

# Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 14.07.2010

Revision: 15.02.2010

## 1 Identification of substance

### Product details

Trade name

**o-Xylylene dichloride**

Stock number:

A12500, L02707

Manufacturer/Supplier:

Alfa Aesar GmbH & Co.KG  
Benzstrasse 3  
D-76185 Karlsruhe / GermanyE-mail: gcat@matthey.com  
www.alfa-chemcat.com

Informing department:

Product safety department.

Emergency information:

Giftnotruf Universität Mainz / Poison Information Center Mainz  
www.giftinfo.uni-mainz.de Telefon: +49(0)6131/19240

## 2 Hazards identification

Hazard designation:

T+ Very toxic  
N Dangerous for the environment

Information pertaining to particular dangers for man and environment

R 22 Harmful if swallowed.  
 R 26 Very toxic by inhalation.  
 R 34 Causes burns.  
 R 50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

GHS label elements

**Danger**

H330 - Fatal if inhaled.

**Danger**

H314 - Causes severe skin burns and eye damage.

**Warning**

H400 - Very toxic to aquatic life.  
 H410 - Very toxic to aquatic life with long lasting effects.

### Warning

H302 - Harmful if swallowed.  
 P280 Wear protective gloves/protective clothing/eye protection/face protection.  
 P302+P352 IF ON SKIN: Wash with plenty of soap and water.  
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P309 IF exposed or if you feel unwell:  
 P310 Immediately call a POISON CENTER or doctor/physician.  
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Prevention:

Response:

Disposal:

## 3 Composition/information on ingredients

Chemical characterization:

o-Xylylene dichloride (CAS# 612-12-4)

Designation: (CAS#)

Identification number(s):

210-291-8

EINECS Number:

## 4 First aid measures

General information

Instantly remove any clothing soiled by the product.  
 Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.  
 Seek immediate medical advice.

After inhalation

After skin contact

Instantly wash with water and soap and rinse thoroughly.

After eye contact

Seek immediate medical advice.

After swallowing

Rinse opened eye for several minutes under running water. Then consult doctor.  
 Seek immediate medical advice.

## 5 Fire fighting measures

Suitable extinguishing agents

CO2, sand, extinguishing powder. Do not use water.

For safety reasons unsuitable extinguishing agents

Water.

Special hazards caused by the material, its products of combustion or flue gases:

Reacts with water forming hydrochloric acid (HCl)  
 Can be released in case of fire:  
 Carbon monoxide and carbon dioxide  
 Hydrogen chloride (HCl)  
 Wear self-contained breathing apparatus.  
 Wear full protective suit.

Protective equipment:

## 6 Accidental release measures

Person-related safety precautions:

Wear protective equipment. Keep unprotected persons away.

Measures for environmental protection:

Ensure adequate ventilation  
 Do not allow material to be released to the environment without proper governmental permits.

Measures for cleaning/collecting:

Use neutralizing agent.  
 Dispose of contaminated material as waste according to item 13.

Additional information:

Ensure adequate ventilation.  
 See Section 7 for information on safe handling  
 See section 8 for information on personal protection equipment.  
 See Section 13 for information on disposal.

## 7 Handling and storage

Handling

Information for safe handling:

Keep containers tightly sealed.  
 Store in cool, dry place in tightly closed containers.  
 Ensure good ventilation/exhaustion at the workplace.

Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

Storage

Requirements to be met by storerooms and containers:

No special requirements.

Information about storage in one common storage facility:

Do not store together with strongly basic or oxidizing materials.  
 Store away from water.

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**Further information about storage conditions:**

Store away from alcohols.  
Store away from amines.

Protect from humidity and keep away from water.  
Keep container tightly sealed.  
Store in cool, dry conditions in well sealed containers.  
Store in a locked cabinet or with access restricted to technical experts or their assistants.

**8 Exposure controls and personal protection****Additional information about design of technical systems:**

Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.

**Components with critical values that require monitoring at the workplace:**

Not required.

**Additional information:**

No data

**Personal protective equipment****General protective and hygienic measures**

The usual precautionary measures should be adhered to in handling the chemicals.  
Keep away from foodstuffs, beverages and food.  
Instantly remove any soiled and impregnated garments.  
Wash hands during breaks and at the end of the work.  
Avoid contact with the eyes and skin.  
Use breathing protection with high concentrations.  
Tightly sealed safety glasses.  
Full face protection  
Face protection  
Protective work clothing.

**Breathing equipment:****Eye protection:****Body protection:****9 Physical and chemical properties:****General Information**

**Form:** Crystalline  
**Colour:** White  
**Smell:** Pungent

**Change in condition**

**Melting point/Melting range:** 53-57°C  
**Boiling point/Boiling range:** 246°C  
**Sublimation temperature / start:** Not determined

**Flash point:** 107°C

**Ignition temperature:** Not determined

**Decomposition temperature:** Not determined

**Danger of explosion:** Product is not explosive.

**Critical values for explosion:**

**Lower:** Not determined  
**Upper:** Not determined

**Steam pressure:** Not determined

**Density:** Not determined

**Solubility in / Miscibility with**

**Water:** Reacts with water forming hydrochloric acid (HCl)

**10 Stability and reactivity****Thermal decomposition / conditions to be avoided:**

No decomposition if used and stored according to specifications.

**Materials to be avoided:**

Oxidizing agents  
Bases  
Alcohols  
Amines

**Dangerous reactions:**

Corrosive action on metals  
Reacts with water forming hydrochloric acid (HCl)

**Dangerous products of decomposition:**

Carbon monoxide and carbon dioxide  
Hydrogen chloride (HCl)

**11 Toxicological information****Acute toxicity:****LD/LC50 values that are relevant for classification:**

Oral	LD50	1131 mg/kg (mouse) 1600 mg/kg (rat)
Inhalative	LC50/4H	250 mg/m3/4H (rat)

**Primary irritant effect:****on the skin:**

Corrosive effect on skin and mucous membranes.

**on the eye:**

Strong corrosive effect.  
Lachrymatory effect.  
No sensitizing effect known.

**Sensitization:****Other information (about experimental toxicology):**

Bacterial mutagenicity test: Ames Salmonella Typhimurium: Negative  
To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.  
Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.  
No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.

**Additional toxicological information:****12 Ecological information:****Ecotoxic effects:**

Very toxic for fish

**Remark:****Additional ecological information:****General notes:**

Water danger class 3 (Self-assessment): extremely hazardous for water.  
Do not allow product to reach ground water, water bodies or sewage system, even in small quantities.  
Danger to drinking water if even extremely small quantities leak into soil.  
Also poisonous for fish and plankton in water bodies.

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Do not allow material to be released to the environment without proper governmental permits.  
Very toxic for aquatic organisms

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## 13 Disposal considerations

**Product:**  
**Recommendation**

Consult state, local or national regulations for proper disposal.  
Hand over to disposers of hazardous waste.  
Must be specially treated under adherence to official regulations.

**Uncleaned packagings:**  
**Recommendation:**

Disposal must be made according to official regulations.

## 14 Transport information

**Land transport ADR/RID and GGVS/GGVE (cross-border/domestic)**



**ADR/RID-GGVS/E Class:** 6.1 (TC2) Toxic substances.  
**Kemler Number:** 68  
**UN-Number:** 2928  
**Packaging group:** II  
**Label:** 6.1+8  
**Special marking:** Symbol (fish and tree)  
**Designation of goods:** 2928 TOXIC SOLID, CORROSIVE, ORGANIC, N.O.S. (o-Xylylene dichloride)  
**Limited quantities (LQ)** LQ18  
**Transport category** 2  
**Tunnel restriction code** D/E

**Maritime transport IMDG/GGVSea:**



**IMDG/GGVSea Class:** 6.1  
**UN Number:** 2928  
**Label:** 6.1+8  
**Packaging group:** II  
**Marine pollutant:** Yes (P)  
**Correct technical name:** Symbol (fish and tree)  
TOXIC SOLID, CORROSIVE, ORGANIC, N.O.S. (o-Xylylene dichloride)

**Air transport ICAO-TI and IATA-DGR:**



**ICAO/IATA Class:** 6.1  
**UN/ID Number:** 2928  
**Label:** 6.1+8  
**Packaging group:** II  
**Correct technical name:** TOXIC SOLID, CORROSIVE, ORGANIC, N.O.S. (o-Xylylene dichloride)

**UN "Model Regulation":**

UN2928, TOXIC SOLID, CORROSIVE, ORGANIC, N.O.S., 6.1 (8), II  
Environmentally hazardous substance, solid; Marine Pollutant

**Environmental hazards:**

## 15 Regulatory information

**Designation according to EC guidelines:**

**Code letter and hazard designation of product:**



T+ Very toxic  
N Dangerous for the environment

**Risk phrases:**

22 Harmful if swallowed.  
26 Very toxic by inhalation.  
34 Causes burns.  
50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**Safety phrases:**

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
28 After contact with skin, wash immediately with plenty of soap and water.  
36/37/39 Wear suitable protective clothing, gloves and eye/face protection.  
45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).  
60 This material and its container must be disposed of as hazardous waste.  
61 Avoid release to the environment. Refer to special instructions/safety data sheets.

**National regulations**

**Information about limitation of use:**

Employment restrictions concerning young persons must be observed.  
For use only by technically qualified individuals.

**Water hazard class:**

Water danger class 3 (Self-assessment): extremely hazardous for water.

## 16 Other information:

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

**Department issuing data specification sheet:** Health, Safety and Environmental Department.

**Contact:** Zachariah Holt  
**Abbreviations and acronyms:** ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)  
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)  
IMDG: International Maritime Code for Dangerous Goods  
IATA: International Air Transport Association  
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)  
ICAO: International Civil Aviation Organization  
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)  
P: Marine Pollutant  
GHS: Globally Harmonized System of Classification and Labelling of Chemicals  
EINECS: European Inventory of Existing Commercial Chemical Substances  
CAS: Chemical Abstracts Service (division of the American Chemical Society)  
LC50: Lethal concentration, 50 percent  
LD50: Lethal dose, 50 percent