#### TECHNICAL DATA SHEET



# LiOH.H2O Lithium Hydroxide, Monohydrate

Chemical Formula LiOH.H2O

CAS No. 1310-66-3

#### PRODUCT DESCRIPTION

Lithium Hydroxide Monohydrate is a white fine powder. Alkaline and readily soluble in water. Produced from lithium carbonate or lithium sulfate

#### **APPLICATIONS**

Lithium Hydroxide Monohydrate is used as an effective accelerator in alumina cement systems and can be used to mitigate alkali-silica reaction in concrete. It is used in paints, ceramics, producing grease thickeners and coolants for corrosion control.

#### 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

#### **PACKAGING**

- 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.

#### TOXICITY/ SAFETY DATA HANDLING / STORAGE / DISPOSAL

Information on toxicity, safety, handling, storage and disposal is contained in the Safety Data Sheet (SDS) for this product.

#### SHELF LIFE AND STORAGE

Product should be stored in a dry place away from direct sunlight and humidity in sealed, original packaging.

#### PRODUCT SPECIFICATIONS

Parameters	Specifications	
Appearance	White Crystals	
LiOH, wt. %	56.5. Min	
CO2, wt. %	0.35. Max	
Cl, wt. %	0.003 Max	
SO4, wt. %	0.05 Max	
CaO, wt. %	0.03 Max	
NaOH, wt. %	0.05 Max	
Fe2O3, wt. %	0.003 Max	
Acid Insolubles, wt. %	0.005 Max	

## OTHER DATA

Loose Bulk Density	0.9 g/cm <sup>3</sup>
Tapped Bulk Density	1.0 g/cm <sup>3</sup>

#### PHYSICAL PROPERTIES

Molecular Weight	41.96
Standard Heat of Formation	-188.9 kca/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>

### WATER SOLUBILITY

% by wt. @ 0° C	10.7
% by wt. @ 20° C	10.9
% by wt. @ 100° C	14.8

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#### LIMITED WARRANTY INFORMATION.

#### PLEASE READ CAREFULLY.

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For more information or answers to questions about the use in specific applications, contact your Technical Sales Representative or call Toll Free 1.833.LITHUSA (1-833-548-4872).

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