CLASSIFICATION: 03 00 00

PRODUCT DESCRIPTION: A one component, quick setting, non-shrink, durable hydraulic cement plug with excellent flexural and bond strengths. This product is freeze/thaw resistant, is non-metallic and has very rapid strength gain.

Section 1: Summary

Basic Method / Product Threshold

CONTENT INVENTORY

Inventory Reporting Format
- Nested Materials Method
- Basic Method

Threshold Disclosed Per
- Material
- Product

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

Residuals/Impurities
- Considered
- Partially Considered
- Not Considered

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

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

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™ DURAPLUG™ | HIGH-ALUMINA CEMENT LT-UNK | QUARTZ LT-1 | CAN PORTLAND CEMENT LT-P1 | CAN | END LIMESTONE; CALCIUM CARBONATE LT-UNK | CALCIUM HYDROXIDE LT-P1 | UNDISCLOSED BM-3 | UNDISCLOSED LT-UNK

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: 2018-08-28
PUBLISHED DATE: 2019-01-18
EXPIRY DATE: 2021-08-28
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, available on the HPDC website at: [www.hpd-collaborative.org/hpd-2-1-standard](http://www.hpd-collaborative.org/hpd-2-1-standard)

---

**L&M DURAPLUG™**

**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](http://www.laticrete.com) for occupational exposure information.

---

**HIGH-ALUMINA CEMENT**

**ID:** 65997-16-2

**HAZARD SCREENING METHOD:** Pharos Chemical and Materials Library  
**HAZARD SCREENING DATE:** 2018-08-28

**%:** 35.0000 - 45.0000  
**GS:** LT-UNK  
**RC:** None  
**NANO:** No  
**ROLE:** Binder

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

- No hazards found

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

---

**QUARTZ**

**ID:** 14808-60-7

**HAZARD SCREENING METHOD:** Pharos Chemical and Materials Library  
**HAZARD SCREENING DATE:** 2018-08-28

**%:** 25.0000 - 35.0000  
**GS:** LT-1  
**RC:** None  
**NANO:** No  
**ROLE:** Aggregate
<table>
<thead>
<tr>
<th>HAZARD TYPE</th>
<th>AGENCY AND LIST TITLES</th>
<th>WARNINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CANCER</td>
<td>US CDC - Occupational Carcinogens</td>
<td>Occupational Carcinogen</td>
</tr>
<tr>
<td>CANCER</td>
<td>CA EPA - Prop 65</td>
<td>Carcinogen - specific to chemical form or exposure route</td>
</tr>
<tr>
<td>CANCER</td>
<td>US NIH - Report on Carcinogens</td>
<td>Known to be Human Carcinogen (respirable size - occupational setting)</td>
</tr>
<tr>
<td>CANCER</td>
<td>MAK</td>
<td>Carcinogen Group 1 - Substances that cause cancer in man</td>
</tr>
<tr>
<td>CANCER</td>
<td>IARC</td>
<td>Group 1 - Agent is carcinogenic to humans - inhaled from occupational sources</td>
</tr>
<tr>
<td>CANCER</td>
<td>New Zealand - GHS</td>
<td>6.7A - Known or presumed human carcinogens</td>
</tr>
<tr>
<td>CANCER</td>
<td>Japan - GHS</td>
<td>Carcinogenicity - Category 1A</td>
</tr>
<tr>
<td>CANCER</td>
<td>Australia - GHS</td>
<td>H350i - May cause cancer by inhalation</td>
</tr>
</tbody>
</table>

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

### PORTLAND CEMENT

- **ID:** 65997-15-1
- **HAZARD SCREENING METHOD:** Pharos Chemical and Materials Library
- **HAZARD SCREENING DATE:** 2018-08-28
- **%:** 22.0000 - 27.0000
- **GS:** LT-P1
- **GS:** LT-UNK
- **GS:** None
- **NANO:** No
- **ROLE:** Binder

<table>
<thead>
<tr>
<th>HAZARD TYPE</th>
<th>AGENCY AND LIST TITLES</th>
<th>WARNINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CANCER</td>
<td>MAK</td>
<td>Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification</td>
</tr>
<tr>
<td>ENDOCRINE</td>
<td>TEDX - Potential Endocrine Disruptors</td>
<td>Potential Endocrine Disruptor</td>
</tr>
</tbody>
</table>

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

### LIMESTONE; CALCIUM CARBONATE

- **ID:** 1317-65-3
- **HAZARD SCREENING METHOD:** Pharos Chemical and Materials Library
- **HAZARD SCREENING DATE:** 2018-08-28
- **%:** 1.0000 - 4.0000
- **GS:** LT-UNK
- **GS:** LT-P1
- **GS:** None
- **NANO:** No
- **ROLE:** Binder

<table>
<thead>
<tr>
<th>HAZARD TYPE</th>
<th>AGENCY AND LIST TITLES</th>
<th>WARNINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>No hazards found</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

### CALCIUM HYDROXIDE

- **ID:** 1305-62-0
- **HAZARD SCREENING METHOD:** Pharos Chemical and Materials Library
- **HAZARD SCREENING DATE:** 2018-08-28
- **%:** 22.0000 - 27.0000
- **GS:** LT-P1
- **GS:** LT-UNK
- **GS:** None
- **NANO:** No
- **ROLE:** Binder
### Component 1
- **%:** 1.0000 - 3.0000
- **GS:** LT-P1
- **RC:** None
- **NANO:** No
- **ROLE:** Flocculant

*No hazards found*

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

### Component 2
- **%:** 0.5000 - 1.0000
- **GS:** BM-3
- **RC:** None
- **NANO:** No
- **ROLE:** Filler

*No hazards found*

**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.

### Component 3
- **%:** 0.1000 - 0.2000
- **GS:** LT-UNK
- **RC:** None
- **NANO:** No
- **ROLE:** Set Time Adjuster

*No hazards found*

**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>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISSUE DATE</td>
<td>2019-01-16</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™ DURAPLUG™ 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>ISSUE DATE</td>
<td>2019-01-09</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>There are no guidelines for maximum VOC content for cement based, water plug materials in LEED v4. Please take note of the VOC content as stated in Section 1: VOLATILE ORGANIC COMPOUND (VOC) CONTENT.</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.

**WATER**

<table>
<thead>
<tr>
<th>CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES</th>
<th>L&amp;M™ DURAPLUG™ to be mixed with water only following mix ratio and directions as stated on product data sheet.</th>
</tr>
</thead>
<tbody>
<tr>
<td>HPD URL</td>
<td>No HPD Available</td>
</tr>
</tbody>
</table>

Section 5: General Notes

L&M™ DURAPLUG™ meets the Living Building Challenge requirement that the product does not contain any of the Red Listed Materials or Chemicals. Specifically, L&M DURAPLUG does not contain the following: •Alkylphenols* •Asbestos •Bisphenol A (BPA)* •Cadmium •Chlorinated Polyethylene & Chlorosulfonated Polyethylene •Chlorobenzenes* •Chlorofluorocarbons (CFCs) & Hydrochlorofluorocarbons (HCFCs)* •Chloroprene (Neoprene) •Chromium VI* •Chlorinated Polyvinyl Chloride (CPVC)* •Formaldehyde (all types - added) •Halogenated Flame Retardants (HFRs) •Lead (added) •Mercury •Polychlorinated Biphenyls (PCBs)* •Perfluorinated Compounds (PFCs)* •Phthalates •Polyvinyl Chloride (PVC) •Polyvinylidene Chloride (PVDC)* •Short Chain Chlorinated Paraffins* •Wood treatments containing Creosote, Arsenic or Pentachlorophenol. L&M DURAPLUG also does not contain the following California-defined Group II toxic exempt solvents: •Methylene Chloride (Dichloromethane) •1,1,1-
Trichloroethane (methyl chloroform) • Trichlorofluoromethane (CFC-11) • Dichlorofluoromethane (CFC-12) • 1,1,2-
trichloro-1,2,2-trifluoroethane (CFC-113) • 1,2-dichloro-1,1,2,2-tetrafluoroethane (CFC-114) • Chloropentafluoroethane (CFC-115) • Cyclic, Branched or Linear, Completely Methylated Siloxanes • (VMS) • Tetrachloroethylene (perchloroethylene) • Ethylfluoride (HFC-161) • 1,1,1,3,3,3-hexafluoropropane (HFC-236fa) • 1,1,2,3,3-pentafluoropropane (HFC-245ca) • 1,1,2,3,3-pentafluoropropane (HFC-245ea) • 1,1,1,2,3-
pentafluoropropane (HFC-245eb) • 1,1,1,3,3-pentafluoropropane (HFC-245fa) • 1,1,1,2,3,3-hexafluoropropane (HFC-
236ea) • 1,1,1,3,3-pentafluorobutane (HFC-365mfc) • Chlorofluoromethane (HCFC-31) • 1,2-dichloro-1,1,2-
trifluoroethane (HCFC-123a) • 1 chloro-1-fluoroethane (HCFC-151a)
MANUFACTURER INFORMATION

MANUFACTURER: LATICRETE International
ADDRESS: 1 Laticrete Park North
               Bethany CT 06524, USA
WEBSITE: www.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>AQU</th>
<th>Aquatic toxicity</th>
</tr>
</thead>
<tbody>
<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) | LT-P1 List Translator Possible Benchmark 1 |
| BM-3 Benchmark 3 (use but still opportunity for improvement) | LT-1 List Translator Likely Benchmark 1 |
| BM-2 Benchmark 2 (use but search for safer substitutes) | LT-UNK List Translator Benchmark Unknown (insufficient information from List Translator lists to benchmark) |
| BM-1 Benchmark 1 (avoid - chemical of high concern) | NoGS Unknown (no data on List Translator Lists) |
| BM-U Benchmark Unspecified (insufficient data to benchmark) |

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.