1. Identification

Product identifier
Ceramic-Polymer SF/LF. Part A

Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture
Coatings and paints, fillers, putties, thinners

Details of the supplier of the safety data sheet
Company name: Ceramic Polymer GmbH
Street: Daimlerweg 9
Place: DE-32289 Rödinghausen
Telephone: +49(0) 52 23 / 9 62 76-0
e-mail: info@ceramic-polymer.de
Internet: www.ceramic-polymer.de
Responsible Department: info@ceramic-polymer.de

Importer:
A.W. Chesterton Company Ltd. 889 Fraser Drive, Unit 105 Burlington, Ontario L7L 4X8, Canada
Phone 905-335-5055

Emergency telephone number: 24 hours per day, 7 days per week Call Infotrac: 1-800-535-5053 Outside N. America: +1 352-323-500 (collect)

2. Hazard identification

Classification of the substance or mixture

WHMIS 2015
Hazard categories:
Flammable liquid: Flam. Liq. 4
Skin corrosion/irritation: Skin Irrit. 2
Respiratory or skin sensitization: Skin Sens. 1
Hazard Statements:
Combustible liquid.
Causes skin irritation.
May cause an allergic skin reaction.

Label elements
WHMIS 2015
Signal word: Warning

Pictograms:

Hazard statements
Combustible liquid.
Causes skin irritation.
May cause an allergic skin reaction.

Precautionary statements
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Avoid breathing dust/fume/gas/mist/vapours/spray.
Contaminated work clothing should not be allowed out of the workplace.
Wear protective gloves/protective clothing/eye protection/face protection.
IF ON SKIN: Wash with plenty of water.
If skin irritation occurs: Get medical advice/attention.
If skin irritation or rash occurs:
Take off contaminated clothing and wash it before reuse.
Store in a well-ventilated place.
Safety Data Sheet

according to WHMIS

Ceramic-Polymer SF/LF  Part A

Print date: 10/19/2017

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Dispose of waste according to applicable legislation

Other hazards
No information available.

3. Composition/information on ingredients

Mixtures

Hazardous components

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Chemical name</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>9003-36-5</td>
<td>Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol</td>
<td>35 - &lt; 40 %</td>
</tr>
<tr>
<td>16096-31-4</td>
<td>1,6-bis(2,3-epoxypropoxy)hexane</td>
<td>5 - &lt; 10 %</td>
</tr>
<tr>
<td>9072-62-2</td>
<td>Polypropylene glycol-Epichlorhydrine-Copolymer</td>
<td>1 - &lt; 5 %</td>
</tr>
</tbody>
</table>

4. First-aid measures

Description of first aid measures

General information
Change contaminated, saturated clothing. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

After inhalation
In case of inhalation of decomposition products, affected person should be moved into fresh air and kept still.

After contact with skin
After contact with skin, wash immediately with plenty of water and soap. Seek medical advice immediately. Do not wash with: Solvents/Thinner

After contact with eyes
After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

After ingestion
If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Do NOT induce vomiting.

Most important symptoms and effects, whether acute or delayed
Immediate medical treatment required because corrosive injuries that are not treated are hard to cure.

Indication of immediate medical attention and special treatment needed
Symptoms may develop several hours following exposure; medical observation therefore necessary for at least 48 hours. First Aid, decontamination, treatment of symptoms. After contact with skin, wash immediately with plenty of Lutrol.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media
Dry extinguishing powder. Carbon dioxide (CO2) alcohol resistant foam. Water spray jet

Unsuitable extinguishing media
High power water jet

Specific hazards arising from the hazardous product
Carbon monoxide Carbon dioxide (CO2) Nitrogen oxides (NOx)

Special protective equipment and precautions for fire-fighters
Special protective equipment for firefighters Protective clothing. In case of fire: Wear self-contained breathing apparatus.
Co-ordinate fire-fighting measures to the fire surroundings.

**Additional information**
Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

### 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures**
- See protective measures under point 7 and 8.
- Provide adequate ventilation.
- Personal protection equipment: see section 8
- Remove persons to safety.

**Environmental precautions**
- Do not allow to enter into surface water or drains. Cover drains. Adverse environmental effects.

**Methods and material for containment and cleaning up**
- Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

**Reference to other sections**
- See protective measures under point 7 and 8. Disposal: see section 13

### 7. Handling and storage

**Precautions for safe handling**

**Advice on safe handling**
- See section 8. Wear personal protection equipment (refer to section 8). Keep container tightly closed.

**Advice on protection against fire and explosion**
- Keep away from sources of heat (e.g. hot surfaces), sparks and open flames.

**Conditions for safe storage, including any incompatibilities**

**Requirements for storage rooms and vessels**
- Keep container tightly closed in a cool, well-ventilated place. Keep/Store only in original container.

**Advice on storage compatibility**
- Keep away from:
  - Food and feedingstuffs
  - Oxidising agent

**Further information on storage conditions**
- Keep away from:
  - Frost
  - Heat
  - Humidity

### 8. Exposure controls/Personal protection

**Control parameters**

**Exposure controls**

**Appropriate engineering controls**
- Provide adequate ventilation as well as local exhaust at critical locations.

**Protective and hygiene measures**
- Work in well-ventilated zones or use proper respiratory protection. Only wear fitting, comfortable and clean protective clothing. Avoid contact with skin, eyes and clothes. Wash hands and face before breaks and after work and take a shower if necessary.

**Eye/face protection**
- Suitable eye protection:
Eye glasses with side protection

goggles

**Hand protection**
Suitable gloves type:
NBR (Nitrile rubber)
Butyl caoutchouc (butyl rubber)
Wear cotton underneath if possible.

**Skin protection**
Protective clothing

**Respiratory protection**
If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.
Filtering device (full mask or mouthpiece) with filter: A-P3
Wear self-contained breathing apparatus.

### 9. Physical and chemical properties

**Information on basic physical and chemical properties**

<table>
<thead>
<tr>
<th>Physical state:</th>
<th>liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colour:</td>
<td></td>
</tr>
<tr>
<td>Odour:</td>
<td>characteristic</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>pH-Value:</th>
<th>not determined</th>
</tr>
</thead>
</table>

**Changes in the physical state**

<table>
<thead>
<tr>
<th>Melting point:</th>
<th>not determined</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial boiling point and boiling range:</td>
<td>not determined</td>
</tr>
<tr>
<td>Sublimation point:</td>
<td>not determined</td>
</tr>
<tr>
<td>Softening point:</td>
<td>not determined</td>
</tr>
<tr>
<td>Pour point:</td>
<td>not determined</td>
</tr>
<tr>
<td>Flash point:</td>
<td>&gt;65 °C</td>
</tr>
</tbody>
</table>

**Flammability**

<table>
<thead>
<tr>
<th>Solid:</th>
<th>not determined</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gas:</td>
<td>not determined</td>
</tr>
</tbody>
</table>

**Explosive properties**
No information available.

<table>
<thead>
<tr>
<th>Lower explosive limits:</th>
<th>not determined</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper explosive limits:</td>
<td>not determined</td>
</tr>
<tr>
<td>Ignition temperature:</td>
<td>not determined</td>
</tr>
</tbody>
</table>

**Auto-ignition temperature**

<table>
<thead>
<tr>
<th>Solid:</th>
<th>not determined</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gas:</td>
<td>not determined</td>
</tr>
</tbody>
</table>

**Decomposition temperature:**
not determined

**Oxidizing properties**
No information available.

<table>
<thead>
<tr>
<th>Vapour pressure:</th>
<th>not determined</th>
</tr>
</thead>
<tbody>
<tr>
<td>Density:</td>
<td>~1.75 g/cm³</td>
</tr>
<tr>
<td>Water solubility:</td>
<td>not determined</td>
</tr>
</tbody>
</table>
Solubility in other solvents
   No information available.
   Partition coefficient: not determined
   Viscosity / dynamic: ~8000 mPa·s
   Viscosity / kinematic: not determined
   Vapour density: not determined
   Evaporation rate: not determined

Other information
   Odour threshold: No information available.

10. Stability and reactivity

Reactivity
   The product is stable under storage at normal ambient temperatures.

Chemical stability
   Does not decompose when used for intended uses. No known hazardous decomposition products.

Possibility of hazardous reactions
   Exothermic reaction with: Acid, Oxidising agent

Conditions to avoid
   Keep away from sources of heat (e.g. hot surfaces), sparks and open flames.

Incompatible materials
   Acid, Oxidising agent

Hazardous decomposition products
   Does not decompose when used for intended uses. No known hazardous decomposition products.

11. Toxicological information

Information on toxicological effects

Acute toxicity
   Based on available data, the classification criteria are not met.

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Chemical name</th>
<th>Route of exposure</th>
<th>Dose</th>
<th>Species</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>9003-36-5</td>
<td>formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol</td>
<td>oral</td>
<td>LD50</td>
<td>&gt; 5000 mg/kg</td>
<td>Rat</td>
</tr>
<tr>
<td></td>
<td></td>
<td>dermal</td>
<td>LD50</td>
<td>&gt; 2000 mg/kg</td>
<td>Rat</td>
</tr>
</tbody>
</table>

Irritation and corrosivity
   Causes skin irritation.
   Serious eye damage/eye irritation: Based on available data, the classification criteria are not met.

Sensitizing effects
   May cause an allergic skin reaction. (Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol; 1,6-bis(2,3-epoxypropoxy)hexane; Polypropylene glycol-Epichlorhydrine-Copolymer)

Carcinogenic/mutagenic/toxic effects for reproduction
   Based on available data, the classification criteria are not met.

STOT-single exposure
   Based on available data, the classification criteria are not met.
STOT-repeated exposure  
Based on available data, the classification criteria are not met.

Aspiration hazard  
Based on available data, the classification criteria are not met.

Name of toxicologically synergistic products  
No information available.

12. Ecological information

Ecotoxicity  
No information available.

Persistence and degradability  
No information available.

Bioaccumulative potential  
No information available.

Mobility in soil  
No information available.

Other adverse effects  
No information available.

13. Disposal considerations

Waste treatment methods

Advice on disposal  
Dispose of waste according to applicable legislation.

Contaminated packaging  
Non-contaminated packages may be recycled. Dispose of waste according to applicable legislation.

14. Transport information

Canadian TDG

<table>
<thead>
<tr>
<th>UN/ID number:</th>
<th>UN 3082</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proper shipping name:</td>
<td>ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (epoxy resin)</td>
</tr>
<tr>
<td>Hazard classes:</td>
<td>9</td>
</tr>
<tr>
<td>Packing group:</td>
<td>III</td>
</tr>
<tr>
<td>Hazard label:</td>
<td>9</td>
</tr>
<tr>
<td>Limited quantity:</td>
<td>5 L</td>
</tr>
</tbody>
</table>

Marine transport (IMDG)

<table>
<thead>
<tr>
<th>UN number:</th>
<th>UN 3082</th>
</tr>
</thead>
<tbody>
<tr>
<td>United Nations proper shipping name:</td>
<td>ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (epoxy resin)</td>
</tr>
<tr>
<td>Transport hazard class(es):</td>
<td>9</td>
</tr>
<tr>
<td>Packing group:</td>
<td>III</td>
</tr>
<tr>
<td>Hazard label:</td>
<td>9</td>
</tr>
<tr>
<td>Limited quantity:</td>
<td>5 L</td>
</tr>
<tr>
<td>Excepted quantity:</td>
<td>E1</td>
</tr>
<tr>
<td>EmS:</td>
<td>F-A, S-F</td>
</tr>
</tbody>
</table>

Air transport (ICAO-TI/IATA-DGR)
Safety Data Sheet

Ceramic-Polymer SF/LF Part A

UN number: UN 3082
United Nations proper shipping name:
Transport hazard class(es): 9
Packing group: III
Hazard label: 9
Limited quantity Passenger: 30 kg G
Passenger LQ: Y964
Excepted quantity: E1
IATA-packing instructions - Passenger: 964
IATA-max. quantity - Passenger: 450 L
IATA-packing instructions - Cargo: 964
IATA-max. quantity - Cargo: 450 L

Environmental hazards
ENVIRONMENTALLY HAZARDOUS: yes
Danger releasing substance: epoxy resin

15. Regulatory information

Canadian regulations
DSL/INDS inventory status
1,6-bis(2,3-epoxypropoxy)hexane: Yes. (DSL)
Polyprenyleneleglycol-Epichlorhydrine-Copolymer: Yes. (DSL)
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropao and phenol: Yes. (DSL)
National Pollutant Release Inventory (NPRI)
1,6-bis(2,3-epoxypropoxy)hexane: No.
Polyprenyleneleglycol-Epichlorhydrine-Copolymer: No.
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropao and phenol: No.

Additional information
No information available.

16. Other information

Abbreviations and acronyms
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
IATA-DGR: Dangerous Goods Refulations by the "International Air Transport Association" (IATA)
ICAO: International Civil Aviation Organization
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
CAS: Chemical Abstracts Service (division of the American Chemical Society)
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
CLP: Regulation on Classification, Labelling and Packaging of Substances and Mixtures,
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
EC50: Effective concentration, 50 percent
DNEL: Derived No Effect Level
PNEC: Predicted No Effect Concentration
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative

Further Information
This information describes the safety requirements of the product(s) and is based on the present state of our knowledge. They do not constitute a guarantee for the properties of the product(s) described in the sense of
the statutory warranty regulations. The suitability of the product for certain applications must be checked separately by the consumer.

(\textit{The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.})