

SAFETY DATA SHEET

according to the Global Harmonized System

Bromobenzene-d5

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 admin@armar.ch
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!

Skin corrosion/irritation, Cat. 2
Flammable liquids, Cat. 3
Hazardous to the aquatic environment, chronic, Cat. 2

3. Composition/information on ingredients

Components		Health hazards	CAS	REACH No.
Bromobenzene-d5	> 90%	CSk2 NChr2 Fliq3	4165-57-5	

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	Do not induce vomiting. Consult a physician if necessary. If conscious, drink plenty of water.

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

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

7. Handling and storage

Handling	Use only in well-ventilated areas.
Storage	Store at room temperature in the original container.

8. Exposure controls / personal protection

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: 51 °C. Water solubility: insoluble Boiling point/range: 151 °C. Melting point/range: -31 °C. Density: 1.5 g/ml. Vapour pressure: 430 Pa. Explosion limits (lower): 0.5 %. Explosion limits (upper): 2.5 %.

10. Stability and reactivity

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

11. Toxicological information

Acute toxicity	Bromobenzene-D5 LD50/oral/rat = 2699 mg/kg.
Local effects	Irritating to skin. Harmful if swallowed. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.
Long term toxicity	Chronic exposure may cause permanent damage of health.
Sensitization	None.

12. Ecological information

Persistence / degradability	Not readily biodegradable.
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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 BROMOBENZENE UN No 2514. Class 3. Packing group III. ADR/RID-Labels 3+ENV. Classification code F1. Risk No. 30. Limited quantity LQ7. Tunnel code D/E
IMO	Proper shipping name Bromobenzene UN No 2514. Class 3. Packing group III. ADR/RID-Labels 3+ENV. Limited quantity 5L. EmS F-E, S-D.

ICAO Proper shipping name Bromobenzene
UN No 2514.
Class 3.
Packing group III.
Packing instruction (passenger aircraft): 309 (60 L).
Packing instruction (LQ): Y309 (10 L).
Packing instruction (cargo aircraft): 310 (220 L).

15. Regulatory information

GHS-Classification
Signal Word WARNING!
Hazard Statements Flammable liquid and vapour.
Causes skin irritation.
Toxic to aquatic life with long lasting effects.

Precautionary Statements Avoid release to the environment.
Keep away from heat/sparks/open flames/hot surfaces. – No smoking.
Collect spillage.
If skin irritation occurs: Get medical advice/attention.
Dispose of contents/container to an approved waste disposal plant.
Take precautionary measures against static discharge.
Wear protective gloves/protective clothing/eye protection/face protection.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
Store in a well-ventilated place. Keep cool.
Keep container tightly closed.

GHS product identifier Bromobenzene-d5, CAS-No. 4165-57-5

EC-Symbol(s) Xi - Irritant.
N - Dangerous for the environment.

R-phrase(s) R10: Flammable.
R38: Irritating to skin.
R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S-phrase(s) 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

Recommended use	Solvent for NMR spectroscopy Chemical intermediate.
GHS-Classification	CSk2: Skin corrosion/irritation, Cat. 2 NChr2: Hazardous to the aquatic environment, chronic, Cat. 2 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.