

Revision number: 3 Revision date: 10/17/2016

1. IDENTIFICATION

Product name: Product code: 2-Chloroethyl Phenyl Sulfide C1388

Product use: Restrictions on use:

Company:

TCI America 9211 N. Harborgate Street Portland, OR 97203 U.S.A. Telephone: +1-800-423-8616 / +1-503-283-1681 Fax: +1-888-520-1075 / +1-503-283-1987 e-mail: sales-US@TCIchemicals.com www.TCIchemicals.com

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] Eye Damage/Irritation [Category 1] Skin Corrosion/Irritation [Category 1B]

Danger!

Signal word:

Hazard Statement(s):

Causes serious eye damage Causes severe skin burns and eye damage Harmful if swallowed Harmful in contact with skin Harmful if inhaled

Pictogram(s) or Symbol(s):



Precautionary Statement(s): [Prevention]

[Response]

[Storage] [Disposal] 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 fume, mist, vapors or spray. Use only outdoors or in a well-ventilated area. Do not breathe dusts or mists. Wear protective gloves, protective clothing, eye protection and face protection. Wear eye protection. Wear protective gloves, protective clothing, eye protection and face protection. Wear eye protection. Wear protective full length face shield). 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. If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Wash contaminated clothing before reuse. Immediately call a poison center or doctor. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Store locked up.

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)

C1388

For laboratory research purposes. Not for drug or household use.

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SAFETY DATA SHEET

Emergency telephone number: Chemical Emergencies: TCI America (8:00am - 5:00pm) PST +1-503-286-7624 Transportation Emergencies: Chemtrec 24-Hour +1-800-424-9300 (U.S.A.) +1-703-527-3887 (International) **Responsible department:** TCI America Environmental Health Safety and Security +1- 503-286-7624

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2. HAZARD(S) IDENTIFICATION

	ON INGREDIENTS
Substance/Mixture:	Substance
Components:	2-Chloroethyl Phenyl Sulfide
Percent:	>98.0%(GC)
CAS Number:	5535-49-9
Molecular Weight:	172.67
Chemical Formula:	C ₈ H ₉ CIS
4. FIRST-AID MEASURES	
Inhalation:	Immediately call a poison center or doctor. Effects of exposure (inhalation) to substance may be delayed. 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:	For severe burns, immediate medical attention is required. Immediately call a poison center or doctor. Remove and wash contaminated clothing before re-use. 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:	IMMEDIATELY flush eyes with running water for at least 15 minutes, keeping eyelids open. Eye contact with vapors or substance may cause severe injury, burns, or death. Call emergency medical service. 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. Do not induce vomiting with out medical advice. 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: Delayed:	Pain. Redness. 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 harmful. 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, CO_2 or water spray. Consult with local fire authorities before attempting large scale fire fighting operations.
Specific hazards arising from the chen	nical
Hazardous combustion products: Other specific hazards:	These products include: Carbon oxides Sulfur oxides Halogenated compounds WARNING: Highly toxic HCI gas is produced during combustion.
heated. Move containers from fire area if Special protective equipment for fire-fi Wear positive pressure self-contained bre	

6. ACCIDENTAL RELEASE MEASURES

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. Vapor respirator. Be sure to use a MSHA/NIOSH approved respirator or equivalent. Wear protective gloves (nitrile).
Emergency procedures:	In case of a spill and/or a leak, always shut off any sources of ignition, ventilate the area, and excercise 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. Ventilate the area. 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. **Environmental precautions:**

Keep away from living quarters. 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:	Do NOT breath gas, fumes, vapor, or spray. Manipulate under an adequate fume hood. Do not ingest. Avoid contact with skin and eyes. Avoid contact with skin. 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:	Store locked up. Keep containers tightly closed 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 under inert gas (e.g. Argon).
Storage incompatibilities:	Combustible substances, Store away from oxidizing agents

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limits:

No data available

Appropriate engineering controls:

Good general ventilation should be sufficient to control airborne levels. Ventilation is normally required when handling or using this product. 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:Vapor respirator. Be sure to use a MSHA/NIOSH approved respirator or equivalent.Hand protection:Wear protective gloves.Eye protection:Splash goggles.Skin and body protection:Lab coat.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state (20°C): Form: Color: Odor: Odor threshold:

Melting point/freezing point: Boiling point/range: Decomposition temperature: Relative density: Kinematic Viscosity:

Partition coefficient: n-octanol/water (log Pow) Liquid Clear Very pale yellow - Yellow No data available No data available

No data available 245°C (473°F) No data available 1.18 No data available No data available

pH: Vapor pressure: Vapor density: Dynamic Viscosity:

Evaporation rate: (Butyl Acetate = 1) No data available No data available No data available No data available

No data available

2-Chloroethyl Phenyl Sulfide

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9. PHYSICAL AND CHEMICAL PROPERTIES Autoignition temperature: No data available Flash point: 104°C (219°F) Flammability (solid, gas): No data available Flammability or explosive limits: Lower: No data available Upper: No data available Solubility(ies): 10. STABILITY AND REACTIVITY **Reactivity:** Not Available. Chemical Stability: Air sensitive. Heat sensitive. Possibility of Hazardous Reactions: No hazardous reactivity has been reported. Conditions to avoid: Air sensitive. Exposure to air. Heat sensitive. Incompatible materials: Strong bases, Strong oxidizing agents **Hazardous Decomposition Products:** No data available 11. TOXICOLOGICAL INFORMATION Acute Toxicity: No data available Skin corrosion/irritation: No data available Serious eye damage/irritation: No data available Respiratory or skin sensitization: No data available Germ cell mutagenicity: No data available Carcinogenicity: No data available 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. Skin contact may produce burrns. Skin contact may result in inflammation; characterized by itching, scaling, reddening, or occasionally blistering. Eye contact can result in corneal damage or blindness. **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 No data available Crustacea:

-	
Persistence and degradability:	No data available
Bioaccumulative potential (BCF):	No data available
Mobillity in soil:	No data available
Partition coefficient:	No data available
n-octanol/water (log Pow)	
Soil adsorption (Koc):	No data available
Henry's Law:	No data available
constant (PaM ³ /mol)	

No data available

Algae:

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12. ECOLOGICAL INFORMATION

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: Other considerations:	Dispose of as unused product. Do not re-use empty containers. Observe all federal, state and local regulations when disposing of the substance.

14. TRANSPORT INFORMATION

DOT (US) UN number: UN1760	Proper Shipping Name: Corrosive liquids, n.o.s.	Class or Division: 8 Corrosive material	Packing Group: II
IATA UN number: UN1760	Proper Shipping Name: Corrosive liquid, n.o.s.	Class or Division: 8 Corrosive material	Packing Group:
IMDG UN number: UN1760	Proper Shipping Name: Corrosive liquid, n.o.s.	Class or Division: 8 Corrosive material	Packing Group:
EmS number:	F-A, S-B		

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

State Right-to-Know

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

Other Information

NFPA Rating:

Health:	3
Flammability:	1
Instability:	0

HMIS Classification:

Health:	3
Flammability:	1
Physical:	0

International Inventories

WHMIS hazard class:

EC-No:

E: Corrosive material. D2A: Materials causing other toxic effects. (Very Toxic) 226-891-8

16. OTHER INFORMATION

Revision date: 10/17/2016 Revision number: 3

TCI chemicals are for research purposes only and are NOT intended for use as drugs, food additives, households, or pesticides. The information herein is believed to be correct, but does not claim to be all inclusive and should be used only as a guide. Neither the above named supplier nor any of its affiliates or subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All chemical reagents must be handled with the recognition that their chemical, physiological, toxicological, and hazardous properties have not been fully investigated or determined. All chemical reagents should be handled only by individuals who are familiar with their potential hazards and who have been fully trained in proper safety, laboratory, and chemical handling procedures. Although certain hazards are described herein, we can not guarantee that these are the only hazards which exist. Our SDS are based only on data available at the time of shipping and are subject to change without notice as new information is obtained. Avoid long storage periods since the product is subject to degradation with age and may become more dangerous or hazardous. It is the responsibility of the user to request updated SDS for products that are stored for extended periods. Disposal of unused product must be undertaken by qualified personnel who are knowledgeable in all applicable regulations and follow all pertinent safety precautions including the use of appropriate protective equipment (e.g. protective goggles, protective clothing, breathing equipment, face mask, fume hood). For proper handling and disposal, always comply with federal, state and local regulations.