

Thionine Chloride: sc-296539



The Power to Question

MATERIAL SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Thionine Chloride
Product Number: sc-296539
Supplier: Santa Cruz Biotechnology, Inc.
2145 Delaware Avenue
Santa Cruz, CA 95060
800.457.3801 or 831.457.3800
Emergency: ChemWatch
Within the US & Canada: 877-715-9305
Outside the US & Canada: +800 2436 2255 (1-800-CHEMCALL) or call +613 9573 3112

2. HAZARD(S) IDENTIFICATION

OSHA Haz Com: CFR 1910.1200:

Acute Toxicity - Oral [Category 4]
Acute Toxicity - Dermal [Category 4]
Acute Toxicity - Inhalation [Category 4]

Signal word:

Warning!

Pictogram(s) or Symbol(s):



Hazard Statement(s):

Harmful if swallowed
Harmful in contact with skin
Harmful if inhaled

Precautionary Statement(s):

Prevention

Do not eat, drink or smoke when using this product. Wash hands and face thoroughly after handling. Wear protective gloves and protective clothing. Avoid breathing dusts or mists. Use only outdoors or in a well ventilated area.

Response

If swallowed: Immediately call a poison center or doctor. Rinse mouth. If on skin: Wash with plenty of water. Call a poison center or doctor if you feel unwell. Take off contaminated clothing and wash it before reuse. If inhaled: Remove person to fresh air and keep comfortable for breathing.

Storage

None.

Disposal

Dispose of contents and container in accordance with US EPA guidelines for the classification and determination of hazardous waste listed in 40 CFR 261.3. (See Section 13)

3. COMPOSITION /INFORMATION ON INGREDIENTS

Components: Thionine Chloride
CAS Number: 581-64-6
Molecular Weight: 263.75
Chemical Formula: C₁₂H₁₀N₃S·Cl

4. FIRST-AID MEASURES

Inhalation:

Call a poison center or doctor if you feel unwell. Move victim to fresh air. Give artificial respiration if victim is not breathing. Administer oxygen if breathing is difficult. Keep victim warm and quiet. Treat symptomatically and supportively. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

Skin contact:

Call a poison center or doctor if you feel unwell. Remove and isolate contaminated clothing and shoes. In case of contact with substance, immediately flush skin with running water for at least 20 minutes. Treat symptomatically and supportively. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

Eye contact:

If this chemical contacts the eyes, immediately wash (irrigate) the eyes with large amounts of water, occasionally lifting the lower and upper eyelids. If eye irritation persists get medical advice/attention. Move victim to fresh air. Check for and remove any contact lenses. Keep victim warm and quiet. Treat symptomatically and supportively. Effects of exposure to substance may be delayed. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

Ingestion:

Harmful if swallowed. Call a physician or Poison Control Center immediately. Do not use mouth-to-mouth method if victim ingested the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Loosen tight clothing such as a collar, tie, belt or waistband. If a person vomits place them in the recovery position so that vomit will not reenter the mouth and throat. Rinse mouth. Keep victim warm and quiet. Treat symptomatically and supportively. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

Symptoms/effects:

Acute: No data available

Delayed: No data available

Immediate medical attention:

WARNING: It might be hazardous to the person providing aid to give mouth-to-mouth respiration, because the inhaled material is corrosive. For severe burns, immediate medical attention is required. If breathing has stopped, perform artificial respiration. Use first aid treatment according to the nature of the injury. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media:

Dry chemical, CO₂, water spray, or alcohol-resistant foam. Consult with local fire authorities before attempting large scale fire fighting operations.

Hazardous combustion products:

These products include: Carbon oxides, Nitrogen oxides, halogenated compounds, silicates

Other specific hazards:

WARNING: Highly toxic HCl gas is produced during combustion.

Special precautions for fire-fighters:

Use water spray or fog; do not use straight streams. Dike fire-control water for later disposal; do not scatter the material. Containers may explode when heated. Move containers from fire area if you can do it without risk.

Special protective equipment for fire-fighters:

Wear positive pressure self-contained breathing apparatus (SCBA). Structural fire fighters' protective clothing provides limited protection in fire situations ONLY; it may not be effective in spill situations. Wear chemical protective clothing which is specifically recommended by the manufacturer. It may provide little or no thermal protection.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:

Avoid contact with skin, eyes, and clothing. Keep people away from and upwind of spill/leak. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing (Section 8). Warn unnecessary personnel to move away. Stop leak if you can do it without risk. Ensure adequate ventilation. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

Personal protective equipment:

Wear eye protection (splash goggles) and face protection (full length face shield). Lab coat. Dust respirator. Be sure to use a MSHA/NIOSH approved respirator or equivalent. Wear protective gloves (nitrile).

Emergency procedures:

Prevent dust cloud. In case of a spill and/or a leak, always shut off any sources of ignition, ventilate the area, and exercise caution. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Warn personnel to move away. Prevent entry into sewers, basements or confined areas; dike if needed.

Methods and materials for containment and cleaning up:

ELIMINATE all ignition sources (no smoking, flares, sparks, or flames in immediate area). Stop leak if without risk. Absorb with an inert material and put the spilled material in an appropriate waste disposal container. Use clean non-sparking tools to collect absorbed material. Ventilate the area.

Environmental precautions:

Prevent further leakage or spillage if safe to do so. Water runoff can cause environmental damage. Prevent entry into sewers, basements or confined areas; dike if needed.

7. HANDLING AND STORAGE

Precautions for safe handling:

Avoid inhalation of vapor or mist. Manipulate under an adequate fume hood. Avoid contact with skin and eyes. May corrode metallic surfaces. Good general ventilation should be sufficient to control airborne levels. Keep container dry. Handle and open container with care. Wear suitable protective clothing, gloves and eye/face protection. When using do not eat, drink, or smoke. Keep away from sources of ignition.

Conditions for safe storage:

Keep only in the original container in a cool well-ventilated place. Keep away from incompatibles. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Avoid prolonged storage periods. Store at room temperature.

Storage incompatibilities:

Store away from oxidizing agents

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Appropriate engineering controls:

Good general ventilation should be sufficient to control airborne levels. Eyewash fountains should be provided in areas where there is any possibility that workers could be exposed to the substance. Follow safe industrial engineering/laboratory practices when handling any chemical.

Respiratory protection:

Dust respirator. Be sure to use a MSHA/NIOSH approved respirator or equivalent.

Hand protection:

Nitrile gloves.

Eye protection:

Safety glasses.

Skin and body protection:

Lab coat.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form (20°C):	Solid	Odor:	No data available
Odor threshold:	No data available	Melting point/freezing point:	No data available
Boiling point/range:	No data available	Vapor pressure:	No data available
Decomposition temperature:	No data available	Vapor Density:	No data available
Relative density:	No data available	Dynamic Viscosity:	No data available
Kinematic viscosity:	No data available	pH:	No data available
Flash point:	No data available	Autoignition temperature:	No data available
Flammability (solid, gas):	No data available	Flammability or explosive limits:	No data available
Solubility(ies):	No data available	Partition coefficient:	No data available
Evaporation rate:	No data available	n-octanol/water (log Pow)	
(Butyl Acetate = 1)			

10. STABILITY AND REACTIVITY

Reactivity:

Not available.

Chemical Stability:

Stable under recommended storage.

Possibility of Hazardous Reactions:

No hazardous reactivity has been reported.

Conditions to avoid:

Avoid excessive heat and light.

Incompatible materials:

Oxidizing agents

Hazardous Decomposition Products:

No data available

11. TOXICOLOGICAL INFORMATION

RTECS Number: SN5425000

Acute Toxicity:

ipr-mus LD50:400 mg/kg

ipr-rat LD50:215 mg/kg

Skin corrosion/irritation:

No data available

Serious eye damage/irritation:

No data available

Respiratory or skin sensitization:

No data available

Germ cell mutagenicity:

mno-sat 1 mg/plate (+/-S9)

dnr-bcs 2 mg/disc

Carcinogenicity:

IARC: No data available

NTP: No data available

OSHA: No data available

Reproductive toxicity:

No data available

Routes of Exposure:

Inhalation, Eye contact, Ingestion, Skin Contact.

Symptoms related to exposure:

Overexposure may result in serious illness or death.

Potential Health Effects:

No specific information available; skin and eye contact may result in irritation. May be harmful if inhaled or ingested.

Target organ(s):

No data available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Fish: No data available

Crustacea: No data available

Algae: No data available

Persistence and degradability:

No data available

Bioaccumulative potential (BCF):

No data available

Mobility in soil:

No data available

Partition coefficient: n-octanol/water (log Pow)

No data available

Soil adsorption (Koc):

No data available

Henry's Law: constant (PaM3/mol)

No data available

13. DISPOSAL CONSIDERATIONS**Disposal of product:**

Recycle to process if possible. It is the generator's responsibility to comply with Federal, State and Local rules and regulations. You may be able to dissolve or mix material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber system. This section is intended to provide assistance but does not replace these laws, nor does compliance in accordance with this section ensure regulatory compliance according to the law. US EPA guidelines for Identification and Listing of Hazardous Waste are listed in 40 CFR Parts 261. The product should not be allowed to enter the environment, drains, water ways or the soil.

Disposal of container:

Dispose of as unused product.

Other considerations:

Observe all federal, state and local regulations when disposing of the substance.

14. TRANSPORT INFORMATION**DOT (US)**

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

15. REGULATORY INFORMATION**Toxic Substance Control Act (TSCA 8b.):**

This product is NOT on the EPA Toxic Substances Control Act (TSCA) inventory. The following notices are required by 40 CFR 720.36 (C) for those products not on the inventory list:

- (i) These products are supplied solely for use in research and development by or under the supervision of a technically qualified individual as defined in 40 CFR 720.0 et sec.
- (ii) The health risks of these products have not been fully determined. Any information that is or becomes available will be supplied on a SDS sheet.

US Federal Regulations**CERCLA Hazardous substance and Reportable Quantity:**

SARA 313:	Not Listed
SARA 302:	Not Listed

State Regulations

Massachusetts:	Not Listed
New Jersey:	Not Listed
Pennsylvania:	Not Listed
California Proposition 65:	Not Listed

Other Information**NPFA Rating**

Health:	0
Flammability:	0
Instability:	0

HMIS Classification

Health:	0
Flammability:	0
Physical:	0

International Inventories**WHMIS hazard class:**

B2: Flammable Liquid.
D2A: Materials causing other toxic effects. (Very Toxic)

EC-No: 209-470-3**Notice Through Official Gazettes Reference Number: (Japan)**

ENCS: Not Listed

16. OTHER INFORMATION

The above information is believed to be correct but does not purport to be complete and should be used only as a guide. The burden of safe use of this material rests entirely with the user.

03/28/2014