L&M™ CRYSTEX™
by LATICRETE International

Health Product Declaration v2.2
created via: HPDC Online Builder

HPD UNIQUE IDENTIFIER: 22381
CLASSIFICATION: 03 62 13 Non-Metallic Non-Shrink Grouting
PRODUCT DESCRIPTION: L&M™ CRYSTEX™ is a high-strength, highly fluid, non-shrink, non-metallic, controlled expansion structural grout with superior dynamic load stability. Provides for long working time, easy placement and can be mixed to a wide range of consistencies.

Section 1: Summary

Basic Method / Product Threshold

CONTENT INVENTORY

Inventory Reporting Format
- Nested Materials Method
- Basic Method

Threshold Disclosed Per
- Material
- Product

Threshold level
- 10 ppm
- 1,000 ppm
- Per GHS SDS
- Other

Residuals/Impurities
- Considered
- Partially Considered
- Not Considered

Explanation(s) provided for Residuals/Impurities?
- Yes
- No

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

% weight and role provided for all substances.

Screened
- Yes Ex/SC
- Yes
- No

All substances screened using Priority Hazard Lists with results disclosed.

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.

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™ CRYSTEX™ | QUARTZ LT-1 | CAN PORTLAND CEMENT LT-P1 | | |
| CAN | END UNDISCLOSED LT-1 | CAN | MUL UNDISCLOSED BM-1 | END | PHY | RES UNDISCLOSED NoGS UNDISCLOSED LT-UNK UNDISCLOSED BM-1 | CAN UNDISCLOSED LT-UNK UNDISCLOSED NoGS UNDISCLOSED BM-3 UNDISCLOSED BM-1 | END | MUL | CAN CALCIUM CARBONATE BM-3 LIMESTONE; CALCIUM CARBONATE LT-UNK | |

Number of Greenscreen BM-4/BM3 contents ... 2
Contents highest concern GreenScreen Benchmark or List translator Score ... BM-1
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): 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

Third Party Verified?
- Yes
- No

PREPARER: Self-Prepared
VERIFIER: 
VERIFICATION #:
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

L&M™ CRYSTEX™

PRODUCT THRESHOLD: 100 ppm
RESIDUALS AND IMPURITIES CONSIDERED: 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 for occupational exposure information.

QUARTZ

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library
HAZARD SCREENING DATE: 2020-10-09
%: 55.0000 - 60.0000
GS: LT-1
RC: None
NANO: No
SUBSTANCE ROLE: Filler

HAZARD TYPE
AGENCY AND LIST TITLES
WARNINGS
CANCER
US CDC - Occupational Carcinogens
Occupational Carcinogen
CANCER
CA EPA - Prop 65
Carcinogen - specific to chemical form or exposure route
CANCER
US NIH - Report on Carcinogens
Known to be Human Carcinogen (respirable size - occupational setting)
CANCER
MAK
Carcinogen Group 1 - Substances that cause cancer in man
CANCER
IARC
Group 1 - Agent is carcinogenic to humans - inhaled from occupational sources
CANCER
IARC
Group 1 - Agent is Carcinogenic to humans
CANCER
GHS - New Zealand
6.7A - Known or presumed human carcinogens
CANCER
GHS - Japan
Carcinogenicity - Category 1A [H350]
CANCER
GHS - Australia
H350i - May cause cancer by inhalation

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

PORTLAND CEMENT

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library
HAZARD SCREENING DATE: 2020-10-09
%: 40.0000 - 45.0000
GS: LT-P1
RC: None
NANO: No
SUBSTANCE ROLE: Binder

HAZARD TYPE
AGENCY AND LIST TITLES
WARNINGS
CANCER
MAK
Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification
ENDOCRINE
TEDX - Potential Endocrine Disruptors
Potential Endocrine Disruptor
### 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.

<table>
<thead>
<tr>
<th>HAZARD SCREENING METHOD</th>
<th>HAZARD SCREENING DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pharos Chemical and Materials Library</td>
<td>2020-10-09</td>
</tr>
</tbody>
</table>

#### Hazard Screening Details

<table>
<thead>
<tr>
<th>Percentage</th>
<th>GS</th>
<th>RC</th>
<th>NANO</th>
<th>Substance Role</th>
<th>Hazard Type</th>
<th>Agency and List Titles</th>
<th>WARNINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>0.2000 - 0.3000</strong></td>
<td>LT-1</td>
<td>None</td>
<td>No</td>
<td>Plasticizer</td>
<td>Cancer</td>
<td>EU - REACH Annex XVII CMRs</td>
<td>Carcinogen Category 1 - Substances known to be Carcinogenic to man</td>
</tr>
<tr>
<td><strong>0.0600 - 0.0700</strong></td>
<td>BM-1</td>
<td>None</td>
<td>No</td>
<td>Viscosity modifier</td>
<td>Endocrine</td>
<td>TEDX - Potential Endocrine Disruptors</td>
<td>Potential Endocrine Disruptor</td>
</tr>
<tr>
<td><strong>0.0500 - 0.1000</strong></td>
<td>NoGS</td>
<td>None</td>
<td>No</td>
<td>Viscosity modifier</td>
<td>Physical Hazard ( Reactive )</td>
<td>EU - GHS (H-Statements)</td>
<td>None found</td>
</tr>
</tbody>
</table>

None found

No warnings found on HPD Priority Hazard Lists

ENDOCRINE Tabled - Potential Endocrine Disruptors

Carcinogen Group 1 - Substances that cause cancer in man

Carcinogen Category 1 - Substances known to be Carcinogenic to man

CMR - Carcinogen, Mutagen &/or Reproductive Toxicant

Carcinogen

May cause cancer

Endocrine Disruptor

Catches fire spontaneously if exposed to air

In contact with water releases flammable gases

Asthmagen (Rs) - sensitizer-induced
HAZARD SCREENING METHOD: Pharos Chemical and Materials Library  
HAZARD SCREENING DATE: 2020-10-09

UNDISCLOSED

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library  
HAZARD SCREENING DATE: 2020-10-09

UNDISCLOSED

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HAZARD SCREENING DATE: 2020-10-09

UNDISCLOSED

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library  
HAZARD SCREENING DATE: 2020-10-09
### UNDISCLOSED

<table>
<thead>
<tr>
<th>HAZARD SCREENING METHOD:</th>
<th>Pharos Chemical and Materials Library</th>
<th>HAZARD SCREENING DATE:</th>
<th>2020-10-09</th>
</tr>
</thead>
<tbody>
<tr>
<td>%: 0.0002 - 0.0005</td>
<td>GS: BM-1</td>
<td>RC: None</td>
<td>NANO: No</td>
</tr>
<tr>
<td>SUBSTANCE ROLE:</td>
<td>Plasticizer</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**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.

### CALCIUM CARBONATE

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<tr>
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<th>HAZARD SCREENING DATE:</th>
<th>2020-10-09</th>
</tr>
</thead>
<tbody>
<tr>
<td>%: Impurity/Residual</td>
<td>GS: BM-3</td>
<td>RC: None</td>
<td>NANO: No</td>
</tr>
<tr>
<td>SUBSTANCE ROLE:</td>
<td>Impurity/Residual</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**HAZARD TYPE**

- **AGENCY AND LIST TITLES**
  - **WARNINGS**
    - None found
    - No warnings found on HPD Priority Hazard Lists

**SUBSTANCE NOTES:** This substance is an impurity or residual. This impurity/residual may or may not be present based on the source of the raw material and/or be less than 100ppm.

### LIMESTONE; CALCIUM CARBONATE

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<thead>
<tr>
<th>HAZARD SCREENING METHOD:</th>
<th>Pharos Chemical and Materials Library</th>
<th>HAZARD SCREENING DATE:</th>
<th>2020-10-09</th>
</tr>
</thead>
<tbody>
<tr>
<td>%: Impurity/Residual</td>
<td>GS: LT-UNK</td>
<td>RC: None</td>
<td>NANO: No</td>
</tr>
<tr>
<td>SUBSTANCE ROLE:</td>
<td>Impurity/Residual</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**HAZARD TYPE**

- **AGENCY AND LIST TITLES**
  - **WARNINGS**
    - None found
    - No warnings found on HPD Priority Hazard Lists

**SUBSTANCE NOTES:** This substance is an impurity or residual. This impurity/residual may or may not be present based on the source of the raw material and/or be less than 100ppm.
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>CERTIFICATE URL:</td>
<td></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>
</tbody>
</table>

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

VOC CONTENT

<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>CERTIFICATE URL:</td>
<td><a href="https://cdn.laticrete.com/~/media/support-and-downloads/technical-datasheets/tds251.ashx">https://cdn.laticrete.com/~/media/support-and-downloads/technical-datasheets/tds251.ashx</a></td>
</tr>
<tr>
<td>ISSUE DATE:</td>
<td>2020-08-12</td>
</tr>
<tr>
<td>EXPIRY DATE:</td>
<td></td>
</tr>
<tr>
<td>CERTIFIER OR LAB:</td>
<td>LATICRETE Lab</td>
</tr>
</tbody>
</table>

CERTIFICATION AND COMPLIANCE NOTES: There are no guidelines for maximum VOC content for structural grout materials in LEED v4.1. Please take note of the VOC content as stated in Section 1: VOLATILE ORGANIC COMPOUND (VOC) CONTENT.

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.

WATER

| HPD URL: | No HPD Available |

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:
L&M CRYSTEX to be mixed with water only following mix ratios and directions as stated on product data sheet.

Section 5: General Notes

L&M™ CRYSTEX™ 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 CRYSTEX 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.
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.