

## LITHIUM HYDROXIDE, REDUCED DUSTING GRADE

CAS No. 1310-66-3

QS-PDS-1022-RDG Revision: 00

<b>Formula</b>	LiOH·H <sub>2</sub> O
<b>Appearance</b>	White crystals
<b>Application</b>	Reduced dusting grade (H <sub>2</sub> O damped) developed for use in lubricating grease and chemical applications where exposure of personnel to the product needs to be minimized.

### Product Specifications

	Guaranteed
LiOH, wt%	55.0 min
CO <sub>2</sub> , wt%	0.35 max
Cl, wt%	0.003 max
SO <sub>4</sub> , wt%	0.06 max
CaO, wt%	0.03 max
Fe <sub>2</sub> O <sub>3</sub> , wt%	0.003 max
NaOH, wt%	0.05 max
Acid Insolubles, wt%	0.005 max

<b>Other Data</b>	Bulk density	Loose	0.9 g/cm <sup>3</sup>
		Tap	1.0 g/cm <sup>3</sup>

<b>Physical Properties</b>	Molecular weight	41.96
	Density @ 20°C	1.51 g/cm <sup>3</sup>
	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

<b>Water Solubility</b>	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·H<sub>2</sub>O.

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

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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).