

## MEDICAL ISOTOPES, Inc.

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### SAFETY DATA SHEET

#### SECTION 1. Identification

**Product:**

Product Name: Lithium Aluminum Deuteride  
Catalog number: D3017

**Supplier:**

Medical Isotopes, Inc.  
100 Bridge Street  
Pelham, NH 03076 USA  
Tel: +1-603-635-2255 Fax: +1-603-635-2448  
Email: [info@medicalisotopes.com](mailto:info@medicalisotopes.com)

**Suitability:**

For laboratory use only.

**Emergency Contact Information:**

Call Chemtrec 24/7  
DOMESTIC NORTH AMERICA 800-424-9300  
INTERNATIONAL, CALL 703-527-3887 (collect calls accepted)

#### SECTION 2. Hazard(s) identification

**Hazard classification:**

Substances and mixtures, which in contact with water, emit flammable gases (Category 1), H260  
Acute toxicity, Oral (Category 3), H301  
Skin corrosion (Category 1B), H314  
Serious eye damage (Category 1), H318

**Signal Word:**

Danger

**Hazard Statements:**

H260 In contact with water releases flammable gases which may ignite spontaneously.  
H301 Toxic if swallowed.  
H314 Causes severe skin burns and eye damage.

**Pictogram:**



**Precautionary Statements:**

P223 Keep away from any possible contact with water, because of violent reaction and possible flash fire.  
P231 + P232 Handle under inert gas. Protect from moisture.  
P264 Wash skin thoroughly after handling.  
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.  
P301 + P330 + P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.  
P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.  
P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P310 Immediately call a POISON CENTER or doctor/ physician.  
P335 + P334 Brush off loose particles from skin. Immerse in cool water/ wrap in wet bandages.

**Other hazards:**

None

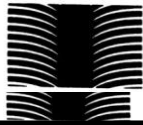
#### SECTION 3. Composition/Information on Ingredients

**Chemical name:**

Lithium Aluminum Deuteride

**Synonyms:**

N/A



## MEDICAL ISOTOPES, Inc.

CAS number:

14128-54-2

Impurities/Additives:

N/A

### SECTION 4. FIRST AID MEASURES

**Skin Contact:** Wash with soap and water for several minutes. Consult a physician.

**Ingestion:** Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**Inhalation:** Remove from exposure and move to fresh air immediately. Consult a physician.

**Eye Contact:** Rinse thoroughly with plenty of water. Consult a physician.

### SECTION 5. FIRE FIGHTING MEASURES

**Suitable extinguishing media**

Use a dry powder extinguisher.

**Special protective equipment for firefighters**

Wear self contained breathing apparatus for fire-fighting if necessary.

**Hazardous combustion products:** Lithium oxides, aluminum oxides.

### SECTION 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions:** Make sure to wear appropriate protective equipment as listed in section 8. Avoid breathing dust, vapors, or mists.

**Spill Clean-up Methods:** Clean up spills immediately, observing precautions in the Protective Equipment section.

Cover with a non-combustible material (e.g. sand, earth, diatomaceous earth), sweep up, and place into a suitable container for disposal. Avoid breathing the resulting dust.

### SECTION 7. HANDLING & STORAGE

**Usage/Handling Precautions:** Make sure to wear appropriate PPE as listed in section 8. Avoid contact with skin and eyes.

**Storage Conditions:** Keep tightly closed and store at room temperature. Handle under an inert gas

### SECTION 8. EXPOSURE CONTROL / PERSONAL PROTECTION

**Engineering Controls:** Use fumehood if available.

**Personal Protective Equipment**

Eyes: Always wear safety glasses when working with chemicals. Wear chemical goggles when working with liquids.

Skin: Wear protective gloves and a lab coat to prevent skin exposure.

### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:** Gray Powder

**Odor:** N/A

**pH:** N/A

**Melting Point:** 125 °C

**Water Solubility (%):** N/A

**Flash Point (°C):** N/A

**Vapor pressure:** N/A

**Autoignition Temperature (°C):** N/A

**Flammability Limits in Air (% by Vol.):** N/A

### SECTION 10. STABILITY & REACTIVITY

**Reactivity:** N/A

**Chemical Stability:** Stable under recommended storage conditions

**Conditions to Avoid:** Water, atmospheric moisture, strong oxidizing agents, alcohols, peroxides, halogenated hydrocarbons, and compounds with active (protic) hydrogen atoms.

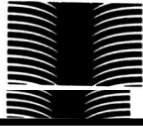
### SECTION 11. TOXICOLOGICAL INFORMATION

**Inhalation:** LD50 – mammal, 70 mg/kg

**Ingestion:** LD50 oral – mouse 85 mg/kg

**Skin and eye contact:** N/A

**Other:** N/A



**SECTION 12. ECOLOGICAL INFORMATION**

N/A

**SECTION 13. DISPOSAL CONSIDERATIONS**

**Disposal Procedures:** Via licensed disposal company. Dispose of according to federal, state/province and local regulations.

**SECTION 14. TRANSPORT INFORMATION**

**DOT (US)**

UN number: 1410 Class: 4.3 Packing group: I  
Proper shipping name: Lithium aluminum hydride  
Marine pollutant: No  
Poison Inhalation Hazard: No

**IMDG**

UN number: 1410 Class: 4.3 Packing group: I EMS-No: F-G, S-M  
Proper shipping name: LITHIUM ALUMINIUM HYDRIDE  
Marine pollutant: No

**IATA**

UN number: 1410 Class: 4.3 Packing group: I  
Proper shipping name: Lithium aluminium hydride  
IATA Passenger: Not permitted for transport

**SECTION 15. REGULATORY INFORMATION**

N/A

**SECTION 16. OTHER INFORMATION**

Preparation information: Last revised on 6/10/2015.

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