

SAFETY DATA SHEET

according to the Global Harmonized System

Trifluoroacetic acid-d

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!

Acute toxicity, inhal., Vapours, Cat. 4
Skin corrosion/irritation, Cat. 1A
Hazardous to the aquatic environment, chronic, Cat. 3

3. Composition/information on ingredients

Components		Health hazards	CAS	REACH No.
Trifluoroacetic acid-d	> 90%	TAInV4 CSk1A NChr3	599-00-8	

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. Prevent vomiting if possible. 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	The product is not flammable.
Special protective equipment for firefighters	Standard procedure for chemical fires.
Specific methods	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

6. Accidental release measures

Personal precautions	Ensure adequate ventilation.
Environmental precautions	Do not flush into surface water or sanitary sewer system.
Methods for cleaning up	Clean up promptly by sweeping or vacuum. 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)	Exposure limit(s): 0.5 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: Impervious clothing.

9. Physical and chemical properties

Form	Liquid.
Colour	Colourless.
Odour	Stinging.
Physical and chemical properties	Flash point: does not flash. Water solubility: completely soluble Melting point/range: -15 °C. Boiling point/range: 71 °C. Density: 1.5 g/ml (20 °C). Vapour pressure: 11000 Pa (20 °C).

10. Stability and reactivity

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

11. Toxicological information

Acute toxicity	LD50/oral/rat <= 200 mg/kg.
Local effects	Harmful by inhalation. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Causes severe burns. Extremely corrosive and destructive to tissue. Harmful if swallowed.

Long term toxicity	Chronic exposure may cause permanent damage of health.
Sensitization	None.

12. Ecological information

Ecotoxicity	May change pH of waters. Waste water from subsequent processing should be given appropriate treatment in line with local regulations.
Persistence / degradability	Not readily biodegradable.
Bioaccumulative potential	Accumulation in aquatic organisms is unlikely.

13. Disposal considerations

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

14. Transport information

ADR/RID	Proper shipping name TRIFLUOROACETIC ACID UN No 2699. Class 8. Packing group I. ADR/RID-Labels 8. Classification code C3. Risk No. 88. Limited quantity LQ0. Tunnel code E
IMO	Proper shipping name Trifluoroacetic acid UN No 2699. Class 8. Packing group I. ADR/RID-Labels 8. Limited quantity Keine. EmS F-A, S-B.
ICAO	Proper shipping name Trifluoroacetic acid UN No 2699. Class 8. Packing group I. Packing instruction (passenger aircraft): 807 (0.5 L). Packing instruction (LQ): –. Packing instruction (cargo aircraft): 809 (2.5 L).

15. Regulatory information

GHS-Classification	
Signal Word	DANGER!
Hazard Statements	Causes severe skin burns and eye damage. Harmful if inhaled. Harmful to aquatic life with long lasting effects.
Precautionary Statements	Do not breathe dust/fume/gas/mist/vapours/spray. Wash skin thoroughly after handling. Avoid release to the environment. 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 locked up. Dispose of contents/container to an approved waste disposal plant.
GHS product identifier	Trifluoroacetic acid-d, CAS-No. 599-00-8, EC-No. 209-961-2
EC-Symbol(s)	C - Corrosive.
R-phrase(s)	R20: Harmful by inhalation. R35: Causes severe burns. R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
S-phrase(s)	S9: Keep container in a well-ventilated place. S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S27: Take off immediately all contaminated clothing. S28: After contact with skin, wash immediately with plenty of soap and water. S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). S61: Avoid release to the environment. Refer to special instructions / safety data sheets.
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

GHS-Classification

TAInV4: Acute toxicity, inhal., Vapours, Cat. 4
CSk1A: Skin corrosion/irritation, Cat. 1A
NChr3: Hazardous to the aquatic environment, chronic, 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.