

# SAFETY DATA SHEET

according to the Global Harmonized System

---

## Lithium aluminum 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 <a href="mailto:admin@armar.ch">admin@armar.ch</a>
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. 1A

---

### 3. Composition/information on ingredients

Components		Health hazards	CAS	REACH No.
Lithium aluminum deuteride	> 90%	CSk1A	14128-54-2	

---

## **4. First aid measures**

<b>Inhalation</b>	Move to fresh air.
<b>Skin contact</b>	Wash off immediately with plenty of water. Consult a physician for severe cases.
<b>Eye contact</b>	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Protect unharmed eye.
<b>Ingestion</b>	Clean mouth with water and drink afterwards plenty of water. Prevent vomiting if possible. Consult a physician for severe cases.

---

## **5. Fire-fighting measures**

<b>Suitable extinguishing media</b>	Dry chemical.
<b>Extinguishing media which must not be used for safety reasons</b>	High volume water jet. Water spray. Alcohol-resistant foam.
<b>Specific hazards</b>	Contact with water liberates extremely flammable gases. The product is not flammable.
<b>Special protective equipment for firefighters</b>	Standard procedure for chemical fires.

---

## **6. Accidental release measures**

<b>Environmental precautions</b>	No special environmental precautions required.
<b>Methods for cleaning up</b>	Use mechanical handling equipment. Clean up promptly by sweeping or vacuum. Contact with water liberates extremely flammable gases.

---

## **7. Handling and storage**

<b>Handling</b>	Plan first aid action before beginning work with this product. Wear personal protective equipment.
<b>Storage</b>	Store at room temperature in the original container.

---

## **8. Exposure controls / personal protection**

<b>Occupational exposure controls</b>	Avoid contact with skin, eyes and clothing.
<b>Personal protection equipment</b>	
<b>Respiratory protection</b>	No special protective equipment required.
<b>Hand protection</b>	Gloves made of latex.
<b>Eye protection</b>	Safety glasses with side-shields conforming to EN 166.

---

## **9. Physical and chemical properties**

<b>Form</b>	Solid.
<b>Colour</b>	White.
<b>Odour</b>	Odorless
<b>Physical and chemical properties</b>	Density: 0.92 g/ml.

---

## **10. Stability and reactivity**

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

---

## **11. Toxicological information**

<b>Local effects</b>	Causes severe burns.
<b>Long term toxicity</b>	Negligible.
<b>Sensitization</b>	None.

---

## 12. Ecological information

<b>Ecotoxicity</b>	LC50/24h/daphnia = 16 mg/l. Toxicity to fish: 100 mg/l. May change pH of waters.
<b>Bioaccumulative potential</b>	Does not bioaccumulate.

---

## 13. Disposal considerations

<b>Waste from residues / unused products</b>	Dispose of as hazardous waste in compliance with local and national regulations.
--	--

---

## 14. Transport information

<b>ADR/RID</b>	Proper shipping name LITHIUM ALUMINIUM HYDRIDE UN No 1410. Class 4.3. Packing group I. ADR/RID-Labels 4.3. Classification code W2. Risk No. X423. Limited quantity LQ0. Tunnel code E
<b>IMO</b>	Proper shipping name Lithium aluminium hydride UN No 1410. Class 4.3. Packing group I. ADR/RID-Labels 4.3. Limited quantity Keine. EmS F-G, S-M.
<b>ICAO</b>	Proper shipping name Lithium aluminium hydride UN No 1410. Class 4.3. Packing group I. Packing instruction (passenger aircraft): Forbidden. Packing instruction (LQ): –. Packing instruction (cargo aircraft): 412 (15 kg).

---

## 15. Regulatory information

<b>GHS-Classification</b>	
<b>Signal Word</b>	DANGER!
<b>Hazard Statements</b>	Causes severe skin burns and eye damage.
<b>Precautionary Statements</b>	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.
<b>GHS product identifier</b>	Lithium aluminum deuteride, CAS-No. 14128-54-2
<b>EC-Symbol(s)</b>	F - Highly flammable. C - Corrosive.
<b>R-phrase(s)</b>	R15: Contact with water liberates extremely flammable gases. R35: Causes severe burns.
<b>S-phrase(s)</b>	S7/9: Keep container tightly closed and in a well-ventilated place. S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S36/37/39: Wear suitable protective clothing, gloves and eye / face protection. S43: In case of fire, use dry chemical. S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
<b>Regulatory Information</b>	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**

<b>Recommended use</b>	Chemical reaction medium. Laboratory chemicals.
<b>GHS-Classification</b>	CSk1A: Skin corrosion/irritation, Cat. 1A
<b>Further information</b>	Take notice of the directions of use on the label.
<b>Disclaimer</b>	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.