

SAFETY DATA SHEET

Version: v1
Revision Date: 2023-12-04
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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name : Lithium
Product Number : L106886
Brand : aladdin
CAS-No. : 7439-93-2

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

Identified uses : Laboratory chemicals, Manufacture of substances.

1.3 Details of the supplier of the safety data sheet

Company : Shanghai Aladdin Biochemical Tech Co., Ltd
Address : 36 Xinjinqiao Road, Shanghai
Telephone : 400-620-6333
Fax : no data available

1.4 Emergency telephone number

Emergency Phone : 0532-83889090

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)
Substances and mixtures emitting flammable gases in contact with water (category 1) , H260
skin corrosion/irritation (category 1B) , H314
severe eye injury/irritation (category 1) , H318

2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word

Danger

Hazard statement(s)

H260

In contact with water releases flammable gases which may ignite spontaneously

H314

Causes severe skin burns and eye damage

Precautionary statement(s)

P264

Wash hands [and ...] thoroughly after handling.

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P280	Wear protective gloves/protective clothing/eye protection/face protection.
P231+P232	Handle under inert gas/... Protect from moisture.
P310	Immediately call a POISON CENTER or doctor/physician.
P363	Wash contaminated clothing before reuse.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P302+P335+P334	Brush off loose particles from skin. Immerse in cool water [or wrap in wet bandages].
P303+P361+P353	IF ON SKIN (or hair): Take off Immediately all contaminated clothing. Rinse SKIN with water [or shower].
P304+P340	IF INHALED: Remove person to fresh air and keep 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.
P370+P378	In case of fire: Use ... to extinguish.
P402+P404	Store in a dry place. Store in a closed container.
P501	Dispose of contents/container to an approved waste disposal plant.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

SECTION 3: Composition/information on ingredients

3.1 Substances

Synonyms	: Lithium metal
Formula	: Li
Molecular weight	: 6.94
CAS No.	: 7439-93-2
EC-NO.	: 231-102-5

Component	Classification	Concentration
Lithium	Substances and mixtures emitting flammable gases in contact with water, Category 1; Skin Corrosion/stimulation, category 1B; Serious Eye Injury/eye Irritation, Category 1; H260, H314, H318	granular, 99.9% metals basis

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice
no data available
If inhaled
After inhalation: fresh air.
In case of skin contact

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In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

In case of eye contact

After eye contact: rinse out with plenty of water. Remove contact lenses.

If swallowed

After swallowing: make victim drink water (two glasses at most). Consult doctor if feeling unwell.

4.2 Most important symptoms and effects, both acute and delayed

no data available

4.3 Indication of any immediate medical attention and special treatment needed

no data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Fire extinguishing agents: sodium chloride, sodium bicarbonate, calcareous sandstone Special powder for extinguishing metal fires

Unsuitable extinguishing media

Foam water

5.2 Special hazards arising from the substance or mixture

Lithium oxides

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information

Use water spray to cool unopened containers.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid inhalation of dusts. Evacuate the danger area, observe emergency procedures, consult an expert.

6.2 Environmental precautions

Do not let product enter drains

6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions. Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4 Reference to other sections

For disposal see section 13.

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SECTION 7: Handling and storage

7.1 Precautions for safe handling

no data available

7.2 Conditions for safe storage, including any incompatibilities

Soak in petroleum or liquid paraffin

7.3 Specific end use(s)

no data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of Regulation (EU)2016/425 and the standard EN 374 derived from it.

Body Protection

Complete suit protecting against chemicals, Flame retardant antistatic protective clothing., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a fullface particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection,use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN(EU).

Control of environmental exposure

If it is safe, prevent further leakage or spillage and do not allow the product to enter the sewer system.

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SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Appearance	form: Granules or Columnar color: Silver,Grey,or Black
b) Odour	no data available
c) Odour Threshold	no data available
d) pH	no data available
e) Melting point/freezing point	180°C
f) Initial boiling point and boiling range	1340°C
g) Flash point	no data available
h) Evaporation rate	no data available
i) Flammability (solid, gas)	no data available
j) Upper/lower flammability or explosive limits	no data available
k) Vapour pressure	no data available
l) Vapour density	no data available
m) Relative density	0.534
n) Water solubility	no data available
o) Partition coefficient: n-octanol/water	no data available
p) Auto-ignition temperature	no data available
q) Decomposition temperature	no data available
r) Viscosity	no data available
s) Explosive properties N	no data available
t) Oxidizing properties N	no data available

9.2 Other safety information

no data available

SECTION 10: Stability and reactivity

10.1 Reactivity

no data available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

There may be a risk of fire or the generation of flammable gases or vapors in conjunction with it: water acid Halogenated hydrocarbon Carbon dioxide (CO₂) Boron trifluoride Halogen halogen compounds Chromium oxychloride Chromium oxide (VI) boron fluorine halide carbon dioxide phosphorus platinum mercury rust nitric acid nitrogen sulfide Metal oxides sodium carbonate hydrogen There is an explosion risk associated with it: nitrogen halogen sulfur bromine Tribromomethane chlorine chloroform Diazo compound dichloromethane Halogenated hydrocarbon iodine Methyl iodine peroxide Mineral acids oxygen Tetrachloromethane Thionyl chloride Trichloroethylene sulfur dioxide sulphuric acid Silver salt carbon monoxide and water water and metal powder

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10.4 Conditions to avoid

React with water to produce hydrogen gas moisture

10.5 Incompatible materials

no data available

10.6 Hazardous decomposition products

no data available

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

LD50 intraperitoneal - mice -1000 mg/kg

Skin corrosion/irritation

no data available

Serious eye damage/eye irritation

no data available

Respiratory or skin sensitisation

no data available

Germ cell mutagenicity

no data available

Carcinogenicity

no data available

Reproductive toxicity

no data available

Specific target organ toxicity - single exposure

no data available

Specific target organ toxicity - repeated exposure

no data available

Aspiration hazard

no data available

Additional Information

High concentrations of lithium ions can cause dizziness and collapse, and limited sodium intake can cause kidney damage. Dehydration, weightlessness, skin effects, and thyroid dysfunction have all been reported. Possible central nervous system effects include aphasia, blurred vision, sensory loss, seizures, etc. Repeated exposure to lithium ions can cause diarrhea, vomiting, and neuromuscular effects such as tremors, cramps, and hyperreflexia., Cough, shortness of breath, headache, nausea

SECTION 12: Ecological information

12.1 Toxicity

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12.2 Persistence and degradability

no data available

12.3 Bioaccumulative potential

no data available

12.4 Mobility in soil

no data available

12.5 Results of PBT and vPvB assessment

no data available

12.6 Other adverse effects

no data available

SECTION 13:

13.1 Disposal considerations

Product

Recycle to process, if possible. Consult your local regional authorities and an expert of disposal. You may be able to dissolve or mix material with a combustible solvent and little by little burn in a chemical incinerator equipped with an afterburner and scrubber system. If a large amount of the substance is burned at a time, an explosion may occur.

Observe all federal, state and local regulations when disposing of the substance.

Contaminated packaging

Dispose of as unused product.

SECTION 14: Transport information

DOT (US)

UN number: 1415

Proper shipping name: Lithium

Environmental Hazards: no data available

Packing group: I

Reportable Quantity(RQ): no data available

Class: 4.3

Poison Inhalation Hazard: no data available

IMDG

UN number: 1415

Proper shipping name: Lithium

Packing group: I

EMS-No: no data available

IATA

UN number: 1415

Proper shipping name: Lithium

Packing group: I

Class: 4.3

SECTION 15: Regulatory information

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This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

SECTION 16: Other information

Further information

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