

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

1. IDENTIFICATION

Product name: Product code: 3,5-Dichlorobenzenesulfonyl Chloride D3503

For laboratory research purposes.

Not for drug or household use.

TCI AMERICA

SAFETY DATA SHEET

Emergency telephone number:

Transportation Emergencies:

+1-703-527-3887 (International) Responsible department:

Environmental Health Safety and Security

TCI America (8:00am - 5:00pm) PST

Chemical Emergencies:

+1-503-286-7624

Chemtrec 24-Hour +1-800-424-9300 (U.S.A.)

+1-503-286-7624

TCI America

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:

2. HAZARD(S) IDENTIFICATION

sales-US@TCIchemicals.com

www.TCIchemicals.com

OSHA Haz Com: CFR 1910.1200: Eye Damage/Irritation [Category 1] Corrosive to Metals [Category 1] Skin Corrosion/Irritation [Category 1B] Signal word: Danger! Hazard Statement(s): Causes serious eye damage Causes severe skin burns and eye damage May be corrosive to metals Pictogram(s) or Symbol(s): Precautionary Statement(s): [Prevention] Do not breathe dusts or mists. Use only outdoors or in a well-ventilated area. Wear protective gloves, protective clothing, eye protection and face protection. Wear eye protection. Wear face protection (full length face shield). Keep only in original container. If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all [Response] contaminated clothing. Rinse skin with water or shower. Wash contaminated clothing before reuse. If inhaled: Remove person to fresh air and keep comfortable for breathing. 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. Absorb spillage to prevent material damage. [Storage] Store locked up. Store in corrosive resistant container with a resistant inner liner. Dispose of contents and container in accordance with US EPA guidelines for the classification and [Disposal] determination of hazardous waste listed in 40 CFR 261.3. (See Section 13)

Hazards not otherwise classified: [HNOC] May develop pressure

3. COMPOSITION/INFORMATION ON INGREDIENTS

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3. COMPOSITION/INFORMATION	
Substance/Mixture:	Substance
Components:	3,5-Dichlorobenzenesulfonyl Chloride
Percent: CAS Number:	>98.0%(GC)(T) 705-21-5
	245.50
Molecular Weight: Chemical Formula:	245.50 C6H3Cl3O2S
	C6H3CI3O2S
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 i 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. For severe burns, immediate medical attention is required. Immediately call a poison center or doctor.
Skin contact:	Remove and wash contaminated clothing before re-use. In case of contact with substance, immediately flush skin with running water for at least 20 minutes. Treat symptomatically and supportively. Ensure that
Eye contact:	medical personnel are aware of the material(s) involved and take precautions to protect themselves. 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. 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 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 cher	
Hazardous combustion products: Other specific hazards:	These products include: Carbon oxides Halogenated compounds Silicates WARNING: Highly toxic HCI gas is produced during combustion.
Special precautions for fire-fighters: Use water spray or fog; do not use straig heated. Move containers from fire area if Special protective equipment for fire-f	
Wear positive pressure self-contained br	eathing apparatus (SCBA). Structural fire fighters' protective clothing provides limited protection in fire situation ations. Wear chemical protective clothing which is specifically recommended by the manufacturer. It may
6. ACCIDENTAL RELEASE MEAS	URES
Personal precautions:	Avoid contact with skin, eyes, and clothing. Keep people away from and upwind of spill/leak. Do not touch

Personal protective equipment:

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. 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:

6. ACCIDENTAL RELEASE MEASURES

Prevent dust cloud. 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. 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:	Store in corrosive resistant container with a resistant inner liner. Keep containers tightly closed in a cool, well-ventilated place. Store locked up. 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). Moisture sensitive.
Storage incompatibilities:	Bases, 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	
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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:	Wear protective clothing (lab coat and chemical resistant boots).

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state (20°C): Form: Color: Odor: Odor threshold:	Solid Crystal - Lump White - Slightly pale yellow No data available No data available		
Melting point/freezing point: Boiling point/range: Decomposition temperature: Relative density: Kinematic Viscosity:	31°C (Freezing point) (88°F) No data available No data available No data available No data available No data available	pH: Vapor pressure: Vapor density: Dynamic Viscosity:	No data available No data available No data available No data available
Partition coefficient: n-octanol/water (log P _{ow})	No data available	Evaporation rate: (Butyl Acetate = 1)	No data available
Flash point: Flammability (solid, gas):	110°C (230°F) No data available	Autoignition temperature: Flammability or explosive limits: Lower: No data avail	No data available able
		Upper: No data avail	able

Solubility(ies):

Soluble: Toluene

10. STABILITY AND REACTIVITY

Reactivity:

Corrodes in contact with metals.

10. STABILITY AND REACTIVITY

10. STABILITY AND REACTIVITY			
Chemical Stability:	Moisture sensitive.		
Possibility of Hazardous Reactions:	No hazardous reactivity has been re		
Conditions to avoid:	Exposure to moisture. Moisture sen	isitive.	
ncompatible materials:	Oxidizing agents No data available		
Hazardous Decomposition Products:	NO data available		
	201		
11. TOXICOLOGICAL INFORMATIC	<i>JN</i>		
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 availab	ole OSHA:	: No data available
Reproductive toxicity:			
No data available			
Routes of Exposure: Symptoms related to exposure:	Inhalation, Eye contact, Ingestion, S	Skin contact.	
Skin contact may produce burrns. Skin co	ntact may result in inflammation: charac	terized by itching, scaling, redde	ening, or occasionally blistering. Eve
contact can result in corneal damage or b			<i></i>
Potential Health Effects:			
No specific information available; skin and		ay be harmful if inhaled or inges	sted.
Target organ(s):	No data available		
12. ECOLOGICAL INFORMATION			
Ecotoxicity	No. dete essellett		
Fish:	No data available		
Crustacea:	No data available		
Algae:	No data available		
Persistence and degradability:	No data available		
Bioaccumulative potential (BCF):	No data available		
Bioaccumulative potential (BCF):	No data avallable		

 Bioaccumulative potential (BCF):
 No data available

 Mobillity in soil:
 No data available

 Partition coefficient:
 No data available

 n-octanol/water (log Pow)
 No data available

 Soil adsorption (Koc):
 No data available

 Henry's Law:
 No data available

 constant (PaM³/mol)
 No

 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. Do not re-use empty containers.

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13. DISPOSAL CONSIDERATIONS Other considerations:

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

14. TRANSPORT INFORMATION

DOT (US) UN number: UN3261	Proper Shipping Name: Corrosive solid, acidic, organic, n.o.s.	Class or Division: 8 Corrosive material	Packing Group: II
IATA UN number: UN3261	Proper Shipping Name: Corrosive solid, acidic, organic, n.o.s.	Class or Division: 8 Corrosive material	Packing Group: II
IMDG UN number: UN3261	Proper Shipping Name: Corrosive solid, acidic, organic, n.o.s.	Class or Division: 8 Corrosive material	Packing Group: II
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	e 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

International Inventories

WHMIS hazard class:

E: Corrosive material.

16. OTHER INFORMATION

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

HMIS Classification:

Health:	3
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.