Safety Data Sheet

according to Regulation (EC) No 1907/2006

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

1.1. Product identifier
Ceramic-Polymer STP-ep-hv Part B, STP-ep-hv Cartridge Part B

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

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

Uses advised against
No data available

1.3. Details of the supplier of the safety data sheet
Company name: Chesterton International GmbH
Street: Am Lenzenfleck 23
Place: D-85737 Ismaning GERMANY
Telephone: +49 89 99 65 46 - 0
Telefax: +49 89 99 65 46 - 50
Email: eu-sds@chesterton.com

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

Hazard categories:
- Acute toxicity: Acute Tox. 4
- Skin corrosion/irritation: Skin Corr. 1
- Serious eye damage/eye irritation: Eye Dam. 1
- Respiratory or skin sensitisation: Skin Sens. 1
- Hazardous to the aquatic environment: Aquatic Chronic 3

Hazard Statements:
- Harmful if swallowed.
- Harmful if inhaled.
- Causes severe skin burns and eye damage.
- Causes serious eye damage.
- May cause an allergic skin reaction.
- Harmful to aquatic life with long lasting effects.

2.2. Label elements
Regulation (EC) No. 1272/2008
Hazard components for labelling
benzyl alcohol
3-aminomethyl-3,5,5-trimethylcyclohexylamine
m-phenylenebis(methylamine)
3-aminopropylnethoxysilane

Signal word: Danger

Pictograms:

Hazard statements
H302+H332 Harmful if swallowed or if inhaled.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P264 Wash hands thoroughly after handling.
P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
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.
P310 Immediately call a POISON CENTER/doctor.

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>
<th>EC No</th>
<th>Index No</th>
<th>REACH No</th>
</tr>
</thead>
<tbody>
<tr>
<td>100-51-6</td>
<td>benzyl alcohol</td>
<td>30 - &lt; 35 %</td>
<td>202-859-9</td>
<td>603-057-00-5</td>
<td>01-2119492630-38</td>
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<tr>
<td>2855-13-2</td>
<td>3-aminomethyl-3,5,5-trimethylcyclohexylamine</td>
<td>20 - &lt; 25 %</td>
<td>220-666-8</td>
<td>612-067-00-9</td>
<td>01-2119514687-32</td>
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<tr>
<td>1477-55-0</td>
<td>m-phenylenebis(methylamine)</td>
<td>15 - &lt; 20 %</td>
<td>216-032-5</td>
<td></td>
<td>01-2119480150-50</td>
</tr>
<tr>
<td>919-30-2</td>
<td>3-aminopropyltriethoxysilane</td>
<td>1 - &lt; 5 %</td>
<td>213-048-4</td>
<td>612-108-00-0</td>
<td>01-2119480479-24</td>
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</tbody>
</table>

Specific Conc. Limits, M-factors and ATE

<table>
<thead>
<tr>
<th>CAS No</th>
<th>EC No</th>
<th>Chemical name</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>100-51-6</td>
<td></td>
<td>benzyl alcohol</td>
<td>30 - &lt; 35 %</td>
</tr>
</tbody>
</table>

- Inhalation: ATE = 11 mg/l (vapours); inhalation: LC50 = >4,178 mg/l (dusts or mists); dermal: LD50 = > 2000 mg/kg; oral: LD50 = 1580 mg/kg

- Dermal: LD50 = > 2000 mg/kg; oral: LD50 = 1030 mg/kg

- Inhalation: ATE = 11 mg/l (vapours); inhalation: LC50 = 1,34 mg/l (dusts or mists); dermal: LD50 = > 3100 mg/kg; oral: LD50 = 930 mg/kg

- Oral: LD50 = 1780 mg/kg

SECTION 4: First aid measures

4.1. Description of first aid measures

General information
- Remove contaminated, saturated clothing immediately.
- Provide fresh air.
Safety Data Sheet

according to Regulation (EC) No 1907/2006

Ceramic-Polymer STP-ep-hv Part B, STP-ep-hv Cartridge Part B

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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.
Call a physician immediately.

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
In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

After ingestion
If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Let 1 glass of water be drunken in little sips (dilution effect). Do NOT induce vomiting.

4.2. Most important symptoms and effects, both acute and delayed
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.

4.3. 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.

SECTION 5: Firefighting measures

5.1. Extinguishing media

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

Unsuitable extinguishing media
Full water jet

5.2. Special hazards arising from the substance or mixture
In case of fire may be liberated:
- Carbon monoxide
- Carbon dioxide
- Nitrogen oxides (NOx)

5.3. Advice for firefighters
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.
SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
   
   **General measures**
   - Provide adequate ventilation.
   - Remove persons to safety.
   - Safe handling: see section 7
   - Personal protection equipment: see section 8

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

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

   **For cleaning up**
   - Clean contaminated articles and floor according to the environmental legislation.

   **Other information**
   - Treat the recovered material as prescribed in the section on waste disposal.

6.4. Reference to other sections
   - Safe handling: see section 7
   - Personal protection equipment: see section 8
   - Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling
   
   **Advice on safe handling**
   - Personal protection equipment: see section 8

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

   **Further information on handling**
   - Wash hands before breaks and after work. Used working clothes should not be worn outside the work area.
   - Street clothing should be stored separately from work clothing.

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
Ceramic-Polymer STP-ep-hv Part B, STP-ep-hv Cartridge Part B

7.3. Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters
## DNEL/DMEL values

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Substance</th>
<th>DNEL type</th>
<th>Exposure route</th>
<th>Effect</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>100-51-6</td>
<td>benzyl alcohol</td>
<td>Worker DNEL, long-term</td>
<td>inhalation</td>
<td>systemic</td>
<td>22 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Worker DNEL, acute</td>
<td>inhalation</td>
<td>systemic</td>
<td>110 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Worker DNEL, long-term</td>
<td>dermal</td>
<td>systemic</td>
<td>8 mg/kg bw/day</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Worker DNEL, acute</td>
<td>dermal</td>
<td>systemic</td>
<td>40 mg/kg bw/day</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Consumer DNEL, long-term</td>
<td>inhalation</td>
<td>systemic</td>
<td>5.4 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Consumer DNEL, acute</td>
<td>inhalation</td>
<td>systemic</td>
<td>27 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Consumer DNEL, long-term</td>
<td>dermal</td>
<td>systemic</td>
<td>4 mg/kg bw/day</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Consumer DNEL, acute</td>
<td>dermal</td>
<td>systemic</td>
<td>20 mg/kg bw/day</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Consumer DNEL, long-term</td>
<td>oral</td>
<td>systemic</td>
<td>4 mg/kg bw/day</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Consumer DNEL, acute</td>
<td>oral</td>
<td>systemic</td>
<td>20 mg/kg bw/day</td>
</tr>
<tr>
<td>2855-13-2</td>
<td>3-aminomethyl-3,5,5-trimethylcyclohexylamine</td>
<td>Worker DNEL, long-term</td>
<td>inhalation</td>
<td>local</td>
<td>0.073 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Worker DNEL, acute</td>
<td>inhalation</td>
<td>local</td>
<td>0.073 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Consumer DNEL, long-term</td>
<td>oral</td>
<td>systemic</td>
<td>0.526 mg/kg bw/day</td>
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<tr>
<td>1477-55-0</td>
<td>m-phenylenebis(methylamine)</td>
<td>Worker DNEL, long-term</td>
<td>dermal</td>
<td>systemic</td>
<td>0.33 mg/kg bw/day</td>
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<td></td>
<td>Worker DNEL, long-term</td>
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<td>0.2 mg/m³</td>
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<td></td>
<td>Worker DNEL, long-term</td>
<td>inhalation</td>
<td>systemic</td>
<td>1.2 mg/m³</td>
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<tr>
<td>919-30-2</td>
<td>3-aminopropyltriethoxysilane</td>
<td>Consumer DNEL, long-term</td>
<td>oral</td>
<td>systemic</td>
<td>1 mg/kg bw/day</td>
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<tr>
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<td></td>
<td>Worker DNEL, long-term</td>
<td>inhalation</td>
<td>systemic</td>
<td>14 mg/m³</td>
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<td></td>
<td>Worker DNEL, acute</td>
<td>inhalation</td>
<td>systemic</td>
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<td>Worker DNEL, long-term</td>
<td>dermal</td>
<td>systemic</td>
<td>2 mg/kg bw/day</td>
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<tr>
<td></td>
<td></td>
<td>Worker DNEL, acute</td>
<td>dermal</td>
<td>systemic</td>
<td>8.3 mg/kg bw/day</td>
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<tr>
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<td>Consumer DNEL, long-term</td>
<td>inhalation</td>
<td>systemic</td>
<td>3.5 mg/m³</td>
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<td>Consumer DNEL, acute</td>
<td>inhalation</td>
<td>systemic</td>
<td>17.4 mg/m³</td>
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<tr>
<td></td>
<td></td>
<td>Consumer DNEL, long-term</td>
<td>dermal</td>
<td>systemic</td>
<td>1 mg/kg bw/day</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Consumer DNEL, acute</td>
<td>dermal</td>
<td>systemic</td>
<td>5 mg/kg bw/day</td>
</tr>
</tbody>
</table>
## PNEC values

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Substance</th>
<th>Environmental compartment</th>
<th>Value</th>
</tr>
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<tbody>
<tr>
<td>100-51-6</td>
<td>benzyl alcohol</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><img src="image1.png" alt="Freshwater" /></td>
<td></td>
<td>1 mg/l</td>
</tr>
<tr>
<td></td>
<td><img src="image2.png" alt="Freshwater (intermittent releases)" /></td>
<td></td>
<td>2,3 mg/l</td>
</tr>
<tr>
<td></td>
<td><img src="image3.png" alt="Marine water" /></td>
<td></td>
<td>0,1 mg/l</td>
</tr>
<tr>
<td></td>
<td><img src="image4.png" alt="Freshwater sediment" /></td>
<td></td>
<td>5,27 mg/kg</td>
</tr>
<tr>
<td></td>
<td><img src="image5.png" alt="Marine sediment" /></td>
<td></td>
<td>0,527 mg/kg</td>
</tr>
<tr>
<td></td>
<td><img src="image6.png" alt="Micro-organisms in sewage treatment plants (STP)" /></td>
<td></td>
<td>39 mg/l</td>
</tr>
<tr>
<td></td>
<td><img src="image7.png" alt="Soil" /></td>
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<td>0,456 mg/kg</td>
</tr>
<tr>
<td>2855-13-2</td>
<td>3-aminomethyl-3,5,5-trimethylcyclohexylamine</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><img src="image8.png" alt="Freshwater" /></td>
<td></td>
<td>0,06 mg/l</td>
</tr>
<tr>
<td></td>
<td><img src="image9.png" alt="Freshwater (intermittent releases)" /></td>
<td></td>
<td>0,23 mg/l</td>
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<tr>
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<td><img src="image10.png" alt="Marine water" /></td>
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<td>0,006 mg/l</td>
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<td><img src="image11.png" alt="Freshwater sediment" /></td>
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<td>5,784 mg/kg</td>
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<tr>
<td></td>
<td><img src="image12.png" alt="Marine sediment" /></td>
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<td>0,578 mg/kg</td>
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<tr>
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<td><img src="image13.png" alt="Micro-organisms in sewage treatment plants (STP)" /></td>
<td></td>
<td>3,18 mg/l</td>
</tr>
<tr>
<td></td>
<td><img src="image14.png" alt="Soil" /></td>
<td></td>
<td>1,121 mg/kg</td>
</tr>
<tr>
<td>1477-55-0</td>
<td>m-phenylenebis(methylamine)</td>
<td></td>
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<td><img src="image15.png" alt="Freshwater" /></td>
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<td>0,094 mg/l</td>
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<td><img src="image16.png" alt="Freshwater (intermittent releases)" /></td>
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<td>0,152 mg/l</td>
</tr>
<tr>
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<td><img src="image17.png" alt="Marine water" /></td>
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<td>0,009 mg/l</td>
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<tr>
<td></td>
<td><img src="image18.png" alt="Freshwater sediment" /></td>
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<td>12,4 mg/kg</td>
</tr>
<tr>
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<td><img src="image19.png" alt="Marine sediment" /></td>
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<td>1,24 mg/kg</td>
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<tr>
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<td><img src="image20.png" alt="Micro-organisms in sewage treatment plants (STP)" /></td>
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<td>10 mg/l</td>
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<td><img src="image21.png" alt="Soil" /></td>
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<td>2,44 mg/kg</td>
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<tr>
<td>919-30-2</td>
<td>3-aminopropyltriethoxysilane</td>
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<td></td>
</tr>
<tr>
<td></td>
<td><img src="image22.png" alt="Freshwater" /></td>
<td></td>
<td>0,5 mg/l</td>
</tr>
<tr>
<td></td>
<td><img src="image23.png" alt="Freshwater (intermittent releases)" /></td>
<td></td>
<td>2,05 mg/l</td>
</tr>
<tr>
<td></td>
<td><img src="image24.png" alt="Marine water" /></td>
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<td>0,05 mg/l</td>
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<td></td>
<td><img src="image25.png" alt="Freshwater sediment" /></td>
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<td>1,8 mg/kg</td>
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<td></td>
<td><img src="image26.png" alt="Marine sediment" /></td>
<td></td>
<td>0,18 mg/kg</td>
</tr>
<tr>
<td></td>
<td><img src="image27.png" alt="Micro-organisms in sewage treatment plants (STP)" /></td>
<td></td>
<td>1,3 mg/l</td>
</tr>
<tr>
<td></td>
<td><img src="image28.png" alt="Soil" /></td>
<td></td>
<td>0,069 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.

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

Hand protection
Tested protective gloves must be worn: EN ISO 374
NBR (Nitrile rubber), Butyl caoutchouc (butyl rubber)
Wearing time with permanent contact: Thickness of the glove material: >= 0,4 mm, Breakthrough time: > 480 min
Wearing time with occasional contact (splashes): Thickness of the glove material: >= 0,1 mm, Breakthrough time: > 30 min
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.
Breakthrough times and swelling properties of the material must be taken into consideration.

Skin protection
For the protection against direct skin contact, body protective clothing is essential (in addition to the usual working clothes).

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

Environmental exposure controls
Do not allow to enter into surface water or drains.

SECTION 9: Physical and chemical properties

9.1. 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>light yellow</td>
</tr>
<tr>
<td>Odour:</td>
<td>like amines</td>
</tr>
<tr>
<td>pH-Value:</td>
<td>~ 11</td>
</tr>
</tbody>
</table>

Changes in the physical state

<table>
<thead>
<tr>
<th>Melting point:</th>
<th>No data available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boiling point or initial boiling point and boiling range:</td>
<td>No data available</td>
</tr>
<tr>
<td>Sublimation point:</td>
<td>No data available</td>
</tr>
<tr>
<td>Softening point:</td>
<td>No data available</td>
</tr>
<tr>
<td>Pour point:</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash point:</td>
<td>&gt; 65 °C</td>
</tr>
</tbody>
</table>
Flammability
- Solid/liquid: No data available
- Gas: No data available

Explosive properties
- No information available.

Lower explosion limits: No data available
Upper explosion limits: No data available
Auto-ignition temperature: No data available

Self-ignition temperature
- Solid: No data available
- Gas: No data available

Decomposition temperature: No data available

Oxidizing properties
- No information available.

Vapour pressure: No data available
(at 25 °C)

Density (at 23 °C): ~ 1.06 g/cm³

Water solubility: partially soluble

Solubility in other solvents
- No information available.

Partition coefficient n-octanol/water: No data available
Viscosity / dynamic: ~ 500 mPa·s
Relative vapour density: No data available
Evaporation rate: No data available

9.2. Other information
- No information available.

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
- Exothermic reaction with:
  - Acid
  - Oxidising agent

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

10.5. Incompatible materials
- Acid, Oxidising agent
10.6. Hazardous decomposition products

No known hazardous decomposition products.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Harmful if swallowed.
Harmful if inhaled.

ATEmix calculated

ATE (oral) 1613.0 mg/kg; ATE (inhalation aerosol) 2.845 mg/l

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Chemical name</th>
<th>Exposure route</th>
<th>Dose</th>
<th>Species</th>
<th>Source</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>100-51-6</td>
<td>benzyl alcohol</td>
<td>oral</td>
<td>LD50</td>
<td>Mouse</td>
<td>Cosmet. Toxicol. 11, 1011-1013 (1973) (1)</td>
<td>OECD Guideline 401</td>
</tr>
<tr>
<td></td>
<td></td>
<td>inhalation vapour</td>
<td>ATE</td>
<td>11 mg/l</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>inhalation (4 h) aerosol</td>
<td>LC50</td>
<td>&gt; 4,178</td>
<td>Rat</td>
<td>ECHA OECD 403</td>
</tr>
<tr>
<td>2855-13-2</td>
<td>3-aminomethyl-3,5,5-trimethylcyclohexylamine</td>
<td>oral</td>
<td>LD50</td>
<td>Mouse</td>
<td>Study report (1965)</td>
<td>OECD Guideline 401</td>
</tr>
<tr>
<td>1477-55-0</td>
<td>m-phenylenebis(methylamine)</td>
<td>oral</td>
<td>LD50</td>
<td>930</td>
<td>Study report (1973)</td>
<td>OECD Guideline 401</td>
</tr>
<tr>
<td></td>
<td></td>
<td>dermal</td>
<td>LD50</td>
<td>&gt; 3100</td>
<td>Study report (1975)</td>
<td>TK 11813 was applied to a shaved area of</td>
</tr>
<tr>
<td></td>
<td></td>
<td>inhalation vapour</td>
<td>ATE</td>
<td>11 mg/l</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>inhalation (4 h) aerosol</td>
<td>LC50</td>
<td>1.34 mg/l</td>
<td>Rat</td>
<td></td>
</tr>
</tbody>
</table>

Irritation and corrosivity

Causes severe skin burns and eye damage.
Causes serious eye damage.

Sensitising effects

May cause an allergic skin reaction. (3-aminomethyl-3,5,5-trimethylcyclohexylamine; m-phenylenebis(methylamine); 3-aminopropyltriethoxysilane)
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.

11.2. Information on other hazards
Endocrine disrupting properties
No data available

SECTION 12: Ecological information

12.1. Toxicity
<table>
<thead>
<tr>
<th>CAS No</th>
<th>Chemical name</th>
<th>Aquatic toxicity</th>
<th>Dose</th>
<th>[h]</th>
<th>[d]</th>
<th>Species</th>
<th>Source</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>100-51-6</td>
<td>benzyl alcohol</td>
<td>Acute fish toxicity</td>
<td>LC50 &gt; 100</td>
<td>96 h</td>
<td></td>
<td>Oryzias latipes</td>
<td>Review article or handbook (2009)</td>
<td>OECD Guideline 203</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Acute algae toxicity</td>
<td>ER50 770 mg/l</td>
<td>72 h</td>
<td></td>
<td>Pseudokirchneriella subcapitata</td>
<td>Review article or handbook (2009)</td>
<td>OECD Guideline 201</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Acute crustacea toxicity</td>
<td>EC50 230 mg/l</td>
<td>48 h</td>
<td></td>
<td>Daphnia magna</td>
<td>Review article or handbook (2009)</td>
<td>OECD Guideline 202</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fish toxicity</td>
<td>NOEC 48,897 mg/l</td>
<td>30 d</td>
<td></td>
<td>Fish species</td>
<td><a href="http://epa.gov/oppt/exposure/pubs/epis">http://epa.gov/oppt/exposure/pubs/epis</a></td>
<td>other: QSAR</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Algae toxicity</td>
<td>NOEC 51 mg/l</td>
<td>3 d</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Crustacea toxicity</td>
<td>NOEC 51 mg/l</td>
<td>21 d</td>
<td></td>
<td>Daphnia magna</td>
<td>Review article or handbook (2009)</td>
<td>OECD Guideline 211</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Acute bacteria toxicity</td>
<td>(1385 mg/l)</td>
<td>3 h</td>
<td></td>
<td>Activated sludge, domestic</td>
<td>Study report (1989)</td>
<td>OECD Guideline 209</td>
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<tr>
<td>2855-13-2</td>
<td>3-aminomethyl-3,5,5-trimethylcyclohexylamine</td>
<td>Acute fish toxicity</td>
<td>LC50 110 mg/l</td>
<td>96 h</td>
<td></td>
<td>Leuciscus idus</td>
<td>Study report (1993)</td>
<td>EU Method C.1</td>
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<tr>
<td></td>
<td></td>
<td>Acute algae toxicity</td>
<td>ER50 37 mg/l</td>
<td>72 h</td>
<td></td>
<td>Desmodesmus subspicatus</td>
<td>Study report (1993)</td>
<td>EU Method C.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Acute crustacea toxicity</td>
<td>EC50 23 mg/l</td>
<td>48 h</td>
<td></td>
<td>Daphnia magna</td>
<td>Study report (2002)</td>
<td>OECD Guideline 202</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Crustacea toxicity</td>
<td>NOEC 3 mg/l</td>
<td>21 d</td>
<td></td>
<td>Daphnia magna</td>
<td>Study report (1993)</td>
<td>other: OECD 202, part 2</td>
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<tr>
<td>1477-55-0</td>
<td>m-phenylenebis(methylamine)</td>
<td>Acute fish toxicity</td>
<td>LC50 &gt; 100 mg/l</td>
<td>96 h</td>
<td></td>
<td>Oncorhynchus mykiss</td>
<td>REACh Registration Dossier</td>
<td>OECD Guideline 203</td>
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<tr>
<td></td>
<td></td>
<td>Acute algae toxicity</td>
<td>ER50 12 mg/l</td>
<td>72 h</td>
<td></td>
<td>Desmodesmus subspicatus</td>
<td>REACh Registration Dossier</td>
<td>OECD Guideline 201</td>
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<tr>
<td></td>
<td></td>
<td>Acute crustacea toxicity</td>
<td>EC50 15,2 mg/l</td>
<td>48 h</td>
<td></td>
<td>Daphnia magna (Big water flea)</td>
<td>REACh Registration Dossier</td>
<td>OECD Guideline 211</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Crustacea toxicity</td>
<td>NOEC 4,7 mg/l</td>
<td>21 d</td>
<td></td>
<td>Daphnia magna</td>
<td>REACh Registration Dossier</td>
<td>OECD Guideline 211</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Acute bacteria toxicity</td>
<td>(&gt; 1000 mg/l)</td>
<td>0,5h</td>
<td></td>
<td>Activated sludge from laboratory wastewater plant</td>
<td>Study report (2004)</td>
<td>OECD Guideline 209</td>
</tr>
<tr>
<td>919-30-2</td>
<td>3-aminopropyltriethoxysilane</td>
<td>Acute fish toxicity</td>
<td>LC50 &gt; 934 mg/l</td>
<td>96 h</td>
<td></td>
<td>Danio rerio</td>
<td>REACh Registration Dossier</td>
<td>OECD Guideline 203</td>
</tr>
</tbody>
</table>
Acute algae toxicity  | ErC50  > 1000 mg/l  | 72 h Desmodesmus subspicatus  | REACh Registration Dossier  | EU Method C.3 |
---|---|---|---|---|
Acute crustacea toxicity  | EC50  331 mg/l  | 48 h Daphnia magna  | REACh Registration Dossier  | OECD Guideline 202 |
Crustacea toxicity  | NOEC  >= 1 mg/l  | 21 d Daphnia magna  | REACh Registration Dossier  | The study consisted of triplicate runs o |
Acute bacteria toxicity  | (180 mg/l)  | 3 h activated sludge of a predominantly domestic sewag  | Study report (2013)  | OECD Guideline 209 |

12.2. Persistence and degradability

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Chemical name</th>
<th>Method</th>
<th>Value</th>
<th>d</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>100-51-6</td>
<td>benzyl alcohol</td>
<td>OECD 301A/ ISO 7827/ EEC 92/69/V, C.4-A</td>
<td>95 - 97%</td>
<td>21</td>
<td>Readily biodegradable (according to OECD criteria).</td>
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<tr>
<td>2855-13-2</td>
<td>3-aminomethyl-3,5,5-trimethylcyclohexylamine</td>
<td>OECD 301A/ ISO 7827/ EEC 92/69/V, C.4-A</td>
<td>8%</td>
<td>28</td>
<td>Not readily biodegradable (according to OECD criteria)</td>
</tr>
<tr>
<td>1477-55-0</td>
<td>m-phenylenebis(methylamine)</td>
<td>OECD 301B/ ISO 9439/ EEC 92/69/V, C.4-C</td>
<td>49%</td>
<td>28</td>
<td>Not readily biodegradable (according to OECD criteria)</td>
</tr>
<tr>
<td>919-30-2</td>
<td>3-aminopropyltriethoxysilane</td>
<td>68</td>
<td>28</td>
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</tbody>
</table>

12.3. Bioaccumulative potential

No information available.

Partition coefficient n-octanol/water

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Chemical name</th>
<th>Log Pow</th>
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<td>100-51-6</td>
<td>benzyl alcohol</td>
<td>1</td>
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<tr>
<td>2855-13-2</td>
<td>3-aminomethyl-3,5,5-trimethylcyclohexylamine</td>
<td>0.99</td>
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<tr>
<td>1477-55-0</td>
<td>m-phenylenebis(methylamine)</td>
<td>ca. 0.18</td>
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<td>919-30-2</td>
<td>3-aminopropyltriethoxysilane</td>
<td>1.7</td>
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BCF

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Chemical name</th>
<th>BCF</th>
<th>Species</th>
<th>Source</th>
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<tbody>
<tr>
<td>100-51-6</td>
<td>benzyl alcohol</td>
<td>1,371</td>
<td>QSAR model</td>
<td><a href="http://epa.gov/oppt/">http://epa.gov/oppt/</a></td>
</tr>
<tr>
<td>2855-13-2</td>
<td>3-aminomethyl-3,5,5-trimethylcyclohexylamine</td>
<td>6.92</td>
<td>fish</td>
<td>SAR and QSAR in Envi</td>
</tr>
<tr>
<td>1477-55-0</td>
<td>m-phenylenebis(methylamine)</td>
<td>3,16</td>
<td>no data</td>
<td>Validated suite of c</td>
</tr>
<tr>
<td>919-30-2</td>
<td>3-aminopropyltriethoxysilane</td>
<td>3.4</td>
<td>Cyprinus carpio</td>
<td>REACh Registration D</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. Endocrine disrupting properties
No information available.

12.7. Other adverse effects
No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Disposal recommendations
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 2735
14.2. UN proper shipping name: AMINES, LIQUID, CORROSIVE, N.O.S.
(3-aminomethyl-3,5,5-trimethylcyclohexylamine, m-phenylenebis(methylamine))
14.3. Transport hazard class(es): 8
14.4. Packing group: II
Hazard label: 8
Classification code: C7
Special Provisions: 274
Limited quantity: 1 L
Excepted quantity: E2
Transport category: 2
Hazard No: 80
Tunnel restriction code: E

Inland waterways transport (ADN)

14.1. UN number: UN 2735
14.2. UN proper shipping name: AMINES, LIQUID, CORROSIVE, N.O.S.
(3-aminomethyl-3,5,5-trimethylcyclohexylamine, m-phenylenebis(methylamine))
14.3. Transport hazard class(es): 8
14.4. Packing group: II
Hazard label: 8
Classification code: C7
Special Provisions: 274
Marine transport (IMDG)

14.1. UN number: UN 2735
14.2. UN proper shipping name: AMINES, LIQUID, CORROSIVE, N.O.S. (3-aminomethyl-3,5,5-trimethylcyclohexylamine, m-phenylenebis(methylamine))

14.3. Transport hazard class(es): 8
14.4. Packing group: II
Hazard label: 8
Special Provisions: 274
Limited quantity: 1 L
Excepted quantity: E2
EmS: F-A, S-B
Segregation group: 18 - alkalis

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number: UN 2735
14.2. UN proper shipping name: AMINES, LIQUID, CORROSIVE, N.O.S. (3-aminomethyl-3,5,5-trimethylcyclohexylamine, m-phenylenebis(methylamine))

14.3. Transport hazard class(es): 8
14.4. Packing group: II
Hazard label: 8
Special Provisions: A3 A803
Limited quantity Passenger: 0.5 L
Passenger LQ: Y840
Excepted quantity: E2
IATA-packing instructions - Passenger: 851
IATA-max. quantity - Passenger: 1 L
IATA-packing instructions - Cargo: 855
IATA-max. quantity - Cargo: 30 L

14.5. Environmental hazards
ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user
No information available.

14.7. Maritime transport in bulk according to IMO instruments
No information available.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
EU regulatory information
Restrictions on use (REACH, annex XVII):

Information according to 2012/18/EU

Not subject to 2012/18/EU (SEVESO III)

National regulatory information

Water hazard class (D):

2 - obviously hazardous to water

15.2. Chemical safety assessment

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

- benzyl alcohol
- 3-aminomethyl-3,5,5-trimethylcyclohexylamine
- m-phenylenebis(methylamine)
- 3-aminopropyltriethoxysilane

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)
- CLP: Classification, labelling and Packaging
- REACH: Registration, Evaluation and Authorization of Chemicals
- GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals
- UN: United Nations
- CAS: Chemical Abstracts Service
- DNEL: Derived No Effect Level
- DMEL: Derived Minimal Effect Level
- PNEC: Predicted No Effect Concentration
- ATE: Acute toxicity estimate
- LC50: Lethal concentration, 50%
- LD50: Lethal dose, 50%
- LL50: Lethal loading, 50%
- EL50: Effect loading, 50%
- EC50: Effective Concentration 50%
- ErC50: Effective Concentration 50%, growth rate
- NOEC: No Observed Effect Concentration
- BCF: Bio-concentration factor
- PBT: persistent, bioaccumulative, toxic
- vPvB: very persistent, very bioaccumulative
- MARPOL: International Convention for the Prevention of Marine Pollution from Ships
- IBC: Intermediate Bulk Container
- SVHC: Substance of Very High Concern
Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]

<table>
<thead>
<tr>
<th>Classification</th>
<th>Classification procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Tox. 4; H302</td>
<td>Calculation method</td>
</tr>
<tr>
<td>Acute Tox. 4; H332</td>
<td>Calculation method</td>
</tr>
<tr>
<td>Skin Corr. 1; H314</td>
<td>Calculation method</td>
</tr>
<tr>
<td>Eye Dam. 1; H318</td>
<td>Calculation method</td>
</tr>
<tr>
<td>Skin Sens. 1; H317</td>
<td>Calculation method</td>
</tr>
<tr>
<td>Aquatic Chronic 3; H412</td>
<td>Calculation method</td>
</tr>
</tbody>
</table>

Relevant H and EUH statements (number and full text)
- **H302**: Harmful if swallowed.
- **H302+H332**: Harmful if swallowed or if inhaled.
- **H312**: Harmful in contact with skin.
- **H314**: Causes severe skin burns and eye damage.
- **H317**: May cause an allergic skin reaction.
- **H318**: Causes serious eye damage.
- **H332**: Harmful if inhaled.
- **H411**: Toxic to aquatic life with long lasting effects.
- **H412**: Harmful to aquatic life with long lasting effects.
- **EUH071**: Corrosive to the respiratory tract.

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.)*