

## Chemical Safety Data Sheet MSDS / SDS

## LITHIUM-7 HYDROXIDE MONOHYDRATE

Revision Date:2026-05-31 Revision Number:1

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

**Product identifier**

Product name : LITHIUM-7 HYDROXIDE MONOHYDRATE  
CBnumber : CB3144570  
CAS : 76576-68-6  
Synonyms : LITHIUM-7 HYDROXIDE MONOHYDRATE

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

Relevant identified uses : For R&D use only. Not for medicinal, household or other use.  
Uses advised against : none

**Company Identification**

Company : Chemicalbook  
Address : Building 1, Huihuang International, Shangdi 10th Street, Haidian District, Beijing  
Telephone : 010-86108875

## SECTION 2: Hazards identification

**GHS Label elements, including precautionary statements**

Symbol(GHS)



Signal word

Danger

**Precautionary statements**

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

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P303+P361+P353 IF ON SKIN (or hair): Remove/Take off Immediately all contaminated clothing. Rinse SKIN with water/shower.

P301+P312 IF SWALLOWED: call a POISON CENTER or doctor/physician IF you feel unwell.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P270 Do not eat, drink or smoke when using this product.

**Hazard statements**

H302 Harmful if swallowed

H314 Causes severe skin burns and eye damage

## SECTION 3: Composition/information on ingredients

### Substance

Product name	: LITHIUM-7 HYDROXIDE MONOHYDRATE
Synonyms	: LITHIUM-7 HYDROXIDE MONOHYDRATE
CAS	: 76576-68-6
MF	: H3LiO2
MW	: 42.97

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## SECTION 4: First aid measures

### First Aid Measures

#### General advice

Immediate medical attention is required.

#### Eye contact

Immediate medical attention is required. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area.

#### Skin Contact

Immediate medical attention is required. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.

#### Inhalation

Remove to fresh air Call a physician or poison control center immediately If not breathing, give artificial respiration If breathing is difficult, give oxygen

#### Ingestion

Immediate medical attention is required. Do NOT induce vomiting. Drink plenty of water.

Never give anything by mouth to an unconscious person. Remove from exposure, lie down.

Clean mouth with water and drink afterwards plenty of water. Call a physician or poison control center immediately.

#### Self-protection of the first aider

Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.

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

#### Symptoms

No information available.

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

#### Note to physicians

Product is a corrosive material. Use of gastric lavage or emesis is contraindicated.

Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur.

Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure. Treat symptomatically.

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## SECTION 5: Firefighting measures

## **Suitable Extinguishing Media**

### **Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

### **Unsuitable Extinguishing Media**

No information available.

## **Specific hazards arising from the chemical**

### **Specific hazards arising from the chemical**

The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating and toxic gases and vapors. In the event of fire and/or explosion do not breathe fumes.

### **Hazardous combustion products**

No information available.

## **Explosion data**

### **Sensitivity to Mechanical Impact**

No information available.

### **Sensitivity to Static Discharge**

No information available.

## **Protective equipment and precautions for firefighters**

### **Protective equipment and precautions for firefighters**

As in any fire, wear self contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

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## **SECTION 6: Accidental release measures**

### **Personal precautions, protective equipment and emergency procedures**

#### **Personal precautions**

Evacuate personnel to safe areas. Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Keep people away from and upwind of spill/leak.

#### **Environmental precautions**

##### **Environmental precautions**

Do not allow into any sewer, on the ground or into any body of water. Should not be released into the environment. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. See Section 12 for additional Ecological Information.

### **Methods and material for containment and cleaning up**

#### **Methods for containment**

Prevent further leakage or spillage if safe to do so.

#### **Methods for cleaning up**

Take up mechanically, placing in appropriate containers for disposal. Clean contaminated surface thoroughly. Use personal protective equipment as required. Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry. Avoid creating dust. Dam up. After cleaning, flush away traces with water.

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## SECTION 7: Handling and storage

### Precautions for safe handling

#### Advice on safe handling

Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.

Ensure adequate ventilation, especially in confined areas. In case of insufficient ventilation, wear suitable respiratory equipment. Use only with adequate ventilation and in closed systems.

### Conditions for safe storage, including any incompatibilities

#### Storage Conditions

Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly labeled containers. Protect from moisture. Store at room temperature.

#### Incompatible materials

Incompatible with strong acids and bases. Incompatible with oxidizing agents.

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## SECTION 8: Exposure controls/personal protection

### Control parameters

#### Exposure Guidelines

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

### Appropriate engineering controls

#### Engineering Controls

Showers

Eyewash stations

Ventilation systems

### Individual protection measures, such as personal protective equipment

#### Eye/face protection

Tight sealing safety goggles. Face protection shield.

#### Skin and Body Protection

Wear protective gloves and protective clothing.

#### Respiratory protection

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

#### General Hygiene Considerations

When using do not eat, drink or smoke. Wash contaminated clothing before reuse. Keep away from food, drink and animal feeding stuffs.

Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with skin, eyes or clothing. Take off all contaminated clothing and wash it before reuse. Wear suitable gloves and eye/face protection.

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## SECTION 9: Physical and chemical properties

### Information on basic physicochemical properties

Physical State	Solid
Appearance	No information available
Odor	No information available
pH	No information available
Melting point/freezing point	No information available
Boiling point	No information available
Flash point	No information available
Liquid Density	1.51 g/cm <sup>3</sup>
Evaporation rate	No information available
Upper flammability limits	No information available
Lower flammability limit	No information available
Vapor pressure	No information available
Vapor density	No information available
Specific gravity	No information available
Water solubility	No information available
Solubility in other solvents	No information available
Partition coefficient	No information available
Autoignition temperature	No information available
Decomposition temperature	No information available
Kinematic viscosity	No information available
Explosive properties	No information available
Oxidizing properties	No information available
Density and/or relative density	1.51 g/mL at 25 °C(lit.)

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## SECTION 10: Stability and reactivity

### Reactivity

Not applicable

### Chemical stability

Stable under recommended storage conditions.

### Possibility of Hazardous Reactions

None under normal processing.

### Hazardous polymerization

No information available.

### Conditions to avoid

Exposure to air or moisture over prolonged periods.

### **Incompatible materials**

Incompatible with strong acids and bases. Incompatible with oxidizing agents.

### **Hazardous Decomposition Products**

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

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## **SECTION 11: Toxicological information**

### **Information on likely routes of exposure**

#### **Inhalation**

Classified based on available data. For more details, see section 2.

#### **Eye contact**

Classified based on available data. For more details, see section 2.

#### **Skin Contact**

Classified based on available data. For more details, see section 2.

#### **Ingestion**

Classified based on available data. For more details, see section 2.

### **Information on toxicological effects**

#### **Symptoms**

Classified based on available data. For more details, see section 2.

### **Delayed and immediate effects as well as chronic effects from short and long-term exposure**

#### **Chronic Toxicity**

Chronic exposure to corrosive fumes/gases may cause erosion of the teeth followed by jaw necrosis. Bronchial irritation with chronic cough and frequent attacks of pneumonia are common. Gastrointestinal disturbances may also be seen. Avoid repeated exposure. Possible risk of irreversible effects.

### **Numerical measures of toxicity - Product Information**

#### **Unknown acute toxicity**

Classified based on available data. For more details, see section 2

The following values are calculated based on chapter 3.1 of the GHS document

#### **ATEmix (oral)**

500 mg/kg

#### **ATEmix (dermal)**

1100 mg/kg

#### **ATEmix (inhalation-dust/mist)**

1.5 mg/l

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## **SECTION 12: Ecological information**

### **Ecotoxicity**

May cause long lasting harmful effects to aquatic life

100% of the mixture consists of components(s) of unknown hazards to the aquatic environment.

### **Persistence and degradability**

No information available.

### **Bioaccumulation**

No information available.

### **Mobility**

No information available.

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## SECTION 13: Disposal considerations

### **Disposal of wastes**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

### **Contaminated packaging**

Do not reuse container.

### **Other Information**

Waste codes should be assigned by the user based on the application for which the product was used.

### **US EPA Waste Number**

D002

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## SECTION 14: Transport information

### **DOT**

#### **UN/ID no**

UN2680

#### **Hazard Class**

8

#### **Packing Group**

II

#### **Proper shipping name**

Lithium hydroxide

#### **Description**

UN2680, Lithium hydroxide, 8, II

#### **Emergency Response Guide Number**

154

## **IMDG**

### **UN/ID no**

UN2680

### **Hazard Class**

8

### **Packing Group**

II

### **Proper shipping name**

Lithium hydroxide

### **Description**

UN2680, Lithium hydroxide, 8, II

### **EmS-No**

F-A, S-B

## **IATA**

### **UN/ID no**

UN2680

### **Hazard Class**

8

### **Packing Group**

II

### **Proper shipping name**

Lithium hydroxide

### **Description**

UN2680, Lithium hydroxide, 8, II

### **ERG Code**

8L

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## SECTION 15: Regulatory information

### **International Inventories**

All of the components in the product are on the following Inventory lists

X - Listed

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

### **US Federal Regulations**

## **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

## **SARA 311/312 Hazard Categories**

### **Acute health hazard**

Yes

### **Chronic Health Hazard**

Yes

### **Fire hazard**

No

### **Sudden release of pressure hazard**

No

### **Reactive hazard**

No

## **CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

## **US State Regulations**

### **California Proposition 65**

This product does not contain any Proposition 65 chemicals.

### **U.S. State Right-to-Know Regulations**

This product does not contain any substances regulated by state right-to-know regulations

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## **SECTION 16: Other information**

### **Abbreviations and acronyms**

CAS: Chemical Abstracts Service

TWA: Time-Weighted Average

STEL: Short-Term Exposure Limit

LD50: Lethal Dose 50%

LC50: Lethal Concentration 50%

EC50: Effective Concentration 50%

PEL: Permissible Exposure Limit

TLV: Threshold Limit Value

IMDG: International Maritime Dangerous Goods Code

IATA: International Air Transport Association

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

DOT: US Department of Transportation

NFPA: National Fire Protection Association

NIOSH: National Institute for Occupational Safety and Health

OSHA: Occupational Safety and Health Administration

**Disclaimer:**

The information in this MSDS is only applicable to the specified product, unless otherwise specified, it is not applicable to the mixture of this product and other substances. This MSDS only provides information on the safety of the product for those who have received the appropriate professional training for the user of the product. Users of this MSDS must make independent judgments on the applicability of this SDS. The authors of this MSDS will not be held responsible for any harm caused by the use of this MSDS.