Safety Data Sheet

according to 29 CFR 1910.1200(g)

Ceramic-Polymer STP-EP2 (AWWA) Part A

1. Identification

Product identifier
Ceramic-Polymer STP-EP2 (AWWA) Part A

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

Details of the supplier of the safety data sheet

<table>
<thead>
<tr>
<th>Company name:</th>
<th>Ceramic Polymer GmbH</th>
<th>Importer:</th>
<th>A.W. Chesterton Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>Street:</td>
<td>Daimlerstrasse 9</td>
<td></td>
<td>860 Salem Street, Groveland</td>
</tr>
<tr>
<td>Place:</td>
<td>DE-32289 Roedinghausen - Germany</td>
<td></td>
<td>MA 01834-1507, USA</td>
</tr>
<tr>
<td>Telephone:</td>
<td>+49(0) 52 23 / 9 62 76-0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e-mail:</td>
<td><a href="mailto:info@ceramic-polymer.de">info@ceramic-polymer.de</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internet:</td>
<td><a href="http://www.ceramic-polymer.de">www.ceramic-polymer.de</a></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Emergency phone number: 24 hours per day, 7 days per week Call Infotrac: 1-800-535-5053
Outside N. America: +1 352-323-3500 (collect)

2. Hazard(s) identification

Classification of the chemical
29 CFR Part 1910.1200
Hazard categories:
Skin corrosion/irritation: Skin Irrit. 2
Respiratory or skin sensitization: Skin Sens. 1
Hazard Statements:
Causes skin irritation
May cause an allergic skin reaction

Label elements
29 CFR Part 1910.1200
Signal word: Warning

Pictograms:

Hazard statements
Causes skin irritation
May cause an allergic skin reaction

Precautionary statements
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 or rash occurs: Get medical advice/attention.
Take off contaminated clothing and wash it before reuse.
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>40 %</td>
</tr>
<tr>
<td>16096-31-4</td>
<td>1,6-bis(2,3-epoxypropoxy)hexane</td>
<td>4 %</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**
- No information available.

**Indication of any immediate medical attention and special treatment needed**
- First Aid, decontamination, treatment of symptoms.
- After contact with skin, wash immediately with plenty of Lutrol.
- Immediate medical treatment required because corrosive injuries that are not treated are hard to cure.
- Symptoms may develop several hours following exposure; medical observation therefore necessary for at least 48 hours.

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 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.

**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**
- Provide adequate ventilation. Avoid contact with skin, eyes and clothes. Use personal protection equipment.
- Do not breathe dust/fume/gas/mist/vapours/spray. Remove persons to safety.

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

**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**
  - Provide adequate ventilation. Avoid contact with skin, eyes and clothes. Use personal protection equipment.
  - Do not breathe dust/fume/gas/mist/vapours/spray. 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.

- **Advice on storage compatibility**
  - Do not store together with:
    - Food and feedingstuffs
    - Oxidising agent

- **Further information on storage conditions**
  - Protect against:
    - Frost
    - Heat
    - Humidity

8. Exposure controls/personal protection

**Control parameters**
- **Additional advice on limit values**
  - To date, no national critical limit values exist.

**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
Hand protection
Wear protective gloves.
Suitable material: NBR (Nitrile rubber), Butyl caoutchouc (butyl rubber)

Wear cotton undermitten if possible. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Respiratory protection
If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.
Combination filtering device (EN 14387) A-P3
Self-contained respirator (breathing apparatus) (DIN EN 133)

Environmental exposure controls
Avoid release to the environment.

9. Physical and chemical properties

Information on basic physical and chemical properties
Physical state: liquid
Color: No information available.
Odor: characteristic

Test method
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: >95 °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
No information available.

Vapor pressure: not determined
Density (at 23 °C): ~1.4 g/cm³
Water solubility: not determined

Solubility in other solvents
No information available.

Partition coefficient: not determined
Viscosity / dynamic: not determined
( at 23 °C)
Viscosity / kinematic: not determined
Vapor density: not determined
Evaporation rate: not determined

Other information
Odour threshold: not determined

10. Stability and reactivity

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

Chemical stability
Stability: Stable
The substance is chemically stable under recommended conditions of storage, use and temperature.

Possibility of hazardous reactions
Hazardous reactions: May occur
Reacts 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
Thermal decomposition
Hazardous decomposition products: Gases

11. Toxicological information

Information on toxicological effects

Route(s) of Entry
dermal

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

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Components</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Exposure route</td>
</tr>
<tr>
<td>9003-36-5</td>
<td>Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol</td>
</tr>
<tr>
<td></td>
<td>oral</td>
</tr>
<tr>
<td></td>
<td>dermal</td>
</tr>
</tbody>
</table>
Safety Data Sheet

Ceramic-Polymer STP-EP2 (AWWA) Part A

Print date: 07/11/2017  Page 6 of 8

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)

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
Toxic to aquatic life with long lasting effects.

Persistence and degradability
The product has not been tested.

Bioaccumulative potential
The product has not been tested.

Mobility in soil
The product has not been tested.

Other adverse effects
No information available.

13. Disposal considerations

Waste treatment methods

Advice on disposal
Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. 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

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)
Safety Data Sheet

according to 29 CFR 1910.1200(g)

Ceramic-Polymer STP-EP2 (AWWA) Part A

Print date: 07/11/2017

Page 7 of 8

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. (epoxy resin)
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: Y964
IATA-max. quantity - Passenger: 450 L
IATA-packing instructions - Cargo: Y964
IATA-max. quantity - Cargo: 450 L

Other applicable information (air transport)
Passenger-LQ: Y964

Environmental hazards
ENVIROMENTALLY 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
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol: Yes.
1,6-bis(2,3-epoxypropoxy)hexane: 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

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.
16. Other information

Hazardous Materials Information Label (HMIS)

Health: 2
Flammability: 1
Physical Hazard: 0

NFPA Hazard Ratings

Health: 2
Flammability: 1
Reactivity: 0
Unique Hazard: 0

Revision date: 11.07.2017
Revision No: 1,00

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route
(Raymond Agreement concerning the International Carriage of Dangerous Goods by Road)
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer
(Regulations Concerning the International Transport of Dangerous Goods by Rail)
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
CLP: Regulation on Classification, Labelling and Packaging of Substances and Mixtures,
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
EC50: Effect 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

The above information describes exclusively the safety requirements of the product and is based on our
current-day knowledge. The information is intended to give you advice about the safe handling of the product
named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be
transferred to other products. In the case of mixing the product with other products or in the case of
processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

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