**Product Description:** L&M™ CHEM HARD™ is a low VOC, colorless solution which reacts chemically with components of concrete to form a dense, insoluble, chemical-resistant surface. Can be applied to fresh or hardened concrete as a hardener and dustproofer.

**Section 1: Summary**

**CONTENT INVENTORY**

<table>
<thead>
<tr>
<th>Inventory 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
- Other

**Residuals/Impurities**
- Considered
- Partially Considered
- Not Considered

**All Substances Above the Threshold Indicated Are:**
- Characterized
- % weight and role provided for all substances.

**Screened**
- Yes Ex/SC
- Yes
- No

**Identified**
- Yes Ex/SC
- Yes
- No

**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.

**INVENTORY AND SCREENING NOTES:**

This HPD was created with Basic Inventory. The materials listed in Section 2 represent 100% of the product content.

**VOLATILE ORGANIC COMPOUND (VOC) CONTENT**

Material (g/l): 0.00
Regulatory (g/l): N/A
Does the product contain exempt VOCs: No
Are ultra-low VOC tints available: N/A

**CERTIFICATIONS AND COMPLIANCE**

See Section 3 for additional listings.

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

**CONSISTENCY WITH OTHER PROGRAMS**

Pre-checked for LEED v4 Material Ingredients Option 1 and Option 2

**PREPARER:** Self-Prepared

**VERIFIER:**

**SCREENING DATE:** 2020-10-09

**PUBLISHED DATE:** 2020-10-09

**EXPIRY DATE:** 2023-10-09
# 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 2.2, available on the HPDC website at: [www.hpd-collaborative.org/hpd-2-2-standard](http://www.hpd-collaborative.org/hpd-2-2-standard)

## L&M™ CHEM HARD™

<table>
<thead>
<tr>
<th>PRODUCT THRESHOLD: 100 ppm</th>
<th>RESIDUALS AND IMPURITIES CONSIDERED: Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>RESIDUALS AND IMPURITIES NOTES: Residuals and impurities are measured by quantitative methods and are only displayed when they are potentially greater than 100 ppm.</td>
<td></td>
</tr>
<tr>
<td>OTHER PRODUCT NOTES: See SDS at <a href="http://www.laticrete.com">www.laticrete.com</a> for occupational exposure information.</td>
<td></td>
</tr>
</tbody>
</table>

### WATER

<table>
<thead>
<tr>
<th>HAZARD SCREENING METHOD: Pharos Chemical and Materials Library</th>
<th>HAZARD SCREENING DATE: 2020-10-09</th>
</tr>
</thead>
<tbody>
<tr>
<td>%: 80.0000 - 90.0000</td>
<td>GS: BM-4</td>
</tr>
<tr>
<td>HAZARD TYPE</td>
<td>AGENCY AND LIST TITLES</td>
</tr>
<tr>
<td>None found</td>
<td></td>
</tr>
</tbody>
</table>

**STABLE**

**ENDOCRINE** - Potential Endocrine Disruptors

**SUBSTANCE NOTES:** The amount of this component may vary based on the plant of manufacture.

### SODIUM SILICATE

<table>
<thead>
<tr>
<th>HAZARD SCREENING METHOD: Pharos Chemical and Materials Library</th>
<th>HAZARD SCREENING DATE: 2020-10-09</th>
</tr>
</thead>
<tbody>
<tr>
<td>%: 10.0000 - 15.0000</td>
<td>GS: LT-P1</td>
</tr>
<tr>
<td>HAZARD TYPE</td>
<td>AGENCY AND LIST TITLES</td>
</tr>
<tr>
<td>ENDOCRINE</td>
<td>TEDX - Potential Endocrine Disruptors</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>Self-declared</th>
</tr>
</thead>
<tbody>
<tr>
<td>APPLICABLE FACILITIES:</td>
<td>Applies to All Facilities.</td>
</tr>
<tr>
<td>ISSUE DATE:</td>
<td>2020-10-09</td>
</tr>
<tr>
<td>EXPIRY DATE:</td>
<td></td>
</tr>
<tr>
<td>CERTIFIER OR LAB:</td>
<td>LATICRETE</td>
</tr>
<tr>
<td>CERTIFICATION AND COMPLIANCE NOTES:</td>
<td>L&amp;M™ CHEM HARD™ has not been tested for VOC emissions.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>VOC CONTENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>TDS 251 &quot;Low VOC LATICRETE Products&quot;</td>
</tr>
<tr>
<td>CERTIFYING PARTY:</td>
</tr>
<tr>
<td>APPLICABLE FACILITIES:</td>
</tr>
<tr>
<td>ISSUE DATE:</td>
</tr>
<tr>
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</tr>
<tr>
<td>CERTIFIER OR LAB:</td>
</tr>
<tr>
<td>CERTIFICATION AND COMPLIANCE NOTES:</td>
</tr>
</tbody>
</table>

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™ CHEM 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 CHEM 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 organo-phosphate 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

The listed contact is responsible for the validity of this HPD and attests that it is accurate and complete to the best of his or her knowledge.

KEY

Hazard Types

- AQU Aquatic toxicity
- CAN Cancer
- DEV Developmental toxicity
- END Endocrine activity
- EYE Eye irritation/corrosivity
- GEN Gene mutation
- GLO Global warming
- LAN Land toxicity
- MAM Mammalian/systemic/organ toxicity
- MULT Multiple
- NEU Neurotoxicity
- NF Not found on Priority Hazard Lists
- OZO Ozone depletion
- PBT Persistent, bioaccumulative, and toxic
- PHY Physical hazard (flammable or reactive)
- REP Reproductive
- RES Respiratory sensitization
- SKI Skin sensitization/irritation/corrosivity
- UNK Unknown

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 (due to insufficient data)
- LT-P1 List Translator Possible 1 (Possible Benchmark-1)
- LT-1 List Translator 1 (Likely Benchmark-1)
- LT-UNK List Translator Benchmark Unknown (the chemical is present on at least one GreenScreen Specified List, but the information contained within the list did not result in a clear mapping to a LT-1 or LT1P score.)
- NoGS No GreenScreen.

Recycled Types

- PreC Pre-consumer recycled content
- PostC Post-consumer recycled content
- UNK Inclusion of recycled content is unknown
- None Does not include recycled content

Other Terms:

- GHS SDS Globally Harmonized System of Classification and Labeling of Chemicals Safety Data Sheet

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.