

**MATERIAL SAFETY DATA SHEET**

Prepared according to 29 CFR 1910.1200

DATE PREPARED: July 2009  
DATE REVISED: March, 2010

PAGE 1  
MSDS NO: 260

---

**SECTION I - IDENTIFICATION**

L&M CONSTRUCTION CHEMICALS, INC  
14851 CALHOUN ROAD  
OMAHA, NE 68152

ASSISTANCE (CHEMTREC) 800-424-9300  
EMERGENCY PHONE NO. 402-453-6600

I.D. NO.: N/A

PRODUCT  
NAME: **LiON HARD**

DOT CLASS: N/A

CHEMICAL  
NAME: Lithium Silicate Solution

DOT SHIPPING  
NAME: N/A

---

**SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION**

INGREDIENTS	OSHA PEL	ACGIH TLV	CAS	% wt
Lithium Silicate	None assigned	None assigned	12627-14-4	<40

Listed and unlisted ingredients are not "hazardous" per OSHA Standard 29 CFR 1910.1200.

---

**SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS**

BOILING POINT (F): 214-216 (water-based)  
VAPOR PRESSURE (mm Hg): N/A  
VAPOR DENSITY (AIR = 1): N/A  
SOLUBILITY IN WATER: 100%  
APPEARANCE: Colorless Clear Liquid  
ODOR: Odorless

SPECIFIC GRAVITY (H<sub>2</sub>O = 1): 1.07

MELTING POINT: N/A  
BULK DENSITY: 8.96 lb./gal.  
PH INFORMATION: 10 to 10.5  
EVAPORATION RATE: N/A

---

**SECTION IV - FIRE AND EXPLOSION HAZARD DATA**

FLASH POINT, °F: Nonflammable  
FLAMMABLE LIMITS - LEL: N/A UEL: N/A  
EXTINGUISHING MEDIA: Non-combustible product

SPECIAL FIRE FIGHTING PROCEDURES: Protective clothing for skin and eye protection should be worn.

---

**SECTION V - REACTIVITY DATA**

STABILITY: unstable: stable: X  
INCOMPATIBILITY (materials to avoid): Acid materials. May react with ammonium salts resulting in evolution of ammonia gas. Flammable hydrogen gas may be produced on contact with aluminum, tin, lead, and zinc.  
HAZARDOUS DECOMPOSITION OR BYPRODUCTS: N/A  
HAZARDOUS POLYMERIZATION: may occur: will not occur: X  
CONDITIONS TO AVOID: N/A

---

**SECTION VI - HEALTH HAZARD DATA****LiON HARD**

POTENTIAL EFFECTS OF EXPOSURE (listed by primary routes of entry)

INHALATION: Exposure to mists or spray may cause coughing, sneezing, or other symptoms of upper respiratory tract irritation. Severe exposure may result in lung tissue damage.

SKIN: Will cause severe irritation on continued contact.

INGESTION: Irritation to mucous membranes of the mouth, throat, esophagus and stomach. Repeated ingestion of large doses of soluble lithium compounds is reported to cause temporary mental function impairment.

EYE CONTACT: Can cause severe irritation if not treated.

**EMERGENCY & FIRST AID PROCEDURES**

INHALATION: If symptoms are present, get person out of area to fresh air. Seek medical attention.

SKIN: Wash with plenty of water for at least 15 minutes. Remove soiled clothing and footwear. Wash clothing before reuse. Footwear should be cleaned before reuse. Seek medical attention if symptoms are present.

INGESTION: Never give anything by mouth to an unconscious person. If swallowed, do not induce vomiting. Give large quantities of milk, if available. If vomiting occurs spontaneously, keep airway clean. Seek medical attention immediately.

EYE CONTACT: Object is to flush material out immediately, then seek medical attention. Immediately flush eyes with large amounts of water for at least several minutes holding lids apart to ensure flushing of the entire surface. Washing eyes for one minute is essential. Seek medical attention.

CARCINOGENICITY: OSHA: NO NTP: NO IARC: NO

HMS RATING: HEALTH – 2, FLAMMABILITY – 0, REACTIVITY – 0

See Section VIII for Personal Protective Equipment (PPE)

---

**SECTION VII - PRECAUTIONS FOR SAFE HANDLING & USE**

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: If a material is spilled or released, contain liquids and prevent discharges to streams of sewer systems.

WASTE DISPOSAL METHOD: Clean up action should be carefully planned and executed. Shipment, storage, and/or disposal of waste materials are regulated and action to handle spilled or released materials must meet the applicable rule. If any questions exist, contact the appropriate agencies.

PRECAUTIONS TO BE TAKEN IN HANDLING & STORAGE: Shower and eyewash facilities should be accessible.

OTHER PRECAUTIONS: Floors may become slippery when wet with LiON HARD.

---

**SECTION VIII - CONTROL MEASURES**

RESPIRATORY PROTECTION: Use local exhaust ventilation where mists or spray may be generated.

VENTILATION:

LOCAL EXHAUST: When mists or spray may be generated.

PROTECTIVE GLOVES: Standard work gloves.

EYE PROTECTION: Face shield and chemical goggles.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Standard work clothing. Standard work shoes.

WORK/HYGIENIC PRACTICES: Wash contaminated clothing and dry before reuse.

**END OF MSDS**