1. Identification

Product identifier: L&M Seal Hard Concentrate

Other means of identification: Not available.

Recommended use of the chemical and restrictions on use:

Recommended use: Concrete hardener/sealer.

Restrictions on use: Not available.

Details of manufacturer or importer:

Manufacturer:

Company Name: LATICRETE International
Address: 1 Laticrete Park, N
Bethany, CT 06524
Telephone: (203)-393-0010
Contact person: Steve Fine
Website: www.laticrete.com
Emergency phone number: Call CHEMTREC day or night
USA/Canada - 1.800.424.9300
Mexico - 1.800.681.9531
Outside USA/Canada - 1.703.527.3887

Supplier:

Company Name: LATICRETE Australia
Address: P.O. Box 508
Virginia Business Mail Centre
29 Telford Street
VIRGINIA QLD 4014
AUSTRALIA
Telephone: (61) (7) 3865-1599
Website: www.laticrete.com
Emergency phone number: 1.703.527.3887

2. Hazard(s) identification

Classification of the hazardous chemical:

Physical hazards: Not classified.

Health hazards:

- Skin corrosion/irritation: Category 2
- Serious eye damage/eye irritation: Category 1

Environmental hazards: Not classified.

Label elements, including precautionary statements:

Hazard symbol(s):

- Corrosion
- Exclamation mark

Signal word: Danger

Hazard statement(s): Causes skin irritation. Causes serious eye damage.

Precautionary statement(s):

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. Immediately call a POISON CENTER/doctor.

Storage
Store away from incompatible materials.

Disposal
Dispose of contents/container in accordance with local/regional/national/international regulations.

Other hazards which do not result in classification
Not a PBT or vPvB substance or mixture.

Supplemental information
Not applicable.

3. Composition/information on ingredients

Mixture

<table>
<thead>
<tr>
<th>Identity of chemical ingredients</th>
<th>CAS number and other unique identifiers</th>
<th>Concentration of ingredients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium silicate</td>
<td>1344-09-8</td>
<td>25 - 30</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

Description of necessary first aid measures

Inhalation
Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if any discomfort continues.

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

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 immediately.

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.

Personal protection for first-aid responders
Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

Symptoms caused by exposure
Irritation of eyes and mucous membranes. Permanent eye damage including blindness could result.

Medical attention and special treatment
Provide general supportive measures and treat symptomatically.

5. Fire-fighting measures

Extinguishing media
Suitable extinguishing media
Water spray, foam, dry powder or carbon dioxide.

Unsuitable extinguishing media
Water. 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 fire fighters
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.

Hazchem code
Not available.

General fire hazards
No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel
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.
For emergency responders

Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the SDS. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Wear appropriate protective equipment and clothing during clean-up.

Environmental precautions

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.

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.

Other issues relating to spills and releases

Never return spills in original containers for re-use. For waste disposal, see Section 13 of the SDS.

7. Handling and storage

Precautions for safe handling

Do not breathe mist or vapor. 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 and personal protection

Control parameters

Follow standard monitoring procedures.

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

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Ensure adequate ventilation, especially in confined areas. Provide eyewash station.

Individual protection measures, for example personal protective equipment (PPE)

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. Wear chemical protective equipment that is specifically recommended by the manufacturer.

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

Hygiene measures

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

Appearance

Clear liquid.

Physical state

Liquid.

Form

Liquid.

Color

Clear.

Odor

Odorless.

Odor threshold

Not available.

pH

11.3

Melting point/freezing point

Not applicable.

Initial boiling point and boiling range

Not applicable.

Flash point

Non flammable.

Evaporation rate

Not applicable.

Flammability (solid, gas)

Not applicable.
Upper/lower flammability or explosive limits

- Flammability limit - lower (%): Not available.
- Flammability limit - upper (%): Not available.
- Explosive limit - lower (%): Not available.
- Explosive limit - upper (%): Not available.

- Vapor pressure: Not applicable.
- Vapor density: Not applicable.
- Relative density: 1.39
- Solubility(ies)
  - Solubility (water): Soluble.
- Partition coefficient (n-octanol/water): Not available.
- Auto-ignition temperature: Not available.
- Decomposition temperature: Not available.
- Viscosity: Not available.

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 acids.
- Hazardous decomposition products: Silicon oxides.

11. Toxicological information

Information on possible routes of exposure

- **Ingestion**: Ingestion may cause irritation and malaise.
- **Inhalation**: In high concentrations, vapors may be irritating to the respiratory system.
- **Skin contact**: Causes skin irritation.
- **Eye contact**: Causes serious eye damage.

Symptoms related to exposure: Irritation of eyes and mucous membranes. Permanent eye damage including blindness could result.

- **Acute toxicity**: May cause discomfort if swallowed.

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium silicate (CAS 1344-09-8)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Acute</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dermal</td>
<td>Rat</td>
<td>&gt; 5000 mg/kg</td>
</tr>
<tr>
<td><strong>Inhalation</strong></td>
<td>Rat</td>
<td>&gt; 2.06 mg/l, 4 Hours</td>
</tr>
<tr>
<td>Oral</td>
<td>Mouse</td>
<td>6600 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Rat</td>
<td>1500 - 2200 mg/kg</td>
</tr>
<tr>
<td></td>
<td></td>
<td>500 mg/kg</td>
</tr>
<tr>
<td><strong>Skin corrosion/irritation</strong></td>
<td></td>
<td>Causes skin irritation.</td>
</tr>
<tr>
<td><strong>Serious eye damage/irritation</strong></td>
<td></td>
<td>Causes serious eye damage.</td>
</tr>
</tbody>
</table>
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.

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.
Chronic effects: Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.
Other information: No other specific acute or chronic health impact noted.

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.
Persistency and degradability: No data is available on the degradability of this product.
Bioaccumulative potential: No data available.
Mobility in soil: Not available.
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 methods: 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.
Residual waste: 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). Avoid discharge into water courses or onto the ground.
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

ADG: Not regulated as dangerous goods.
RID: 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

Safety, health and environmental regulations
National regulations: This Safety Data Sheet was prepared in accordance with the Code of Practice on Preparation of Safety Data Sheets for Hazardous Chemicals.

Australia Medicines & Poisons Appendix A
Poisons schedule number not allocated.
Australia Medicines & Poisons Appendix B
Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix C
Sodium silicate (CAS 1344-09-8)
For domestic use.

Australia Medicines & Poisons Appendix D
Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix E
Sodium silicate (CAS 1344-09-8)
For advice, contact a Poisons information Centre (Phone eg Australia 131 - 126; New Zealand 03 - 4747 - 000) or a doctor (at once). If swallowed, do NOT induce vomiting. If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes. If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water.

Australia Medicines & Poisons Appendix F
Sodium silicate (CAS 1344-09-8)
Applies to all preparations in any concentration. Strongly alkaline. Avoid contact with eyes. Avoid contact with skin.

Australia Medicines & Poisons Appendix G
Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix H
Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix I
Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix J
Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix K
Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 2
Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 3
Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 4
Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 5
Sodium silicate (CAS 1344-09-8)
Applies to all preparations in any concentration. Exception may apply, see the regulation for relevance.

Australia Medicines & Poisons Schedule 6
Sodium silicate (CAS 1344-09-8)
For non-domestic use. Exception may apply, see the regulation for relevance.

Australia Medicines & Poisons Schedule 7
Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 8
Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 9
Poisons schedule number not allocated.

High Volume Industrial Chemicals (HVIC)
Sodium silicate (CAS 1344-09-8)
10000 - 99999 TONNES See the regulation for additional information.

Importation of Ozone Deleting Substances (Customs(Prohibited imports) Regulations 1956, Schedule 10)
Not listed.

National Pollutant Inventory (NPI) substance reporting list
Not listed.

Prohibited Carcinogenic Substances
Not regulated.

Prohibited Substances (National Model Regulation for the control of Workplace Hazardous Substances, Schedule 2 NOHSC:1005 (1994) as amended)
Not listed.
Restricted Importation of Organochlorine Chemicals (Customs(Prohibited Imports) Regulations 1956, Schedule 9)
Not listed.

Restricted Carcinogenic Substances
Not regulated.

International regulations

Stockholm Convention
Not applicable.

Rotterdam Convention
Not applicable.

Kyoto protocol
Not applicable.

Montreal Protocol
Not applicable.

Basel Convention
Not applicable.

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>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSL)</td>
<td>No</td>
</tr>
<tr>
<td>China</td>
<td>Inventory of Existing Chemical Substances in China (IECSC)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European Inventory of Existing Commercial Chemical Substances (EINECS)</td>
<td>No</td>
</tr>
<tr>
<td>Europe</td>
<td>European List of Notified Chemical Substances (ELINCS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Japan</td>
<td>Inventory of Existing and New Chemical Substances (ENCS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Korea</td>
<td>Existing Chemicals List (ECL)</td>
<td>Yes</td>
</tr>
<tr>
<td>New Zealand</td>
<td>New Zealand Inventory</td>
<td>Yes</td>
</tr>
<tr>
<td>Philippines</td>
<td>Philippine Inventory of Chemicals and Chemical Substances (PICCS)</td>
<td>Yes</td>
</tr>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*A "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

Issue date
12-August-2014

Revision date
- 

Key abbreviations or acronyms used
DNEL: Derived No-Effect Level.
PNEC: Predicted No-Effect Concentration.

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

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