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MSDS Information for:  
Cat. #OP-0006  
*EpiQuik™* Total Histone Extraction HT Kit

A Material Safety Data Sheet (MSDS) for the product as a whole is not required, as it is a kit consisting of individual components.

The following components are defined as hazardous (See MSDS page)

Pre-lysis buffer	10 ml
Lysis buffer	20 ml
Balance buffer	8 ml
DTT solution	20 $\mu$ l

The following components are defined as non-hazardous and do not require MSDS. The products do not contain any hazardous components above 1% or any carcinogens above 0.1% as defined in 29 CFR 1910. 1200, the OSHA Hazard Communication Standard.

### Material Safety Data Sheet

#### Section 1. Identification

Product Name *EpiQuik™* Total Histone Extraction Kit  
Product No. OP-0006  
Supplier Epigentek Group Inc.  
110 Bi County Blvd. Ste 122  
Farmingdale, NY 11735

In Case of Emergency 631-755-0888

#### Section 2. Composition, Information on Ingredients

Ingredient Name: Pre-lysis buffer Ingredient 1

Cas# 9002-93-1

#### Section 3. Hazards Identification

Acute toxicity, Category 4, Oral, H302  
Skin irritation, Category 2, H315

Serious eye damage, Category 1, H318

#### **Section 4. First Aid Measures**

Description of first-aid measures

Inhalation After inhalation: fresh air.

Skin contact In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

Eye contact After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist. Remove contact lenses.

Ingestion After swallowing: caution if victim vomits. Risk of aspiration! Keep airways free. Pulmonary failure possible after aspiration of vomit. Call a physician immediately. Never give anything by mouth to an unconscious person. Most important symptoms and effects, both acute and delayed Dermatitis, Vomiting SAFETY DATA SHEET according to the (US) Hazard Communicate

#### **Section 5. Fire Fight Measures**

Extinguishing media Suitable extinguishing media

Water, Foam, Carbon dioxide (CO<sub>2</sub>), Dry powder

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

Special hazards arising from the substance or mixture Combustible.

Vapors are heavier than air and may spread along floors.

Forms explosive mixtures with air on intense heating.

Development of hazardous combustion gases or vapors possible in the event of fire. Advice for firefighters

Special protective equipment for fire-fighters Stay in danger area only with self-contained breathing apparatus.

Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing. Further information Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

#### **Section 6. Accident Release Measures**

##### **Personal precautions, protective equipment and emergency procedures**

Advice for non-emergency personnel: Do not breathe vapors, aerosols.

Avoid substance contact. Ensure adequate ventilation.

Evacuate the danger area, observe emergency procedures, consult an expert.

Advice for emergency responders:

Protective equipment see section 8.

##### **Environmental precautions**

Do not let product enter drains.

##### **Methods and materials for containment and cleaning up Cover drains.**

Collect, bind, and pump off spills.

Observe possible material restrictions (see sections 7 and 10). Take up with liquid-absorbent material (e.g. Chemisorb®).

Dispose of properly. Clean up affected area.

#### **Section 7. Handling and Storage**

## Precautions for safe handling

Observe label precautions.

## Conditions for safe storage, including any incompatibilities

Tightly closed. Store at +15°C to +25°C (+59°F to +77°F).

## Section 8. Exposure Control and Personal Protection

Exposure limit(s)

Contains no substances with occupational exposure limit values.

Engineering measures

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

Individual protection measures Protective clothing should be selected specifically for the workplace, depending on concentration and quantity of the hazardous substances handled. The chemical resistance of the protective equipment should be inquired at the respective supplier.

Hygiene measures

Immediately change contaminated clothing.

Apply skin- protective barrier cream. Wash hands and face after working with substance. Eye/face protection

Tightly fitting safety goggles

Hand protection

full contact: Glove material: butyl-rubber Glove thickness: 0.7 mm Break through time: > 480 min

splash contact: Glove material: butyl-rubber Glove thickness: 0.7 mm Break through time: > 480 min

The protective gloves to be used must comply with the specifications of EC Directive 89/686/EEC and the related standard EN374, for example KCL 898 Butoject® (full contact), KCL 898 Butoject® (splash contact).

The breakthrough times stated above were determined by KCL in laboratory tests acc. to EN374 with samples of the recommended glove types.

This recommendation applies only to the product stated in the safety data sheet and supplied by us as well as to the purpose specified by us. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: [www.kcl.de](http://www.kcl.de)).

Other protective equipment: protective clothing

Respiratory protection required when vapors/aerosols are generated. Recommended Filter type: Filter A-(P2)

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are performed according to the instructions of the producer. These measures have to be properly documented.

## Section 9. Physical and Chemical Properties

Physical state liquid Color colorless

Odor weak Odor Threshold No information available.

pH 5.0 - 8.0 at 10 g/l 68 °F (20 °C)

Solidification point 43 °F (6 °C) Boiling point/boiling range > 392 °F (> 200 °C) at 1,013 hPa

Flash point 484 °F (251 °C) at 1,013 hPa Method: ASTM D 93

Evaporation rate No information available.

Flammability (solid, gas) No information available.

Lower explosion limit No information available.

Upper explosion limit No information available.

Vapor pressure < 0.01 hPa at 68 °F (20 °C)

Relative vapor density No information available.  
Density 1.07 g/cm<sup>3</sup> at 68 °F (20 °C)  
Relative density No information available.  
Water solubility at 68 °F (20 °C) soluble  
Partition coefficient: noctanol/water log Pow: 2.7 (20 °C) (calculated) (External MSDS) Bioaccumulation is not expected.  
Autoignition temperature No information available.  
Decomposition temperature No information available.  
Viscosity, dynamic No information available.  
Explosive properties Not classified as explosive.  
Oxidizing properties none  
Cloud point 145 - 156 °F (63 - 69 °C)

## **Section 10. Stability and Reactivity**

### Reactivity

Forms explosive mixtures with air on intense heating. A range from approx. 15 Kelvin below the flash point is to be rated as critical.

### Chemical stability

Upon decomposition in closed containers and tubes risk of bursting due to buildup of overpressure.

### Possibility of hazardous reactions

Violent reactions possible with: Strong oxidizing agents, Strong acids Conditions to avoid Strong heating.

Incompatible materials no information available

Hazardous decomposition products in the event of fire: See section 5.

## **Section 11. Toxicological Information**

### Information on toxicological effects

Likely route of exposure Eye contact, Skin contact

Acute oral toxicity LD50 Rat: 1,900 - 5,000 mg/kg (External MSDS)

Symptoms: Vomiting, Irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract.,

Risk of aspiration upon vomiting.,

Aspiration may cause pulmonary edema and pneumonitis.

Acute inhalation toxicity Symptoms:

Possible damages: , mucosal irritations

Acute dermal toxicity LD50 Rabbit: > 3,000 mg/kg (External MSDS)

Skin irritation Rabbit Result: irritating OECD Test Guideline 404 The value is given in analogy to the following substances: 4-(1,1,3,3-tetramethylbutyl)phenol

Causes skin irritation.

Drying-out effect resulting in rough and chapped skin.

Dermatitis Eye irritation Risk of corneal clouding.

Causes serious eye damage.

Sensitization Sensitization test: human Result: negative (External MSDS)

Specific target organ systemic toxicity - single exposure

The substance or mixture is not classified as specific target organ toxicant, single exposure. Specific target organ systemic toxicity - repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Aspiration hazard Regarding the available data the classification criteria are not fulfilled. Carcinogenicity

IARC No ingredient of this product present at levels greater than or equal to 0.1% is identified as

probable, possible or confirmed human carcinogen by IARC. OSHA No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

ACGIH No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

Further information After absorption:

We have no description of any toxic symptoms.

Other dangerous properties can not be excluded.

SAFETY DATA SHEET according to the (US) Hazard Communication Standard

Handle in accordance with good industrial hygiene and safety practice.

## Section 12. Ecological Information

Ecotoxicity Toxicity to fish

semi-static test LC50 *Leuciscus idus* (Golden orfe): 0.26 mg/l; 96 h

Analytical monitoring: yes OECD Test Guideline 203

The value is given in analogy to the following substances: 4-(1,1,3,3-tetramethylbutyl)phenol Toxicity to daphnia and other aquatic invertebrates static test EC50 *Daphnia magna* (Water flea): 0.011 mg/l; 48 h (ECOTOX Database)

The value is given in analogy to the following substances: 4-(1,1,3,3-tetramethylbutyl)phenol

Toxicity to algae static test EC50 *Pseudokirchneriella subcapitata* (green algae): 1.9 mg/l; 96 h (ECHA)

The value is given in analogy to the following substances: 4-(1,1,3,3-tetramethylbutyl)phenol

Toxicity to fish (Chronic toxicity) flow-through test *Danio rerio* (zebra fish): 0.012 mg/l Analytical monitoring: yes OECD Test Guideline 210

The value is given in analogy to the following substances: 4-(1,1,3,3-tetramethylbutyl)phenol Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) semi-static test NOEC *Daphnia magna* (Water flea): 0.03 mg/l; 21 d

Analytical monitoring: yes OECD Test Guideline 202

The value is given in analogy to the following substances: 4-(1,1,3,3-tetramethylbutyl)phenol

Persistence and degradability Biodegradability 22 %; 28 d; aerobic OECD Test Guideline 301C Not readily biodegradable.

Bioaccumulative potential Partition coefficient: n-octanol/water log Pow: 2.7 (20 °C) (calculated) (External MSDS)

Bioaccumulation is not expected.

Mobility in soil No information available.

Additional ecological information

Causes endocrine disruption.

Discharge into the environment must be avoided.

## Section 13. Disposal Considerations

The information presented only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. Disposal should be in accordance with applicable regional, national and local laws and regulations.

## Section 14. Transport Information

Land transport (DOT) UN number UN 3082

Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (OCTYLPHENOXPOLYETHOXYETHANOL)

Class 9 Packing group III Environmentally hazardous -- Air transport (IATA) UN number UN 3082

Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (OCTYLPHENOXPOLYETHOXYETHANOL)

Class 9 Packing group III Environmentally hazardous -- Special precautions for user no Sea transport (IMDG) UN number UN 3082 Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (OCTYLPHENOXYPOLYETHOXYETHANOL)  
Class 9 Packing group III Environmentally hazardous -- Special precautions for user yes EmS F-A S-F

### Section 15. Regulatory Information

#### OSHA Hazard Communication Evaluation

Meets criteria for hazardous material, as defined by 29 CFR 1910.1200

### Section 16. Other Information

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## Material Safety Data Sheet

### Section 1. Identification

**Product Name** EpiQuik™ Total Histone Extraction HT Kit  
**Product No.** OP-0006  
**Supplier** Epigentek Group Inc.  
110 Bi County Blvd. Ste 122  
Farmingdale, NY 11735

**In Case of Emergency** 631-755-0888

### Section 2. Composition, Information on Ingredients

#### Ingredient Name

Lysis buffer ingredient 1

**Cas#** 7647-01-0

### Section 3. Hazards Identification

Label precautionary statements

Toxic

Toxic by inhalation

Causes burns

Irritating to respiratory system

Toxic if ingested

Eye contact may cause severe burns

#### Section 4. First Aid Measures

- Inhalation:** Remove to fresh air. If breathing is difficult, give oxygen. Get medical attention immediately.
- Ingestion:** Give large quantities of water or milk if available. Never give anything by mouth to an unconscious person. Get medical attention immediately.
- Skin Contact:** In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.
- Eye Contact:** Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

#### Section 5. Fire Fight Measures

- Fire:** Not considered to be a fire hazard. May react with metals or heat to release flammable hydrogen gas.
- Explosion:** Not considered to be an explosion hazard.
- Fire Extinguishing Media:** Water or water spray. Neutralize with soda ash or slaked lime.
- Special Information:** In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

#### Section 6. Accident Release Measures

- General Information:** Use proper personal protective equipment as indicated in Section 8
- Spills/Leaks:** Wear respirator, chemical safety goggles, rubber boots and heavy rubber gloves. Absorb onto vermiculite and hold for waste disposal. Ventilate area and wash spill site after material pickup is complete.

#### Section 7. Handling and Storage

- Handling:** Wear appropriate NIOSH/MSHHA approved respirator, chemical resistant gloves, safety goggles and other protective clothing. Mechanical Exhaust required.
- Storage:** Store in a cool, dry place. Store in a tightly closed container

#### Section 8. Exposure Control and Personal Protection

- Engineering Controls:** Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits
- Eye:** Wear safety glasses and chemical goggles if splashing is possible
- Skin:** Wear appropriate protective gloves to prevent skin exposure
- Clothing:** Wear appropriate protective clothing to minimize contact with skin
- Respirators:** Following the OSHA respirator regulations found in 29CFR 1910.134 or European Standard EN 149.

#### Section 9. Physical and Chemical Properties

- Physical State:** Liquid
- Appearance:** Clear colorless

**Solubility:** Infinitely soluble.  
**Density:** 1.05 @ 15°C (59F)  
**pH:** 2.02 (0.01 N)  
**% Volatiles by Volume @ 21 °C:** 100  
**Boiling Point:** 101 – 103°C (214 – 217°F)  
**Melting Point:** No information found.  
**Vapor Density (Air=1):** No information found.  
**Vapor Pressure (mm Hg):** No information found.  
**Evaporation Rate (BuAc=1):** No information found.

## Section 10. Stability and Reactivity

**Stability:** Stable under ordinary conditions of use and storage.  
**Hazardous Decomposition Products:** When heated to decomposition, emits toxic hydrogen chloride fumes and will react with water or steam to produce heat and toxic and corrosive fumes. Thermal oxidative decomposition produces toxic chlorine fumes and explosive hydrogen gas.  
**Hazardous Polymerization:** Will not occur.  
**Incompatibilities:** A strong mineral acid, concentrated hydrochloric acid is highly reactive with strong bases, metals, metal oxides, hydroxides, amines, carbonates and other alkaline materials. Incompatible with materials such as cyanides, sulfides, sulfites, and formaldehyde.  
**Conditions to Avoid:** Heat, direct sunlight.

## Section 11. Toxicological Information

Hydrochloric acid: Inhalation rat LC50: 3124 ppm/1H; Oral rabbit LD50: 900 mg/kg. Investigated as a tumorigen, mutagen, reproductive effector.

-----\Cancer Lists\-----

Ingredient	---NTP Carcinogen---		IARC Category
	Known	Anticipated	
Hydrogen Chloride (7647-01-0)	No	No	3
Water (7732-18-5)	No	No	None

## Section 12. Ecological Information

No information available

## Section 13. Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations

## Section 14. Transport Information

No information available

## Section 15. Regulatory Information

Chemical Inventory Status  
 Ingredient TSCA EC Japan Australia



Hydrogen Chloride (7647-01-0)	Yes	Yes	Yes	Yes
Water (7732-18-5)	Yes	Yes	Yes	Yes

## Section 16. Other Information

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# Material Safety Data Sheet

## Section 1. Identification

**Product Name** EpiQuik™ Total Histone Extraction HT Kit  
**Product No.** OP-0006  
**Supplier** Epigentek Group Inc  
 110 Bi County Blvd. Ste 122  
 Farmingdale, NY 11735

**In Case of Emergency** 631-755-0888

## Section 2. Composition, Information on Ingredients

### Ingredient Name

Balance buffer ingredient-1  
 Cas# 1310-73-2

## Section 3. Hazards Identification

### Emergency Overview

Causes severe irritation and burns. Harmful if swallowed. Avoid breathing vapor or dust. Use with adequate ventilation. Avoid contact with eyes, skin, and clothes. Wash hands thoroughly after handling. Keep container closed.

### Potential Health Effects

**Inhalation:** Severe irritant. Effects from inhalation of mist vary from mild irritation to serious damage of the upper respiratory tract, depending on severity of exposure. Symptoms may include sneezing, sore throat, or runny nose. Severe pneumonitis may occur.

**Ingestion:** Corrosive! Swallowing may cause severe burns of mouth, throat, and stomach. Severe scarring of tissue and death may result. Symptoms may include bleeding, vomiting, diarrhea, and decrease of blood pressure. Damage may appear days after exposure.

**Skin Contact:** Corrosive! Contact with skin can cause irritation or severe burns and scarring with greater exposures.

**Eye Contact:** Corrosive! Causes irritation of eyes, and with greater exposures it can cause burns that may result in permanent impairment of vision, even blindness.

**Chronic Exposure:** Prolonged contact with dilute solutions or dust has a destructive effect upon tissue.

#### Section 4. First Aid Measures

**Inhalation:** Quickly move victim to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen supply. Call a physician.

**Ingestion:** DO NOT INDUCE VOMITING! Give large quantities of water or milk if available. Never give anything by mouth to an unconscious person. Get medical attention immediately.

**Skin Contact:** Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Call a physician, immediately. Wash clothing before reuse.

**Eye Contact:** Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

##### *Note to Physician:*

Perform endoscopy in all cases of suspected sodium hydroxide ingestion. In cases of severe esophageal corrosion, the use of therapeutic doses of steroids should be considered. General supportive measures with continual monitoring of gas exchange, acid-base balance, electrolytes, and fluid intake are also required.

#### Section 5. Fire Fighting Measures

**Fire:** Not considered to be a fire hazard. Hot or molten material can react violently with water. Can react with certain metals, such as aluminum, to generate flammable hydrogen gas.

**Explosion:** May cause fire and explosions when in contact with incompatible materials.

**Extinguishing Media:** Use any appropriate means suitable for extinguishing surrounding fire. Adding water to caustic solution generates large amounts of heat.

**Special Information:** In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus.

#### Section 6. Accidental Release Measures

Ventilate area of leak or spill. Keep unnecessary and unprotected people away from area of spill. Absorb spill with inert material, then place in a chemical waste container. Neutralize with a weak acid.

#### Section 7. Handling and Storage

Keep in a tightly closed container. Protect from physical damage. Store in a cool, dry, ventilated area away from sources of heat, moisture, and incompatibilities. Wash hands thoroughly after handling.

#### Section 8. Exposure Controls/Personal Protection

**Respiratory**

**Protection:** NIOSH/MSHA-approved respirator

**Skin Protection:** Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

**Eye Protection:** Use chemical safety goggles. Maintain eye wash fountain and quick-drench facilities in work area.

## Section 9. Physical and Chemical Properties

**Appearance:** Clear, colorless solution.

**Odor:** Odorless.

**Solubility:** Completely miscible with water.

**pH:** 12.0

**% Volatiles** No information found.

**Boiling Point:** Information not available

**Melting Point:** Not applicable

**Vapor Density** No information found.

**Vapor Pressure:** Information not available.

**Evaporation**

**Rate:** No information found.

## Section 10. Stability and Reactivity

**Stability:** Stable under ordinary conditions of use and storage.

**Hazardous Decomposition:** Not established.

**Hazardous Dolymerization:** Will not occur.

**Materials to Avoid:** Acids, flammable liquids, organic halogens, metals, nitrocompounds.

**Conditions to Avoid:** Heat, incompatibles.

## Section 11. Toxicological Information

**Irritation Data:** Skin, rabbit: 500 mg/24H severe; eye rabbit: 50 ug/24H severe.

**Carcinogen:** Not considered to be carcinogenic by ACGIH and IARC

## Section 12. Ecological Information

**Environmental Fate:** No information found.

**Environmental Toxicity:** No information found.

## Section 13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste facility. Although not a listed RCRA hazardous waste, this material may exhibit one or more characteristics of a hazardous waste and require appropriate analysis to determine specific disposal requirements. Processing, use, or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

## Section 14. Transport Information

Information not available.

## Section 15. Regulatory Information

### OSHA Hazard Communication Evaluation

Meets criteria for hazardous material, as defined by 29 CFR 1910.1200

## Section 16. Other Information

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# Material Safety Data Sheet

## Section 1. Identification

**Product Name:** EpiQuik™ Total Histone Extraction HT Kit  
**Product No.** OP-0006  
**Supplier** Epigentek Group Inc.  
110 Bi County Blvd. Ste 122  
Farmingdale, NY 11735

**In Case of Emergency** 631-755-0888

## Section 2. Composition, Information on Ingredients

**Ingredient Name**  
DTT  
**Cas#** 3483-12-3

## Section 3. Hazards Identification

**Inhalation:** Causes irritation to the respiratory tract. Symptoms may include coughing, shortness of breath. Can cause nausea, headache and vomiting. Exposure may result in blood in urine, difficulty breathing, irregular heartbeat, anemia, weakness, drunkenness, bluish skin color, lung congestion, kidney damage, paralysis, convulsions unconsciousness and coma. Thiols may cause central nervous system depression

**Ingestion:** Exposure can cause nausea, headache, vomiting, diarrhea, weakness, drunkenness, restlessness, bluish skin color, paralysis and coma.

**Skin Contact:** Causes irritation to skin. Symptoms include redness, itching, and pain. May be absorbed through the skin. May cause dermatitis.

**Eye Contact:** Causes irritation, redness, and pain.

**Chronic Exposure:** No information found.

#### Section 4. First Aid Measures

<b>Inhalation</b>	Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
<b>Ingestion</b>	Give large amounts of water to drink. Never give anything by mouth to an unconscious person. Get medical attention.
<b>Skin Contact</b>	Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention if symptoms occur.
<b>Eye Contact:</b>	Immediately flush eyes with plenty of water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get medical attention if irritation persists.

#### Section 5. Fire Fight Measures

<b>Fire</b>	Flash point: > 109°C. As with most organic solids, fire is possible at elevated temperatures or by contact with an ignition source.
<b>Explosion</b>	Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.
<b>Extinguishing Media</b>	Water spray, dry chemical, alcohol foam, or carbon dioxide.
<b>Special Information</b>	In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

#### Section 6. Accident Release Measures

Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Spills: Pick up and place in a suitable container for reclamation or disposal, using a method that does not generate dust.

#### Section 7. Handling and Storage

Product must be refrigerated at 2 – 8°C (36 – 46°F). Keep in a tightly closed container. Protect against physical damage. Handle and store under nitrogen. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.

#### Section 8. Exposure Control, Personal Protection

<b>Airborne Exposure Limits</b>	None established.
<b>Ventilation System</b>	A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, <i>Industrial Ventilation, A Manual of Recommended Practices</i> , most recent edition, for details.
<b>Personal Respirators</b>	For conditions of use where exposure to the dust or mist is apparent,

**Skin Protection**  
**Eye Protection**

a half-face dust/mist respirator may be worn. For emergencies or instances where the exposure levels are not known, use a full-face positive-pressure, air-supplied respirator. **WARNING:** Air-purifying respirators do not protect workers in oxygen-deficient atmospheres. Wear protective gloves and clean body-covering clothing. Use chemical safety goggles. Maintain eye wash fountain and quick-drench facilities in work area.

## Section 9. Physical and Chemical Properties

Appearance	White crystals.
Odor	Thiol odor.
Solubility	Soluble in water.
Specific Gravity	1.0
pH	4.3 (5% solution)
% Volatiles by Volume	0
Boiling Point	125 – 130°C (257 – 266°F)
Melting Point	42 – 43°C (108 – 109°F)
Vapor Density (Air=1)	5.3
Vapor Pressure (mm Hg)	No information found.
Evaporation Rate (BuAc=1)	No information found.

## Section 10. Stability and Reactivity

Stability	Stable under ordinary conditions of use and storage. Hygroscopic.
Decomposition Products	Burning may produce carbon monoxide, carbon dioxide, sulfur oxides.
Hazardous Polymerization	Will not occur.
Incompatibilities	Strong oxidizers.
Conditions to Avoid	Heat, flames, ignition sources and incompatibles.

## Section 11. Toxicological Information

LD50	Oral rat LD50: 400 mg/kg.
Carcinogenicity	No information found.

## Section 12. Ecological Information

No information available.

## Section 13. Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

## Section 14. Transport Information

No information available

## Section 15. Regulatory Information

**US FEDERAL:** Listed on the TSCA inventory.

## Section 16. Other Information

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