



**Additional hazard information :**

In case of fire, liberates toxic gases/ fume.

With respect to additional hazard information, see Section 11.

**Section 3. Composition / information on ingredients**

Chemical or common name:	Lithium
Chemical formula:	Li
Single Substance or Compound:	Single substance
Composition:	100%
CAS #:	7439-93-2
RTECS#:	OJ5540000
TSCA inventory:	listed
EINECS:	2311025

**Section 4. First aid measures**

Eye contact:	Promptly rinse eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes and get medical attention.
Skin contact:	Promptly flush contaminated skin with soap or mild detergent and water. Contact physician if irritation continues.
Ingestion:	Rinse mouth and throat with water. Get medical attention immediately.
Inhalation:	Remove the exposed person immediately and provide fresh air. Get medical attention.

**Section 5. Fire fighting measures**

Extinguishing media:	DRY sand, dry chemical, soda ash or lime DO NOT use water or foam.
Fire fighting:	Contact with water liberates flammable gases. Self-contained breathing apparatus and full protective clothing should be used, if the material is involved in fire. Remove container to safe place if possible. Depending on the situation, withdraw from area and let fire burn.

**Section 6. Accidental release measures**

Personal Precautions:	Workers should use protective wears to prevent contact with the spilt adhesive and inhalation of its vapor.
Environmental hazard precaution:	Shut off leak if without risk. Prevent flow out to river, etc. so as not to badly affect.
Method for containment and cleaning up:	Avoid unnecessary contacts with spills. DO NOT use water Indoor leakage: Ventilate as much as possible until the cleaning is completed. Outdoor leakage: Work from the windward and evacuate the leeward crowd. Gather up, pack in closed container as much as possible. Carefully wash spill site with plenty of water after material pick up.

## Section 7. Handling and storage

### Precautions to be taken in handling:

Safe handling: Handle the material in a dry inert gas atmosphere, utilizing glove bag or glove box.  
Handling worker wears suitable protective clothing.

### Precautions to be taken in storage:

General precautions: Store in a cool, dry place away from incompatible materials.  
Keep container or bottle tightly closed.  
Keep away from water, moisture and source of heat.

## Section 8. Exposure controls / personal protection

Exposure guideline: ACGIH (2012) : No data available  
OSHA (2006) : No data available

Facility measures: Local ventilation of closed work room or total proper ventilation to prevent inhalation.

Protective ware: Wear appropriate NIOSH/MSHA-approved respirator, safety goggles, face shields, protective gloves.

## Section 9. Physical and chemical properties

Color and Form: Metallic silver solid

Chemical formula: Li

Atomic weight: 6.94

Melting point: 180.54 °C

Boiling point: 1347 °C

Density: 0.534 g/cm<sup>3</sup> at 20 °C (Liquid) 0.515 g/cm<sup>3</sup> at 180.5 °C

Water solubility: Reacts with water, forming lithium hydroxide and hydrogen.

Flammable: Substances which in contact with water emit flammable gases

Oxidation: None

## Section 10. Stability and reactivity

Stability: Stable in closed container.

Reactivity: React with most acids and generates hydrogen.  
Violently react with dilute hydrochloric acid, dilute sulfuric acid and nitric acid.  
Slowly react with concentrated sulfuric acid.  
React with methanol and ethanol and produce methoxide and ethoxide.

Incompatibility: Iron and Iron salt, ferrate, phosphorus, sulfur, oxygen, nickel and nickel alloy, chlorinated solvents, halogens, acids and water.  
React with heavy metals and explosive mixtures are easily formed.

Hazardous decomposition products: Hydrogen, lithium hydroxide. ( contact with water )  
Lithium oxides (by heating)

## Section 11. Toxicological information

Acute toxicity: GHS : No data available

Skin corrosive / irritation: GHS : Category 1A-1C  
Causes severe skin burns and eye damage.

Serious eye damage / irritation:	GHS : Category 1 ; Causes severe eye damage.
Respiratory/ skin sensitization:	GHS : No data available
Germ cell mutagenicity:	GHS : No data available
Carcinogenicity:	GHS : No data available
Reproductive toxicity:	GHS : No data available
Specific target organ toxicity	
– single exposure:	GHS : Category 2 ; May cause damage to organs (Respiratory organs)
Specific target organ toxicity	
– repeated exposure:	GHS : No data available
Aspiration hazard:	GHS : No data available

## Section 12. Ecological information

### Ecotoxicity:

#### Hazards to the aquatic environment

- acute toxicity: GHS : No data available
- chronic toxicity: GHS : No data available

Hazardous the ozone layer: GHS : No data available  
No Freon or Halon

Fish toxicity: No data available

Degradability: No data available

Bioaccumulative potential: Li biological half-life 2day,  
Rate of absorption oral=1.0      Respiratory tract=0.75

Mobility in soil: No data available

## Section 13. Disposal considerations

Disposal method: User of the product should contract with the local government or licensed 'Industrial Waste Haulers' for disposal of waste.

## Section 14. Transport information

UN number: 1415

IATA shipping name: Lithium

IATA classification: Hazardous Class 4.3

Substances which in contact with water emit flammable gases.

IATA packing group: I

HS code: 2805.19

Marine pollution: None

## Section 15. Regulatory information

TSCA inventory : listed.

Please refer to any other local / national measures that may be relevant.

## Section 16. Other information

The information described above is believed to be correct. However, Kojundo Chemical Lab. makes no representation, warranty nor guarantee of any kind with respect to the information on this data sheet or any use of the product based upon this information.