**CLASSIFICATION:** 03 05 00

**PRODUCT DESCRIPTION:** L&M™ FGS HARDENER PLUS™ is a component of the L&M FGS PERMASHINE™ Floor Polishing System, this product is formulated to increase the wear resistance and surface strength of concrete floors which have been mechanically ground, smoothed and polished.

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### Section 1: Summary

**CONTENT INVENTORY**

**Inventory Reporting Format**
- C Nested Materials Method
- C Basic Method

**Threshold Disclosed Per**
- C Material
- C Product

**Threshold level**
- C 100 ppm
- C 1,000 ppm
- C Per GHS SDS
- C Per OSHA MSDS
- C Other

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

**All Substances Above the Threshold Indicated Are:**
- C Characterized - Yes Ex/SC Yes No

  % weight and role provided for all substances.

- C Screened - Yes Ex/SC Yes No

  All substances screened using Priority Hazard Lists with results disclosed.

- C Identified - Yes Ex/SC Yes No

  One or more substances not disclosed by Name (Specific or Generic) and Identifier and/ or one or more Special Condition did not follow guidance.

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**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™ FGS HARDENER PLUS™ [ WATER | BM-4 | SODIUM SILICATE | LT-P1 | END UNDISCLOSED LT-UNK ]

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.

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**VOCAL 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

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**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**

No pre-checks completed or disclosed.

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**PREPARER:** Self-Prepared
**VERIFIER:**
**VERIFICATION #:**
**SCREENING DATE:** 2020-03-17
**PUBLISHED DATE:** 2020-05-11
**EXPIRY DATE:** 2023-03-17
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)

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**L&M™ FGS HARDENER PLUS™**

**PRODUCT THRESHOLD:** 100 ppm

**RESIDUALS AND IMPURITIES CONSIDERED:** Yes

**RESIDUALS AND IMPURITIES NOTES:** Residuals and impurities are measured by quantitative methods and are displayed only if they are potentially greater than 100 ppm.

**OTHER PRODUCT NOTES:** See SDS at [https://laticrete.com](https://laticrete.com) for occupational exposure information.
### WATER

**HAZARD SCREENING METHOD:** Pharos Chemical and Materials Library  
**HAZARD SCREENING DATE:** 2020-03-17  
**%:** 87.00 - 95.00  
**GS:** BM-4  
**RC:** None  
**NANO:** No  
**ROLE:** Diluent

**HAZARD TYPE**  
**AGENCY AND LIST TITLES**  
**WARNINGS**

None found  
No warnings found on HPD Priority Hazard Lists

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

### SODIUM SILICATE

**HAZARD SCREENING METHOD:** Pharos Chemical and Materials Library  
**HAZARD SCREENING DATE:** 2020-03-17  
**%:** 10.00 - 13.00  
**GS:** LT-P1  
**RC:** None  
**NANO:** No  
**ROLE:** Hardener

**HAZARD TYPE**  
**AGENCY AND LIST TITLES**  
**WARNINGS**

ENDOCRINE  
TEDX - Potential Endocrine Disruptors  
Potential Endocrine Disruptor

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

### UNDISCLOSED

**HAZARD SCREENING METHOD:** Pharos Chemical and Materials Library  
**HAZARD SCREENING DATE:** 2020-03-17  
**%:** 0.01 - 0.02  
**GS:** LT-UNK  
**RC:** None  
**NANO:** No  
**ROLE:** Pigment

**HAZARD TYPE**  
**AGENCY AND LIST TITLES**  
**WARNINGS**

None found  
No warnings found on HPD Priority Hazard Lists

**SUBSTANCE NOTES:** The amount of this component may vary based on the plant of manufacture. This product is shown as undisclosed to preserve integrity of formula and maintain competitive advantage. The component CAS# was used to identify associated hazards.
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>CERTIFIER OR LAB:</td>
<td>LATICRETE</td>
</tr>
<tr>
<td>ISSUE DATE:</td>
<td>2019-01-22</td>
</tr>
<tr>
<td>EXPIRY DATE:</td>
<td></td>
</tr>
<tr>
<td>CERTIFICATION AND COMPLIANCE NOTES:</td>
<td>L&amp;M™ FGS HARDENER PLUS™ has not been tested for VOC emissions.</td>
</tr>
</tbody>
</table>

VOC CONTENT

<table>
<thead>
<tr>
<th>CERTIFYING PARTY:</th>
<th>Self-declared</th>
</tr>
</thead>
<tbody>
<tr>
<td>APPLICABLE FACILITIES:</td>
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<tr>
<td>EXPIRY DATE:</td>
<td></td>
</tr>
<tr>
<td>CERTIFICATION AND COMPLIANCE NOTES:</td>
<td>L&amp;M™ FGS HARDENER PLUS™ meet LEED v4 Credit &quot;Low Emitting Materials&quot; VOC Content Requirements per SCAQMD Rule 1113 (Default).</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™ FGS HARDENER PLUS™ 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 FGS HARDENER PLUS 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

### 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

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

#### 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

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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.