

CLASSIFICATION: 09 300 (Tile); 09 600 (Flooring); 07 42 00 (Wall Panels)

PRODUCT DESCRIPTION: By combining opposites - light and stone - a surprisingly elegant building material is born. One which is able to efficiently transport light through its solid mass, and emit light from myriad points on its surface, using either an unseen LED source or ambient lighting. Sensitile's Terrazzo family of materials is available both as pre-cast tiles and slabs but can also be custom cast to the specific requirements of different projects.

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

Explanation(s) provided
for Residuals/Impurities?

- Yes No

Are All Substances Above the Threshold Indicated:

Characterized Yes No

Percent Weight and Role Provided?

Screened Yes No

Using Priority Hazard Lists with Results Disclosed?

Identified Yes No

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

GREENSCREEN SCORE | HAZARD TYPE

**CONCRETE SLABS & TILES [SILICA, AMORPHOUS LT-P1 | CAN
PORTLAND CEMENT LT-P1 | END | CAN CALCIUM OXIDE LT-P1
ALUMINUM OXIDE LT-P1 | RES UNDISCLOSED NoGS 2-(2-
BUTOXYETHOXY)ETHANOL LT-P1 | EYE | END FERRIC OXIDE BM-2 | CAN
TITANIUM DIOXIDE LT-1 | CAN | END SODIUM OXIDE LT-UNK
DIPOTASSIUM OXIDE LT-UNK BORIC OXIDE LT-1 | REP | MUL]**

Number of Greenscreen BM-4/BM3 contents ... 0

Contents highest concern GreenScreen
Benchmark or List translator Score ... LT-1

Nanomaterial ... No

INVENTORY AND SCREENING NOTES:

Sensitile worked with a HPD Third Party Preparer to obtain all required chemical formulation information to the disclosure level of 1,000 ppm (0.1%)

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

CERTIFICATIONS AND COMPLIANCE See Section 3 for additional listings.

Recycled content: SCS Recycled Content Certification - Recycling Programs

CONSISTENCY WITH OTHER PROGRAMS

Pre-checked for LEED v4 Material Ingredients, Option 1

Third Party Verified?

- Yes
 No

PREPARER: Self-Prepared
VERIFIER: SCS Global Services
VERIFICATION #: qGE-4855

SCREENING DATE: 2018-02-21
PUBLISHED DATE: 2018-05-18
EXPIRY DATE: 2021-02-21



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

CONCRETE SLABS & TILES

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

RESIDUALS AND IMPURITIES NOTES: Sensitile worked with a HPD Third Party Preparer to verify that all residuals and impurities have been considered in the preparation of this HPD)

OTHER PRODUCT NOTES:

SILICA, AMORPHOUS

ID: 7631-86-9

#: 59.2800 - 72.9100 GS: LT-P1 RC: None NANO: No ROLE: Sand Component

HAZARDS:

AGENCY(IES) WITH WARNINGS:

CANCER

Japan - GHS

Carcinogenicity - Category 1A

SUBSTANCE NOTES:

PORTLAND CEMENT

ID: 65997-15-1

#: 27.0000 - 27.7500 GS: LT-P1 RC: PostC NANO: No ROLE: Cement Component

HAZARDS:

AGENCY(IES) WITH WARNINGS:

ENDOCRINE

TEDX - Potential Endocrine Disruptors

Potential Endocrine Disruptor

CANCER

MAK

Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification

SUBSTANCE NOTES:

CALCIUM OXIDE

ID: 1305-78-8

#: 4.6700 - 5.2500 GS: LT-P1 RC: PostC NANO: No ROLE: Glass Component

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES:

ALUMINUM OXIDE

ID: 1344-28-1

#: **0.6000 - 5.9600** GS: **LT-P1** RC: **None** NANO: **No** ROLE: **Sand Component**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

RESPIRATORY

AOEC - Asthmagens

Asthmagen (ARs) - sensitizer-induced - inhalable forms only

SUBSTANCE NOTES:

#: **0.1800 - 0.1900** GS: **NoGS** RC: **None** NANO: **No** ROLE: **Plasticizer Component**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: **The Undisclosed chemical information was obtained by Sensitile's HPD preparer and properly entered under this HPD. The chemical information is proprietary to the Sensitile supplier and therefore has been redacted from this substance entry.**

2-(2-BUTOXYETHOXY)ETHANOL

ID: 112-34-5

#: **0.1000 - 0.1400** GS: **LT-P1** RC: **PostC** NANO: **No** ROLE: **Reducing Agent Component**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

EYE IRRITATION

EU - GHS (H-Statements)

H319 - Causes serious eye irritation

ENDOCRINE

TEDX - Potential Endocrine Disruptors

Potential Endocrine Disruptor

SUBSTANCE NOTES:

FERRIC OXIDE

ID: 1309-37-1

#: **0.0400 - 0.2100** GS: **BM-2** RC: **None** NANO: **No** ROLE: **Sand Component**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

CANCER

MAK

Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification

SUBSTANCE NOTES:

TITANIUM DIOXIDE

ID: 13463-67-7

%: **0.0400 - 0.2100**

GS: **LT-1**

RC: **PostC**

NANO: **No**

ROLE: **Sand and Glass Component**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

CANCER

US CDC - Occupational Carcinogens

Occupational Carcinogen

CANCER

MAK

Carcinogen Group 3A - Evidence of carcinogenic effects but not sufficient to establish MAK/BAT value

CANCER

CA EPA - Prop 65

Carcinogen - specific to chemical form or exposure route

CANCER

IARC

Group 2B - Possibly carcinogenic to humans - inhaled from occupational sources

ENDOCRINE

TEDX - Potential Endocrine Disruptors

Potential Endocrine Disruptor

SUBSTANCE NOTES:

SODIUM OXIDE

ID: **1313-59-3**

%: **0.0000 - 0.1100**

GS: **LT-UNK**

RC: **PostC**

NANO: **No**

ROLE: **Glass Component**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES:

DIPOTASSIUM OXIDE

ID: **12136-45-7**

%: **0.0000 - 0.1100**

GS: **LT-UNK**

RC: **PostC**

NANO: **No**

ROLE: **Glass Component**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES:

BORIC OXIDE

ID: **1303-86-2**

%: **0.0000 - 0.2700**

GS: **LT-1**

RC: **PostC**

NANO: **No**

ROLE: **Glass Component**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

REPRODUCTIVE

EU - SVHC Authorisation List

Toxic to reproduction - Prioritized for listing

REPRODUCTIVE

EU - GHS (H-Statements)

H360FD - May damage fertility. May damage the unborn child

REPRODUCTIVE

EU - REACH Annex XVII CMRs

Toxic to Reproduction Category 2 - Substances which should be regarded as if they impair fertility or cause Developmental Toxicity in humans

MULTIPLE

ChemSec - SIN List

CMR - Carcinogen, Mutagen &/or Reproductive Toxicant

REPRODUCTIVE

Korea - GHS

Reproductive toxicity - Category 1 [H360 - May damage

fertility or the unborn child]

REPRODUCTIVE

EU - Annex VI CMRs

Reproductive Toxicity - Category 1B

REPRODUCTIVE

Australia - GHS

H360Fd - May damage fertility. Suspected of damaging the unborn child

SUBSTANCE NOTES:

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.

RECYCLED CONTENT

SCS Recycled Content Certification - Recycling Programs

CERTIFYING PARTY: **Third Party**

APPLICABLE FACILITIES: **Ypsilanti, MI, USA**

CERTIFICATE URL:

https://www.scs-certified.com/products/cert_pdfs/Sensitile_2017_SCS-RC-04615_s_v2.pdfTerrazzo_010918.pdf

ISSUE DATE:

2017-11-29

EXPIRY DATE:

2018-12-28

CERTIFIER OR LAB:

SCS Global Services

CERTIFICATION AND COMPLIANCE NOTES: **SCS RECYCLED CONTENT CERTIFIED** Conforms to SCS Recycled Content Standard V7-0 for a Minimum 6% Post-Consumer Recycled Content. The material quantification and mass-balance calculations are completed on a dry-weight basis. Certificate No: SCS-RC-04615

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

By combining opposites - light and stone - a surprisingly elegant building material is born. One which is able to efficiently transport light through its solid mass, and emit it from myriad points on its surface, using either an unseen LED source or ambient lighting. Sensitile's Terrazzo family of materials is available both as pre-cast tiles and slabs but can also be custom cast to the specific requirements of different projects. Models included under this current HPD are: • Sensitile® Terrazzo Slabs • Sensitile® Terrazzo Tiles • Terrazzo Lumina™ Slabs • Terrazzo Lumina™ Tiles • PIXA™ Slabs



MANUFACTURER INFORMATION

MANUFACTURER: **Sensitile Systems**
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Ypsilanti MI 48198, USA
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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	GLO Global warming	PHY Physical Hazard (reactive)
CAN Cancer	MAM Mammalian/systemic/organ toxicity	REP Reproductive toxicity
DEV Developmental toxicity	MUL Multiple hazards	RES Respiratory sensitization
END Endocrine activity	NEU Neurotoxicity	SKI Skin sensitization/irritation/corrosivity
EYE Eye irritation/corrosivity	OZO Ozone depletion	LAN Land Toxicity
GEN Gene mutation	PBT Persistent Bioaccumulative Toxic	NF Not found on Priority Hazard Lists

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.