

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

1. IDENTIFICATION

Product name: Product code: 2,3-Dichlorotoluene D1805

Product use: Restrictions on use: For laboratory research purposes. Not for drug or household use.

Company:	Emergency telephone number:
TCI America	Chemical Emergencies:
9211 N. Harborgate Street	TCI America (8:00am - 5:00pm) PST
Portland, OR 97203 U.S.A.	+1-503-286-7624
Telephone:	Transportation Emergencies:
+1-800-423-8616 / +1-503-283-1681	Chemtrec 24-Hour
Fax:	+1-800-424-9300 (U.S.A.)
+1-888-520-1075 / +1-503-283-1987	+1-703-527-3887 (International)
e-mail:	Responsible department:
sales-US@TCIchemicals.com	TCI America
www.TCIchemicals.com	Environmental Health Safety and Security +1- 503-286-7624

2. HAZARD(S) IDENTIFICATION

OSHA Haz Com: CFR 1910.1200:	Flammable Liquids [Category 4]
Signal word:	Warning!
Hazard Statement(s):	Combustible liquid
Pictogram(s) or Symbol(s):	None
Precautionary Statement(s): [Prevention] [Response] [Storage] [Disposal]	Keep away from heat, sparks, open flames or other hot surfaces No smoking. Wear protective gloves, eye protection and face protection. 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)

TCI AMERICA

SAFETY DATA SHEET

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture:	Substance	
Components:	2,3-Dichlorotoluene	
Percent:	>98.0%(GC)	
CAS Number:	32768-54-0	
Molecular Weight:	161.03	
Chemical Formula:	$C_7H_6CI_2$	
4. FIRST-AID MEASURES		

Inhalation:	Call emergency medical service. 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. 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.

4. FIRST-AID MEASURES	
Eye contact: Ingestion:	In case of contact with substance, immediately flush eyes with running water for at least 20 minutes. 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. If swallowed, seek medical advice immediately and show the container or label. 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:	No data available No data available
Immediate medical attention:	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 , water spray, or alcohol-resistant foam. Consult with local fire authorities before attempting large scale fire fighting operations.
Specific hazards arising from the ch	

Hazardous combustion products:	These products include: Carbon oxides Halogenated compounds
Other specific hazards:	WARNING: Highly toxic HCl gas is produced during combustion.

Special precautions for fire-fighters:

CAUTION: All these products have a very low flash point: Use of water spray when fighting fire may be inefficient. Use water spray or fog; do not use straight streams. Do not use straight streams. Runoff to sewer may create fire or explosion hazard. 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:	Use spark-proof 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.
Personal protective equipment:	Splash goggles. 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:

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. 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.

2,3-Dichlorotoluene	TCI AMERICA		Page 3 of 5
7. HANDLING AND STORAG Conditions for safe storage:	Keep only in the original co	ontainer in a cool well-ventilated place.	
Storage incompatibilities:	incompatibles. Containers leakage. Avoid prolonged s	neat, sparks, open flame, or any other in which are opened must be carefully re- storage periods. Store away from oxidizing agents	
8. EXPOSURE CONTROLS /	PERSONAL PROTECTION		
Exposure limits:	No data available		
	e sufficient to control airborne levels. V eas where there is any possibility that	entilation is normally required when ha workers could be exposed to the substa	
Personal protective equipment			
Respiratory protection: Hand protection: Eye protection: Skin and body protection:	Vapor respirator. Be sure t Wear protective gloves. Splash goggles. Lab coat.	o use a MSHA/NIOSH approved respir	ator or equivalent.
9. PHYSICAL AND CHEMICA	L PROPER [IES		
Physical state (20°C): Form: Color: Odor: Odor threshold:	Liquid Clear Colorless - Almost colorles No data available No data available	s	
Melting point/freezing point: Boiling point/range: Decomposition temperature: Relative density: Kinematic Viscosity:	4°C (Freezing point) (39°F) 208°C (406°F) No data available 1.27 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 Pow)	No data available	Evaporation rate: (Butyl Acetate = 1)	No data available
Flash point: Flammability (solid, gas):	83°C (181°F) No data available	Autoignition temperature: Flammability or explosive limits: Lower: No data ava	
Solubility(ies): Water: Insoluble Very soluble: Organic	solvents	Upper: No data ava	ilable
10. STABILITY AND REACTI	VITY		
Reactivity: Chemical Stability: Possibility of Hazardous Reactic Conditions to avoid: Incompatible materials: Hazardous Decomposition Produ	ns: In use, may form flammabl Avoid excessive heat and Strong oxidizing agents	d storage conditions. (See Section 7) e/explosive vapor-air mixture. light.	
11. TOXICOLOGICAL INFOR	MATION		

2,3-Dichlorotoluene

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.

Symptoms related to exposure:

No specific information is available in our data base regarding the toxic effects of this material for humans. However, exposure to any chemical should be kept to a minimum. Always follow safe industrial hygiene practices and wear proper protective equipment when handling this compound. **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

raiger organ(s).

12. ECOLOGICAL INFORMATION

Ecotoxicity Fish: Crustacea:	No data available No data available
Algae:	No data available
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)	

13. DISPOSAL CONSIDERATIO	NS
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 INFORMATIO	N
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 ON the EPA Toxic Substances Control Act (TSCA) inventory.

		nd Reportable Quantity:	
SARA 313	-	Not Listed	
SARA 302	:	Not Listed	
State Regulations	<u>5</u>		
State Right-to-Kn	wo		
Massachu	isetts	Not Listed	
New Jerse	∋y	Not Listed	
Pennsylva		Not Listed	
California Propos	sition 65:	Not Listed	
Other Information	<u>n</u>		
NFPA Rating:		HMIS Classific	ation:
Health:	0	Health:	0
Flammability:	2	Flammabil	ity: 2
Instability:	0	Physical:	0
International Inve	entories		
WHMIS hazard cl		B3: Combustible Liquid.	
Willing Huzulu of	455.	251-203-8	

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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.