

Product introduction



Lithium Foil

Most suitable for low-volume production or laboratories use
Possible to manufacture in various sizes

Thickness	0.1-3.0mm(±0.01mm)
Width	15-100mm(±0.5mm)
Length	Please contact us for your requirements



Rectangular Lithium Foil

Available in requisite amount

Thickness & width	Possible to manufacture in various sizes
Length	Please contact us for your requirements



Rolling Lithium Foil

Even thinner than conventional products
Best consideration of next generation lithium batteries

Thickness	0.02-0.09mm(±0.005mm)
Width	30-50mm
Length	Please contact us for your requirements



Coin Type Lithium

Punching operation is unnecessary during experiments with this product
Available in requisite amount

Thickness	0.02-3mm(±0.01mm)
Diameter	4-21mm etc.



Lithium foil with substrate

Used for Lithium ion capacitors, micro medical devices, etc

Substrate	Copper foil, SUS foil/Single side or both sides
Thickness & width	Possible to manufacture in various sizes
Length	Please contact us for your requirements



Rectangular Lithium Foil

Available in requisite amount

Thickness & width	Possible to manufacture in various sizes
Length	Please contact us for your requirements



Lithium Alloy Foil

Most suitable for low-volume production or laboratories use
Possible to manufacture in various sizes
Please contact us for the composition details

Thickness	0.1-3.0mm(±0.01mm)
Width	15-100mm(±0.5mm)
Length	Please contact us for your requirements



Lithium Wire/Rod

For a diversity of uses such as chemical catalyst, etc

Diameter	1-13mm
Length	Please contact us for your requirements

SAFETY DATA SHEET**LITHIUM**

MSDS No. HM-110

SECTION 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME : Lithium
CHEMICAL FORMULA : Li
CHEMICAL FAMILY : Alkali Metals
CREATION DATE : 10 Jun., 2002
REVISION DATE : 30 Jan., 2013

EMERGENCY TELEPHONE NUMBER FOR THE SHIPMENTS OF HAZARDOUS MATERIALS :
CHEMTREC (703)-527-3887

SECTION 2 HAZARDS IDENTIFICATION**GHS Classification**

Physical	Health	Environmental
Water-reactive flammable solid, - Category 1	Corrosive to skin - Category 1B Corrosive to eye - Category 1	None

GHS Label :
Hazard Pictograms



Component	CAS #	wt. %	Exposure Limits in Air		
			ACGIH-TLV	OSHA-PEL	OTHER
Lithium	7439-93-2	> 99	Not Established	Not Established	Not Established

SECTION 3 PHYSICAL DATA

PHYSICAL STATE : Solid
APPEARANCE : Silvery-white soft metal
ODOR : None

MELTING POINT : 180.5°C
BOILING POINT : 1342°C
SPECIFIC GRAVITY : 0.534 g/cm³

SECTION 4 FIRE OR EXPLOSION HAZARD**SPECIAL FIRE FIGHTING PROCEDURES :**

DO NOT USE WATER, SAND OR CARBON DIOXIDE.

Use dry graphite, Lith-X, dry sodium chloride, or dry lithium chloride.

Wear self-contained breathing apparatus and full fire fighting protective clothing when fighting significant-sized fires.

Lithium fires can throw off molten lithium metal particles. Burning lithium releases corrosive lithium hydroxide dust and fumes.

Lithium metal can reignite after fire is initially extinguished. Never leave extinguished fire unattended. After all material has apparently burned and cooled, carefully turn over remaining residue and be prepared to re-extinguish should this reignition occur. Carefully place residue in a steel drum, using a long-handled shovel, and cover with extinguish media.

CONDITIONS OF FLAMMABILITY :

Flammable solid.

Reacts vigorously with water generating flammable and/or explosive hydrogen gas and corrosive dust (Lithium hydroxide).

Presents fire and explosion risk when exposed to water, nitrogen, acids or oxidizing agents.

Elevated temperatures above melting point (180.5°C) can result in spontaneous ignition in air.

SECTION 5 REACTIVITY DATA

STABILITY : Normally stable.

CONDITIONS TO AVOID : Contact with water and moisture or humid air. Temperatures above the melting point (180.5°C).

MATERIALS TO AVOID : Reacts with moisture, oxygen, nitrogen, and carbon dioxide.
Reacts violently with : water, oxidizers, chlorinated solvents, halogens.

HAZARDOUS DECOMPOSITION PRODUCTS :

Lithium does not decompose. However, it is highly reactive in contact with many other substances, releasing large quantities of heat and/or hazardous products. It can react violently with water, the humidity in air and the moisture in other substances, releasing hydrogen gas and/or corrosive fumes of lithium oxide and/or lithium hydroxide.

SECTION 6 PREVENTIVE MEASURES

PERSONAL PROTECTIVE EQUIPMENT :

Wear safety glasses or goggles and dry rubber gloves. Full flame-resistant face shield is required if the metal is in a molten state. Avoid inhalation, contact with eyes, skin and clothing.

ENGINEERING CONTROLS :

Provide adequate ventilation, quick-drench eyewash and safety shower.

LEAK OR SPILL :

Remove all sources of ignition. To prevent ignition, cover with mineral oil and place in an oiled steel drum which is approved for transport. Keep water and moisture away from spilled material.

HANDLING :

Can be handled in open atmosphere at room temperature either coated with mineral oil or in low conditions of relative humidity or under an inert gas (e.g., argon or helium). Nitrogen should not be used as the inert gas. To maintain best quality, humidity levels of less than 2% (dew point - 30°C) are recommended.

STORAGE REQUIREMENTS :

Store in original unopened shipping container. Once opened, store in argon atmosphere, dry air or mineral oil.

Store in cool place. Keep away from water, humid air, acids and oxidizing materials. Keep away from sparks, heat and flame. Protect shipping container from physical damage.

SECTION 7 TOXICOLOGICAL PROPERTIES

EXPOSURE BY CONTACT :

Eye contact : Corrosive (may cause blindness)

Skin contact : Corrosive (causes burns)

ROUTE OF ENTRY :

Inhalation : Corrosive

Ingestion : Corrosive

Skin absorption : Corrosive

ACUTE EFFECTS :

Lithium metal is extremely destructive to tissue of the mucous membranes and upper respiratory tract. It is extremely reactive with body moisture and is corrosive to skin, nose, throat, stomach and eyes.

Harmful if swallowed, inhaled or absorbed through skin.

SECTION 8 FIRST AID MEASURES

EYES :

Immediately wipe away any particles; then flush with very large amounts of water occasionally lifting the upper and lower lids, for at least 15 minutes. See a physician immediately.

SKIN :

Quickly brush away as much of the material as possible. If particles are embedded in the skin and cannot be removed, cover area with USP Grade mineral oil and see a physician immediately. If particles are not embedded, flush with large amounts of water. Obtain medical attention.

INHALATION :

Remove to fresh air. If breathing difficulty occurs, administer oxygen. See a physician immediately.

INGESTION :

Quickly wipe from the mouth as much of the material as possible and immediately rinse the mouth with large amounts of water. See a physician immediately. DO NOT induce vomiting.

SECTION 9 TRANSPORTATION INFORMATION

Proper shipping name (IMDG, ICAO) :	Lithium
UN number :	UN 1415
Hazard class number (IMDG, ICAO) :	4.3, Dangerous When Wet
Packing group (IMDG, ICAO) :	PG I