

LITHIUM HYDROXIDE MONOHYDRATE FINES

CAS No. 1310-66-3

QS-PDS-1020 Revision: 00

Formula	LiOH·H ₂ O
Appearance	White crystals
Application	Smaller particle size than other grades of lithium hydroxide offered by FMC, providing greater reactivity which can be beneficial in some chemical applications

Product Specifications

Guaranteed

LiOH, wt%	56.5	min
CO ₂ , wt%	0.50	max
Cl, wt%	0.003	max
SO ₄ , wt%	0.06	max
CaO, wt%	0.1	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	Weight percent LiOH in
	(°C)	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 375 lbs (170 kg) polyethylene-lined fiber drums
Supersacks of discrete weight between 400 and 2200 lb (182 – 1000 kg)

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).