

## LITHIUM HYDROXIDE, ANHYDROUS

CAS No. 1310-65-2

QS-PDS-1023 Revision: 00

**Application** Intermediates generator in organic synthesis catalyst in alkyd resin manufacture and esterification reactions, stabilizer in some photographic developers, and heat sink material. Absorption of carbon dioxide from sealed environments, as in submarines, spacecraft, and self-contained breathing apparatus.

**Appearance** White powder

### Product specification

### Guaranteed

LiOH, wt%	95	min
Li <sub>2</sub> CO <sub>3</sub> , wt%	3.0	max
CaO, wt%	0.06	max
Cl, wt%	0.005	max
SO <sub>4</sub> , wt%	0.07	max
Fe <sub>2</sub> O <sub>3</sub> , wt%	0.006	max
NaOH, wt%	0.07	max
Acid Insolubles, wt%	0.01	max

**Bulk Density** 0.45 g/cm<sup>3</sup> (28 lb/ft<sup>3</sup>)

### Physical Properties

Molecular weight	23.94	
Density @ 20°C	1.46	g/cm <sup>3</sup>
Standard heat of formation	-116.589	kcal/mole
Standard heat of solution	-4.887	kcal/mole
Specific heat @ 25°C	0.405	cal/g/°C
Standard heat of fusion	5.01	kcal/mole
Melting point	471.1	°C

### Toxicity/Safety Data

Corrosive. Odorless, white crystals. Corrosive to eyes (may cause blindness), skin, nose and throat. Continuous inhalation exposure may cause lung damage.

Additional information on toxicity and safety is contained in the Material Safety Data Sheet (MSDS) available on this product.

### Air Treatment Construction Energy Fine Chemicals Glass & Ceramics Greases & Lubricants Polymers Pool Water Treatment

MARKETS SERVED	<b>NORTH AMERICA AND HEADQUARTERS</b> FMC Lithium Seven LakePointe Plaza 2801 Yorkmont Road, Suite 300 Charlotte, NC 28208 P: +1.704.426.5300 F: +1.704.426.5370	<b>EUROPE</b> FMC Chemicals Commercial Road Bromborough Merseyside CH62 3NL, England P: +44.151.482.7356 F: +44.151.482.7361	<b>JAPAN</b> FMC Lithium 9F, Aoyama Building 1-2-3, Kita-Aoyama Minato-ku, Tokyo 107-0061, Japan T: +81.3.3402.3716 F: +81.3.3402.3700	<b>CHINA</b> FMC Lithium 15F Far East International Plaza No. 317 Xianxia Road Shanghai 200051 P. R. China T: +86.21.6235.1919 F: +86.21.6235.1917	<b>INDIA</b> FMC India Private Limited Embassy Star 8, Palace Road High Grounds Bangalore 560052, India T: +91.80.2238.4311 F: +91.80.2238.5255	<b>TAIWAN</b> FMC Lithium 9F-1, 263 Tun Hwa S. Rd. Sec. 1 Taipei, Taiwan T: +866.2.2705.4400 F: +866.2.2702.7460
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**Handling/Storage/Disposal** Do not get in eyes, on skin or clothing. Avoid breathing dust. Wash thoroughly after handling. Keep container closed. Store away from acids and water.

Dispose of waste according to local and Federal laws and regulations.

**Shipping Containers** 110 lb of product shipped in a 38 gallon (143.8L) polyethylene-lined fiber drum.  
50 lb of product shipped in a 16.5 gallon (62.5L) Aluminized fiber drum, double polyethylene-lined.

**Shipping Limitations** Shipments of lithium hydroxide are described as "Lithium Hydroxide, UN 2680."  
All shipments are Hazard Class 8 and require "Corrosive" labels.

Post	Not acceptable
Parcel, Air	Restricted quantities
Sea	Class 8 (IMDG)
Road, Rail	Class 8.41 b (RID/ADR)

For shipments within Europe labeling for supply requirements are:

C	Corrosive
R&S phrases	see Material Safety Data Sheet

Responsible Care initiative dictates that all shipments of lithium chemicals must be transported in an approved vehicle in a responsible manner (i.e., no flat bed trucks).