MATERIAL SAFETY DATA SHEET (MSDS)

1. PRODUCT NAME AND COMPANY IDENTIFICATION

Product Name:

- Lithium Hydroxide Monohydrate
- Synonyms: LiOH·H₂O; Lithium Hydrate Monohydrate

Manufacturer/Supplier:

Swadesh (India) Chemical Pvt. Ltd.

Address:

Survey No: 512, Plot No. 7, Shri Hari Industrial Park, Kadadra Village, Near ZAK GIDC, Dehgam, Gandhinagar, Gujarat, India – 382330

Contact:

Email: business@swadeshindia.inWebsite: www.swadeshindia.in

Recommended Use:

Alkali source in batteries; grease thickener; CO₂ scrubber

2. COMPOSITION/INGREDIENT INFORMATION

Component	CAS No.	Concentration (%)
Lithium Hydroxide Monohydrate	1310-66-3	≥ 98%

Additional Notes:

• Impurities: Molecular Weight: 41.96 g/mol (anhydrous basis)

3. HAZARDS IDENTIFICATION

GHS Classification:

- Skin Corrosion/Irritation Category 1B (H314)
- Serious Eye Damage Category 1 (H318)

Hazard Statements:

- Causes severe skin burns and eye damage
- Harmful if swallowed

4. FIRST AID MEASURES

- **Eye Contact:** Rinse immediately with plenty of water for ≥30 minutes (hold eyelids open). Seek immediate medical attention.
- **Skin Contact: Remove contaminated clothing.** Rinse skin with water/shower for ≥15 minutes. Get medical attention.
- Ingestion: Do NOT induce vomiting. Rinse mouth. Drink 2-3 glasses of water. Seek immediate medical help.
- Inhalation (dust): Move to fresh air. Give artificial respiration if needed.

5. FIRE FIGHTING MEASURES

- Extinguishing Media: Dry chemical, CO₂, sand (DO NOT use water)
- Special Hazards: Reacts violently with water to generate heat
- Firefighting PPE: Full protective gear with SCBA

6. ACCIDENTAL RELEASE MEASURES (STEPS FOR SPILLS)

- Spill Response:
 - o Small Spills: Collect with dry, inert absorbent
 - Large Spills: Isolate area. Prevent contact with water/moisture
- Environmental Precautions:
 - Highly alkaline (pH >12). Prevent entry to waterways.



7. HANDLING AND STORAGE

- Handling:
 - Use in a dry atmosphere. Handle under inert gas if possible.
- Storage:
 - Airtight container in cool, dry place. Separate from acids/moisture.
 - o Shelf Life: 24 months (when properly stored

8. EXPOSURE CONTROL/PERSONAL PROTECTION

- Engineering Controls: Local exhaust ventilation
- PPE:
 - Gloves: Rubber/neoprene
 - Eye Protection: Tight-fitting goggles + face shield
 - Respiratory Protection: NIOSH-approved dust mask
 - Clothing: Chemical-resistant apron

9. PHYSICAL AND CHEMICAL PROPERTIES

Property	Value
Appearance	White crystalline powder
Odor	Odorless
Melting Point	462°C (anhydrous)
Solubility	12.8 g/100mL (20°C)

10. STABILITY AND REACTIVITY

- Chemical Stability: Hygroscopic (absorbs moisture from air)
- Incompatible Materials: Water, acids, aluminum, zinc
- Hazardous Decomposition Products: Above 600°C, releases Li₂O fumes

11. TOXICOLOGICAL INFORMATION

Acute Toxicity (Oral, Rat):

Oral LD50 (rat): 210 mg/kg

Skin Sensitization:

• Severe burns possible

Mutagenicity:

Negative (Ames test)

12. ECOLOGICAL INFORMATION

Biodegradability:

Not applicable (inorganic compound)

Aquatic Toxicity:

LC50 (fish, 96h): 100-500 mg/L

13. DISPOSAL CONSIDERATIONS

Waste Disposal:

• Neutralize with dilute acid before disposal as hazardous waste

14. TRANSPORT INFORMATION

DOT/IMO/IATA:

Class 8 (Corrosive), UN2680

15. REGULATORY INFORMATION

India:

Compliant with CPCB regulations

International:

- REACH registered
- OSHA compliant

16. ADDITIONAL INFORMATION

Revision Date: 20/04/24

Disclaimer: This MSDS is provided for informational purposes only. Users should make their own determination of suitability for any particular purpose.