



Lithium Hydroxide, Monohydrate

CAS No. 1310-66-3

QS-PDS-1022 Revision: 06

Date of Last Revision: June 12, 2024

**Formula:** LiOH.H<sub>2</sub>O

**Appearance:** White crystals

**Application:** A free-flowing, granular solid used in the production of cathode materials for lithium ion batteries. It is also well suited in the manufacturing of high-purity lithium greases, dyes, specialty resins and many other chemical specialties.

<b>Product Specifications:</b>	LiOH, wt. %	56.5	min
	CO <sub>2</sub> , wt. %	0.35	max
	Cl, wt. %	0.003	max
	SO <sub>4</sub> , wt. %	0.05	max
	CaO, wt. %	0.03	max
	NaOH, wt. %	0.05	max
	Fe <sub>2</sub> O <sub>3</sub> , wt. %	0.003	max
	Acid Insolubles, wt. %	0.005	max

<b>Other Data:</b>	Loose Bulk Density	0.9 g/cm <sup>3</sup>
	Tapped Bulk Density	1.0 g/cm <sup>3</sup>

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

<b>Water Solubility:</b>	% by wt. @ 0°C : 10.7
	% by wt. @ 20°C : 10.9
	% by wt. @ 100°C : 14.8

**Toxicity/Safety Data** *Information on toxicity, safety, handling, storage and disposal is contained in the Safety Data Sheet (SDS) for this product.*  
**Handling / Storage / Disposal:**



- Shipping Containers:**
- 100 Kg of product in a polyethylene-lined fiber drum. Four (4) fiber drums per pallet. 400 Kg per pallet.
  - 20 Kg of product in a polyethylene bag. Forty-four (50) bags per pallet. 1000 Kg per pallet.
  - 25 Kg of product in a polyethylene bag. Forty (40) bags per pallet. 1000 Kg per pallet.
  - 50 lbs of product in a polyethylene bag. Forty-four (40) bags per pallet. 2000 lbs per pallet.
  - 450 Kg of product in a supersack, stacked two (2) high, 900 Kg per pallet.
  - 1000 Kg of product in a supersack, single stacked. 1000 Kg per pallet.

**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