Material Safety Data Sheet

3-chloro-2hydroxypropyl trimethyl ammonium chloride

Section 1: Chemical Product and Company Identification

【Chemical name】3-chloro-2hydroxypropyl trimethyl ammonium chloride
【CAS】3327-22-8
【EINECS No】222-048-3
【Molecular Formula】C6H15Cl2NO

Contact Information for Emergency: (0086) 551 65418678

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Section 2: Composition and Information on Ingredients

<table>
<thead>
<tr>
<th>Product Name</th>
<th>CAS#</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-chloro-2hydroxypropyl trimethyl ammonium chloride</td>
<td>3327-22-8</td>
<td>60 WT. %</td>
</tr>
</tbody>
</table>

Section 3: Hazards Identification

SPECIAL INDICATION OF HAZARDS TO HUMANS AND THE ENVIRONMENT
Not hazardous according to Directive 67/548/EEC.

Section 4: First Aid Measures

AFTER INHALATION
If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.
AFTER SKIN CONTACT
In case of contact, immediately wash skin with soap and copious
amounts of water.

AFTER EYE CONTACT
In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

AFTER INGESTION
If swallowed, wash out mouth with water provided person is conscious. Call a physician.

Section 5: Fire and Explosion Data

EXTINGUISHING MEDIA
Suitable: Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

SPECIAL RISKS
Specific Hazard(s): Emits toxic fumes under fire conditions.

SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS
Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Section 6: Accidental Release Measures

METHODS FOR CLEANING UP
Absorb on sand or vermiculite and place in closed containers for disposal.
Ventilate area and wash spill site after material pickup is complete.

Section 7: Handling and Storage

HANDLING
Directions for Safe Handling: Avoid inhalation.
Avoid contact with eyes, skin, and clothing.
Avoid prolonged or repeated exposure.

STORAGE
Conditions of Storage: Keep tightly closed.

Section 8: Exposure Controls/Personal Protection

ENGINEERING CONTROLS
Safety shower and eye bath. Mechanical exhaust required.

GENERAL HYGIENE MEASURES
Wash thoroughly after handling.

PERSONAL PROTECTIVE EQUIPMENT
Respiratory Protection: Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Respiratory protection is not required. Where protection is desired, use multi-purpose combination (US) or type
ABEK (EN 14387) respirator cartridges.
Hand Protection: Protective gloves.
Eye Protection: Chemical safety goggles.

Section 9: Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance Physical State</td>
<td>Liquid</td>
</tr>
<tr>
<td>Property Value At Temperature or Pressure</td>
<td>pH 2.0. - 6.0.</td>
</tr>
<tr>
<td>BP/BP Range</td>
<td>N/A</td>
</tr>
<tr>
<td>MP/MP Range</td>
<td>188,000 °C</td>
</tr>
<tr>
<td>Flash Point</td>
<td>113,000 °C Method: closed cup</td>
</tr>
<tr>
<td>Flammability</td>
<td>N/A</td>
</tr>
<tr>
<td>Autoignition Temp</td>
<td>N/A</td>
</tr>
<tr>
<td>Oxidizing Properties</td>
<td>N/A</td>
</tr>
<tr>
<td>Explosive Properties</td>
<td>N/A</td>
</tr>
<tr>
<td>Explosion Limits</td>
<td>N/A</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>N/A</td>
</tr>
<tr>
<td>SG/Density</td>
<td>1,1540 g/cm3</td>
</tr>
<tr>
<td>Partition Coefficient</td>
<td>N/A</td>
</tr>
<tr>
<td>Viscosity</td>
<td>N/A</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>N/A</td>
</tr>
<tr>
<td>Saturated Vapor Conc.</td>
<td>N/A</td>
</tr>
<tr>
<td>Evaporation Rate</td>
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<tr>
<td>Bulk Density</td>
<td>N/A</td>
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<tr>
<td>Decomposition Temp.</td>
<td>N/A</td>
</tr>
<tr>
<td>Solvent Content</td>
<td>N/A</td>
</tr>
<tr>
<td>Water Content</td>
<td>N/A</td>
</tr>
<tr>
<td>Surface Tension</td>
<td>N/A</td>
</tr>
<tr>
<td>Conductivity</td>
<td>N/A</td>
</tr>
<tr>
<td>Miscellaneous Data</td>
<td>N/A</td>
</tr>
<tr>
<td>Solubility</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Section 10: Stability and Reactivity Data

STABILITY
Stable: Stable.
Conditions to Avoid: Keep solution acidic (pH < 6).
Materials to Avoid: Strong oxidizing agents.
HAZARDOUS DECOMPOSITION PRODUCTS
HAZARDOUS POLYMERIZATION
Hazardous Polymerization: Will not occur
### Section 11: Toxicological Information

RTECS NUMBER: BP5275400

**SIGNS AND SYMPTOMS OF EXPOSURE**

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

**ROUTE OF EXPOSURE**

- **Skin Contact:** May cause skin irritation.
- **Skin Absorption:** May be harmful if absorbed through the skin.
- **Eye Contact:** May cause eye irritation.
- **Inhalation:** Material may be irritating to mucous membranes and upper respiratory tract. May be harmful if inhaled.
- **Ingestion:** May be harmful if swallowed.

### Section 12: Ecological Information

No data available.

### Section 13: Disposal Considerations

**SUBSTANCE DISPOSAL**

Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

### Section 14: Transport Information

**RID/ADR**
Non-hazardous for road transport.

**IMDG**
Non-hazardous for sea transport.

**IATA**
Non-hazardous for air transport.

### Section 15: Other Regulatory Information

Not hazardous according to Directive 67/548/EEC.

**COUNTRY SPECIFIC INFORMATION**

- **Germany**
  - **WGK:** 2
  - **Self-Classification**
## Section 16: Other Information

| References: | Not available. |
| Other Special Considerations: | Not available. |
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| Last Updated: | 05/21/2013 12:00 PM |

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