SAFETY DATA SHEET

1. Identification

Product identifier: L&M Lion Hard Concentrate
Other means of identification: Not available.
Recommended use: Concrete hardener.
Recommended restrictions: None known.

<table>
<thead>
<tr>
<th>Manufacturer:</th>
<th>Importer/Supplier/Distributor Information:</th>
</tr>
</thead>
</table>
| LATICRETE International.  
1 Laticrete Park N.  
Bethany CT 06524  
PHONE:203-393-0010 | LATICRETE Middle East LLC  
P.O. Box. 86028, Ras Al Khaimah,  
United Arab Emirates  
Phone: +971 7 244 6396  
Contact Person: Mohmed Rafiq. M |

2. Hazard(s) identification

Physical hazards: Not classified.
Health hazards: Skin corrosion/irritation - Category 2  
Serious eye damage/eye irritation - Category 2A
OSHA defined hazards: Not classified.
Label elements:

Signal word: Warning
Hazard statement: Causes skin irritation. Causes serious eye irritation.
Precautionary statement:
Prevention: Wash thoroughly after handling. Wear protective gloves/eye protection/face protection.
Response: If on skin: Wash with plenty of water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Storage: Store away from incompatible materials.
Disposal: Dispose of contents/container in accordance with local/regional/national/international regulations.

3. Composition/information on ingredients

Mixtures

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silicic acid, lithium salt</td>
<td>12627-14-4</td>
<td>14 - 17</td>
</tr>
</tbody>
</table>

Composition comments: All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.
4. First-aid measures
Inhalation
No specific first aid measures noted.

Skin contact
Take off immediately all contaminated clothing. Wash contaminated clothing before reuse. Get medical attention.

Eye contact
Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention.

Ingestion
Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Get medical attention if any discomfort continues.

Most important symptoms/effects, acute and delayed
Irritation of eyes.

Indication of immediate medical attention and special treatment needed
Provide general supportive measures and treat symptomatically.

General information
Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures
Suitable extinguishing media
Water spray, foam, dry powder or carbon dioxide.

Unsuitable extinguishing media
Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical
By heating and fire, irritating vapors/gases may be formed.

Special protective equipment and precautions for firefighters
Self-contained breathing apparatus and full protective clothing must be worn in case of fire. Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace.

Fire-fighting equipment/instructions
Move containers from fire area if you can do so without risk. Use water spray to cool unopened containers.

General fire hazards
No unusual fire or explosion hazards noted.

6. Accidental release measures
Personal precautions, protective equipment and emergency procedures
Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained.

Methods and materials for containment and cleaning up
Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Environmental precautions
Never return spills in original containers for re-use. For waste disposal, see Section 13 of the SDS. Avoid release to the environment. Do not discharge into drains, water courses or onto the ground. Environmental manager must be informed of all major releases.

7. Handling and storage
Precautions for safe handling
Do not breathe mist. Do not get in eyes, on skin, on clothing. Use with adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities
Keep container tightly closed. Store in a cool and well-ventilated place. Store away from incompatible materials (See Section 10).

8. Exposure controls/personal protection
Occupational exposure limits
No exposure limits noted for ingredient(s).

Biological limit values
No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls
Provide eyewash station.

Individual protection measures, such as personal protective equipment
Eye/face protection
Wear safety glasses with side shields (or goggles). Face-shield.
Skin protection
  Hand protection
    Wear appropriate chemical resistant gloves.
  Other
    Wear appropriate chemical resistant clothing.
Respiratory protection
  In case of insufficient ventilation, wear suitable respiratory equipment.
Thermal hazards
  Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations
  Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Clear liquid</td>
</tr>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Form</td>
<td>Liquid</td>
</tr>
<tr>
<td>Color</td>
<td>Clear</td>
</tr>
<tr>
<td>Odor</td>
<td>Odorless</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>Not available</td>
</tr>
<tr>
<td>pH</td>
<td>11.3</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Flash point</td>
<td>Non flammable</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Upper/lower flammability or explosive limits</td>
<td></td>
</tr>
<tr>
<td>Flammability limit - lower (%)</td>
<td>Not available</td>
</tr>
<tr>
<td>Flammability limit - upper (%)</td>
<td>Not available</td>
</tr>
<tr>
<td>Explosive limit - lower (%)</td>
<td>Not available</td>
</tr>
<tr>
<td>Explosive limit - upper (%)</td>
<td>Not available</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Vapor density</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Relative density</td>
<td>1.39</td>
</tr>
<tr>
<td>Solubility(ies)</td>
<td></td>
</tr>
<tr>
<td>Solubility (water)</td>
<td>Soluble</td>
</tr>
<tr>
<td>Partition coefficient (n-octanol/water)</td>
<td>No data available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>Not available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not available</td>
</tr>
</tbody>
</table>

10. Stability and reactivity

Reactivity
  The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability
  Material is stable under normal conditions.
Possibility of hazardous reactions
  Will not occur.
Conditions to avoid
  Heat, flames and sparks. Contact with incompatible materials.
Incompatible materials
  Strong oxidizing agents.
Hazardous decomposition products
  Carbon oxides. Silicon oxides. Lithium oxides

11. Toxicological information

Information on likely routes of exposure
  Ingestion
    Ingestion may cause irritation and malaise.
Inhalation
No inhalation hazard under normal conditions. High mist concentrations may cause irritation of respiratory tract.

Skin contact
Causes skin irritation.

Eye contact
Causes serious eye irritation.

Symptoms related to the physical, chemical and toxicological characteristics
Irritation of eyes.

Information on toxicological effects

Acute toxicity
May cause discomfort if swallowed.

Skin corrosion/irritation
Causes skin irritation.

Serious eye damage/eye irritation
Causes serious eye irritation.

Respiratory or skin sensitization

Respiratory sensitization
No data available.

Skin sensitization
Not a skin sensitizer.

Germ cell mutagenicity
No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity
This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
Not listed.

Reproductive toxicity
No data available.

Specific target organ toxicity - single exposure
No data available.

Specific target organ toxicity - repeated exposure
No data available.

Aspiration hazard
No data available.

Further information
Lithium salts: Repeated ingestion of lithium salts may cause renal damage, central nervous system disturbances, and electrolyte imbalance.

12. Ecological information

Ecotoxicity
The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Persistence and degradability
No data available.

Bioaccumulative potential
No data available.

Mobility in soil
No data available.

Mobility in general
The product is soluble in water.

Other adverse effects
No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions
Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazardous waste code
The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products
Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging
Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.
14. Transport information

DOT
Not regulated as dangerous goods.

IATA
Not regulated as dangerous goods.

IMDG
Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not applicable.

15. Regulatory information

US federal regulations
This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
Not listed.

CERCLA Hazardous Substance List (40 CFR 302.4)
Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)
Hazard categories
Immediate Hazard - Yes
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance
Not listed.

SARA 311/312 Hazardous chemical
Yes

SARA 313 (TRI reporting)
Not regulated.

Other federal regulations
Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List
Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
Not regulated.

Safe Drinking Water Act (SDWA)
Not regulated.

US state regulations
This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

US. Massachusetts RTK - Substance List
Not regulated.

US. New Jersey Worker and Community Right-to-Know Act
Not listed.

US. Pennsylvania Worker and Community Right-to-Know Law
Not listed.

US. Rhode Island RTK
Not regulated.

US. California Proposition 65
US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance
Not listed.

International Inventories

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Australian Inventory of Chemical Substances (AICS)</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Country(s) or region | Inventory name | On inventory (yes/no)*
--- | --- | ---
Canada | Domestic Substances List (DSL) | Yes
Canada | Non-Domestic Substances List (NDSL) | No
China | Inventory of Existing Chemical Substances in China (IECSC) | Yes
Europe | European Inventory of Existing Commercial Chemical Substances (EINECS) | No
Europe | European List of Notified Chemical Substances (ELINCS) | Yes
Japan | Inventory of Existing and New Chemical Substances (ENCS) | Yes
Korea | Existing Chemicals List (ECL) | Yes
New Zealand | New Zealand Inventory | Yes
Philippines | Philippine Inventory of Chemicals and Chemical Substances (PICCS) | No
United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory | Yes

*"Yes" indicates this product complies with the inventory requirements administered by the governing country(s). A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date | 15-July-2014
Revision date | -
Version # | 01

NFPA ratings

References

HSDB® - Hazardous Substances Data Bank
Registry of Toxic Effects of Chemical Substances (RTECS)

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