

SAFETY DATA SHEET

according to the Global Harmonized System

Toluene-d8

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!

Specific target organ toxicity (repeated exposure, inhalation), Cat. 2
Skin corrosion/irritation, Cat. 2
Aspiration hazard, Cat. 1
Specific target organ toxicity (single exposure, narcotic effects), Cat. 3
Flammable liquids, Cat. 2

3. Composition/information on ingredients

Components		Health hazards	CAS	REACH No.
Toluene-d8	> 90%	CSk2 SREIn2 SAsp1 SSENarc3 Fliq2	2037-26-5	

4. First aid measures

Inhalation	Move to fresh air. Consult a physician after significant exposure.
Skin contact	Wash with water and soap as a precaution.
Eye contact	Rinse thoroughly with plenty of water, also under the eyelids. If eye irritation persists, consult a specialist.
Ingestion	Clean mouth with water and drink afterwards plenty of water. Do not induce vomiting. Consult a physician if necessary.

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.

6. Accidental release measures

Personal precautions	Remove all sources of ignition. Pay attention to flashback.
Environmental precautions	Do not flush into surface water or sanitary sewer system.
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).

7. Handling and storage

Handling	Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours). Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air. The product should only be used in areas from which all naked lights and other sources of ignition have been excluded.
Storage	Keep containers tightly closed in a dry, cool and well-ventilated place.

8. Exposure controls / personal protection

Exposure limit(s)	MAK (Maximale Arbeitsplatzkonzentration): 50 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 VITON.
Eye protection	Safety glasses.
Skin and body protection	Wear as appropriate: Solvent-resistant apron and boots.

9. Physical and chemical properties

Form	Liquid.
Colour	Colourless.
Odour	Aromatic.
Physical and chemical properties	Flash point: 4 °C. Water solubility: insoluble Melting point/range: -84 °C. Boiling point/range: 109 °C. Density: 0.94 g/ml (20 °C). Vapour pressure: 2900 Pa (20 °C). Explosion limits (lower): 1.2 %. Explosion limits (upper): 8 %.

10. Stability and reactivity

Stability	No decomposition if used as directed.
Conditions to avoid	Heating in air.
Materials to avoid	Incompatible with oxidizing agents. Halogens and halogen compounds
Hazardous decomposition products	None under normal use.

11. Toxicological information

Acute toxicity	Toluene-D8 LD50/dermal/rabbit = 12124 mg/kg. LD50/oral/rat = 636 mg/kg.
Local effects	Irritating to skin. Inhalation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.
Long term toxicity	Negligible.
Sensitization	None.

12. Ecological information

Ecotoxicity	Toxicity to fish: 1 mg/l.
Persistence / degradability	The solvent is biodegradable.
Bioaccumulative potential	Does not bioaccumulate.

13. Disposal considerations

Waste from residues / unused products	Can be incinerated, when in compliance with local regulations.
Contaminated packaging	Offer rinsed packaging material to local recycling facilities.

14. Transport information

ADR/RID	Proper shipping name TOLUENE UN No 1294. Class 3. Packing group II. ADR/RID-Labels 3. Classification code F1. Risk No. 33. Limited quantity LQ4. Tunnel code D/E
IMO	Proper shipping name Toluene UN No 1294. Class 3. Packing group II. ADR/RID-Labels 3. Limited quantity 1 L. EmS F-E, S-D.

ICAO Proper shipping name Toluene
UN No 1294.
Class 3.
Packing group II.
Packing instruction (passenger aircraft): 305 (5 L).
Packing instruction (LQ): Y305 (1 L).
Packing instruction (cargo aircraft): 307 (60 L).

15. Regulatory information

GHS-Classification
Signal Word DANGER!
Hazard Statements Highly flammable liquid and vapour.
May be fatal if swallowed and enters airways.
Causes skin irritation.
May cause drowsiness and dizziness.
May cause damage to organs through prolonged or repeated exposure if inhaled.

Precautionary Statements Keep away from heat/sparks/open flames/hot surfaces. – No smoking.
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: Immediately call a POISON CENTER or doctor/physician.
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.
Get medical advice/attention if you feel unwell.
Do NOT induce vomiting.
If skin irritation occurs: Get medical advice/attention.
Store in a well-ventilated place. Keep cool.
Dispose of contents/container to an approved waste disposal plant.

GHS product identifier Toluene-d8, CAS-No. 2037-26-5, EC-No. 218-009-5

EC-Symbol(s) F - Highly flammable.
Xn - Harmful.

R-phrases(s) R11: Highly flammable.
R38: Irritating to skin.
R48/20: Harmful: danger of serious damage to health by prolonged exposure through inhalation.
R62: Possible risk of impaired fertility.
R65: Harmful: may cause lung damage if swallowed.
R67: Vapours may cause drowsiness and dizziness.

S-phrase(s) S36/37: Wear suitable protective clothing and gloves.
S62: If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

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

CSk2: Skin corrosion/irritation, Cat. 2
SREIn2: Specific target organ toxicity (repeated exposure, inhalation), Cat. 2
SAsp1: Aspiration hazard, Cat. 1
SSENarc3: Specific target organ toxicity (single exposure, narcotic effects), Cat. 3
Fliq2: Flammable liquids, Cat. 2

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.