

# MATERIAL SAFETY DATA SHEET

24 HR. EMERGENCY PHONE # CHEM-TREC 1-800-424-9300

Manufacturer: ProChem, Inc.  
826 Roosevelt Road  
Rockford, IL 61109

Phone: (815) 398-1788  
Fax: (815) 398-1810  
E-Mail: Prochem1@aol.com

---

## SECTION 1 Product Identification

---

**CHEMICAL NAME:** Lithium hydroxide  
**CAS #:** 1310-66-3  
**FORMULA:** LiOH.H2O

---

## SECTION 2 Composition and Information on Ingredients

---

INGREDIENT:	CAS #	%	ACGIH (TWA)	OSHA (PEL)
Title Compound	1310-66-3	100	no data	no data

---

## SECTION 3 Hazards Identification

---

**EMERGENCY OVERVIEW:** A corrosive alkaline hydroxide. Contact with the human body will result in chemical burns. Lithium salts are toxic to the central nervous system and on repeated ingestion may damage kidneys. Teratogen

**PRIMARY ROUTES OF EXPOSURE:** Ingestion, inhalation, skin and eyes

**EYE CONTACT:** Causes severe burns to the eyes resulting in redness and watering.

**SKIN CONTACT:** Prolonged contact with moist skin will cause chemical burns.

**INHALATION:** Corrosive to the nose, mucous membranes and respiratory tract.

**INGESTION:** Ingestion may lead to dizziness, abdominal cramps, vomiting, bloody diarrhea, weakness, and convulsions.

**CHRONIC HEALTH EFFECTS:** May cause kidney damage. May be a teratogen.

**ACUTE HEALTH EFFECTS:** Lithium salts are toxic to the central nervous system. Corrosive to skin, eyes and respiratory tract.

---

## SECTION 4 First Aid Measures

---

**EYE EXPOSURE:** Immediately flush the eyes with copious amounts of water for at least 15 minutes. Assure flushing under eyelids. A victim may need assistance in keeping their eyelids open. Get immediate competent medical attention.

**SKIN EXPOSURE:** Wash affected area with water. Remove contaminated clothes if necessary. Seek medical assistance if irritation persists.

**INHALATION:** Remove the victim to fresh air. Closely monitor the victim for signs of respiratory problems, such as difficulty in breathing, coughing, wheezing, or pain. In such cases seek immediate medical assistance.

**INGESTION:** Seek medical assistance immediately. Keep the victim calm. Give the victim water (only if conscious). Induce vomiting only if directed by medical personnel.

---

## **SECTION 5                      Firefighting Measures**

---

**FLASH POINT:** not applicable

**AUTO IGNITION TEMPERATURE:** none

**EXPLOSION LIMITS:** none

**EXTINGUISHING MEDIUM:** None. Material is non flammable

**SPECIAL FIREFIGHTING PROCEDURES:** If involved in a fire, fire fighters should be equipped with a NIOSH approved positive pressure self-contained breathing apparatus and full protective clothing.

**HAZARDOUS COMBUSTION AND DECOMPOSITION PRODUCTS:** No hazardous combustion or decomposition products.

**UNUSUAL FIRE OR EXPLOSION HAZARDS:** No unusual fire or explosion hazards.

---

## **SECTION 6                      Accidental Release Measures**

---

**SPILL AND LEAK PROCEDURES:** Small spills can be mixed with vermiculite or sodium carbonate and swept up.

---

## **SECTION 7                      Handling and Storage**

---

**HANDLING AND STORAGE:** Store material in a tightly sealed container.

---

## **SECTION 8                      Exposure Controls and Personal Protection**

---

**EYE PROTECTION:** Always wear approved safety glasses w/side shields, or safety goggles, face shield when handling a chemicals substance in the laboratory.

**SKIN PROTECTION:** Chemical-resistant.

**VENTILATION:** If possible, handle the material in an efficient fume hood.

**RESPIRATOR:** If in form of fine dust and ventilation is not available a respirator should be worn. The use of respirators requires a Respirator Protection Program to be in compliance with 29 CFR 19-10.134.

---

## **SECTION 9                      Physical and Chemical Properties**

---

**COLOR AND FORM:** white powder

**MOLECULAR WEIGHT:** 23.95 (41.96)

**MELTING POINT (DEG. C.):** none

**BOILING POINT:** no data

**VAPOR PRESSURE:** not applicable

**SPECIFIC GRAVITY:** no data

**SOLUBILITY IN WATER:** 22.3g/100cc(10°C)

---

## **SECTION 10                    Stability and Reactivity**

---

**STABILITY:** hygroscopic

**HAZARDOUS POLYMERIZATION:** no hazardous polymerization

**CONDITIONS TO AVOID:** none

**INCOMPATIBILITY:** mineral acids and active metals  
**DECOMPOSITION PRODUCTS:** none

---

## **SECTION 11 Toxicological Information**

---

**RTECS DATA:** No information available in the RTECS files.  
**MUTAGENIC EFFECTS:** no data  
**TETRATOGENIC EFFECTS:** no data  
**CARCINOGENIC EFFECTS:** no data  
To the best of our knowledge the toxicological effects of this compound have not been fully investigated.

---

## **SECTION 12 Ecological Information**

---

**ECOLOGICAL INFORMATION:** No information available

---

## **SECTION 13 Disposal Considerations**

---

**DISPOSAL:** Dispose of in according to local state and federal regulations.

---

## **SECTION 14 Transportation Information**

---

Lithium Hydroxide, Class 8, UN 2680, PG II

---

## **SECTION 15 Regulatory Information**

---

**TSCA:** Not listed in the TSCA inventory  
**SARA (TITLE 313):** Title compound not listed

---

## **SECTION 16 Other Information**

---

**DISCLAIMER:** The information herein is believed to be accurate and reliable as of the date compiled. However, ProChem, Inc. makes no representation, warranty, or guarantee of any kind with respect to the information in this document or any use of the product based on the information.  
**DATE PREPARED:** 4/06