

SAFETY DATA SHEET

according to the Global Harmonized System

Dimethylformamide-d7

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



WARNING!

Serious eye damage/eye irritation, Cat. 2

3. Composition/information on ingredients

Components		Health hazards	CAS	REACH No.
Dimethylformamide-d7	> 90%	CEy2	4472-41-7	

4. First aid measures

Inhalation	Move to fresh air.
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.

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.
Special protective equipment for firefighters	Standard procedure for chemical fires.

6. Accidental release measures

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). After cleaning, flush away traces with water.

7. Handling and storage

Handling	No special technical protective measures required.
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	No special protective equipment required.
Hand protection	Gloves made of Nitril.
Eye protection	Safety glasses.

9. Physical and chemical properties

Form	Liquid.
Colour	Colourless.
Odour	Mild.
Physical and chemical properties	pH: 7 (3 % solution). Flash point: 58 °C. Water solubility: completely soluble Fat solubility: completely soluble Melting point/range: -60 °C. Boiling point/range: 155 °C. Density: 1.05 g/ml. Vapour pressure: 350 Pa (20 °C). Explosion limits (lower): 2.2 %. Explosion limits (upper): 16 %.

10. Stability and reactivity

Stability	No decomposition if used as directed.
Conditions to avoid	Do not freeze. Heating in air.
Materials to avoid	Incompatible with strong acids and bases. Alkaline metals.
Hazardous decomposition products	None under normal use.

11. Toxicological information

Acute toxicity	Dimethylformamid-D7 LD50/dermal/rabbit = 1500 mg/kg. LD50/oral/rat = 2800 mg/kg.
Local effects	Irritating to eyes. May cause skin irritation with susceptible persons. Difficulty in breathing.
Long term toxicity	Negligible.
Sensitization	None.

12. Ecological information

Ecotoxicity	EC50/48h/daphnia = 13000 mg/l. LC50/96h/fish > 500 mg/l.
Persistence / degradability	Readily biodegradable.
Bioaccumulative potential	Does not bioaccumulate.

13. Disposal considerations

Waste from residues / unused products	Can be used without re-conditioning. 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 N,N-DIMETHYLFORMAMIDE UN No 2265. Class 3. Packing group III. ADR/RID-Labels 3. Classification code F1. Risk No. 30. Limited quantity LQ7. Tunnel code D/E
IMO	Proper shipping name N,N-Dimethylformamide UN No 2265. Class 3. Packing group III. ADR/RID-Labels 3. Limited quantity 5 L. EmS F-E, S-D.

ICAO Proper shipping name N,N-Dimethylformamide
UN No 2265.
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 Causes serious eye irritation.
Precautionary Statements Wash skin thoroughly after handling.
Wear protective gloves and eye/face protection.
IF IN EYES: Rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.

GHS product identifier Dimethylformamide-d7, CAS-No. 4472-41-7, EC-No. 224-745-8

EC-Symbol(s) T - Toxic.

R-phrase(s) R61: May cause harm to unborn child.
R20/21: Harmful by inhalation and in contact with skin.
R36: Irritating to eyes.

S-phrase(s) S53: Avoid exposure - obtain special instructions before use.
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 CEy2: Serious eye damage/eye irritation, 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.