

LITHIUM HYDROXIDE MONOHYDRATE TECHNICAL GRADE

CAS No. 1310-66-3

QS-PDS-1022 Revision: 00

Formula LiOH·H₂O

Appearance White crystals

Application A free-flowing, granular solid well suited for use in the manufacture of lithium greases, dyestuffs, specialty resins and many other chemical specialties. It has a narrow particle size distribution and a low fines content.

Product Specifications

Guaranteed

LiOH, wt%	56.5	min
CO ₂ , wt%	0.35	max
Cl, wt%	0.003	max
SO ₄ , wt%	0.05	max
CaO, wt%	0.03	max
Fe ₂ O ₃ , wt%	0.003	max
NaOH, wt%	0.05	max
Acid Insolubles, wt%	0.005	max

Other Data	Bulk density	Loose	0.9 g/cm ³
		Tap	1.0 g/cm ³

Physical Properties	Molecular weight	41.96
	Density @ 20°C	1.51 g/cm ³
	Standard heat of formation	-188.9 kcal/mole
	Standard heat of fusion	-0.867 kcal/mole
	Specific heat @ 25°C	0.453 cal/g/°C
	Loses water of hydration	100 - 110°C

Water Solubility	Temperature (°C)	Weight Percent LiOH in saturated solution*
	0	10.7
	20	10.9
	100	14.8

* The solid phase in equilibrium with saturated solution is the monohydrate, LiOH·H₂O.

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

MARKETS SERVED	NORTH AMERICA AND HEADQUARTERS FMC Lithium Seven LakePointe Plaza 2801 Yorkmont Road, Suite 300 Charlotte, NC 28208 P: +1.704.426.5300 F: +1.704.426.5370	EUROPE FMC Chemicals Commercial Road Bromborough Merseyside CH62 3NL, England P: +44.151.482.7356 F: +44.151.482.7361	JAPAN 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	CHINA FMC Lithium 15F Far East International Plaza No. 317 Xianxia Road Shanghai 200051 P. R. China T: +86.21.6235.1919 T: +86.21.6235.1917	INDIA FMC India Private Limited Embassy Star 8, Palace Road High Grounds Bangalore 560052, India T: +91.80.2238.4311 F: +91.80.2238.5255	TAIWAN 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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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.

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 50lb (22.7kg) bags, shipped 40 to a pallet.
55lb (25kg) bags, shipped 40 to a pallet
100 kg polyethylene-lined fiber drums
Supersacks of discrete weight between 400 and 2200 lb (182 - 1000kg).

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 a DOT-approved vehicle in a responsible manner (i.e., no flat bed trucks).