LATICRETE® LHT PLUS™ (White) by LATICRETE International

CLASSIFICATION: 09 30 00 Tiling

PRODUCT DESCRIPTION: A polymer modified large and heavy tile mortar specifically formulated to provide a one-step installation for large format ceramic tile, porcelain tile, marble and stone on floors. Approved for use over exterior glue plywood for interior installations.

Section 1: Summary

Basic Method / Product Threshold

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 | Residuals/Impurities | All Substances Above the Threshold Indicated Are:
--- | --- | ---
100 ppm | Considered | Characterized: Yes Ex/SC Yes No % weight and role provided for all substances.
1,000 ppm | Partially Considered | Screened: Yes Ex/SC Yes No All substances screened using Priority Hazard Lists with results disclosed.
Per GHS SDS | Not Considered |
Per OSHA MSDS |
Other |

Residuals/Impurities provided for Residuals/Impurities? 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.

<table>
<thead>
<tr>
<th>MATERIAL</th>
<th>SUBSTANCE</th>
<th>RESIDUAL OR IMPURITY</th>
<th>GREENSCREEN SCORE</th>
<th>HAZARD TYPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>LATICRETE® LHT PLUS™ (WHITE)</td>
<td>QUARTZ LT-1</td>
<td>CAN</td>
<td>Portland Cement LT-P1</td>
<td>END</td>
</tr>
</tbody>
</table>

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.

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: UL/GreenGuard Gold Certified
VOC content: TDS 251 "Low VOC LATICRETE Products"
LCA: LATICRETE Cement Mortar for Tile Installation Product Specific (Type III) Environmental Product Declaration

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: 2018-08-22
PUBLISHED DATE: 2019-09-23
EXPIRY DATE: 2021-08-22

LATICRETE LHT PLUS (White) hpdrepository.hpd-collaborative.org HPD v2.1.1 created via HPDC Builder Page 1 of 7
## 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 2.1.1, 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)

### LATICRETE® LHT PLUS™ (WHITE)

<table>
<thead>
<tr>
<th>PRODUCT THRESHOLD:</th>
<th>100 ppm</th>
</tr>
</thead>
<tbody>
<tr>
<td>RESIDUALS AND IMPURITIES CONSIDERED:</td>
<td>Yes</td>
</tr>
<tr>
<td>RESIDUALS AND IMPURITIES NOTES:</td>
<td>Residuals and impurities are measured by quantitative methods and are only displayed when they are potentially greater than 100 ppm.</td>
</tr>
</tbody>
</table>

### QUARTZ

<table>
<thead>
<tr>
<th>ID:</th>
<th>14808-60-7</th>
</tr>
</thead>
<tbody>
<tr>
<td>HAZARD SCREENING METHOD:</td>
<td>Pharos Chemical and Materials Library</td>
</tr>
<tr>
<td>HAZARD SCREENING DATE:</td>
<td>2018-08-22</td>
</tr>
<tr>
<td>%:</td>
<td>55.00 - 65.00</td>
</tr>
<tr>
<td>GS:</td>
<td>LT-1</td>
</tr>
<tr>
<td>RC:</td>
<td>None</td>
</tr>
<tr>
<td>NANO:</td>
<td>No</td>
</tr>
<tr>
<td>ROLE:</td>
<td>Aggregate</td>
</tr>
<tr>
<td>HAZARD TYPE</td>
<td></td>
</tr>
<tr>
<td>AGENCY AND LIST TITLES</td>
<td></td>
</tr>
<tr>
<td>WARNINGS</td>
<td></td>
</tr>
<tr>
<td>CANCER</td>
<td>IARC</td>
</tr>
<tr>
<td>CANCER</td>
<td>US CDC - Occupational Carcinogens</td>
</tr>
<tr>
<td>CANCER</td>
<td>CA EPA - Prop 65</td>
</tr>
<tr>
<td>CANCER</td>
<td>IARC</td>
</tr>
<tr>
<td>CANCER</td>
<td>US NIH - Report on Carcinogens</td>
</tr>
<tr>
<td>CANCER</td>
<td>MAK</td>
</tr>
<tr>
<td>CANCER</td>
<td>New Zealand - GHS</td>
</tr>
<tr>
<td>CANCER</td>
<td>Japan - GHS</td>
</tr>
<tr>
<td>CANCER</td>
<td>Australia - GHS</td>
</tr>
<tr>
<td>SUBSTANCE NOTES:</td>
<td>The amount of this component may vary based on the plant of manufacture.</td>
</tr>
</tbody>
</table>

### PORTLAND CEMENT

<table>
<thead>
<tr>
<th>ID:</th>
<th>65997-15-1</th>
</tr>
</thead>
<tbody>
<tr>
<td>HAZARD SCREENING METHOD:</td>
<td>Pharos Chemical and Materials Library</td>
</tr>
<tr>
<td>HAZARD SCREENING DATE:</td>
<td>2018-08-22</td>
</tr>
<tr>
<td>%:</td>
<td>20.00 - 30.00</td>
</tr>
<tr>
<td>GS:</td>
<td>LT-P1</td>
</tr>
<tr>
<td>RC:</td>
<td>None</td>
</tr>
<tr>
<td>NANO:</td>
<td>No</td>
</tr>
<tr>
<td>ROLE:</td>
<td>Binder</td>
</tr>
<tr>
<td>Substance</td>
<td>EPA hazard and list title</td>
</tr>
<tr>
<td>-----------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>ENDOCRINE</td>
<td>TEDX - Potential Endocrine Disruptors</td>
</tr>
<tr>
<td>CANCER</td>
<td>MAK</td>
</tr>
</tbody>
</table>

**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: 2018-08-22

| %: 5.00 - 15.00 | **GS:** NoGS | **RO:** None | **NANO:** No | **ROLE:** Filler |

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.

---

**UNDISCLOSED**

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library | HAZARD SCREENING DATE: 2018-08-22

| %: 1.00 - 3.00 | **GS:** LT-UNK | **RO:** None | **NANO:** No | **ROLE:** Polymer |

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.

---

**UNDISCLOSED**

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library | HAZARD SCREENING DATE: 2018-08-22

| %: 0.10 - 0.50 | **GS:** LT-UNK | **RO:** None | **NANO:** No | **ROLE:** Working Time Adjuster |

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 DIFORMATE**

| HAZARD SCREENING METHOD: Pharos Chemical and Materials Library | HAZARD SCREENING DATE: 2018-08-22 |

**ID:** 544-17-2
<table>
<thead>
<tr>
<th>Substance</th>
<th>ID</th>
<th>HAZARD SCREENING METHOD</th>
<th>HAZARD SCREENING DATE</th>
<th>%:</th>
<th>GS</th>
<th>GS</th>
<th>RC</th>
<th>NANO</th>
<th>ROLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNDISCLOSED</td>
<td></td>
<td>Pharos Chemical and Materials Library</td>
<td>2018-08-22</td>
<td>0.00 - 8.00</td>
<td>LT-UNK</td>
<td>None</td>
<td>None</td>
<td>No</td>
<td>Binder</td>
</tr>
<tr>
<td>SUBSTANCE NOTES:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>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.</td>
</tr>
<tr>
<td>CALCIUM CARBONATE</td>
<td>471-34-1</td>
<td>Pharos Chemical and Materials Library</td>
<td>2018-08-22</td>
<td>Impurity/Residual</td>
<td>BM-3</td>
<td>None</td>
<td>None</td>
<td>No</td>
<td>Impurity/Residual</td>
</tr>
<tr>
<td>SUBSTANCE NOTES:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>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.</td>
</tr>
<tr>
<td>LIMESTONE; CALCIUM CARBONATE</td>
<td>1317-65-3</td>
<td>Pharos Chemical and Materials Library</td>
<td>2018-08-22</td>
<td>Impurity/Residual</td>
<td>LT-UNK</td>
<td>None</td>
<td>None</td>
<td>No</td>
<td>Impurity/Residual</td>
</tr>
<tr>
<td>SUBSTANCE NOTES:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>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.</td>
</tr>
</tbody>
</table>
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>UL/GreenGuard Gold Certified</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISSUE DATE:</td>
<td>2019-01-18</td>
</tr>
<tr>
<td>EXPIRY DATE:</td>
<td>2020-07-09</td>
</tr>
<tr>
<td>CERTIFIER OR LAB:</td>
<td>UL Environment</td>
</tr>
</tbody>
</table>

CERTIFYING PARTY: Third Party

APPLICABLE FACILITIES: Applies to All Facilities.

CERTIFICATE URL: http://certificates.greenguard.org/default.aspx?id=135449&t=cs&

CERTIFICATION AND COMPLIANCE NOTES: LATICRETE LHT Plus (White) meets LEED v4 Credit "Low Emitting Materials" Emissions Requirements. This product was tested in accordance with California Department of Public Health (CDPH) v1.2-2017 in an office and classroom environment.

VOC CONTENT

<table>
<thead>
<tr>
<th>CERTIFYING PARTY:</th>
<th>TDS 251 &quot;Low VOC LATICRETE Products&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISSUE DATE:</td>
<td>2019-01-18</td>
</tr>
<tr>
<td>CERTIFIER OR LAB:</td>
<td>LATICRETE</td>
</tr>
</tbody>
</table>

CERTIFYING PARTY: Self-declared

APPLICABLE FACILITIES: Applies to All Facilities.

CERTIFICATE URL: https://cdn.laticrete.com/~media/support-and-downloads/technical-datasheets/tds251.ashx

CERTIFICATION AND COMPLIANCE NOTES: Meets LEED v4 Credit "Low Emitting Materials" VOC Content Requirements per SCAQMD Rule 1168 (Tile Adhesive).

LCA

<table>
<thead>
<tr>
<th>CERTIFYING PARTY:</th>
<th>LATICRETE Cement Mortar for Tile Installation Product Specific (Type III) Environmental Product Declaration</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISSUE DATE:</td>
<td>2016-11-29</td>
</tr>
<tr>
<td>EXPIRY DATE:</td>
<td>2021-11-28</td>
</tr>
<tr>
<td>CERTIFIER OR LAB:</td>
<td>UL Environment</td>
</tr>
</tbody>
</table>

CERTIFYING PARTY: Third Party

APPLICABLE FACILITIES: Applies to All Facilities.

CERTIFICATE URL: https://cdn.laticrete.com/~media/environmental-product-data-sheets/cement-mortar-for-tile-installation.ashx

CERTIFICATION AND COMPLIANCE NOTES: Meets LEED v4 Credit "Building Product Disclosure and Optimization - Environmental Product Declarations" requirements as a Product Specific (Type III) EPD.

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
LATICRETE® LHT™ Plus (White) to be mixed with water only following mix ratio and directions as stated on product data sheet.

Section 5: General Notes

LATICRETE® LHT PLUS™ (White) meets the Living Building Challenge requirement that the product does not contain any of the Red Listed Materials or Chemicals. Specifically, LATICRETE LHT PLUS (White) 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.

LATICRETE LHT PLUS (White) 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)
- 1,1,2,3,3-pentafluoropropane (HFC-245eb)
- 1,1,1,3,3-pentafluoropropane (HFC-245fa)
- 1,1,2,3,3-hexafluoropropane (HFC-236ea)
- 1,1,13,3-pentafluorobutane (HFC-365mfc)
- Chlorofluoromethane (HCFC-31)
- 1,2-dichloro-1,1,2-trifluoroethane (HCFC-123a)
- 1 chloro-1-fluoroethane (HCFC-151a)
Section 6: References

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

AQU Aquatic toxicity
CAN Cancer
DEV Developmental toxicity
END Endocrine activity
EYE Eye irritation/corrosivity
GEN Gene mutation

GLO Global warming
MAM Mammalian/systemic/organ toxicity
MUL Multiple hazards
NEU Neurotoxicity
OZO Ozone depletion
PBT Persistent Bioaccumulative Toxic

PHY Physical Hazard (reactive)
REP Reproductive toxicity
RES Respiratory sensitization
SKI Skin sensitization/irritation/corrosivity
LAN Land Toxicity
NF Not found on Priority Hazard Lists

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

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.