

**LITHIUM HYDROXIDE MONOHYDRATE HIGH PURITY GRADE**

4-HL - ver. 2

**CAS No.:** 1310-66-3  
**Formula:** LiOH·H<sub>2</sub>O  
**Appearance:** White free-flowing crystals

**Application:** A free-flowing crystalline material with greatly reduced levels of impurities. High purity grade is used in the manufacture of cathode materials for lithium ion batteries, specialty greases and fine chemical formulations.

| Parameter             | Specification   |
|-----------------------|-----------------|
| LiOH, wt%             | <b>56,5</b> min |
| CO <sub>2</sub> , wt% | <b>0,30</b> max |
| Cl, ppm               | <b>15</b> max   |
| S, ppm                | <b>20</b> max   |
| Ca, ppm               | <b>20</b> max   |
| Fe, ppm               | <b>5</b> max    |
| Na, ppm               | <b>20</b> max   |
| Mg, ppm               | <b>5</b> max    |
| Mn, ppm               | <b>5</b> max    |
| Cr, ppm               | <b>5</b> max    |
| Cu, ppm               | <b>5</b> max    |
| K, ppm                | <b>10</b> max   |
| Ni, ppm               | <b>5</b> max    |

**Material can be produced as per customers specification.**

**Physical Properties:** Molecular weight 41,96 g/mol  
Density at 20°C 1,51 g/cm<sup>3</sup>  
Bulk density Approx 0,9 g/cm<sup>3</sup>

**Melting point:** 462 °C for LiOH

| Water Solubility: | Temperature (°C) | LiOH in 100 g H <sub>2</sub> O |
|-------------------|------------------|--------------------------------|
|                   | 0                | 10,7                           |
|                   | 20               | 10,9                           |
|                   | 100              | 14,8                           |



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### Toxicity/Safety Data:

Precautionary statements: Do not breathe dust. Harmful if swallowed. Causes severe skin burns and eye damage. Wear protective gloves, protective clothing, eye protection and face protection.

Response: IF SWALLOWED: rinse mouth. Do NOT induce vomiting. immediately call a poison center or doctor. IF ON SKIN (or hair): take off immediately all contaminated clothing. rinse skin with water or shower. immediately call a poison center or doctor. IF IN HALED: remove person to fresh air and keep comfortable for breathing. immediately call a poison center or doctor. IF IN EYES: rinse cautiously with water for several minutes. remove contact lenses, if present and easy to do. continue rinsing. immediately call a poison center or doctor.

COMPLETE AND DETAILED INFORMATION ON TOXICITY AND SAFETY IS CONTAINED IN THE SAFETY DATA SHEET (SDS).

### Storage & disposal:

Store away from acids, liquids and water. Always keep container closed. Disposal in accordance with local and national regulations. Do not dispose of waste into sewer. Do not dispose of together with household waste.

### Packaging:

- 25 kg net polypropylene bags with polyethylene lining, on pallet of 1000 kg
- 50 Lbs net polypropylene bags with polyethylene lining, on pallet of 2000 Lbs
- 500 kg net polyethylene-lined Big bags
- 1000 kg net polyethylene-lined Big bags

### Shipping Limitations:

Shipments of lithium hydroxide are described as "Lithium Hydroxide, UN 2680." All shipments are Hazard Class 8 and require "Corrosive" labels.

|             |                       |           |
|-------------|-----------------------|-----------|
| Parcel, Air | Restricted quantities |           |
| Sea         | Class 8               | (IMDG)    |
| Road, Rail  | Class 8.41            | (RID/ADR) |