Sintered Stone Slabs by Lapitec SpA

Health Product Declaration v2.1.1

created via: HPDC Online Builder

CLASSIFICATION: 12 36 40 Stone Countertops; 09 30 33 Stone Tiling; 09 62 00 Specialty Flooring; 09 70 00 Wall Finishes

PRODUCT DESCRIPTION: Lapitec sintered stone is an industrial product made from a wet mixture of natural minerals, without the use of resin or cement, cold-formed by means of vibro-compression under vacuum and consolidated, after drying, by sintering up to 1200°C. Lapitec sintered stone is as workable as natural stone across the entire thickness and is available in the form of rough slabs, slabs, tiles, and any other cut-to-size product. It is used for interiors and exteriors and is suitable for cladding, paving, flooring, curtain walling, and ventilated facade. Models covered under this HPD are GS-SB, GS-BB, BRT-W, and BRT-N.

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

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

SINTERED STONE SLABS [CERAMIC MATERIALS AND WARES, CHEMICALS LT-P1 | MUL FRITS, CHEMICALS LT-P1 | MUL FELDSPAR LT-UNK | RES WATER BM-4 UNDISCLOSED LT-P1 | SKI KAOLIN CLAY LT-UNK | CAN QUARTZ LT-1 | CAN ZIRCON (ZR(SIO4)) LT-UNK UNDISCLOSED LT-UNK UNDISCLOSED LT-P1 | END SILICA, AMORPHOUS LT-P1 | CAN UNDISCLOSED LT-UNK UNDISCLOSED CHEMICAL #1 LT-UNK UNDISCLOSED CHEMICAL #2 LT-UNK | RES]

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:

Lapitec worked with an HPDC Approved Preparer to confirm that all residuals and impurities were considered under the preparation of this HPD. This was accomplished by obtaining full formulation disclosure, including residuals and impurities, down to the 1,000 ppm threshold. Due to the proprietary nature of the information, the name and CAS numbers for certain chemicals have been redacted from this substance entry. "Undisclosed" indicates chemicals Lapitec holds confidential; "Undisclosed Chemical #n" indicates chemicals Lapitec suppliers protect with NDAs.

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: No VOC Certification
LCA: Environmental Product Declaration (EPD) by BRE

CONSISTENCY WITH OTHER PROGRAMS

Pre-checked for LEED v4 Material Ingredients, Option 1

Third Party Verified?

- ◉ Yes
- ○ No

PREPARER: ToxServices LLC
VERIFIER: SCS Global Services
VERIFICATION #: qGE-8410

SCREENING DATE: 2019-12-02
PUBLISHED DATE: 2020-02-12
EXPIRY DATE: 2022-12-02

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 2.1.1, available on the HPDC website at: www.hpd-collaborative.org/hpd-2-1-1-standard

SINTERED STONE SLABS

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

RESIDUALS AND IMPURITIES NOTES: Lapitec worked with an HPDC Approved Preparer to confirm that all residuals and impurities were considered under the preparation of this HPD. This was accomplished by obtaining full formulation disclosure, including residuals and impurities, down to the 1,000 ppm threshold.

OTHER PRODUCT NOTES: Models covered under this HPD are GS-SB, GS-BB, BRT-W, and BRT-N. During the manufacturing process (Sinterization process), a combination of techniques create physical change in the material converting these ingredients into a benign sintered stone product.

CERAMIC MATERIALS AND WARES, CHEMICALS

ID: 66402-68-4

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2019-12-02**

%: **53.00 - 60.00**

GS: **LT-P1**

RC: **None**

NANO: **No**

ROLE: **Structure Component**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters

SUBSTANCE NOTES: The range of 53% - 60% is only in reference to the GS-SB and GS-BB models.

FRITS, CHEMICALS

ID: 65997-18-4

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2019-12-02**

%: **42.00 - 80.00**

GS: **LT-P1**

RC: **None**

NANO: **No**

ROLE: **Structure Component**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters

SUBSTANCE NOTES: The range of 42% - 80% is only in reference to the BRT-W and BRT-N models.

FELDSPAR

ID: 68476-25-5

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2019-12-02**

%: **8.30 - 12.45** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Structure Component**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
RESPIRATORY	AOEC - Asthmagens	Asthmagen (Rs) - sensitizer-induced

SUBSTANCE NOTES:

WATER

ID: **7732-18-5**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2019-12-02**

%: **8.05 - 11.70** GS: **BM-4** RC: **None** NANO: **No** ROLE: **Structure, Rheological Modifier, and Binder Components**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES:

UNDISCLOSED

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2019-12-02**

%: **4.80 - 6.00** GS: **LT-P1** RC: **None** NANO: **No** ROLE: **Binder Component**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
SKIN IRRITATION	EU - GHS (H-Statements)	H314 - Causes severe skin burns and eye damage

SUBSTANCE NOTES: This substance was properly screened by the HPD Approved Preparer. The HPDC Approved Preparer obtained full disclosure down to the 1,000 ppm threshold for the trade name ingredient containing this chemical. Due to the proprietary nature of the information, the name and CAS number for this chemical have been redacted from this substance entry.

KAOLIN CLAY

ID: **1332-58-7**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2019-12-02**

%: **4.15 - 12.45** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Structure Component**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CANCER	MAK	Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification

SUBSTANCE NOTES:

QUARTZ

ID: 14808-60-7

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2019-12-02**

%: **1.70 - 2.70** GS: **LT-1** RC: **None** NANO: **No** ROLE: **Structure Component**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CANCER	IARC	Group 1 - Agent is Carcinogenic to humans
CANCER	US CDC - Occupational Carcinogens	Occupational Carcinogen
CANCER	CA EPA - Prop 65	Carcinogen - specific to chemical form or exposure route
CANCER	IARC	Group 1 - Agent is carcinogenic to humans - inhaled from occupational sources
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	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:

ZIRCON (ZR(SIO4))

ID: 14940-68-2

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2019-12-02**

%: **1.00 - 2.00** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Structure Component**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES:

UNDISCLOSED

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2019-12-02**

%: **1.00 - 3.00** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Structure Component**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: This substance was properly screened by the HPD Approved Preparer. The HPDC Approved Preparer obtained full disclosure down to the 1,000 ppm threshold for the trade name ingredient containing this chemical. Due to the proprietary nature of the information, the name and CAS number for this chemical have been redacted from this substance entry.

UNDISCLOSED

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2019-12-02**

%: **0.09 - 3.00** GS: **LT-P1** RC: **None** NANO: **No** ROLE: **Rheological Modifier Component**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor

SUBSTANCE NOTES: This substance was properly screened by the HPD Approved Preparer. The HPDC Approved Preparer obtained full disclosure down to the 1,000 ppm threshold for the trade name ingredient containing this chemical. Due to the proprietary nature of the information, the name and CAS number for this chemical have been redacted from this substance entry.

SILICA, AMORPHOUS

ID: **7631-86-9**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2019-12-02**

%: **0.00 - 5.00** GS: **LT-P1** RC: **None** NANO: **No** ROLE: **Structure Component**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CANCER	GHS - Japan	Carcinogenicity - Category 1A [H350]
CANCER	GHS - Australia	H350i - May cause cancer by inhalation

SUBSTANCE NOTES:

UNDISCLOSED

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2019-12-02**

%: **0.00 - 0.18** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Rheological Modifier Component**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: This substance was properly screened by the HPD Approved Preparer. The HPDC Approved Preparer obtained full disclosure down to the 1,000 ppm threshold for the trade name ingredient containing this chemical. Due to the proprietary nature of the information, the name and CAS number for this chemical have been redacted from this substance entry.

UNDISCLOSED CHEMICAL #1

ID: **Undisclosed**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2019-12-02**

%: **0.00 - 4.00** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Structure Component**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: This substance was properly screened by the HPD Approved Preparer. The HPDC Approved Preparer obtained full disclosure down to the 1,000 ppm threshold for the trade name ingredient containing this chemical. Due to the proprietary nature of the information, the name and CAS number for this chemical have been redacted from this substance entry.

UNDISCLOSED CHEMICAL #2

ID: **Undisclosed**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2019-12-02**

%: **0.00 - 1.00**

GS: **LT-UNK**

RC: **None**

NANO: **No**

ROLE: **Structure Component**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
RESPIRATORY	AOEC - Asthmagens	Asthmagen (Rs) - sensitizer-induced

SUBSTANCE NOTES: This substance was properly screened by the HPD Approved Preparer. The HPDC Approved Preparer obtained full disclosure down to the 1,000 ppm threshold for the trade name ingredient containing this chemical. Due to the proprietary nature of the information, the name and CAS number for this chemical have been redacted from this substance entry.

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 — **No VOC Certification**

CERTIFYING PARTY: Self-declared
APPLICABLE FACILITIES: N/A
CERTIFICATE URL:

ISSUE DATE: 2019-11-26
EXPIRY DATE:
CERTIFIER OR LAB: N/A

CERTIFICATION AND COMPLIANCE NOTES: CDPH Standard V1.2 (Section 01350/CHPS)- Not tested

LCA — **Environmental Product Declaration (EPD) by BRE**

CERTIFYING PARTY: Third Party
APPLICABLE FACILITIES: All Facilities
CERTIFICATE URL: http://www.greenbooklive.com/pdfdocs/en15804epd/BREGENEPD000236.pdf

ISSUE DATE: 2019-01-10
EXPIRY DATE: 2024-01-09
CERTIFIER OR LAB: bre

CERTIFICATION AND COMPLIANCE NOTES: EPD Number: 000236; BRE Environmental Profiles 2013 Product Category Rules for Type III environmental product declaration of construction products to EN 15804:2012+A1:2013.

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

Lapitec can be used in a minimum thickness of 12 mm and a maximum of 30 mm, in a maximum size of 1500 x 3365 mm, or cut into different sizes and shapes. Sintered stone can be installed with thin set, with mechanical fasteners (e.g. rivets, screws, undercut bolts, clips), with structural bonding (e.g. polyurethane glue, silicone glue), or directly to a substrate upon a subframe (e.g. aluminum, galvanized steel), none of which are included under this HPD.

Section 6: References

MANUFACTURER INFORMATION

MANUFACTURER: **Lapitec SpA**
ADDRESS: **Via Bassanese 6**
31050 Vedelago Treviso 31050, Italy
WEBSITE: **www.lapitec.com**

CONTACT NAME: **Marco Ruzzante**
TITLE: **Engineering and Manufacturing Department Manager**
PHONE: **+ 39 0423 700239**
EMAIL: **emd@lapitec.it**

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 (insuficient 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.