

Revision number: 2 Revision date: 10/06/2014

1. IDENTIFICATION

Product name: Product code: 2,5-Dichloro-3-methylthiophene D3680

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] Skin Corrosion/Irritation [Category 2] Eye Damage/Irritation [Category 1] Flammable Liquids [Category 4]

Signal word:

Hazard Statement(s):

Danger!

Causes serious eye damage Causes skin irritation Combustible liquid Harmful if swallowed

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. Wear eye protection. Wear face protection (full length face shield). Keep away from heat, sparks, open flames or other hot surfaces. - No smoking. Wear protective gloves, eye protection and face protection.

If swallowed: Immediately call a poison center or doctor. Rinse mouth. If on skin: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor. In case of fire: Use dry chemical, CO2, water spray or alcohol-resistant foam to extinguish. Store in well-ventilated place. Keep cool.

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)

Emergency telephone number: Chemical Emergencies: TCI America (8:00am - 5:00pm) PST +1-503-286-7624 Transportation Emergencies:

+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

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

TCI AMERICA

SAFETY DATA SHEET

TCI AMERICA

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture: Components:	Substance 2,5-Dichloro-3-methylthiophene
Percent:	>96.0%(GC)
CAS Number:	17249-90-0
Molecular Weight:	167.05
Chemical Formula:	$C_5H_4Cl_2S$

4. FIRST-AID MEASURES

Inhalation:	Immediately call a poison center or doctor. 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:	precautions to protect themselves. 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
Ingestion:	personnel are aware of the material(s) involved and take precautions to protect themselves. Harmful if swallowed. Do not induce vomiting with out medical advice. If swallowed, seek medical advice immediately and show the container or label. 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 chem	
Hazardous combustion products: Other specific hazards:	These products include: Carbon oxides Halogenated compounds Silicates WARNING: Highly toxic HCI gas is produced during combustion.
have a very low flash point: Use of water s explosion hazard. Containers may explode Special protective equipment for fire-fig Wear positive pressure self-contained brea	t streams. Dike fire-control water for later disposal; do not scatter the material. CAUTION: All these products spray when fighting fire may be inefficient. Do not use straight streams. Runoff to sewer may create fire or e when heated. Move containers from fire area if you can do it without risk. ghters: athing apparatus (SCBA). Structural fire fighters' protective clothing provides limited protection in fire situations tions. Wear chemical protective clothing which is specifically recommended by the manufacturer. It may
6 ACCIDENTAL RELEASE MEASU	IDES

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:

Avoid contact with skin, eyes, and clothing. Keep people away from and upwind of spill/leak. Use sparkproof tools and explosion-proof equipment. Remove all sources of ignition. 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.

6. ACCIDENTAL RELEASE MEAS	SURES
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:	Isolate area until gas has dispersed. 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). All equipment used when handling the product must be grounded. 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. Keep away from heat and sources of ignition. Use explosion-proof equipment. Use only non-sparking hand tool when handling this product. Ground all equipment containing material. Take measures to prevent build up of electrostatic charge. 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 sources of ignition. Store and use away from heat, sparks, open flame, or any other ignition source. Keep away from incompatibles. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Avoid prolonged storage periods. Store in refrigerator.	
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.

Personal protective equipment

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 Slightly pale yellow - Yellow No data available No data available

No data available 185°C (365°F) No data available 1.37 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

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9. PHYSICAL AND CHEMICAL		A. (- 1 (1	No data available	
Flash point: Flammability (solid, gas):	77°C (171°F) No data available	Autoignition temperate Flammability or explose		
			lo data available	
		Upper: N	lo data available	
Solubility(ies):				
10. STABILITY AND REACTIVI	ТҮ			
Reactivity:	Not Available.			
Chemical Stability:	Heat sensitive.			
Possibility of Hazardous Reaction Conditions to avoid:	s: In use, may form flar Heat sensitive.	nmable/explosive vapor-air mixtur	e.	
ncompatible materials:	Oxidizing agents			
Hazardous Decomposition Produc	ts: No data available			
11. TOXICOLOGICAL INFORM	ATION			
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 conta	act, Ingestion, Skin contact.		
Symptoms related to exposure: Overexposure may result in serious i blistering. Skin contact may result in Potential Health Effects:	llness or death. Skin contact r redness, pain or dry skin. Eye	nay result in inflammation; charact contact can result in corneal dam	erized by itching, scaling, reddenin age or blindness.	g, or occasionally
Skin and eye contact may result in ir Target organ(s):	ritation. No data available			
12. ECOLOGICAL INFORMATI	ON			
Ecotoxicity				
Fish:	No data available			
Crustacea: Algae:	No data available No data available			
Persistence and degradability:	No data available			
Bioaccumulative potential (BCF):	No data available			
Nobillity in soil:	No data available			
Partition coefficient: n-octanol/water (log Pow)	No data available			
Soil adsorption (Koc): Henry's Law: constant (PaM³/mol)	No data available No data available			

12. ECOLOGICAL INFORMATION

13. DISPOSAL CONSIDERAT	TIONS	
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. Do not re-use empty containers.	
Other considerations:	Observe all federal, state and local regulations when disposing of the substance.	
14. TRANSPORT INFORMAT	ION	
DOT (US)	Non-hazardous for transportation.	
IATA	Non-hazardous for transportation.	
IMDG	Non-hazardous for transportation.	

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:	2
Flammability:	1
Instability:	0

International Inventories

WHMIS hazard class:

B3: Combustible Liquid. D2A: Materials causing other toxic effects. (Very Toxic) D2B: Materials causing other toxic effects. (Toxic)

16. OTHER INFORMATION

Revision date: 10/06/2014 Revision number: 2

HMIS Classification:

Health:	2
Flammability:	1
Physical:	0

16. OTHER INFORMATION

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 gogles, protective clothing, breathing equipment, face mask, fume hood). For proper handling and disposal, always comply with federal, state and local regulations.