SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier
Proguard M-ST2 Part A

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

Use of the substance/mixture
- Colour

Uses advised against
- No information available.

1.3. Details of the supplier of the safety data sheet

<table>
<thead>
<tr>
<th>Company name:</th>
<th>Ceramic Polymer GmbH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Street:</td>
<td>Daimlerring 9</td>
</tr>
<tr>
<td>Place:</td>
<td>DE-32289 Rödinghausen</td>
</tr>
<tr>
<td>Telephone:</td>
<td>+49(0) 52 23 / 9 62 76-0</td>
</tr>
<tr>
<td>e-mail:</td>
<td><a href="mailto:info@ceramic-polymer.de">info@ceramic-polymer.de</a></td>
</tr>
<tr>
<td>Internet:</td>
<td><a href="http://www.ceramic-polymer.de">www.ceramic-polymer.de</a></td>
</tr>
<tr>
<td>Responsible Department</td>
<td>+49(0) 551 - 1 92 40 (GIZ-Nord, 24h)</td>
</tr>
</tbody>
</table>

1.4. Emergency telephone number:
+49(0) 551 - 1 92 40 (GIZ-Nord, 24h)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

<table>
<thead>
<tr>
<th>Hazard categories:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammable liquid: Flam. Liq. 3</td>
</tr>
<tr>
<td>Skin corrosion/irritation: Skin Irrit. 2</td>
</tr>
<tr>
<td>Serious eye damage/eye irritation: Eye Irrit. 2</td>
</tr>
<tr>
<td>Respiratory or skin sensitisation: Skin Sens. 1</td>
</tr>
<tr>
<td>Specific target organ toxicity - repeated exposure: STOT RE 2</td>
</tr>
<tr>
<td>Hazardous to the aquatic environment: Aquatic Chronic 2</td>
</tr>
</tbody>
</table>

Hazard Statements:
- Flammable liquid and vapour.
- Causes skin irritation.
- Causes serious eye irritation.
- May cause an allergic skin reaction.
- May cause damage to organs through prolonged or repeated exposure.
- Toxic to aquatic life with long lasting effects.

2.2. Label elements

Regulation (EC) No. 1272/2008

<table>
<thead>
<tr>
<th>Hazard components for labelling</th>
</tr>
</thead>
<tbody>
<tr>
<td>epoxy resin (number average molecular weight &lt;= 700), reaction product: bisphenol-A-(epichlorhydrin)</td>
</tr>
<tr>
<td>Phenol, 4,4’-(1-methylethylidene)bis-, polymer with 2,2’- ((1-methylethylidene)bis(4,1-phenyleneoxymethylene))bis(oxirane)</td>
</tr>
<tr>
<td>Naphtha (petroleum), hydrodesulphurized heavy; Low boiling point hydrogen treated naphtha</td>
</tr>
</tbody>
</table>

Signal word: Warning

Pictograms:
Hazard statements
- H226: Flammable liquid and vapour.
- H315: Causes skin irritation.
- H317: May cause an allergic skin reaction.
- H319: Causes serious eye irritation.
- H373: May cause damage to organs through prolonged or repeated exposure.
- H411: Toxic to aquatic life with long lasting effects.

Precautionary statements
- P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P241: Use explosion-proof electrical/ventilating/lighting equipment.
- P260: Do not breathe dust/fume/gas/mist/vapours/spray.
- P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
- P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P501: Dispose of contents/container to an appropriate recycling or disposal facility.

2.3. Other hazards
No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures
Hazardous components

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Chemical name</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>25068-38-6</td>
<td>epoxy resin (number average molecular weight &lt;= 700), reaction product: bisphenol-A- (epichlorhydrin)</td>
<td>25-&lt;50 %</td>
</tr>
<tr>
<td>500-033-5</td>
<td></td>
<td>500-033-5</td>
</tr>
<tr>
<td>25036-25-3</td>
<td>Phenol. 4,4'-(1-methylethylidene)bis-, polymer with 2,2''-((1-methyleneidene)bis(4,1-phenyleneoxy)methylene)bis(oxyrane)</td>
<td>20-&lt;25 %</td>
</tr>
<tr>
<td>1330-20-7</td>
<td>xylene</td>
<td>10-&lt;15 %</td>
</tr>
<tr>
<td>64742-82-1</td>
<td>Naphtha (petroleum), hydrodesulphurized heavy; Low boiling point hydrogen treated naphtha</td>
<td>3-&lt;5 %</td>
</tr>
<tr>
<td>64742-95-6</td>
<td>Solvent naphtha (petroleum), light arom.; Low boiling point naphtha - unspecified</td>
<td>1&lt;2,5 %</td>
</tr>
<tr>
<td>78-83-1</td>
<td>2-methylpropan-1-ol; iso-butanol</td>
<td>1&lt;2,5 %</td>
</tr>
<tr>
<td>107-98-2</td>
<td>1-methoxy-2-propanol; monopropylene glycol methyl ether</td>
<td>0,5&lt;1 %</td>
</tr>
</tbody>
</table>
| 4.1. 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
Remove casualty to fresh air and keep warm and at rest.
If unconscious place in recovery position and seek medical advice.

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.

4.2. Most important symptoms and effects, both acute and delayed
   Symptoms may develop several hours following exposure; medical observation therefore necessary for at least 48 hours.

4.3. Indication of any immediate medical attention and special treatment needed
   First Aid, decontamination, treatment of symptoms.

SECTION 5: Firefighting measures

5.1. Extinguishing media
   Suitable extinguishing media
   Dry extinguishing powder. Carbon dioxide (CO2). alcohol resistant foam. Water spray jet
   Unsuitable extinguishing media
   Full water jet

5.2. Special hazards arising from the substance or mixture
   Carbon monoxide Carbon dioxide (CO2). Nitrogen oxides (NOx)

5.3. Advice for firefighters
   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.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
   See protective measures under point 7 and 8.
   Provide adequate ventilation.
   Personal protection equipment: see section 8

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

6.3. 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.

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

SECTION 7: Handling and storage

7.1. 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.

7.2. 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.

   Hints on joint storage
   Keep away from:
   Food and feedingstuffs
   Oxidising agent
Further information on storage conditions
Keep away from:
Frost
Heat
Humidity

7.3. Specific end use(s)
No information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Substance</th>
<th>ppm</th>
<th>mg/m³</th>
<th>fibres/ml</th>
<th>Category</th>
<th>Origin</th>
</tr>
</thead>
<tbody>
<tr>
<td>107-98-2</td>
<td>1-Methoxypropan-2-ol</td>
<td>100</td>
<td>375</td>
<td></td>
<td>TWA (8 h)</td>
<td>WEL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>150</td>
<td>560</td>
<td></td>
<td>STEL (15 min)</td>
<td>WEL</td>
</tr>
<tr>
<td>78-83-1</td>
<td>2-Methylpropan-1-ol</td>
<td>50</td>
<td>154</td>
<td></td>
<td>TWA (8 h)</td>
<td>WEL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>75</td>
<td>231</td>
<td></td>
<td>STEL (15 min)</td>
<td>WEL</td>
</tr>
<tr>
<td>1330-20-7</td>
<td>Xylene: mixed isomers</td>
<td>50</td>
<td>220</td>
<td></td>
<td>TWA (8 h)</td>
<td>WEL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>100</td>
<td>441</td>
<td></td>
<td>STEL (15 min)</td>
<td>WEL</td>
</tr>
</tbody>
</table>

Biological Monitoring Guidance Values (EH40)

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Substance</th>
<th>Parameter</th>
<th>Value</th>
<th>Test material</th>
<th>Sampling time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1330-20-7</td>
<td>Xylene, α-, m-, p- or mixed isomers</td>
<td>methyl hippuric acid (creatinine)</td>
<td>650 mmol/mol</td>
<td>urine</td>
<td>Post shift</td>
</tr>
</tbody>
</table>
### DNEL/DMEL values

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Substance</th>
<th>Exposure route</th>
<th>Effect</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>25068-38-6</td>
<td>epoxy resin (number average molecular weight &lt;= 700), reaction product: bisphenol-A-(epichlorhydrin)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Worker DNEL, long-term</td>
<td>inhalation</td>
<td>systemic</td>
<td>12.25 mg/m³</td>
</tr>
<tr>
<td></td>
<td>Worker DNEL, acute</td>
<td>inhalation</td>
<td>systemic</td>
<td>12.25 mg/m³</td>
</tr>
<tr>
<td></td>
<td>Worker DNEL, long-term</td>
<td>dermal</td>
<td>systemic</td>
<td>8.33 mg/kg bw/day</td>
</tr>
<tr>
<td></td>
<td>Worker DNEL, acute</td>
<td>dermal</td>
<td>systemic</td>
<td>8.33 mg/kg bw/day</td>
</tr>
<tr>
<td></td>
<td>Consumer DNEL, long-term</td>
<td>dermal</td>
<td>systemic</td>
<td>3.571 mg/kg bw/day</td>
</tr>
<tr>
<td></td>
<td>Consumer DNEL, acute</td>
<td>dermal</td>
<td>systemic</td>
<td>3.571 mg/kg bw/day</td>
</tr>
<tr>
<td></td>
<td>Consumer DNEL, long-term</td>
<td>oral</td>
<td>systemic</td>
<td>0.75 mg/kg bw/day</td>
</tr>
<tr>
<td></td>
<td>Consumer DNEL, acute</td>
<td>oral</td>
<td>systemic</td>
<td>0.75 mg/kg bw/day</td>
</tr>
<tr>
<td></td>
<td>Workers DNEL, acute</td>
<td>inhalation</td>
<td>systemic</td>
<td>77 mg/m³</td>
</tr>
<tr>
<td></td>
<td>Workers DNEL, acute</td>
<td>inhalation</td>
<td>systemic</td>
<td>289 mg/m³</td>
</tr>
<tr>
<td></td>
<td>Workers DNEL, acute</td>
<td>inhalation</td>
<td>local</td>
<td>289 mg/m³</td>
</tr>
<tr>
<td></td>
<td>Workers DNEL, long-term</td>
<td>dermal</td>
<td>systemic</td>
<td>180 mg/kg bw/day</td>
</tr>
<tr>
<td></td>
<td>Consumer DNEL, long-term</td>
<td>inhalation</td>
<td>systemic</td>
<td>14.8 mg/m³</td>
</tr>
<tr>
<td></td>
<td>Consumer DNEL, acute</td>
<td>inhalation</td>
<td>systemic</td>
<td>174 mg/m³</td>
</tr>
<tr>
<td></td>
<td>Consumer DNEL, acute</td>
<td>inhalation</td>
<td>local</td>
<td>174 mg/m³</td>
</tr>
<tr>
<td></td>
<td>Consumer DNEL, long-term</td>
<td>dermal</td>
<td>systemic</td>
<td>108 mg/kg bw/day</td>
</tr>
<tr>
<td></td>
<td>Consumer DNEL, long-term</td>
<td>oral</td>
<td>systemic</td>
<td>1.6 mg/kg bw/day</td>
</tr>
<tr>
<td></td>
<td>Workers DNEL, acute</td>
<td>inhalation</td>
<td>systemic</td>
<td>1300 mg/m³</td>
</tr>
<tr>
<td></td>
<td>Workers DNEL, acute</td>
<td>inhalation</td>
<td>local</td>
<td>840 mg/m³</td>
</tr>
<tr>
<td></td>
<td>Workers DNEL, acute</td>
<td>inhalation</td>
<td>local</td>
<td>1100 mg/m³</td>
</tr>
<tr>
<td></td>
<td>Consumer DNEL, acute</td>
<td>inhalation</td>
<td>systemic</td>
<td>1200 mg/m³</td>
</tr>
<tr>
<td></td>
<td>Consumer DNEL, long-term</td>
<td>inhalation</td>
<td>local</td>
<td>180 mg/m³</td>
</tr>
<tr>
<td></td>
<td>Consumer DNEL, acute</td>
<td>inhalation</td>
<td>local</td>
<td>640 mg/m³</td>
</tr>
<tr>
<td></td>
<td>Workers DNEL, long-term</td>
<td>inhalation</td>
<td>systemic</td>
<td>150 mg/m³</td>
</tr>
<tr>
<td></td>
<td>Workers DNEL, long-term</td>
<td>dermal</td>
<td>systemic</td>
<td>25 mg/kg bw/day</td>
</tr>
<tr>
<td></td>
<td>Workers DNEL, long-term</td>
<td>dermal</td>
<td>systemic</td>
<td>32 mg/m³</td>
</tr>
<tr>
<td></td>
<td>Workers DNEL, long-term</td>
<td>dermal</td>
<td>systemic</td>
<td>11 mg/kg bw/day</td>
</tr>
<tr>
<td></td>
<td>Workers DNEL, long-term</td>
<td>oral</td>
<td>systemic</td>
<td>11 mg/kg bw/day</td>
</tr>
<tr>
<td></td>
<td>Workers DNEL, long-term</td>
<td>inhalation</td>
<td>local</td>
<td>310 mg/m³</td>
</tr>
<tr>
<td></td>
<td>Workers DNEL, long-term</td>
<td>inhalation</td>
<td>local</td>
<td>55 mg/m³</td>
</tr>
</tbody>
</table>
# Safety Data Sheet

according to Regulation (EC) No 1907/2006

## Proguard M-ST2 Part A

Print date: 09.11.2018 Page 7 of 14

---

### Worker DNEL, long-term
- **Substance:** 1-methoxy-2-propanol; monopropylene glycol methyl ether
- **Environmental compartment:** Inhalation
- **Value:** 369 mg/m³

### Consumer DNEL, long-term
- **Substance:** 1-methoxy-2-propanol; monopropylene glycol methyl ether
- **Environmental compartment:** Inhalation
- **Value:** 43.9 mg/m³

### Worker DNEL, acute
- **Substance:** 1-methoxy-2-propanol; monopropylene glycol methyl ether
- **Environmental compartment:** Inhalation
- **Value:** 553.5 mg/m³

### Worker DNEL, acute
- **Substance:** 1-methoxy-2-propanol; monopropylene glycol methyl ether
- **Environmental compartment:** Inhalation
- **Value:** 553.5 mg/m³

### Worker DNEL, long-term dermal systemic
- **Substance:** 1-methoxy-2-propanol; monopropylene glycol methyl ether
- **Environmental compartment:** Dermal
- **Value:** 183 mg/kg bw/day

### Consumer DNEL, long-term dermal systemic
- **Substance:** 1-methoxy-2-propanol; monopropylene glycol methyl ether
- **Environmental compartment:** Dermal
- **Value:** 78 mg/kg bw/day

### Consumer DNEL, long-term oral systemic
- **Substance:** 1-methoxy-2-propanol; monopropylene glycol methyl ether
- **Environmental compartment:** Oral
- **Value:** 33 mg/kg bw/day

---

### PNEC values

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Substance</th>
<th>Environmental compartment</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>25068-38-6</td>
<td>epoxy resin (number average molecular weight &lt;= 700), reaction product: bisphenol-A-(epichlorhydrin)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Freshwater</td>
<td></td>
<td>0.006 mg/l</td>
</tr>
<tr>
<td></td>
<td>Marine water</td>
<td></td>
<td>0.001 mg/l</td>
</tr>
<tr>
<td></td>
<td>Freshwater sediment</td>
<td></td>
<td>0.996 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Marine sediment</td>
<td></td>
<td>0.1 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Secondary poisoning</td>
<td></td>
<td>11 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Soil</td>
<td></td>
<td>0.196 mg/kg</td>
</tr>
<tr>
<td>1330-20-7</td>
<td>xylene</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Freshwater</td>
<td></td>
<td>0.327 mg/l</td>
</tr>
<tr>
<td></td>
<td>Marine water</td>
<td></td>
<td>0.327 mg/l</td>
</tr>
<tr>
<td></td>
<td>Freshwater sediment</td>
<td></td>
<td>12.46 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Marine sediment</td>
<td></td>
<td>12.46 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Micro-organisms in sewage treatment plants (STP)</td>
<td></td>
<td>6.58 mg/l</td>
</tr>
<tr>
<td></td>
<td>Soil</td>
<td></td>
<td>2.31 mg/kg</td>
</tr>
<tr>
<td>78-83-1</td>
<td>2-methylpropan-1-ol; iso-butanol</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Freshwater</td>
<td></td>
<td>0.4 mg/l</td>
</tr>
<tr>
<td></td>
<td>Marine water</td>
<td></td>
<td>11 mg/l</td>
</tr>
<tr>
<td></td>
<td>Marine water</td>
<td></td>
<td>0.04 mg/l</td>
</tr>
<tr>
<td></td>
<td>Freshwater sediment</td>
<td></td>
<td>1.56 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Marine sediment</td>
<td></td>
<td>0.156 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Micro-organisms in sewage treatment plants (STP)</td>
<td></td>
<td>10 mg/l</td>
</tr>
<tr>
<td></td>
<td>Soil</td>
<td></td>
<td>0.076 mg/kg</td>
</tr>
<tr>
<td>107-98-2</td>
<td>1-methoxy-2-propanol; monopropylene glycol methyl ether</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Freshwater</td>
<td></td>
<td>10 mg/l</td>
</tr>
<tr>
<td></td>
<td>Freshwater (intermittent releases)</td>
<td></td>
<td>100 mg/l</td>
</tr>
<tr>
<td></td>
<td>Marine water</td>
<td></td>
<td>1 mg/l</td>
</tr>
<tr>
<td></td>
<td>Freshwater sediment</td>
<td></td>
<td>52.3 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Marine sediment</td>
<td></td>
<td>5.2 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Micro-organisms in sewage treatment plants (STP)</td>
<td></td>
<td>100 mg/l</td>
</tr>
<tr>
<td></td>
<td>Soil</td>
<td></td>
<td>4.59 mg/kg</td>
</tr>
</tbody>
</table>
8.2. 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.
When using do not eat, drink, smoke, sniff.

Eye/face protection
goggles

Hand protection
Tested protective gloves must be worn: DIN EN 374
Breakthrough times and swelling properties of the material must be taken into consideration.
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.
Observe the wear time limits as specified by the manufacturer.
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.
Combination filtering device (EN 14387) ABEK-P2
Self-contained respirator (breathing apparatus) (DIN EN 133)

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Liquid
Colour: various
Odour: characteristic

pH-Value: not determined

Changes in the physical state
Melting point: not determined
Initial boiling point and boiling range: 137-143 °C
Sublimation point: not determined
Softening point: not determined
Pour point: not determined
Flash point: 30 °C

Flammability
Solid: not determined
Gas: not determined

Explosive properties
not explosive according to EU A.14
Vapours can form explosive mixtures with air.

Lower explosion limits: 1.1
Upper explosion limits: 7
Ignition temperature: 500 °C

**Auto-ignition temperature**

Solid: not determined
Gas: not determined

Decomposition temperature: not determined

**Oxidizing properties**

Not oxidising.

**Vapour pressure:**
(at 20 °C) 6,7 hPa

**Density:** 1,351 g/cm³

**Water solubility:** Immiscible

**Solubility in other solvents**

No information available.

**Partition coefficient:** not determined

**Viscosity / dynamic:** not determined

**Viscosity / kinematic:** not determined

**Vapour density:** not determined

**Evaporation rate:** not determined

**Solvent content:** 21,3

**Solid content:** 78,7

---

**SECTION 10: Stability and reactivity**

**10.1. Reactivity**

The product is stable under storage at normal ambient temperatures.

**10.2. Chemical stability**

The substance is chemically stable under recommended conditions of storage, use and temperature.

**10.3. Possibility of hazardous reactions**

No information available.

**10.4. Conditions to avoid**

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

**10.5. Incompatible materials**

No information available.

**10.6. Hazardous decomposition products**

No information available.

---

**SECTION 11: Toxicological information**

**11.1. Information on toxicological effects**

**Acute toxicity**

Based on available data, the classification criteria are not met.
### Proguard M-ST2 Part A

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Chemical name</th>
<th>Exposure route</th>
<th>Dose</th>
<th>Species</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1330-20-7</td>
<td>xylene</td>
<td>dermal</td>
<td>ATE 1100 mg/kg</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>inhalation vapour</td>
<td>ATE 11 mg/l</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>inhalation aerosol</td>
<td>ATE 1,5 mg/l</td>
<td></td>
<td></td>
</tr>
<tr>
<td>64742-82-1</td>
<td>Naphtha (petroleum), hydrodesulphurized heavy; Low boiling point hydrogen treated naphtha</td>
<td>oral</td>
<td>LD50 &gt; 5000 mg/kg</td>
<td>Rat</td>
<td>Study report (1986)</td>
</tr>
<tr>
<td>64742-95-6</td>
<td>Solvent naphtha (petroleum), light arom.; Low boiling point naphtha - unspecified</td>
<td>oral</td>
<td>LD50 &gt; 5000 mg/kg</td>
<td>Rat</td>
<td>Study report (1986)</td>
</tr>
</tbody>
</table>

**Irritation and corrosivity**
- Causes skin irritation.
- Causes serious eye irritation.

**Sensitising effects**
- May cause an allergic skin reaction. (epoxy resin (number average molecular weight <= 700), reaction product: bisphenol-A-(epichlorhydrin); Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2,2''-((1-methylethylidene)bis(4,1-phenyleneoxymethylene))bis(oxyrane))

**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**
- May cause damage to organs through prolonged or repeated exposure. (Naphtha (petroleum), hydrodesulphurized heavy; Low boiling point hydrogen treated naphtha)

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

### SECTION 12: Ecological information

**12.1. Toxicity**
### Aquatic toxicity

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS No</th>
<th>Dose</th>
<th>[h]</th>
<th>[d]</th>
<th>Species</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>epoxy resin (number average molecular weight &lt;= 700), reaction product: bisphenol-A-(epichlorhydrin)</td>
<td>25068-38-6</td>
<td>ErC50 &gt; 100 mg/l</td>
<td>72 h</td>
<td>Pseudokirchneriella subcapitata</td>
<td>Study report (2007)</td>
<td></td>
</tr>
<tr>
<td>Acute algae toxicity</td>
<td>NOEC</td>
<td>0,3 mg/l</td>
<td>21 d</td>
<td>Daphnia magna</td>
<td>Study report (1984)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS No</th>
<th>Acute fish toxicity</th>
<th>LC50</th>
<th>2,6 mg/l</th>
<th>96 h</th>
<th>Oncorhynchus mykiss (Rainbow trout)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute algae toxicity</td>
<td>ErC50</td>
<td>2,2 mg/l</td>
<td>72 h</td>
<td>Pseudokirchneriella subcapitata</td>
<td>Supplier</td>
<td></td>
</tr>
<tr>
<td>Acute crustacea toxicity</td>
<td>EC50</td>
<td>3,2 mg/l</td>
<td>48 h</td>
<td>Daphnia magna (Big water flea)</td>
<td>ECHA</td>
<td></td>
</tr>
</tbody>
</table>

| Naphtha (petroleum), hydrodesulfurized heavy; Low boiling point hydrogen treated naphtha | 64742-82-1 | Fish toxicity | NOEC | 2,6 mg/l | 21 d | Daphnia magna            | Study report (1999)         |
| Crustacea toxicity | NOEC | 2,6 mg/l | 21 d | Daphnia magna            | Study report (1999)         |

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS No</th>
<th>Acute fish toxicity</th>
<th>LC50</th>
<th>1430 mg/l</th>
<th>96 h</th>
<th>Pimephales promelas</th>
<th>Study report (1995)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute algae toxicity</td>
<td>ErC50</td>
<td>1799 mg/l</td>
<td>72 h</td>
<td>Pseudokirchneriella subcapitata</td>
<td>Supplier</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute crustacea toxicity</td>
<td>EC50</td>
<td>1100 mg/l</td>
<td>48 h</td>
<td>Daphnia pulex</td>
<td>Environmental Toxicology and Chemistry 5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS No</th>
<th>Acute fish toxicity</th>
<th>LC50</th>
<th>&gt; 4600 - &lt; 10000 mg/l</th>
<th>96 h</th>
<th>Leuciscus idus</th>
<th>Study report (1989)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute algae toxicity</td>
<td>ErC50</td>
<td>&gt; 1000 mg/l</td>
<td>96 h</td>
<td>Pseudokirchneriella subcapitata</td>
<td>Supplier</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute crustacea toxicity</td>
<td>EC50</td>
<td>21100 - 259000 mg/l</td>
<td>48 h</td>
<td>Daphnia magna</td>
<td>Study report (1981)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 12.2. Persistence and degradability

No information available.

### 12.3. Bioaccumulative potential

#### Partition coefficient n-octanol/water

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS No</th>
<th>Log Pow</th>
</tr>
</thead>
<tbody>
<tr>
<td>epoxy resin (number average molecular weight &lt;= 700), reaction product: bisphenol-A-(epichlorhydrin)</td>
<td>25068-38-6</td>
<td>&gt;= 2,64</td>
</tr>
<tr>
<td>2-methylpropan-1-ol; iso-butanol</td>
<td>78-83-1</td>
<td>10</td>
</tr>
<tr>
<td>1-methoxy-2-propanol; monopropylene glycol methyl ether</td>
<td>107-98-2</td>
<td>&lt; 1</td>
</tr>
</tbody>
</table>
BCF

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Chemical name</th>
<th>BCF</th>
<th>Species</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>25068-38-6</td>
<td>epoxy resin (number average molecular weight &lt;= 700), reaction product: bisphenol-A-(epichlorhydrin)</td>
<td>31</td>
<td></td>
<td>Study report (2010)</td>
</tr>
<tr>
<td>64742-82-1</td>
<td>Naphtha (petroleum), hydrodesulphurized heavy; Low boiling point hydrogen treated naphtha</td>
<td>10 - 2500</td>
<td>modelled data</td>
<td>Computer model (2000)</td>
</tr>
</tbody>
</table>

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. 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.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number: UN 1263
14.2. UN proper shipping name: Paint
14.3. Transport hazard class(es): 3
14.4. Packing group: III
Hazard label: 3
Classification code: F1
Special Provisions: 163 367 650
Limited quantity: 5 L
Excepted quantity: E1
Transport category: 3
Hazard No: 30
Tunnel restriction code: D/E

Inland waterways transport (ADN)

14.1. UN number: UN 1263
14.2. UN proper shipping name: Paint
14.3. Transport hazard class(es): 3
14.4. Packing group: III
Hazard label: 3
Classification code: F1
Special Provisions: 163 367 650
Limited quantity: 5 L
Excepted quantity: E1

Marine transport (IMDG)

14.1. UN number: UN 1263
14.2. **UN proper shipping name:** Paint

14.3. **Transport hazard class(es):** 3

14.4. **Packing group:** III

Hazard label: 3

Marine pollutant: P

Special Provisions: 163, 223, 367, 955

Limited quantity: 5 L

Excepted quantity: E1

EmS: F-E, S-E

**Air transport (ICAO-TI/IATA-DGR)**

14.1. **UN number:** UN 1263

14.2. **UN proper shipping name:** Paint

14.3. **Transport hazard class(es):** 3

14.4. **Packing group:** III

Hazard label: 3

Special Provisions: A3 A72 A192

Limited quantity Passenger: 10 L

Passenger LQ: Y344

Excepted quantity: E1

IATA-packing instructions - Passenger: 355

IATA-max. quantity - Passenger: 60 L

IATA-packing instructions - Cargo: 366

IATA-max. quantity - Cargo: 220 L

14.5. **Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: yes

Danger releasing substance: epoxy resin

14.6. **Special precautions for user**

No information available.

14.7. **Transport in bulk according to Annex II of Marpol and the IBC Code**

No information available.

**SECTION 15: Regulatory information**

15.1. **Safety, health and environmental regulations/legislation specific for the substance or mixture**

EU regulatory information

2010/75/EU (VOC): 21,3

2004/42/EC (VOC): 21,3

National regulatory information

Employment restrictions:

Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers. Observe employment restrictions for women of child-bearing age.

Water contaminating class (D): 2 - clearly water contaminating

15.2. **Chemical safety assessment**

For the following substances of this mixture a chemical safety assessment has been carried out:

- epoxy resin (number average molecular weight <= 700)
- reaction product: bisphenol-A-(epichlorhydrin)
- xylene
- Naphtha (petroleum), hydrodesulphurized heavy; Low boiling point hydrogen treated naphtha

Revision No: 1,00  GB - EN  Revision date: 09.11.2018
SECTION 16: Other information

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
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

Relevant H and EUH statements (number and full text)

H226 Flammable liquid and vapour.
H304 May be fatal if swallowed and enters airways.
H312 Harmful in contact with skin.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H372 Causes damage to organs through prolonged or repeated exposure.
H373 May cause damage to organs through prolonged or repeated exposure.
H411 Toxic to aquatic life with long lasting effects.
EUH066 Repeated exposure may cause skin dryness or cracking.

Further Information

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.)