

SAFETY DATA SHEET

according to the Global Harmonized System

Acetic acid anhydride-d6

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 admin@armar.ch
Emergency telephone number	Tox-Zentrum Zürich : 145 / +41 44 251 51 51 [24h/7d]
Revision Date	24.03.2010
Version	GHS 1

2. Hazards identification



DANGER!

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

3. Composition/information on ingredients

Components		Health hazards	CAS	REACH No.
Acetic acid anhydride-d6	> 90%	CSk1B Fliq3	16649-49-3	

4. First aid measures

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

5. Fire-fighting measures

Suitable extinguishing media	Use dry chemical, CO ₂ , water spray or alcohol foam.
Extinguishing media which must not be used for safety reasons	High volume water jet.
Specific hazards	Solvents may produce excessive pressure under fire-conditions. Sealed containers may rupture and ignite. Cool containers / tanks with water spray. Burning produces irritant fumes.
Special protective equipment for firefighters	Standard procedure for chemical fires.
Specific methods	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.

6. Accidental release measures

Environmental precautions	No special environmental precautions required.
Methods for cleaning up	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.

7. Handling and storage

Handling	Plan first aid action before beginning work with this product. Wear personal protective equipment.
Storage	Store at room temperature in the original container.

8. Exposure controls / personal protection

Exposure limit(s)	MAK (Maximale Arbeitsplatzkonzentration): 5 ppm.
Occupational exposure controls	Avoid contact with skin, eyes and clothing.
Personal protection equipment	
Respiratory protection	In the case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit.
Hand protection	Gloves made of latex.
Eye protection	Safety glasses with side-shields conforming to EN 166.
Skin and body protection	Wear as appropriate: Solvent-resistant apron and boots. Impervious clothing.

9. Physical and chemical properties

Form	Liquid.
Colour	Colourless.
Odour	Of vinegar.
Physical and chemical properties	Flash point: 54 °C. Water solubility: hydrolyses Melting point/range: -73 °C. Boiling point/range: 140 °C. Density: 1.15 g/ml. Vapour pressure: 490 Pa (20 °C). Explosion limits (lower): 2 %. Explosion limits (upper): 10.3 %.

10. Stability and reactivity

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

11. Toxicological information

Acute toxicity	LDLO/oral/rat = 1780 mg/kg.
Local effects	Harmful by inhalation and if swallowed. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Inhalation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting. Extremely corrosive and destructive to tissue.
Long term toxicity	Negligible.
Sensitization	None.

12. Ecological information

Ecotoxicity	EC50/24h/daphnia = 55 mg/l. LC50/48h/golden orfe = 265 mg/l. May change pH of waters.
Persistence / degradability	Readily biodegradable. Neutralization is normally necessary before waste water is discharged into water treatment plants.
Bioaccumulative potential	Does not bioaccumulate.

13. Disposal considerations

Waste from residues / unused products	Can be used without re-conditioning. Taking into account local regulations the product may be disposed of as waste water after neutralisation.
Contaminated packaging	Offer rinsed packaging material to local recycling facilities.

14. Transport information

ADR/RID	Proper shipping name ACETIC ANHYDRIDE UN No 1715. Class 8. Packing group II. ADR/RID-Labels 8+3. Classification code CF1. Risk No. 83. Limited quantity LQ22. Tunnel code D/E
IMO	Proper shipping name Acetic anhydride UN No 1715. Class 8. Packing group II. ADR/RID-Labels 8+3. Limited quantity 1 L. EmS F-E, S-C.

ICAO	Proper shipping name Acetic anhydride UN No 1715. 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).
-------------	---

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.
GHS product identifier	Acetic acid anhydride-d6, CAS-No. 16649-49-3, EC-No. 240-697-0
EC-Symbol(s)	C - Corrosive.
R-phrase(s)	R10: Flammable. R20/22: Harmful by inhalation and if swallowed. R34: Causes burns.
S-phrase(s)	S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S36/37/39: Wear suitable protective clothing, gloves and eye / face protection. 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.

16. Other information

Recommended use	Solvent for NMR spectroscopy
GHS-Classification	CSk1B: Skin corrosion/irritation, Cat. 1B Fliq3: Flammable liquids, Cat. 3
Further information	Take notice of the directions of use on the label.
Disclaimer	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.