

## Chemical Safety Data Sheet MSDS / SDS

**2,6-DICHLOROTOLUENE**Revision Date:2024-12-21 Revision Number:1

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**SECTION 1: Identification of the substance/mixture and of the company/undertaking****Product identifier**

Product name : 2,6-DICHLOROTOLUENE  
CBnumber : CB9168011  
CAS : 29797-40-8  
EINECS Number : 249-854-8  
Synonyms : 1,3-dichloro-2-methylbenzene,DICHLOROTOLUENE MIXTURE

**Relevant identified uses of the substance or mixture and uses advised against**

Relevant identified uses : For R&D use only. Not for medicinal, household or other use.  
Uses advised against : none

**Company Identification**

Company : Chemicalbook  
Address : Building 1, Huihuang International, Shangdi 10th Street, Haidian District, Beijing  
Telephone : 400-158-6606

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**SECTION 2: Hazards identification****Classification of the substance or mixture**

Skin irritation, Category 2  
Hazardous to the aquatic environment, long-term (Chronic) - Category Chronic 1

**Label elements****Pictogram(s)**

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Signal word : Warning

**Hazard statement(s)**

H315 Causes skin irritation  
H410 Very toxic to aquatic life with long lasting effects

**Precautionary statement(s)****Prevention**

P264 Wash ... thoroughly after handling.  
P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/...  
P273 Avoid release to the environment.

**Response**

P302+P352 IF ON SKIN: Wash with plenty of water/...

P321 Specific treatment (see ... on this label).

P332+P317 If skin irritation occurs: Get medical help.

P362+P364 Take off contaminated clothing and wash it before reuse.

P391 Collect spillage.

**Storage**

none

**Disposal**

P501 Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

**Other hazards**

no data available

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## SECTION 3: Composition/information on ingredients

**Substance**

Product name	: 2,6-DICHLOROTOLUENE
Synonyms	: 1,3-dichloro-2-methylbenzene,DICHLOROTOLUENE MIXTURE
CAS	: 29797-40-8
EC number	: 249-854-8
MF	: C7H6Cl2
MW	: 161.03

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## SECTION 4: First aid measures

**Description of first aid measures****If inhaled**

Fresh air, rest. Half-upright position. Refer for medical attention.

**Following skin contact**

Remove contaminated clothes. Rinse skin with plenty of water or shower. Refer for medical attention .

**Following eye contact**

First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then refer for medical attention.

**Following ingestion**

Rinse mouth. Do NOT induce vomiting. Refer for medical attention .

**Most important symptoms and effects, both acute and delayed**

Acute: vapors are highly irritating to eyes. May be fatal if inhaled, swallowed, or absorbed through skin. (EPA, 1998)

Excerpt from ERG Guide 153 [Substances - Toxic and/or Corrosive (Combustible)]: TOXIC; inhalation, ingestion or skin contact with material may cause severe injury or death. Contact with molten substance may cause severe burns to skin and eyes. Avoid any skin contact. Effects of contact or inhalation may be delayed. Fire may produce irritating, corrosive and/or toxic gases. Runoff from fire control or dilution water may

be corrosive and/or toxic and cause pollution. (ERG, 2016)

### **Indication of any immediate medical attention and special treatment needed**

no data available

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## **SECTION 5: Firefighting measures**

### **Extinguishing media**

Keep unnecessary people away and isolate hazard area. Stay upwind and keep out of low areas. Wear positive pressure breathing apparatus and special protective clothing. For small fires: dry chemical, carbon dioxide, water spray, or foam. For large fires: water spray, fog, or foam. Move container from fire area if possible. Fight fire from maximum distance. Dike fire control water for later disposal; do not scatter the material. (EPA, 1998)

### **Specific Hazards Arising from the Chemical**

Fire may produce irritating or poisonous gases. Runoff from fire control water may give off poisonous gases and may cause pollution. Cylinder may explode in the heat of fire. Reacts with water to release hydrochloric acid. (EPA, 1998)

Excerpt from ERG Guide 153 [Substances - Toxic and/or Corrosive (Combustible)]: Combustible material: may burn but does not ignite readily. When heated, vapors may form explosive mixtures with air: indoors, outdoors and sewers explosion hazards. Those substances designated with a (P) may polymerize explosively when heated or involved in a fire. Contact with metals may evolve flammable hydrogen gas. Containers may explode when heated. Runoff may pollute waterways. Substance may be transported in a molten form. (ERG, 2016)

### **Advice for firefighters**

Wear self-contained breathing apparatus for firefighting if necessary.

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## **SECTION 6: Accidental release measures**

### **Personal precautions, protective equipment and emergency procedures**

Avoid dust formation. Avoid breathing mist, gas or vapours. Avoid contacting with skin and eye. Use personal protective equipment. Wear chemical impermeable gloves. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

### **Environmental precautions**

Personal protection: complete protective clothing including self-contained breathing apparatus. Collect leaking and spilled liquid in sealable containers as far as possible. Absorb remaining liquid in sand or inert absorbent. Then store and dispose of according to local regulations.

### **Methods and materials for containment and cleaning up**

Collect and arrange disposal. Keep the chemical in suitable and closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

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## **SECTION 7: Handling and storage**

## Precautions for safe handling

Handling in a well ventilated place. Wear suitable protective clothing. Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Use non-sparking tools. Prevent fire caused by electrostatic discharge steam.

## Conditions for safe storage, including any incompatibilities

Separated from food and feedstuffs. See Chemical Dangers. Ventilation along the floor.

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## SECTION 8: Exposure controls/personal protection

### Control parameters

#### Occupational Exposure limit values

<b>Component</b>	Dichloromethylbenzene			
<b>CAS No.</b>	29797-40-8			
	<b>Limit value - Eight hours</b>		<b>Limit value - Short term</b>	
	<b>ppm</b>	<b>mg/m<sup>3</sup></b>	<b>ppm</b>	<b>mg/m<sup>3</sup></b>
<b>Austria</b>	5	30	20	120
<b>France</b>	?	0,2	?	?
<b>Germany (AGS)</b>	1,3	8	2,6 (1)	16 (1)
	<b>Remarks</b>			
<b>Germany (AGS)</b>	(1) 15 minutes average value			

#### Biological limit values

no data available

### Exposure controls

Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Set up emergency exits and the risk-elimination area.

### Individual protection measures

#### Eye/face protection

Wear tightly fitting safety goggles with side-shields conforming to EN 166(EU) or NIOSH (US).

#### Skin protection

Wear fire/flammable resistant and impervious clothing. Handle with gloves. Gloves must be inspected prior to use. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

#### Respiratory protection

If the exposure limits are exceeded, irritation or other symptoms are experienced, use a full-face respirator.

#### Thermal hazards

no data available

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## SECTION 9: Physical and chemical properties

### Information on basic physicochemical properties

Physical state	Benzylidene chloride is a colorless oily liquid with a faint aromatic odor. Insoluble in water and denser than water. Strongly irritates skin and eyes. Used to manufacture dyes.
Colour	COLORLESS OILY LIQUID
Odour	PUNGENT ODOR
Melting point/freezing point	-16.4°C
Boiling point or initial boiling point and boiling range	202°C at 760mmHg
Flammability	Combustible. Gives off irritating or toxic fumes (or gases) in a fire.
Lower and upper explosion limit/flammability limit	no data available
Flash point	80.9°C
Auto-ignition temperature	525°C
Decomposition temperature	no data available
pH	no data available
Kinematic viscosity	no data available
Solubility	less than 1 mg/mL at 63° F (NTP, 1992)
Partition coefficient n-octanol/water	log Kow= 3.217 (calculated)
Vapour pressure	0.233mmHg at 25°C
Density and/or relative density	0.993g/cm <sup>3</sup>
Relative vapour density	5.6 (technical grade) (NTP, 1992) (Relative to Air)
Particle characteristics	no data available

## SECTION 10: Stability and reactivity

### Reactivity

Decomposes on burning. Decomposes on contact with acids or water. This produces toxic fumes including hydrogen chloride (see ICSC 0163). Reacts with strong oxidants.

### Chemical stability

no data available

### Possibility of hazardous reactions

Combustible. BENZYLIDENE CHLORIDE is incompatible with strong oxidizers and strong bases. It readily hydrolyzes under acid or alkaline conditions. It reacts with metals (except nickel and lead). (NTP, 1992).

### Conditions to avoid

no data available

### Incompatible materials

Reacts with water to release hydrochloric acid.

### Hazardous decomposition products

when heated to decomp ... emits toxic fumes of /hydrogen chloride/.

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## SECTION 11: Toxicological information

### Acute toxicity

- Oral: LD50 Rat oral 3,250 mg/kg.
- Inhalation: no data available
- Dermal: 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

Evaluation: There is limited evidence in humans for the carcinogenicity of alpha-chlorinated toluenes and benzoyl chloride. ... There is limited evidence in experimental animals for the carcinogenicity of benzal chloride. ... Overall evaluation: Combined exposures to alpha-chlorinated toluenes and benzoyl chloride are probably carcinogenic to humans (Group 2A). alpha-Chlorinated toluenes & benzoyl chloride

### Reproductive toxicity

no data available

### STOT-single exposure

no data available

### STOT-repeated exposure

no data available

### Aspiration hazard

no data available

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## SECTION 12: Ecological information

### Toxicity

Toxicity to fish: no data available

Toxicity to daphnia and other aquatic invertebrates: no data available

Toxicity to algae: no data available

Toxicity to microorganisms: no data available

### **Persistence and degradability**

Benzal chloride was found to readily biodegrade in water(1).

### **Bioaccumulative potential**

Based on a computer-calculated log Kow value of 3.217(1), the BCF value for benzal chloride can be estimated to be 164(2, SRC). Due to the relatively rapid hydrolysis of benzal chloride in water, bioconcentration in aquatic organisms is not likely to occur(SRC).

### **Mobility in soil**

Based on molecular topology and quantitative structure-activity relationship analysis, the Koc value for benzal chloride can be estimated to be about 510(1, SRC) which is indicative of medium to low soil mobility(SRC). Due to the relatively rapid hydrolysis in water, leaching of benzal chloride in moist soils is not expected to be significant since it is expected to hydrolyze first(SRC).

### **Other adverse effects**

no data available

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## **SECTION 13: Disposal considerations**

### **Disposal methods**

#### **Product**

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

#### **Contaminated packaging**

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

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## **SECTION 14: Transport information**

### **UN Number**

ADR/RID: Not dangerous goods. (For reference only, please check.)

IMDG: Not dangerous goods. (For reference only, please check.)

IATA: Not dangerous goods. (For reference only, please check.)

### **UN Proper Shipping Name**

ADR/RID: Not dangerous goods. (For reference only, please check.)

IMDG: Not dangerous goods. (For reference only, please check.)

IATA: Not dangerous goods. (For reference only, please check.)

### **Transport hazard class(es)**

ADR/RID: Not dangerous goods. (For reference only, please check.)

IMDG: Not dangerous goods. (For reference only, please check.)

IATA: Not dangerous goods. (For reference only, please check.)

### **Packing group, if applicable**

ADR/RID: Not dangerous goods. (For reference only, please check.)

IMDG: Not dangerous goods. (For reference only, please check.)

IATA: Not dangerous goods. (For reference only, please check.)

### **Environmental hazards**

ADR/RID: Yes

IMDG: Yes

IATA: Yes

### **Special precautions for user**

no data available

### **Transport in bulk according to IMO instruments**

no data available

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## SECTION 15: Regulatory information

### **Safety, health and environmental regulations specific for the product in question**

#### **European Inventory of Existing Commercial Chemical Substances (EINECS)**

Listed.

#### **EC Inventory**

Listed.

#### **United States Toxic Substances Control Act (TSCA) Inventory**

Listed.

#### **China Catalog of Hazardous chemicals 2015**

Not Listed.

#### **New Zealand Inventory of Chemicals (NZIoC)**

Listed.

#### **PICCS**

Listed.

#### **Vietnam National Chemical Inventory**

Listed.

#### **IECSC**

Listed.

#### **Korea Existing Chemicals List (KECL)**

Not Listed.

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## SECTION 16: Other information

### **Abbreviations and acronyms**



CAS: Chemical Abstracts Service

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

RID: Regulation concerning the International Carriage of Dangerous Goods by Rail

IMDG: International Maritime Dangerous Goods

IATA: International Air Transportation Association

TWA: Time Weighted Average

STEL: Short term exposure limit

LC50: Lethal Concentration 50%

LD50: Lethal Dose 50%

EC50: Effective Concentration 50%

## References

IPCS - The International Chemical Safety Cards (ICSC), website: <http://www.ilo.org/dyn/icsc/showcard.home>

HSDB - Hazardous Substances Data Bank, website: <https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm>

IARC - International Agency for Research on Cancer, website: <http://www.iarc.fr/>

eChemPortal - The Global Portal to Information on Chemical Substances by OECD, website: [http://www.echemportal.org/echemportal/index?pagelD=0&request\\_locale=en](http://www.echemportal.org/echemportal/index?pagelD=0&request_locale=en)

CAMEO Chemicals, website: <http://cameochemicals.noaa.gov/search/simple>

ChemIDplus, website: <http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp>

ERG - Emergency Response Guidebook by U.S. Department of Transportation, website: <http://www.phmsa.dot.gov/hazmat/library/erg>

Germany GESTIS-database on hazard substance, website: <http://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index-2.jsp>

ECHA - European Chemicals Agency, website: <https://echa.europa.eu/>

### Disclaimer:

The information in this MSDS is only applicable to the specified product, unless otherwise specified, it is not applicable to the mixture of this product and other substances. This MSDS only provides information on the safety of the product for those who have received the appropriate professional training for the user of the product. Users of this MSDS must make independent judgments on the applicability of this SDS. The authors of this MSDS will not be held responsible for any harm caused by the use of this MSDS.