Section 5 - Fire Fighting Measures

Flash Point: 220 °F 110 °C

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

Procedure(s) of Personal Precaution(s)
Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves.

Methods for Cleaning Up
Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

Section 7 - Handling and Storage

Handling
User Exposure
Do not breathe dust. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

Storage
Suitable
Keep tightly closed.

Section 8 - Exposure Controls / PPE

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

Personal Protective Equipment
Respiratory
Government approved respirator.

Hand
Compatible chemical-resistant gloves.

Eye
Chemical safety goggles.

General Hygiene Measures
Wash thoroughly after handling.

Section 9 - Physical/Chemical Properties

Appearance
Solid

Physical State: Color: Form: White Powder

Sigma Chemical - M1254
Sigma-Aldrich Corporation
www.sigma-aldrich.com
Molecular Weight: 209.26 AMU

pH: 2.5 - 4.0
BP/BP Range: N/A
MVP/RVP Range: 277 °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
Odor 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: 220°F
Flash Point °C: 110°C
Explosion Limits: N/A
Flammability: N/A
Autoignition Temp: N/A
Solubility: Soluble in water: 1 M in H2O, 20°C, complete, colorless

N/A = not available

Section 10 - Stability and Reactivity

Stability
- Stable
- Stable
- Materials to Avoid: Strong oxidizing agents, strong bases.

Hazardous Decomposition Products
- Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, nitrogen oxides, sulfur oxides.

Hazardous Polymerization
- Hazardous Polymerization: Will not occur.

Section 11 - Toxicological Information

Route of Exposure
- Skin Contact: Causes skin irritation.
- Skin Absorption: May be harmful if absorbed through the skin.
- Eye Contact: Causes eye irritation.
- Inhalation: Material is irritating to mucous membranes and upper respiratory tract. May be harmful if inhaled.

Ingestion
- May be harmful if swallowed.

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

RTECS Number: QE9104530

Toxicity Data
- Oral: > 316 mg/kg (LD50)

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.

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

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
- Symbol of Danger: Xi
- Indication of Danger: Irritant
- Risk Statements: R: 36/37/38
- Irritating to eyes, respiratory system and skin.
- Safety Statements: S: 26 36
- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.

US Classification and Label Text
- Indication of Danger: Irritant
- Risk Statements: Irritating to eyes, respiratory system and skin.
- Safety Statements: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.

United States Regulatory Information
- SARA Listed: No
- TSCA Inventory Item: Yes
- Canada Regulatory Information
- WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPIC, and the MSDS contains all the information required by the CPIC.
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 2006 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.