Eye Exposure
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.

Section 5 - Fire Fighting Measures

Autoignition Temp: N/A

Extinguishing Media
Suitable
- Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

Firefighting
Protective Equipment
- Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Specific Hazard(s)
- Emits toxic fumes under fire conditions.

Section 6 - Accidental Release Measures

Methods for Cleaning Up
- Sweep up, place in an approved and shielded waste disposal receptacle. Avoid breathing dust. Ventilate area and wash spill site after material pickup is complete.

Section 7 - Handling and Storage

Handling
- User Exposure
- Avoid inhalation. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

Storage
- Suitable
- Keep tightly closed.

Special Requirements
- Hygroscopic.

Section 8 - Exposure Controls / PPE

Engineering Controls
- Safety shower and eye bath. Mechanical exhaust required.

Personal Protective Equipment
- Respiratory
- Wear dust mask.
- Hand
- Protective gloves.
- Eye
- Chemical safety goggles.
### General Hygiene Measures
Wash thoroughly after handling.

### Section 9 - Physical/Chemical Properties

<table>
<thead>
<tr>
<th>Appearance</th>
<th>Physical State</th>
<th>Color</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Solid</td>
<td>White</td>
<td>Crystalline</td>
</tr>
</tbody>
</table>

- **Molecular Weight:** 185.65 AMU
- **pH:** 4.0 - 5.5
- **BP/IP Range:** N/A
- **MP/IP Range:** 178 °C
- **Freezing Point:** N/A
- **Vapor Pressure:** N/A
- **Vapor Density:** N/A
- **Saturated Vapor Conc.:** N/A
- **SG/Density:** N/A
- **Bulk Density:** N/A
- **Color Threshold:** N/A
- **Volatility:** N/A
- **VOC Content:** N/A
- **Water Content:** N/A
- **Solvent Content:** N/A
- **Evaporation Rate:** N/A
- **Viscosity:** N/A
- **Partition Coefficient:** N/A
- **Decomposition Temp.:** N/A
- **Flash Point °F:** N/A
- **Flash Point °C:** N/A
- **Explosion Limits:** N/A
- **Flammability:** N/A
- **Autoignition Temp:** N/A
- **Solubility:** N/A

N/A = not available

### Section 10 - Stability and Reactivity

**Stability:**
- Stable
- Stable.

**Materials to Avoid:**
- Acids, Acid chlorides, Acid anhydrides, Oxidizing agents.

**Hazardous Decomposition Products**

**Hazardous Decomposition Products**
- Thermal decomposition may produce carbon monoxide, carbon dioxide, and nitrogen oxides. Hydrogen chloride gas.

### Section 11 - Toxicological Information

#### 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**
  - May be harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract.
- **Ingestion**
  - May be harmful if swallowed.

**Target Organ(s) or System(s)**
Liver. Kidneys.

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

- **RTECS Number:** KL6346500

**Chronic Exposure - Carcinogenic**
- **Mouse - Oral:** 12533 MG/KG: 2.9Y C
- **Mouse - Oral:** 123 MG/KG: 2.9Y C

### Section 12 - Ecological Information

No data available.

### Section 13 - Disposal Considerations

**Appropriate Method of Disposal of Substance or Preparation**
- Contact a licensed professional waste disposal service to dispose of this material.
- Dispose 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

#### DOT
- **Proper Shipping Name:** None
- **Non-Hazardous for Transport:** This substance is considered to be non-hazardous for transport.

#### IATA
- **Non-Hazardous for Air Transport:** Non-hazardous for air transport.

### Section 15 - Regulatory Information

- **EU Additional Classification**
  - **Safety Statements:** S: 22 24/25
    - Do not breathe dust. Avoid contact with skin and eyes.
Section 16 - Other Information

Disclaimer
For R&D use only. Not for drug, household or other uses.

Warranty
The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2005 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.