

# SAFETY DATA SHEET

according to the Global Harmonized System

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## Acetic acid-d4

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

Use of the Substance/Preparation	Solvent for NMR spectroscopy
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	24.03.2010
Version	GHS 1

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### 2. Hazards identification



DANGER!

Skin corrosion/irritation, Cat. 1A  
Flammable liquids, Cat. 3

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### 3. Composition/information on ingredients

Components		Health hazards	CAS	REACH No.
Acetic acid-d4	> 90%	CSk1A Fliq3	1186-52-3	

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## **4. First aid measures**

<b>Inhalation</b>	Move to fresh air. Consult a physician after significant exposure.
<b>Skin contact</b>	Wash off immediately with plenty of water. Consult a physician for severe cases.
<b>Eye contact</b>	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Protect unharmed eye.
<b>Ingestion</b>	Clean mouth with water and drink afterwards plenty of water. Do not induce vomiting. Consult a physician for severe cases.

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## **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>	Solvents may produce excessive pressure under fire-conditions. Sealed containers may rupture and ignite. Cool containers / tanks with water spray. Burning produces irritant fumes.
<b>Special protective equipment for firefighters</b>	Standard procedure for chemical fires.
<b>Specific methods</b>	Do not use a solid water stream as it may scatter and spread fire. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

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## **6. Accidental release measures**

<b>Environmental precautions</b>	No special environmental precautions required.
<b>Methods for cleaning up</b>	Clean up promptly by sweeping or vacuum. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). After cleaning, flush away traces with water.

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## **7. Handling and storage**

<b>Handling</b>	Provide sufficient air exchange and/or exhaust in work rooms. Plan first aid action before beginning work with this product. Wear personal protective equipment.
<b>Storage</b>	Store at room temperature in the original container.

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

<b>Exposure limit(s)</b>	MAK (Maximale Arbeitsplatzkonzentration): 10 ppm.
<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 latex.
<b>Eye protection</b>	Safety glasses with side-shields conforming to EN 166.
<b>Skin and body protection</b>	Wear as appropriate: Solvent-resistant apron and boots. Impervious clothing.

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## **9. Physical and chemical properties**

<b>Form</b>	Liquid.
<b>Colour</b>	Colourless.
<b>Odour</b>	Of vinegar.
<b>Physical and chemical properties</b>	Flash point: 40 °C. Water solubility: completely soluble Fat solubility: partly miscible. Melting point/range: 16 °C. Boiling point/range: 116 °C. Density: 1.12 g/ml. Vapour pressure: 1540 Pa (20 °C). Explosion limits (lower): 4 %. Explosion limits (upper): 17 %.

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## **10. Stability and reactivity**

<b>Stability</b>	No decomposition if used as directed.
<b>Conditions to avoid</b>	Heating in air. Burning produces obnoxious and toxic fumes.
<b>Materials to avoid</b>	Incompatible with strong bases and oxidizing agents. Corrodes base metals.
<b>Hazardous decomposition products</b>	None under normal use.

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## 11. Toxicological information

<b>Acute toxicity</b>	<b>Deuterated acetic acid</b> LD50/dermal/rabbit = 1060 mg/kg. LD50/oral/rat = 3310 mg/kg.
<b>Local effects</b>	Inhalation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting. Causes severe burns. Extremely corrosive and destructive to tissue.
<b>Long term toxicity</b>	Negligible.
<b>Sensitization</b>	None.

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## 12. Ecological information

<b>Ecotoxicity</b>	EC50/24h/daphnia = 95 mg/l. LC50/48h/golden orfe = 410 mg/l. May change pH of waters.
<b>Persistence / degradability</b>	Neutralization is normally necessary before waste water is discharged into water treatment plants. Readily biodegradable.
<b>Bioaccumulative potential</b>	Does not bioaccumulate.

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## 13. Disposal considerations

<b>Waste from residues / unused products</b>	Can be used without re-conditioning.
<b>Contaminated packaging</b>	Offer rinsed packaging material to local recycling facilities.

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## 14. Transport information

<b>ADR/RID</b>	Proper shipping name ACETIC ACID SOLUTION UN No 2789. Class 8. Packing group II. ADR/RID-Labels 8+3. Classification code CF1. Risk No. 83. Limited quantity LQ22. Tunnel code D/E
<b>IMO</b>	Proper shipping name Acetic acid, glacial UN No 2789. Class 8. Packing group II. ADR/RID-Labels 8+3. Limited quantity 1 L. EmS F-E, S-C.

**ICAO**

Proper shipping name Acetic acid, glacial  
UN No 2789.  
Class 8.  
Packing group II.  
Packing instruction (passenger aircraft): 809 (1 L).  
Packing instruction (LQ): Y809 (0.5 L).  
Packing instruction (cargo aircraft): 813 (30 L).

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## 15. Regulatory information

**GHS-Classification****Signal Word**

DANGER!

**Hazard Statements**

Flammable liquid and vapour.  
Causes severe skin burns and eye damage.

**Precautionary Statements**

Keep away from heat/sparks/open flames/hot surfaces. – No smoking.  
Keep container tightly closed.  
Take precautionary measures against static discharge.  
Do not breathe dust/fume/gas/mist/vapours/spray.  
Wash skin thoroughly after handling.  
Wear protective gloves/protective clothing/eye protection/face protection.  
IF SWALLOWED: rinse mouth. Do NOT induce vomiting.  
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.  
Store in a well-ventilated place. Keep cool.  
Dispose of contents/container to an approved waste disposal plant.  
Acetic acid-d4, CAS-No. 1186-52-3, EC-No. 214-693-4

**GHS product identifier****EC-Symbol(s)**

C - Corrosive.

**R-phrase(s)**

R10: Flammable.  
R35: Causes severe burns.

**S-phrase(s)**

S23: Do not breathe vapour  
S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

**Regulatory Information**

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.

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## **16. Other information**

<b>Recommended use</b>	Solvent for NMR spectroscopy
<b>GHS-Classification</b>	CSk1A: Skin corrosion/irritation, Cat. 1A Fliq3: Flammable liquids, Cat. 3
<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.