

# SAFETY DATA SHEET

according to the Global Harmonized System

## 1,2-Dichlorobenzene-d4

### 1. Identification of the substance/preparation and of the company/undertaking

Use of the Substance/Preparation	Solvent for NMR spectroscopy Chemical intermediate
Company/Undertaking Identification	ARMAR AG Müligasse 7 CH-5312 Döttingen Schweiz Tel. +41 56 245 2600 <a href="mailto:admin@armar.ch">admin@armar.ch</a>
Emergency telephone number	Tox-Zentrum Zürich : 145 / +41 44 251 51 51 [24h/7d]
Revision Date	21.05.2010
Version	GHS 1

### 2. Hazards identification



WARNING!

Acute toxicity, oral, Cat. 4  
Specific target organ toxicity (single exposure, inhalation), Cat. 3  
Serious eye damage/eye irritation, Cat. 2  
Skin corrosion/irritation, Cat. 2  
Hazardous to the aquatic environment, chronic, Cat. 1

### 3. Composition/information on ingredients

Components		Health hazards	CAS	REACH No.
1,2-Dichlorobenzene-d4	> 90%	TAOr4 CEy2 SSEIn3 CSk2 NChr1	2199-69-1	

---

## **4. First aid measures**

<b>Inhalation</b>	Move to fresh air. Consult a physician after significant exposure.
<b>Skin contact</b>	Wash with water and soap as a precaution.
<b>Eye contact</b>	Rinse thoroughly with plenty of water, also under the eyelids. If eye irritation persists, consult a specialist.
<b>Ingestion</b>	If conscious, drink plenty of water. Consult a physician if necessary.

---

## **5. Fire-fighting measures**

<b>Suitable extinguishing media</b>	Use dry chemical, CO <sub>2</sub> , water spray or alcohol foam.
<b>Extinguishing media which must not be used for safety reasons</b>	High volume water jet.
<b>Specific hazards</b>	Burning produces irritant fumes.
<b>Special protective equipment for firefighters</b>	Standard procedure for chemical fires.

---

## **6. Accidental release measures**

<b>Environmental precautions</b>	Do not flush into surface water or sanitary sewer system.
<b>Methods for cleaning up</b>	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

---

## **7. Handling and storage**

<b>Handling</b>	Use only in area provided with appropriate exhaust ventilation.
<b>Storage</b>	Store at room temperature in the original container.

---

## **8. Exposure controls / personal protection**

<b>Occupational exposure controls</b>	Avoid contact with skin, eyes and clothing.
<b>Personal protection equipment</b>	
<b>Respiratory protection</b>	In the case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit.
<b>Hand protection</b>	Gloves made of VITON.
<b>Eye protection</b>	Safety glasses.

---

## 9. Physical and chemical properties

<b>Form</b>	Liquid.
<b>Colour</b>	Colourless.
<b>Odour</b>	Aromatic.
<b>Physical and chemical properties</b>	Flash point: 65 °C. Water solubility: insoluble Boiling point/range: 180 °C. Melting point/range: -17 °C. Density: 1.325 g/ml. Vapour pressure: 130 Pa (20 °C). Explosion limits (lower): 2.2 %. Explosion limits (upper): 12 %.

---

## 10. Stability and reactivity

<b>Stability</b>	No decomposition if used as directed.
<b>Conditions to avoid</b>	Heating in air.
<b>Materials to avoid</b>	Alkaline metals.
<b>Hazardous decomposition products</b>	None under normal use.

---

## 11. Toxicological information

<b>Acute toxicity</b>	<b>1,2-Dichlorbenzene-D4</b> LD50/dermal/rabbit = > 10000 mg/kg. LD50/oral/rat = 500 mg/kg.
<b>Local effects</b>	Irritating to eyes, respiratory system and skin. In case of skin irritations or allergic reactions see a physician. Harmful if swallowed. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.
<b>Long term toxicity</b>	Chronic exposure may cause permanent damage of health.
<b>Sensitization</b>	None.
<b>Further information</b>	Health injuries are not known or expected under normal use.

---

## 12. Ecological information

<b>Ecotoxicity</b>	Toxicity to fish: 50 mg/l. LC50/48h/daphnia = 68 mg/l.
<b>Persistence / degradability</b>	Not readily biodegradable.

---

## 13. Disposal considerations

<b>Waste from residues / unused products</b>	Dispose of as hazardous waste in compliance with local and national regulations. Do not contaminate ponds, waterways or ditches with chemical or used container.
<b>Contaminated packaging</b>	Empty containers can be landfilled, when in compliance with local regulations.

---

## 14. Transport information

<b>ADR/RID</b>	Proper shipping name o-DICHLOROBENZENE UN No 1591. Class 6.1. Packing group III. ADR/RID-Labels 6.1+ENV. Classification code T1. Risk No. 60. Limited quantity LQ7. Tunnel code E
<b>IMO</b>	Proper shipping name Ortho-dichlorobenzene UN No 1591. Class 6.1. Packing group III. ADR/RID-Labels 6.1+ENV. Limited quantity 5 L. EmS F-A, S-A.
<b>ICAO</b>	Proper shipping name o-Dichlorobenzene UN No 1591. Class 6.1. Packing group III. Packing instruction (passenger aircraft): 611 (60 L). Packing instruction (LQ): Y611 (2 L). Packing instruction (cargo aircraft): 618 (220 L).

---

## 15. Regulatory information

<b>GHS-Classification</b>	
<b>Signal Word</b>	WARNING!
<b>Hazard Statements</b>	Harmful if swallowed. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. Very toxic to aquatic life with long lasting effects.
<b>Precautionary Statements</b>	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Wear protective gloves and eye/face protection. Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid release to the environment. IF ON SKIN: Wash with plenty of soap and water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Collect spillage. Rinse mouth. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Dispose of contents/container to an approved waste disposal plant. Do not eat, drink or smoke when using this product. Store in a well-ventilated place. Keep container tightly closed.
<b>GHS product identifier</b>	1,2-Dichlorobenzene-d4, CAS-No. 2199-69-1
<b>EC-Symbol(s)</b>	Xn - Harmful. N - Dangerous for the environment.
<b>R-phrase(s)</b>	R22: Harmful if swallowed. R36/37/38: Irritating to eyes, respiratory system and skin. R50/53: Very toxic to aquatic organisms, may cause long-term effects in the aquatic environment.
<b>S-phrase(s)</b>	S23: Do not breathe vapour S60: This material and its container must be disposed of as hazardous waste. S61: Avoid release to the environment. Refer to special instructions / safety data sheets.
<b>Regulatory Information</b>	The product is classified and labelled according to Regulation (EC) No. 1272/2008 (GHS/CLP). The product is classified and labelled in accordance with Directive 1999/45/EC.

---

## 16. Other information

<b>Recommended use</b>	Solvent for NMR spectroscopy Chemical intermediate.
<b>GHS-Classification</b>	TAOr4: Acute toxicity, oral, Cat. 4 CSk2: Skin corrosion/irritation, Cat. 2 CEy2: Serious eye damage/eye irritation, Cat. 2 SSEIn3: Specific target organ toxicity (single exposure, inhalation), Cat. 3 NChr1: Hazardous to the aquatic environment, chronic, Cat. 1
<b>Further information</b>	Take notice of the directions of use on the label.
<b>Disclaimer</b>	The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release. It is not to be considered a warranty or quality specification.