

**CAS-No.: 7439-93-2 MSDS**

## MATERIAL SAFETY DATA SHEET (MSDS)

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product form : Substance  
:  
EC-No. : 231-102-5  
CAS-No. : 7439-93-2  
Product code : 04421  
Formula : Li

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

##### 1.2.1. Relevant identified uses

Industrial/Professional use spec : Industrial  
For professional use only

##### 1.2.2. Uses advised against

No additional information available

#### 1.3. Details of the supplier of the safety data sheet

LOBA CHEMIE PVT.LTD.  
107 Wode House Road, Jehangir Villa, Colaba  
400005 Mumbai - INDIA  
T +91 22 6663 6663 - F +91 22 6663 6699  
[info@lobachemie.com](mailto:info@lobachemie.com) - [www.lobachemie.com](http://www.lobachemie.com)

#### 1.4. Emergency telephone number

Emergency number : + 91 22 6663 6663 (9:00am - 6:00 pm)

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Substances and Mixtures H260  
which, in contact with  
water, emit flammable  
gases, Category 1  
Skin corrosion/irritation, H314  
Category 1B

Full text of H statements : see section 16

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### Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

F; R14/15

C; R34

Full text of R-phrases: see section 16

### Adverse physicochemical, human health and environmental effects

No additional information available

## 2.2. Label elements

### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS02

GHS05

Signal word (CLP) :

Danger

Hazard statements (CLP) :

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

Precautionary statements (CLP) :

P223 - Do not allow contact with water.  
P231+P232 - Handle under inert gas. Protect from moisture.  
P280 - Wear protective gloves/protective clothing/eye protection/face protection.  
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P370+P378 - In case of fire: Use ... to extinguish.

## 2.3. Other hazards

No additional information available

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Name	Product identifier	%
LITHIUM (METAL) Extra Pure	(CAS-No.) 7439-93-2 (EC-No.) 231-102-5	100

Full text of R- and H-statements: see section 16

### 3.2. Mixtures

Not applicable

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures after inhalation :

Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.

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First-aid measures after skin contact	: Brush off loose particles from skin. Immerse in cool water/wrap in wet bandages. Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER/doctor.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor.

### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects : Causes severe skin burns and eye damage.

### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media : Dry powder.  
Unsuitable extinguishing media : Do not use extinguishing media containing water.

### 5.2. Special hazards arising from the substance or mixture

Fire hazard : In case of fire, use sand - Never use water.

### 5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel. No flames, no sparks. Eliminate all sources of ignition.

#### 6.1.2. For emergency responders

Protective equipment : Use personal protective equipment as required.

### 6.2. Environmental precautions

Do not allow water (or moist air) contact with this material.

### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Collect spillage. On land, sweep or shovel into suitable containers. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible.

### 6.4. Reference to other sections

No additional information available

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Additional hazards when processed : Do not allow contact with water.  
Precautions for safe handling : Protect from moisture. Handle under inert gas. Do not breathe dust/fume/gas/mist/vapours/spray.  
Hygiene measures : Wash hands, forearms and face thoroughly after handling. Wash contaminated clothing before reuse.

### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a dry place. Protect from moisture. Store in dry protected location to prevent any moisture contact.  
Incompatible materials : Do not allow contact with water.

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### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

No additional information available

### 8.2. Exposure controls

Hand protection	: protective gloves
Eye protection	: Chemical goggles or face shield
Skin and body protection	: Wear suitable protective clothing
Respiratory protection	: Wear appropriate mask

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Solid
Molecular mass	: 6.94 g/mol
Colour	: silver white.
Odour	: odourless.
Odour threshold	: No data available
pH	: 12
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: 180.5 °C
Freezing point	: No data available
Boiling point	: 1317 °C
Flash point	: No data available
Auto-ignition temperature	: 179 °C
Decomposition temperature	: No data available
Flammability (solid, gas)	: In contact with water releases flammable gases which may ignite spontaneously.
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 0.5 g/cm <sup>3</sup>
Solubility	: Water: Reacts violently with water
Log Pow	: No data available

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Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Corrosive vapours. Reacts violently with water.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

In contact with water releases flammable gases which may ignite spontaneously. Highly reactive material. Reacts violently with water.

### 10.4. Conditions to avoid

Moisture. Water, humidity.

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

No additional information available

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Not classified

Skin corrosion/irritation : Causes severe skin burns and eye damage.  
pH: 12

Serious eye damage/irritation : Serious eye damage, category 1, implicit  
pH: 12

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

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### SECTION 12: Ecological information

#### 12.1. Toxicity

No additional information available

#### 12.2. Persistence and degradability

No additional information available

#### 12.3. Bioaccumulative potential

No additional information available

#### 12.4. Mobility in soil

No additional information available

#### 12.5. Results of PBT and vPvB assessment

No additional information available

#### 12.6. Other adverse effects

No additional information available

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

Product/Packaging disposal recommendations : Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

Additional information : Do not allow water (or moist air) contact with this material.

### SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

#### 14.1. UN number

UN-No. (ADR) : 1415

UN-No. (IMDG) : 1415

UN-No. (IATA) : 1415

UN-No. (ADN) : 1415

UN-No. (RID) : 1415

#### 14.2. UN proper shipping name

Proper Shipping Name (ADR) : LITHIUM

Proper Shipping Name (IMDG) : LITHIUM

Proper Shipping Name (IATA) : Lithium

Proper Shipping Name (ADN) : LITHIUM

Proper Shipping Name (RID) : LITHIUM

Transport document description (ADR) : UN 1415 LITHIUM, 4.3, I, (B/E)

Transport document description (IMDG) : UN 1415 LITHIUM, 4.3, I

Transport document description (IATA) : UN 1415 Lithium, 4.3, I

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Transport document description (ADN) : UN 1415 LITHIUM, 4.3, I

Transport document description (RID) : UN 1415 LITHIUM, 4.3, I

### 14.3. Transport hazard class(es)

#### ADR

Transport hazard class(es) (ADR) : 4.3

Danger labels (ADR) : 4.3



#### IMDG

Transport hazard class(es) (IMDG) : 4.3

Danger labels (IMDG) : 4.3



#### IATA

Transport hazard class(es) (IATA) : 4.3

Hazard labels (IATA) : 4.3



#### ADN

Transport hazard class(es) (ADN) : 4.3

Danger labels (ADN) : 4.3



#### RID

Transport hazard class(es) (RID) : 4.3

Danger labels (RID) : 4.3



### 14.4. Packing group

Packing group (ADR) : I

Packing group (IMDG) : I

Packing group (IATA) : I

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Packing group (ADN) : I  
Packing group (RID) : I

### 14.5. Environmental hazards

Dangerous for the environment : No  
Marine pollutant : No  
Other information : No supplementary information available

### 14.6. Special precautions for user

#### - Overland transport

Classification code (ADR) : W2  
Limited quantities (ADR) : 0  
Excepted quantities (ADR) : E0  
Packing instructions (ADR) : P403, IBC04  
Mixed packing provisions (ADR) : MP2  
Tank code (ADR) : L10BN(+)  
Tank special provisions (ADR) : TU1, TE5, TT3, TM2  
Vehicle for tank carriage : AT  
Transport category (ADR) : 1  
Special provisions for carriage - Packages (ADR) : V1  
Special provisions for carriage - Loading, unloading and handling (ADR) : CV23  
Special provisions for carriage - Operation (ADR) : S20  
Hazard identification number (Kemler No.) : X423  
Orange plates :



Tunnel restriction code (ADR) : B/E  
EAC code : 4W

#### - Transport by sea

Limited quantities (IMDG) : 0  
Excepted quantities (IMDG) : E0  
Packing instructions (IMDG) : P403  
Special packing provisions (IMDG) : PP31  
IBC packing instructions (IMDG) : IBC04  
IBC special provisions (IMDG) : B1  
EmS-No. (Fire) : F-G  
EmS-No. (Spillage) : S-N  
Stowage category (IMDG) : E  
Stowage and handling (IMDG) : H1  
Segregation (IMDG) : SG35, SG26  
MFAG-No : 138

#### - Air transport

PCA Excepted quantities (IATA) : E0  
PCA Limited quantities (IATA) : Forbidden  
PCA limited quantity max net quantity (IATA) : Forbidden  
PCA packing instructions (IATA) : Forbidden  
PCA max net quantity (IATA) : Forbidden



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CAO packing instructions (IATA)	: 487
CAO max net quantity (IATA)	: 15kg
Special provisions (IATA)	: A1
ERG code (IATA)	: 4W

### - Inland waterway transport

Classification code (ADN)	: W2
Limited quantities (ADN)	: 0
Excepted quantities (ADN)	: E0
Equipment required (ADN)	: PP, EX, A
Ventilation (ADN)	: VE01
Provisions for handling and stowage of the cargo (ADN)	: HA08
Number of blue cones/lights (ADN)	: 0

### - Rail transport

Classification code (RID)	: W2
Limited quantities (RID)	: 0
Excepted quantities (RID)	: E0
Packing instructions (RID)	: P403, IBC04
Mixed packing provisions (RID)	: MP2
Tank codes for RID tanks (RID)	: L10BN(+)
Special provisions for RID tanks (RID)	: TU1, TE5, TT3, TM2
Transport category (RID)	: 1
Special provisions for carriage – Packages (RID)	: W1
Special provisions for carriage - Loading, unloading and handling (RID)	: CW23
Hazard identification number (RID)	: X423

### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### 15.1.1. EU-Regulations

No REACH Annex XVII restrictions

LITHIUM (METAL) Extra Pure is not on the REACH Candidate List

LITHIUM (METAL) Extra Pure is not on the REACH Annex XIV List

#### 15.1.2. National regulations

##### Germany

Reference to AwSV : Water hazard class (WGK) 1, Slightly hazardous to water (Classification according to AwSV; ID No. 7195)

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

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### Netherlands

SZW-lijst van kankerverwekkende stoffen : The substance is not listed  
SZW-lijst van mutagene stoffen : The substance is not listed  
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding : The substance is not listed  
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid : The substance is not listed  
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : The substance is not listed

### Denmark

Recommendations Danish Regulation : Young people below the age of 18 years are not allowed to use the product

## 15.2. Chemical safety assessment

No additional information available

## SECTION 16: Other information

Full text of R-, H- and EUH-statements:

Skin Corr. 1B	Skin corrosion/irritation, Category 1B
Water-react. 1	Substances and Mixtures which, in contact with water, emit flammable gases, Category 1
H260	In contact with water releases flammable gases which may ignite spontaneously.
H314	Causes severe skin burns and eye damage.
R14/15	Reacts violently with water, liberating extremely flammable gases
R34	Causes burns
C	Corrosive
F	Highly flammable

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product*