

SAFETY DATA SHEET

according to the Global Harmonized System

Lithium deuteride

1. Identification of the substance/preparation and of the company/undertaking

Use of the Substance/Preparation	Chemical reaction medium
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



DANGER!

Skin corrosion/irritation, Cat. 1B
{EUH014} Reacts violently with water.

3. Composition/information on ingredients

Components		Health hazards	CAS	REACH No.
Lithium deuteride	> 90%	Csk1B EUH014	13587-16-1	

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	Clean mouth with water and drink afterwards plenty of water. Consult a physician for severe cases.

5. Fire-fighting measures

Suitable extinguishing media	Dry chemical.
Extinguishing media which must not be used for safety reasons	High volume water jet. Water spray. Alcohol-resistant foam.
Specific hazards	Burning produces irritant fumes. Contact with water liberates extremely flammable gases.
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	Remove all sources of ignition.
Methods for cleaning up	Use mechanical handling equipment. Clean up promptly by sweeping or vacuum.

7. Handling and storage

Handling	Plan first aid action before beginning work with this product. Wear personal protective equipment.
Storage	Keep containers tightly closed in a dry, cool and well-ventilated place.

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 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	Solid.
Colour	White.
Odour	Odorless
Physical and chemical properties	Water solubility: Decomposes in contact with water Melting point/range: 680 °C. Density: 0.82 g/ml.

10. Stability and reactivity

Stability	No decomposition if used as directed.
Conditions to avoid	Burning produces obnoxious and toxic fumes.
Materials to avoid	Reacts violently with water, liberating highly flammable gases. Corrodes base metals.
Hazardous decomposition products	None under normal use.

11. Toxicological information

Local effects	Causes burns.
Long term toxicity	Negligible.
Sensitization	None.

12. Ecological information

Persistence / degradability	No data is available on the product itself.
Bioaccumulative potential	Does not bioaccumulate.

13. Disposal considerations

Waste from residues / unused products	Dispose of as hazardous waste in compliance with local and national regulations.
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14. Transport information

ADR/RID	Proper shipping name LITHIUM HYDRIDE UN No 1414. Class 4.3. Packing group I. ADR/RID-Labels 4.3. Classification code W2. Risk No. X423. Limited quantity LQ0. Tunnel code E
IMO	Proper shipping name Lithium hydride UN No 1414. Class 4.3. Packing group I. ADR/RID-Labels 4.3. Limited quantity Keine. EmS F-G, S-N.
ICAO	Proper shipping name Lithium hydride UN No 1414. Class 4.3. Packing group I. Packing instruction (passenger aircraft): Forbidden. Packing instruction (LQ): –. Packing instruction (cargo aircraft): 412 (15 kg).

15. Regulatory information

GHS-Classification	
Signal Word	DANGER!
Hazard Statements	Causes severe skin burns and eye damage.
Precautionary Statements	Do not breathe dust/fume/gas/mist/vapours/spray. Wear protective gloves/protective clothing/eye protection/face protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. IF SWALLOWED: rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician. Store locked up. Wash skin thoroughly after handling. IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Dispose of contents/container to an approved waste disposal plant.
GHS product identifier	Lithium deuteride, CAS-No. 13587-16-1, EC-No. 237-018-5
EC-Symbol(s)	F - Highly flammable. C - Corrosive.
R-phrase(s)	R11: Highly flammable. R14: Reacts violently with water. R34: Causes burns.
S-phrase(s)	S16: Keep away from sources of ignition - No smoking. S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S27: Take off immediately all contaminated clothing. 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). S7/9: Keep container tightly closed and in a well-ventilated place.
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	Chemical reaction medium. Laboratory chemicals
GHS-Classification	CSk1B: Skin corrosion/irritation, Cat. 1B
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.