L&M™ LION HARD™
by LATICRETE International

CLASSIFICATION: 03 05 00
PRODUCT DESCRIPTION: L&M™ LION HARD™ is a low VOC, environmentally friendly lithium silicate concrete floor densifier, hardener, and sealer. This product penetrates bare concrete surfaces and transforms them into permanently dust free floors that get better with age. There’s no scrubbing or washing necessary.

### Section 1: Summary

#### Inventory Inventory Format

<table>
<thead>
<tr>
<th>Reporting Format</th>
<th>Threshold Disclosed Per</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nested Materials Method</td>
<td>Material</td>
</tr>
<tr>
<td>Basic Method</td>
<td>Product</td>
</tr>
</tbody>
</table>

#### Threshold level

- 100 ppm
- 1,000 ppm
- Per GHS SDS
- Per OSHA MSDS
- Other

#### Residuals/Impurities

- Characterized
  - Yes Ex/SC: Yes
  - Yes: Yes
  - No: No
- Partially Considered
- Not Considered

### CONTENT IN DESCENDING ORDER OF QUANTITY

Summary of product contents and results from screening individual chemical substances against HPD Priority Hazard Lists and the GreenScreen for Safer Chemicals®. The HPD does not assess whether using or handling this product will expose individuals to its chemical substances or any health risk. Refer to Section 2 for further details.

**MATERIAL | SUBSTANCE | RESIDUAL OR IMPURITY | GREENSCREEN SCORE | HAZARD TYPE**

- L&M™ LION HARD™ | WATER BM-4 | SILICIC ACID, LITHIUM SALT LT-UNK | UNDISCLOSED LT-P1 | MUL |

- Number of Greenscreen BM-4/BM3 contents: 1
- Contents highest concern GreenScreen Benchmark or List translator Score: LT-P1
- Nanomaterial: No

**INVENTORY AND SCREENING NOTES:**
This HPD was created with Basic Inventory. Materials listed as Undisclosed in Section 2 is done to preserve integrity of formula and maintain competitive advantage. The component CAS# was used to identify associated hazards of these components.

#### VOLATILE ORGANIC COMPOUND (VOC) CONTENT

- Material (g/l): 6.1
- Regulatory (g/l): 6.1
- Does the product contain exempt VOCs: No
- Are ultra-low VOC tints available: Yes

#### CERTIFICATIONS AND COMPLIANCE

- VOC emissions: N/A
- VOC content: TDS 251 "Low VOC LATICRETE Products"

**CONSISTENCY WITH OTHER PROGRAMS**

No pre-checks completed or disclosed.

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**Third Party Verified?**
- Yes
- No

**PREPARER:** Self-Prepared

**VERIFIER:**

**VERIFICATION #:**

**SCREENING DATE:** 2020-03-17

**PUBLISHED DATE:** 2020-05-11

**EXPIRY DATE:** 2023-03-17

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L&M LION HARD
hpdrepository.hpd-collaborative.org
Section 2: Content in Descending Order of Quantity

This section lists contents in a product based on specific threshold(s) and reports detailed health information including hazards. This HPD uses the inventory method indicated above, which is one of three possible methods:

- Basic Inventory method with Product-level threshold.
- Nested Material Inventory method with Product-level threshold
- Nested Material Inventory method with individual Material-level thresholds

Definitions and requirements for the three inventory methods and requirements for each data field can be found in the HPD Open Standard version 2.1.1, available on the HPDC website at: [www.hpd-collaborative.org/hpd-2-1-1-standard](http://www.hpd-collaborative.org/hpd-2-1-1-standard)

<table>
<thead>
<tr>
<th><strong>L&amp;M™ LION HARD™</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PRODUCT THRESHOLD:</strong> 100 ppm</td>
</tr>
<tr>
<td><strong>RESIDUALS AND IMPURITIES NOTES:</strong> Residuals and impurities are measured by quantitative methods and are only displayed when they are potentially greater than 100 ppm.</td>
</tr>
<tr>
<td><strong>OTHER PRODUCT NOTES:</strong> See SDS at <a href="http://www.laticrete.com">www.laticrete.com</a> for occupational exposure information.</td>
</tr>
<tr>
<td>Substance</td>
</tr>
<tr>
<td>---------------------------------</td>
</tr>
<tr>
<td>WATER</td>
</tr>
<tr>
<td>SILICIC ACID, LITHIUM SALT</td>
</tr>
<tr>
<td>UNDISCLOSED</td>
</tr>
</tbody>
</table>

SUBSTANCE NOTES: The amount of this component may vary based on the plant of manufacture.
Section 3: Certifications and Compliance

This section lists applicable certification and standards compliance information for VOC emissions and VOC content. Other types of health or environmental performance testing or certifications completed for the product may be provided.

### VOC EMISSIONS

<table>
<thead>
<tr>
<th>CERTIFYING PARTY</th>
<th>ISSUE DATE</th>
<th>EXPIRY DATE</th>
<th>CERTIFIER OR LAB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-declared</td>
<td>2018-12-20</td>
<td></td>
<td>LATICRETE</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>APPLICABLE FACILITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applies to All Facilities.</td>
</tr>
</tbody>
</table>

CERTIFICATION AND COMPLIANCE NOTES: L&M™ LION HARD™ has not been tested for VOC emissions.

### VOC CONTENT

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<thead>
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</tr>
</thead>
<tbody>
<tr>
<td>Self-declared</td>
<td>2019-01-22</td>
<td></td>
<td>LATICRETE</td>
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CERTIFICATION AND COMPLIANCE NOTES: Meets LEED v4 Credit "Low Emitting Materials" VOC Content Requirements per SCAQMD Rule 1113 (Default).

Section 4: Accessories

This section lists related products or materials that the manufacturer requires or recommends for installation (such as adhesives or fasteners), maintenance, cleaning, or operations. For information relating to the contents of these related products, refer to their applicable Health Product Declarations, if available.

No accessories are required for this product.

Section 5: General Notes

L&M™ LION HARD™ meets the Living Building Challenge v4.0 requirement that the product does not contain any of the Red Listed Materials or Chemicals. Specifically, L&M LION HARD does not contain the following:

- Antimicrobials (marketed with a health claim)
- Alkylphenols and related compounds
- Asbestos
- Bisphenol A (BPA) and structural analogues
- California Banned Solvents
- Chlorinated Polymers, including Chlorinated polyethylene (CPE), Chlorinated Polyvinyl Chloride (CPVC), Chloroprene (neoprene monomer), Chlorosulfonated polyethylene (CSPE), Polyvinylidene chloride (PVDC), and Polyvinyl Chloride (PVC)
- Chlorobenzenes
- Chlorofluorocarbons (CFCs) & Hydrochlorofluorocarbons (HCFCs)
- Formaldehyde (added)
- Monomeric, polymeric and organophosphate halogenated flame retardants (HFRs)
- Organotin Compounds
- Perfluorinated Compounds (PFCs)
- Phthalates (orthophthalates)
- Polychlorinated Biphenyls (PCBs)
- Polycyclic Aromatic Hydrocarbons (PAH)
- Short-Chain and Medium-Chain Chlorinated Paraffins
- Toxic Heavy Metals - Arsenic, Cadmium, Chromium, Lead (added), and Mercury
- Wood treatments containing Creosote, Arsenic or Pentachlorophenol. See Section 1 for Volatile Organic Compounds (VOC) (wet applied products) information.
MANUFACTURER INFORMATION

MANUFACTURER: LATICRETE International
ADDRESS: 1 Laticrete Park North
Bethany CT 06524, USA
WEBSITE: https://laticrete.com

CONTACT NAME: Mitch Hawkins
TITLE: Senior Manager, Technical Services
PHONE: 203-393-4619
EMAIL: wmhawkins@laticrete.com

KEY

OSHA MSDS Occupational Safety and Health Administration Material Safety Data Sheet
GHS SDS Globally Harmonized System of Classification and Labeling of Chemicals Safety Data Sheet

Hazard Types

AQU Aquatic toxicity
CAN Cancer
DEV Developmental toxicity
END Endocrine activity
EYE Eye irritation/corrosivity
GEN Gene mutation
GLO Global warming
MAM Mammalian/systemic toxicity
MUL Multiple hazards
NEU Neurotoxicity
OZO Ozone depletion
PBT Persistent Bioaccumulative Toxic
PHY Physical Hazard (reactive)
REP Reproductive toxicity
RES Respiratory sensitization
SKI Skin sensitization/irritation/corrosivity
LAN Land Toxicity
NF Not found on Priority Hazard Lists

GreenScreen (GS)

BM-4 Benchmark 4 (prefer-safer chemical)
BM-3 Benchmark 3 (use but still opportunity for improvement)
BM-2 Benchmark 2 (use but search for safer substitutes)
BM-1 Benchmark 1 (avoid - chemical of high concern)
BM-U Benchmark Unspecified (insufficient data to benchmark)
LT-P1 List Translator Possible Benchmark 1
LT-1 List Translator Likely Benchmark 1
LT-UNK List Translator Benchmark Unknown (insufficient information from List Translator lists to benchmark)
NoGS Unknown (no data on List Translator Lists)

Recycled Types

PreC Preconsumer (Post-Industrial)
PostC Postconsumer
Both Both Preconsumer and Postconsumer
Unk Inclusion of recycled content is unknown
None Does not include recycled content

Other Terms

Inventory Methods:

Nested Method / Material Threshold Substances listed within each material per threshold indicated per material
Nested Method / Product Threshold Substances listed within each material per threshold indicated per product
Basic Method / Product Threshold Substances listed individually per threshold indicated per product

Nano Composed of nano scale particles or nanotechnology
Third Party Verified Verification by independent certifier approved by HPDC
Preparer Third party preparer, if not self-prepared by manufacturer
Applicable facilities Manufacturing sites to which testing applies

The Health Product Declaration (HPD) Open Standard provides for the disclosure of product contents and potential associated human and environmental health hazards. Hazard associations are based on the HPD Priority Hazard Lists, the GreenScreen List Translator™, and when available, full GreenScreen® assessments. The HPD Open Standard v2.1 is not:

• a method for the assessment of exposure or risk associated with product handling or use,
• a method for assessing potential health impacts of: (i) substances used or created during the manufacturing process or (ii) substances created after the product is delivered for end use.

Information about life cycle, exposure and/or risk assessments performed on the product may be reported by the manufacturer in appropriate Notes sections, and/or, where applicable, in the Certifications section.

The HPD Open Standard was created and is supported by the Health Product Declaration Collaborative (the HPD Collaborative), a customer-led organization composed of stakeholders throughout the building industry that is committed to the continuous improvement of building products through transparency, openness, and innovation throughout the product supply chain.

The product manufacturer and any applicable independent verifier are solely responsible for the accuracy of statements and claims made in this HPD and for compliance with the HPD standard noted.