CLASSIFICATION: 04 20 10.00 Masonry(Thin Brick): Architectural & Glazed Masonry

PRODUCT DESCRIPTION: The raw brick that makes up our Glazed Thin Brick is sourced through a supplier who has been in business for over 100 years and continues to source and manufacture all brick right here in California, within 150 miles from the Fireclay Tile factory. Brick qualifies for LEED points and is glazed on site at the Fireclay Tile factory in Aromas, CA. As with all hand made tile and brick, some degree of color and size variation is to be expected.

Section 1: Summary

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

Are All Substances Above the Threshold Indicated:
- Characterized  ❑ Yes  ❑ No

Percent Weight and Role Provided?
- Residuals/Impurities

Screened
- Using Priority Hazard Lists with Results Disclosed?

Identified
- Name and Identifier Provided?

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 |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>FIRECLAY TILE - GLAZED THIN BRICK</td>
<td>CLAY NoGS FRITS, CHEMICALS (UNLEADED) LT-P1</td>
<td>MANGANESE DIOXIDE LT-P1 CHROMITE NoGS BARIUM CARBONATE LT-UNK</td>
</tr>
</tbody>
</table>

Number of Greenscreen BM-4/BM3 contents ... 0
Contents highest concern GreenScreen Benchmark or List translator Score ... LT-P1
Nanomaterial ... No

INVENTORY AND SCREENING NOTES:
M1-Emission Classification of Building Materials is the lowest emission class.

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

VOC Content data is not applicable for this product category.

CERTIFICATIONS AND COMPLIANCE

See Section 3 for additional listings.

VOC emissions: Emission Classification of Building Materials - M1

CONSISTENCY WITH OTHER PROGRAMS

No pre-checks completed or disclosed.

Third Party Verified?
- Yes
- No

PREPARER: Self-Prepared
VERIFIER:
VERIFICATION #:
SCREENING DATE: 2018-05-02
PUBLISHED DATE: 2018-10-03
EXPIRY DATE: 2021-05-02
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

FIRECLAY TILE - GLAZED THIN BRICK

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

RESIDUALS AND IMPURITIES NOTES: Brick made from Clay or Shale is extracted from the ground and fired to become a solid mass that does not off gas or leach out materials harmful to the environment or people.

OTHER PRODUCT NOTES: Clay/Shale Aluminum Silicate is the main ingredient in manufacturing clay brick products and is one of the most readily available soil types on earth. The product is recyclable by grinding, reforming, firing and repackaging. Crushed brick can be use as decorative landscaping materials. Fireclay tile recycles our own tile and glaze waste and reincorporates it into our recycled body tile.

<table>
<thead>
<tr>
<th>CLAY</th>
<th>ID: 1302-87-0</th>
</tr>
</thead>
<tbody>
<tr>
<td>%: 95.0000 - 100.0000</td>
<td>GS: NoGS</td>
</tr>
<tr>
<td>HAZARDS: None Found</td>
<td>AGENCY(IES) WITH WARNINGS: No warnings found on HPD Priority lists</td>
</tr>
<tr>
<td>SUBSTANCE NOTES: Clay, Aluminum Silicate, is the main ingredient in our thin brick. It is one of the most abundant soil types on earth.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FRITS, CHEMICALS (UNLEADED)</th>
<th>ID: 65997-18-4</th>
</tr>
</thead>
<tbody>
<tr>
<td>%: 2.0000 - 5.0000</td>
<td>GS: LT-P1</td>
</tr>
<tr>
<td>HAZARDS: MULTIPLE</td>
<td>AGENCY(IES) WITH WARNINGS: German FEA - Substances Hazardous to Waters; Class 2 - Hazard to Waters</td>
</tr>
<tr>
<td>SUBSTANCE NOTES: Fritz are oxides to color the glaze. When fired at high temperatures in a kiln the resulting product is inert.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MANGANESE DIOXIDE</th>
<th>ID: 1313-13-9</th>
</tr>
</thead>
<tbody>
<tr>
<td>%: 0.0000 - 3.0000</td>
<td>GS: LT-P1</td>
</tr>
<tr>
<td>HAZARDS:</td>
<td>AGENCY(IES) WITH WARNINGS:</td>
</tr>
</tbody>
</table>
### CHROMITE

<table>
<thead>
<tr>
<th>%:</th>
<th>0.0000 - 3.0000</th>
<th>GS:</th>
<th>NoGS</th>
<th>RC:</th>
<th>None</th>
<th>NANO:</th>
<th>No</th>
<th>ROLE: A pigment added to clay to make white brick transition to various ranges of grays.</th>
</tr>
</thead>
</table>

**HAZARDS:**

None Found

**AGENCY(IES) WITH WARNINGS:**

None Found

No warnings found on HPD Priority lists

**SUBSTANCE NOTES:** A pigment added to clay to make white brick transition to various ranges of grays.

### BARIUM CARBONATE

<table>
<thead>
<tr>
<th>%:</th>
<th>0.0000 - 3.0000</th>
<th>GS:</th>
<th>LT- UNK</th>
<th>RC:</th>
<th>None</th>
<th>NANO:</th>
<th>No</th>
<th>ROLE: Barium Carbonate is used to tie up soluble salts inherent in clays that create efflorescence and scum.</th>
</tr>
</thead>
</table>

**HAZARDS:**

None Found

**AGENCY(IES) WITH WARNINGS:**

None Found

No warnings found on HPD Priority lists

**SUBSTANCE NOTES:** Barium Carbonate is used to tie up soluble salts inherent in clays that create efflorescence and scum.
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>Thin Brick does not give off volatile organic compounds, VOC's, because it is an inherently non-emitting source per LEED®.</td>
</tr>
<tr>
<td>CERTIFICATE URL:</td>
<td></td>
</tr>
<tr>
<td>ISSUE DATE:</td>
<td>2018-05-01</td>
</tr>
<tr>
<td>EXPIRY DATE:</td>
<td></td>
</tr>
<tr>
<td>CERTIFIER OR LAB:</td>
<td>Self Declared</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.

MORTAR AND GROUT

| HPD URL: | No HPD Available |

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:

Mortar and Grout are required for all Installations. VOC content of various mortars and grouts depends on the product selected.

Section 5: General Notes

Fireclay Tile's Thin Brick does not contain any volatile organic compounds, VOC's. Fireclay Tile's Thin Brick is substantially lighter than traditional glazed brick, resulting in potentially an 85% cost and emission reduction. Fireclay Tile recycles our own tile and glaze waste and reincorporates it into our recycled clay tile.
MANUFACTURER INFORMATION

MANUFACTURER: Fireclay Tile
ADDRESS: 901 Brannon Street
          San Francisco CA 94013, United States
WEBSITE: www.fireclaytile.com

CONTACT NAME: Paul Burns
TITLE: Founder & Chief Ceramicist
PHONE: 800.773.2226
EMAIL: paul@fireclaytile.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)

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.

Fireclay Tile - Glazed Thin Brick
hpdrepository.hpd-collaborative.org
HPD v2.1 created via HPDC Builder Page 5 of 5