

## Material Safety Data Sheet

Identity: Lithium

Formula: Li

### SECTION I - GENERAL INFORMATION

Manufacturer: [Stanford Advanced Materials](#) (SAM)

The information below is believed to be accurate and represents the best information available to SAM. However, SAM makes no warranty, expressed or implied with respect to such information and assumes no liability resulting from its use.

### SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

Molecular weight: 6.941

CAS #	OSHA PEL	ACGIH TLV	%
7439-93-2	N/A	N/A	0-100

### SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

Physical States: Solid

Boiling Point: 1336 °C

Vapor Pressure (vs. air or mmHg): N/A

Melting Point: 180.5 °C

Density: 0.531 g/cm<sup>3</sup>

Evaporation Rate: N/A

Flash Point: N/A

Solubility in water: Reacts violently with water

*Appearance and odor:* Silver to grey pieces, no odor

### SECTION IV - FIRE AND EXPLOSION HAZARD DATA:

*Method Used:* Flammable in water *Explosive Limits:* LEL: N/A UEL: N/A*Extinguishing Media:* DO NOT USE WATER, CO<sub>2</sub>, or HALOGENATED EXTINGUISHERS

#### Special Fire Fighting Procedures:

Firefighters must wear full face, self-contained breathing apparatus with full protective clothing to prevent contact with skin and eyes. Fumes from fire are hazardous. Isolate runoff to prevent environmental pollution.

*Unusual Fire and Explosion Hazards:* Contact with water liberates extremely flammable gases

### SECTION V - REACTIVITY DATA

*Stability:* Stable*Conditions to Avoid (stability):* None*Incompatibility:* Water/moisture, air, acids, oxidizing agents, halogens, heavy metal powders, sulfur  
Halocarbons, carbon dioxide*Hazardous Decomposition or Byproducts:* Flammable gases including hydrogen or metal oxide fumes*Hazardous Polymerization:* Will not occur*Conditions to avoid (hazardous polymerization):* None

SECTION VI - HEALTH HAZARD DATA

Health Hazards (Acute and Chronic):

*Inhalation:* May have a corrosive effect on mucous membranes;

*Ingestion:* Large amounts may cause vomiting, diarrhea, ataxia, intestinal irritation, kidney injury, central nervous system depression and a drop in blood pressure. May also cause slurred speech, weakness, tremors, fatigue or hyperactive reflexes.

*Skin:* May have a corrosive effect on skin

*Eye:* Strong corrosive effect; May cause redness, itching, swelling, blurred vision, burning and/or watering

*Carcinogenicity:* NTP? No

IARC Monographs? No

OSHA Regulated? No

*Medical Conditions Aggravated by Exposure:* Pre-existing allergies

Emergency and First Aid Procedures:

*Inhalation:* Remove victim to fresh air, keep warm and quiet, and give oxygen if breathing is difficult; seek medical attention

*Ingestion:* Give 1-2 glasses of milk or water and induce vomiting, seek medical attention. Never induce vomiting or give anything by mouth to an unconscious person

*Skin:* Remove contaminated clothing, brush material off skin, wash affected area with mild soap and water, and seek medical attention if symptoms persist

*Eye:* Flush eyes with lukewarm water, lifting upper and lower eyelids for at least 15 minutes and seek medical attention

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

*Steps to be taken in case material is released or spilled:*

Wear appropriate respiratory and protective equipment specified in section VIII. Isolate spill area, provide ventilation and extinguish sources of ignition. Vacuum up spill using a high efficiency particulate absolute (HEPA) air filter and place in a closed container for proper disposal. Take care not to raise dust. DO NOT flush with water or use sparking tools.

*Waste disposal method:* Dispose of in accordance with state, local, and federal regulations.

*Hazard Label Information:*

Store in cool, DRY area and in tightly sealed container. Wash thoroughly after handling.

STORE UNDER ARGON

DO NOT STORE with acids or oxidizing agents

SECTION VIII - CONTROL MEASURES

*Protective Equipment Summary (Hazard Label Information):*

NIOSH approved respirator, impervious gloves, safety glasses, clothes to prevent contact.

*Ventilation:* Local Exhaust: To maintain concentration at low exposure levels.

Mechanical (General): Recommended.

*Work/Hygienic/Maintenance Practices:*

Implement engineering and work practice controls to reduce and maintain concentration of exposure at low levels. Use good housekeeping and sanitation practices. Do not use tobacco or food in work area. Wash thoroughly before eating or smoking. Do not blow dust off clothing or skin with compressed air.

Please be advised that N/A can either mean Not Applicable or No Data Has Been Established