1. Identification

Product identifier
Ceramic-Polymer SF/LF Part A

Recommended use of the chemical and restrictions on use
Use of the substance/mixture
Coatings and paints, fillers, putties, thinners

Uses advised against
No information available.

Details of the supplier of the safety data sheet

Manufacturer
Company name: Ceramic Polymer GmbH
Street: Daimler Ring 9
Place: DE-32289 Rödinghausen
Telephone: +49(0) 52 23 / 9 62 76-0
Fax: +49(0) 52 23 / 9 62 76-17
E-mail: info@ceramic-polymer.de
Internet: www.ceramic-polymer.de
Responsible Department: info@ceramic-polymer.de

Importer
Company name: A.W. Chesterton Company
Street: 860 Salem Street
Place: USA Groveland, MA 01834-1507
Telephone: 978-469-6446

Emergency phone 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(s) identification

Classification of the chemical
29 CFR Part 1910.1200
Hazard categories:
- Flammable liquids: 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
29 CFR Part 1910.1200
Signal word: Warning

Pictograms:

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

Precautionary statements
- Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
- Avoid breathing dust/fume/gas/mist/vapors/spray.
- Contaminated work clothing must 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.
- Dispose of waste according to applicable legislation

Hazards not otherwise classified
- No information available.

3. Composition/information on ingredients

Mixtures

Hazardous components

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Components</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 %</td>
</tr>
<tr>
<td>16096-31-4</td>
<td>1,6-bis(2,3-epoxypropoxy)hexane</td>
<td>6 %</td>
</tr>
<tr>
<td>9072-62-2</td>
<td>Polypropyleneglycol-Epichlorhydrine-Copolymer</td>
<td>3 %</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, both acute and delayed
- Immediate medical treatment required because corrosive injuries that are not treated are hard to cure.

Indication of any 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**
- Carbon dioxide (CO2) alcohol resistant foam. Water spray jet

**Unsuitable extinguishing media**
- High power water jet

## Specific hazards arising from the chemical
- 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 exhaustion 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 undermitten 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

Physical state: liquid
Color: characteristic

pH-Value: not determined

Changes in the physical state
Melting point/freezing point: not determined
Initial boiling point and boiling range: not determined
Sublimation point: not determined
Softening point: not determined
Pour point: not determined
Flash point: >65 °C

Flammability
Solid: not determined
Gas: not determined

Explosive properties
No information available.
Lower explosion limits: not determined
Upper explosion limits: not determined
Ignition temperature: not determined
Auto-ignition temperature
   Solid: not determined
   Gas: not determined

Decomposition temperature: not determined

Oxidizing properties
   Odour threshold: No information available.
   Vapor pressure: not determined
   Density: ~1.75 g/cm³
   Water solubility: not determined

Solubility in other solvents
   No information available.
   Partition coefficient: not determined
   Viscosity / dynamic: ~8000 mPa·s
   Viscosity / kinematic: not determined
   Vapor density: not determined
   Evaporation rate: not determined

Other information
   No information available.

10. Stability and reactivity

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

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

Possibility of hazardous reactions
   Hazardous reactions: May occur
   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
   Route(s) of Entry
      eyes. Inhalation. dermal.

Acute toxicity
   Based on available data, the classification criteria are not met.
Ceramic-Polymer SF/LF Part A

Print date: 09/27/2017

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Components</th>
<th>Exposure route</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.

**Specific target organ toxicity (STOT) - single exposure**
- Based on available data, the classification criteria are not met.

**Specific target organ toxicity (STOT) - repeated exposure**
- Based on available data, the classification criteria are not met.

Carcinogenicity (NTP): No ingredient of this mixture is listed.
Carcinogenicity (IARC): No ingredient of this mixture is listed.
Carcinogenicity (OSHA): No ingredient of this mixture is listed.

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

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

US DOT 49 CFR 172.101

**UN/ID number:**
- UN 3082

Revision No: 1.00
USA - EN
Revision date: 09/25/2017
Safety Data Sheet

Ceramic-Polymer SF/LF Part A

according to 29 CFR 1910.1200(g)

Print date: 09/27/2017

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (epoxy resin)

Transport hazard class(es): 9
Packing group: III
Hazard label: 9

Marine transport (IMDG)
UN number: UN 3082
UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (epoxy resin)
Transport hazard class(es): 9
Packing group: III
Hazard label: 9
Limited quantity: 5 L
Excepted quantity: E1
EmS: F-A, S-F

Air transport (ICAO-TI/IATA-DGR)
UN number: UN 3082
UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
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

Special precautions for user
No information available.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
No information available.

15. Regulatory information

U.S. Regulations

National Inventory TSCA
1,6-bis(2,3-epoxypropoxy)hexane: Yes.
Polypropylene glycol-Epichlorhydrine-Copolymer: Yes.
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol: Yes.

National regulatory information

SARA Section 311/312 Hazards:
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol (9003-36-5): Immediate (acute) health hazard
1,6-bis(2,3-epoxypropoxy)hexane (16096-31-4): Immediate (acute) health hazard
Polypropylene glycol-Epichlorhydrine-Copolymer (9072-62-2): Immediate (acute) health hazard
State Regulations

Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65, State of California)
This product contains no chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

Additional information
No information available.

16. Other information

Hazardous Materials Information Label (HMIS)
Health: 1
Flammability: 2
Physical Hazard: 1

NFPA Hazard Ratings
Health: 1
Flammability: 2
Reactivity: 1
Unique Hazard: 1

Revision date: 09/25/2017
Revision No: 1,00

Abbreviations and acronyms
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
IATA-DGR: Dangerous Goods Regulations 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
TSCA: Toxic Substances Control Act
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

Other data
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.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor’s safety data sheet.)