

HPD UNIQUE IDENTIFIER: 31589

CLASSIFICATION: 03 00 00 Concrete

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 dustproof.

Section 1: Summary

Basic Method / Product Threshold

CONTENT INVENTORY

<p><b>Inventory Reporting Format</b></p> <p><input type="radio"/> Nested Materials Method</p> <p><input checked="" type="radio"/> Basic Method</p> <p><b>Threshold Disclosed Per</b></p> <p><input type="radio"/> Material</p> <p><input checked="" type="radio"/> Product</p>	<p><b>Threshold Level</b></p> <p><input checked="" type="radio"/> 100 ppm</p> <p><input type="radio"/> 1,000 ppm</p> <p><input type="radio"/> Per GHS SDS</p> <p><input type="radio"/> Other</p>	<p><b>Residuals/Impurities Evaluation</b></p> <p><input checked="" type="radio"/> Completed</p> <p><input type="radio"/> Partially Completed</p> <p><input type="radio"/> Not Completed</p> <p><b>Explanation(s) provided :</b></p> <p><input checked="" type="radio"/> Yes <input type="radio"/> No</p>	<p><i>For all contents above the threshold, the manufacturer has:</i></p> <p><b>Characterized</b> <input checked="" type="radio"/> Yes <input type="radio"/> No</p> <p><i>Provided weight and role.</i></p> <p><b>Screened</b> <input checked="" type="radio"/> Yes <input type="radio"/> No</p> <p><i>Provided screening results using HPDC-approved methods.</i></p> <p><b>Identified</b> <input checked="" type="radio"/> Yes <input type="radio"/> No</p> <p><i>Provided name and CAS RN or other identifier.</i></p>
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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.

**PRODUCT | MATERIAL OR SUBSTANCE | RESIDUAL OR IMPURITY**  
**GREENSCREEN SCORE | HAZARD TYPE**  
**L&M™ CHEM HARD™ [ WATER BM-4 SODIUM SILICATE LT-P1 ] END**  
**[ SKI | EYE ]**

Number of Greenscreen BM-4/BM3 contents ... 1  
 Contents highest-concern GreenScreen score(s) (BM-1, LT-1, LT-P1) ... LT-P1  
 Nanomaterial ... No

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 colorants available that do not increase the VOC content of the base paint when tinted: N/A

CERTIFICATIONS AND COMPLIANCE *See Section 3 for additional listings.*

VOC emissions: CDPH Standard Method - Not tested  
 VOC content: EPA Method 24 - Volatile Matter Content (EPA 24)

CONSISTENCY WITH OTHER PROGRAMS

Pre-checked for LEED v4 Option 1.  
 Pre-checked for LEED v4 Option 2.  
 Pre-checked for LEED v4.1 Option 1.

Third Party Verified?

- Yes  
 No

PREPARER: Self-Prepared  
 VERIFIER:  
 VERIFICATION #:

SCREENING DATE: 2022-09-16  
 PUBLISHED DATE: 2023-03-03  
 EXPIRY DATE: 2025-09-16

*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 2.3, available on the HPDC website at: [www.hpd-collaborative.org/hpd-2-3-standard](http://www.hpd-collaborative.org/hpd-2-3-standard)*

**L&M™ CHEM HARD™**

PRODUCT THRESHOLD: 100 ppm

RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes

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

OTHER PRODUCT NOTES: See SDS at [www.laticrete.com](http://www.laticrete.com) for occupational exposure information.

**WATER**

ID: 7732-18-5

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2023-02-09 20:55:48**%: **80.0000 - 90.0000** GreenScreen: **BM-4** RC: **None** NANO: **No** SUBSTANCE ROLE: **Diluent**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
EXEMPT	European Union / European Commission (EU EC)	EU - REACH Exemptions Exempted from REACH Annex IV listing due to intrinsic safety

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

**SODIUM SILICATE**

ID: 1344-09-8

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2023-02-09 20:55:50**%: **10.0000 - 15.0000** GreenScreen: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Surface modifier**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
SKI	GHS - New Zealand	Skin corrosion category 1C
EYE	GHS - New Zealand	Serious eye damage category 1
SKI	GHS - Australia	H314 - Causes severe skin burns and eye damage [Skin corrosion/irritation - Category 1A or 1B or 1C]

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes of Problematic Chemicals Antimicrobials

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	CDPH Standard Method - Not tested	
CERTIFYING PARTY: Self-declared	ISSUE DATE: 2022-08-29	CERTIFIER OR LAB: None
APPLICABLE FACILITIES: Applies to All Facilities.	EXPIRY DATE:	
CERTIFICATE URL:		
CERTIFICATION AND COMPLIANCE NOTES: L&M™ CHEM HARD™ has not been tested for VOC emissions.		

VOC CONTENT	EPA Method 24 - Volatile Matter Content (EPA 24)	
CERTIFYING PARTY: Self-declared	ISSUE DATE: 2023-01-23	CERTIFIER OR LAB: LATICRETE
APPLICABLE FACILITIES: Applies to All Facilities.	EXPIRY DATE:	
CERTIFICATE URL: <a href="https://cdn.laticrete.com/~media/health-product-datasheets/lm/chem-hard-hpd.ashx">https://cdn.laticrete.com/~media/health-product-datasheets/lm/chem-hard-hpd.ashx</a>		
CERTIFICATION AND COMPLIANCE NOTES: Meets LEED v4.1 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™ CHEM HARD™ meets the Living Building Challenge v4.1 (March 2022) 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:** Director, Technical Services  
**PHONE:** 203-393-4619  
**EMAIL:** [wmhawkins@laticrete.com](mailto: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**

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

**GreenScreen (GS)**

<b>BM-4</b> Benchmark 4 (prefer-safer chemical)	<b>LT-P1</b> List Translator Possible 1 (Possible Benchmark-1)
<b>BM-3</b> Benchmark 3 (use but still opportunity for improvement)	<b>LT-1</b> List Translator 1 (Likely Benchmark-1)
<b>BM-2</b> Benchmark 2 (use but search for safer substitutes)	<b>LT-UNK</b> List Translator Benchmark Unknown
<b>BM-1</b> Benchmark 1 (avoid - chemical of high concern)	<b>NoGS</b> No GreenScreen.
<b>BM-U</b> Benchmark Unspecified (due to insufficient data)	

GreenScreen Benchmark scores sometimes also carry subscripts, which provide more context for how the score was determined. These are DG (data gap), TP (transformation product), and CoHC (chemical of high concern). For more information, see 2.2.2.4 GreenScreen® for Safer Chemicals, [www.greenscreenchemicals.org](http://www.greenscreenchemicals.org), and Best Practices for Hazard Screening on the HPDC website ([hpd-collaborative.org](http://hpd-collaborative.org)).

**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.*