- **Section 8: EXPOSURE CONTROLS/PERSOAL PROTECTION**
  - **TWA** TWA (time-weighted average)
  - **STEL** STEL (Short Term Exposure Limit)
  - **Ceiling** Maximum limit value
  - **Skin designation**
  - **Issue Date:** 02-Jan-2013

**Revision Date:** 25-Oct-2017

**Revision Note:** New format.

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

*End of Safety Data Sheet*