



American International Chemical, Inc.

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MATERIAL SAFETY DATA SHEET

LITHIUM HYDROXIDE MONOHYDRATE

SECTION 1 - CHEMICAL PRODUCT AND COMPANY INFORMATION

| | | |
|---------------------------------------|----------------------------|--------------|
| American International Chemical, Inc. | Emergency Number: Chemtrec | 800-424-9300 |
| 135 Newbury Street | | 703-527-3887 |
| Framingham, MA 01701 | Information Number: | 800-238-0001 |

Date: August 2007

Synonyms: Lithium Hydroxide

CAS #: 1310-66-3

DOT Hazard Class: UN 2680, Class 8, PG II, Corrosive

SECTION 2 - COMPOSITION AND INFORMATION ON INGREDIENTS

Lithium Hydroxide Monohydrate 100%

SECTION 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: White crystalline solid, odorless. It is poison and corrosive and may be fatal if swallowed or inhaled. Can cause burns to any area upon contact. Do not allow water to enter the container.

POTENTIAL HEALTH EFFECTS:

Skin: Can cause severe skin irritation, redness or burns.

Eyes: Can cause severe irritation, burning, blurred vision and pain.

Inhalation: Can cause severe irritation to the respiratory tract. Extremely destructive to tissue of the mucous membranes. Some effects are difficulty breathing, low blood pressure, dizziness, bluish skin color and lung congestion.

Ingestion: Swallowing can cause severe burns of the mouth, throat and stomach, leading to death.

Carcinogenicity: Not Identifiable

SECTION 4 - FIRST AID MEASURES

Skin: Immediately wash skin with soap and water for at least 15 minutes, while removing contaminated clothing and shoes.

Eyes: Immediately flush with plenty of water for at least 15 minutes, holding eye lids apart.

Inhalation: Remove to the fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

Ingestion: Wash out mouth with lots of water. If swallowed, DO NOT INDUCE VOMMITING. Give large quantities of water.

On All Of The Above: Get medical attention immediately.

SECTION 5 - FIRE FIGHTING MEASURES

Flash Point: Non Combustible

Flammable Limits: Non combustible

Extinguishing Media: Use media that is appropriate to treat surrounding fire.

Special Fire Fighting Procedures:

Use fire fighting procedure that is appropriate to treat surrounding fire. All firefighters should use self-contained breathing apparatus and full fire-fighting turn-out gear. If large amounts of combustible material is involved, use spray or fog in flooding amounts.

Unusual Fire Explosion Hazard: Not considered an explosion hazard.

Auto Ignition Temperature: Not Applicable

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Isolate hazard area and deny entry to unnecessary or unprotected personnel. Ventilate area of spill. Contain spill, sweep up, collect and place in a disposal container. Avoid runoff into storm sewers and ditches which lead to waterways.

SECTION 7 - HANDLING AND STORAGE

Avoid contact with skin, eyes and clothing. Use with adequate ventilation. Avoid breathing dust. Use normal personal hygiene and housekeeping. Store in cool dry corrosion resistant area away from other incompatible materials. Product is slightly hygroscopic and should be stored in a dry area to prevent moisture pick up and caking.

SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

RESPIRATORY PROTECTION: Use NIOSH/MSHA approved respirators.

VENTILATION REQUIREMENTS: Ventilate as necessary to eliminate dust from the work area and maintain concentrations below the limit.

SKIN AND EYE PROTECTION: Use rubber or neoprene gloves, chemical goggles and/or full face shield, boots and clothing sufficient to protect skin from dust.

WORK, HYGIENIC PRACTICES:

As required to protect skin and eyes from dust, safety showers and/or eye wash should be available. Do not leave food or smoke in work area. Wash thoroughly and remove or clean any contaminated clothing.

EXPOSURE LIMITS: AIHA Workplace Environmental Exposure Limit (WEEL) 1 mg/m³ as LiOH (One-minute TWA, Ceiling), equivalent to 1.75 mg/M³ as LiOH.HOH.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point: Not Applicable

Vapor Pressure (MM Hg): Not Applicable

Vapor Density (AIR=1): Not Applicable

Specific Gravity (H₂O=1): 1.51

Percent Volatile by Volume (%): Not Applicable

Melting Point: 470°C [878°F]

Evaporation Rate (Butyl Acetate=1): Not Applicable

Solubility in Water: Appreciable

pH: 14.0 @ 1.0N solution

SECTION 10 - STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable under normal temperatures and pressures. When exposed to air LiOH picks up carbon dioxide and cakes up. Reaction with water is slightly exothermic.

HAZARDOUS POLYMERIZATION: Will not occur under normal conditions.

HAZARDOUS DECOMPOSITION PRODUCTS: May release corrosive fumes of Lithium Hydroxide.

KEEP AWAY FROM: Water, Carbon Dioxide, Acrolein, Strong Acids, Aluminum, Zinc and Strong Oxidizers. Avoid moisture and extreme heat.

SECTION 11 - TOXICOLOGICAL INFORMATION

| | | |
|--------------------------------|----------------|------|
| 960 mg/m ³ /4 hours | Rat Inhalation | LC50 |
| 200 mg/kg | Oral Mouse | LDLo |

SECTION 12 - ECOLOGICAL INFORMATION

Not Available

SECTION 13 - DISPOSAL CONSIDERATIONS

Dispose of in accordance with all federal, state and local regulations.

RCRA WASTE #: Not Listed

SECTION 14 - TRANSPORTATION INFORMATION

D.O.T. SHIPPING NAME: Lithium Hydroxide Monohydrate
UN 2680, Class 8, PG II, Corrosive

SECTION 15 - REGULATORY INFORMATION

OSHA STATUS: Not listed

TSCA STATUS: Listed

CERCLA REPORTABLE REQUIREMENTS: (RQ) None

SARA TITLE III INFORMATION:

Section 302 Extremely Hazardous Substance Not listed

Section 313 Toxic Chemicals: Not listed

Section 311/312 Hazard Category: Acute, reactivity hazard

SECTION 16 - OTHER INFORMATION

NFPA: Health 3 Flammability 0 Reactivity 1

Reason for Issue: Changed Date

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