1. Identification

**Product identifier**

Proguard CN-1M V15 H3 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**

- **Company name:** Ceramic Polymer GmbH
- **Street:** Daimlerstrasse 9
- **Place:** DE-32289 Roedinghausen - Germany
- **Telephone:** +49(0) 5223 / 9 62 76-0
- **E-mail:** info@ceramic-polymer.de
- **Internet:** www.ceramic-polymer.de
- **Responsible Department:**
- **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**

<table>
<thead>
<tr>
<th>Hazard categories</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin corrosion/irritation: Skin Corr. 1C</td>
<td></td>
</tr>
<tr>
<td>Serious eye damage/eye irritation: Eye Dam. 1</td>
<td></td>
</tr>
<tr>
<td>Respiratory or skin sensitization: Skin Sens. 1</td>
<td></td>
</tr>
<tr>
<td>Reproductive toxicity: Repr. 1B</td>
<td></td>
</tr>
<tr>
<td>Hazard Statements:</td>
<td></td>
</tr>
<tr>
<td>Causes severe skin burns and eye damage</td>
<td></td>
</tr>
<tr>
<td>Causes serious eye damage</td>
<td></td>
</tr>
<tr>
<td>May cause an allergic skin reaction</td>
<td></td>
</tr>
<tr>
<td>May damage fertility or the unborn child</td>
<td></td>
</tr>
</tbody>
</table>

**Label elements**

**29 CFR Part 1910.1200**

- **Signal word:** Danger
- **Pictograms:**

   ![Pictogram](image)

- **Hazard statements**
  - Causes severe skin burns and eye damage
  - May cause an allergic skin reaction
  - May damage fertility or the unborn child

- **Precautionary statements**
  - Obtain special instructions before use.
  - Do not handle until all safety precautions have been read and understood.
  - Do not breathe 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 swallowed: Rinse mouth. Do NOT induce vomiting.
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
If inhaled: Remove person to fresh air and keep comfortable for breathing.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
Continue rinsing.
Immediately call a poison center/doctor.
Wash contaminated clothing before reuse.
Store locked up.
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>27.5 %</td>
</tr>
<tr>
<td>30499-70-8</td>
<td>Reaction mass of 1-(2,3-epoxypropoxy)-2,2-bis ((2,3-epoxypropoxy)methyl) butane and 1- (2,3-epoxypropoxy)-2-((2,3-epoxypropoxy)methyl)-2-hydroxy butane</td>
<td>27.5 %</td>
</tr>
<tr>
<td>28064-14-4</td>
<td>Phenol, polymer with formaldehyde, glycidether</td>
<td>17.5 %</td>
</tr>
<tr>
<td>78-93-3</td>
<td>butanone</td>
<td>2 %</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.
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
Provide adequate ventilation. Use personal protection equipment. Remove persons to safety. Do not breathe dust/fume/gas/mist/vapours/spray. Avoid contact with skin, eyes and clothes.

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.
Dispersion: see section 13

7. Handling and storage

Precautions for safe handling

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

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
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

Exposure limits

<table>
<thead>
<tr>
<th>CAS No.</th>
<th>Substance</th>
<th>ppm</th>
<th>mg/m³</th>
<th>f/cc</th>
<th>Category</th>
<th>Origin</th>
</tr>
</thead>
<tbody>
<tr>
<td>78-93-3</td>
<td>2-Butanone (Methyl ethyl ketone)</td>
<td>200</td>
<td>590</td>
<td></td>
<td>TWA (8 h)</td>
<td>PEL</td>
</tr>
<tr>
<td>78-93-3</td>
<td>2-Butanone</td>
<td>200</td>
<td>590</td>
<td></td>
<td>TWA (8 h)</td>
<td>REL</td>
</tr>
<tr>
<td>78-93-3</td>
<td>Methyl ethyl ketone</td>
<td>300</td>
<td>885</td>
<td></td>
<td>STEL (15 min)</td>
<td>REL</td>
</tr>
</tbody>
</table>

Biological Exposure Indices (BEI-ACGIH)

<table>
<thead>
<tr>
<th>CAS No.</th>
<th>Substance</th>
<th>Determinant</th>
<th>Value</th>
<th>Test material</th>
<th>Sampling time</th>
</tr>
</thead>
<tbody>
<tr>
<td>78-93-3</td>
<td>METHYL ETHYL KETONE</td>
<td>Methyl ethyl ketone</td>
<td>2 mg/L</td>
<td>urine</td>
<td>End of shift</td>
</tr>
</tbody>
</table>

Exposure controls

- Provide adequate ventilation as well as local exhaustion at critical locations.
- 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

- 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.

Skin protection

- Protective clothing

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: > 100 °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 20 °C): ~1.3 g/cm³
Water solubility: not determined

Solubility in other solvents
No information available.
Partition coefficient: not determined
Viscosity / dynamic: not determined
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
Does not decompose when used for intended uses. No known hazardous decomposition products.

11. Toxicological information

Information on toxicological effects

Route(s) of Entry
dermal, inhalative, Eye contact.

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

<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 &gt; 5000 mg/kg</td>
<td>Rat</td>
<td>Manufacturer</td>
</tr>
<tr>
<td></td>
<td></td>
<td>dermal</td>
<td>LD50 &gt; 2000 mg/kg</td>
<td>Rat</td>
<td>Manufacturer</td>
</tr>
<tr>
<td>30499-70-8</td>
<td>Reaction mass of 1-(2,3-epoxypropoxy)-2,2-bis ((2,3-epoxypropoxy)methyl) butane and 1-(2,3-epoxypropoxy)-2-((2,3-epoxypropoxy)methyl)-2-hydroxy butane</td>
<td>oral</td>
<td>LD50 3398 mg/kg</td>
<td>Rat</td>
<td>Manufacturer</td>
</tr>
<tr>
<td></td>
<td></td>
<td>dermal</td>
<td>LD50 &gt; 3170 mg/kg</td>
<td>Rat</td>
<td>Manufacturer</td>
</tr>
<tr>
<td>78-93-3</td>
<td>butanone</td>
<td>oral</td>
<td>LD50 3300 mg/kg</td>
<td>Rat</td>
<td>IUCLID</td>
</tr>
<tr>
<td></td>
<td></td>
<td>dermal</td>
<td>LD50 6400 - 8000 mg/kg</td>
<td>Rabbit</td>
<td>Supplier</td>
</tr>
<tr>
<td></td>
<td></td>
<td>inhalative (4 h) aerosol</td>
<td>LC50 34.5 mg/l</td>
<td>Rat</td>
<td>Manufacturer</td>
</tr>
</tbody>
</table>

Irritation and corrosivity
Causes severe skin burns and eye damage

Sensitizing effects
May cause an allergic skin reaction (Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol; Reaction mass of 1-(2,3-epoxypropoxy)-2,2-bis ((2,3-epoxypropoxy)methyl) butane and 1-(2,3-epoxypropoxy)-2-((2,3-epoxypropoxy)methyl)-2-hydroxy butane; Phenol, polymer with formaldehyde, glycidether)

Carcinogenic/mutagenic/toxic effects for reproduction
May damage fertility or the unborn child (Reaction mass of 1-(2,3-epoxypropoxy)-2,2-bis
((2,3-epoxypropoxy)methyl) butane and 1-(2,3-epoxypropoxy)-2-((2,3-epoxypropoxy)methyl)-2-hydroxy
butane)
Germ cell mutagenicity: Based on available data, the classification criteria are not met.
Carcinogenicity: 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
No information available.
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 1760
Proper shipping name: Corrosive liquids, n.o.s. (epoxy resin)
Transport hazard class(es): 8
Packing group: III
Hazard label: 8

Marine transport (IMDG)
UN number: UN 1760
UN proper shipping name: CORROSIVE LIQUID, N.O.S. (epoxy resin)
Transport hazard class(es): 8
Packing group: III
Hazard label: 8
Limited quantity: 5 L
Excepted quantity: E1
EmS: F-A, S-B

Air transport (ICAO-TI/IATA-DGR)

UN number: UN 1760
UN proper shipping name: CORROSIVE LIQUID, N.O.S. (epoxy resin)
Transport hazard class(es): III
Packing group: 8
Hazard label: 8
Limited quantity Passenger: 1 L
Passenger LQ: Y841
Excepted quantity: E1
IATA-packing instructions - Passenger: 852
IATA-max. quantity - Passenger: 5 L
IATA-packing instructions - Cargo: 856
IATA-max. quantity - Cargo: 60 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
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol: Yes.
Reaction mass of 1-(2,3-epoxypropoxy)-2,2-bis ((2,3-epoxypropoxy)methyl) butane and 1-(2,3-epoxypropoxy)-2-((2,3-epoxypropoxy)methyl)-2-hydroxy butane: Yes.
Phenol, polymer with formaldehyde, glycidether: Yes.
butanone: Yes.

National regulatory information
SARA Section 304 CERCLA:
Methyl ethyl ketone (78-93-3): Reportable quantity = 5,000 (2270) lbs. (kg)
SARA Section 311/312 Hazards:
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol (9003-36-5):
Immediate (acute) health hazard
Reaction mass of 1-(2,3-epoxypropoxy)-2,2-bis ((2,3-epoxypropoxy)methyl) butane and 1-(2,3-epoxypropoxy)-2-((2,3-epoxypropoxy)methyl)-2-hydroxy butane (30499-70-8): Immediate (acute) health hazard
Phenol, polymer with formaldehyde, glycidether (28064-14-4): Immediate (acute) health hazard
Methyl ethyl ketone (78-93-3): Fire hazard, Immediate (acute) health hazard
Clean Air Act Section 112(b):
Methyl ethyl ketone (78-93-3)

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
Hazardous Materials Information Label (HMIS)
- Health: 3
- Flammability: 1
- Physical Hazard: 0

NFPA Hazard Ratings
- Health: 3
- Flammability: 1
- Reactivity: 0
- Unique Hazard: 0

Revision date: 07/11/2017
Revision No: 1,00

Abbreviations and acronyms
- ADR: Accord européen sur le transport des marchandises dangereuses par Route (European 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
- 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
The above information describes exclusively the safety requirements of the product and is based on our present-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.)