

HPD UNIQUE IDENTIFIER: (to be provided)

CLASSIFICATION: Floor and Wall Tiles -6907.21

PRODUCT DESCRIPTION: Porcelain Stoneware Tiles (Impervious Tiles) , in conformity with ANSI 137-1 and ISO 13006, are made through a production process that involves a high temperature firing phase. This involves a chemical-physical transformation that generates a chemically inert, high-density and non-porous, impermeable structure. As a result porcelain stoneware tiles do not release VOCs, are nonflammable, are flame retardant, and do not release toxic fumes or gases when exposed to high temperatures, do not absorb liquids, vapors or toxic substances; are not affected by household chemicals in low and high concentration: frequent sanitizing intervention (as per Covid19 prevention) do not damage the ceramic surfaces. Porcelain stoneware tiles have a durability equal to the average life of the building (50 years)

Section 1: Summary

Basic Method / Product Threshold

CONTENT INVENTORY

Inventory Reporting Format

- Nested Materials Method
- Basic Method

Threshold level

- 100 ppm
- 1,000 ppm
- Per GHS SDS
- 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
All substances disclosed by Name (Specific or Generic) and Identifier.

Threshold Disclosed Per

- Material
- Product

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

41ZERO42 S.R.L. - CERAMIC TILES GROUP BIA - ISO 13006 - EN14411 |
KAOLIN CLAY (PRIMARY CASRN IS 1332-58-7) LT-UNK | CAN QUARTZ LT-
1 | CAN NEPHELINE SYENITE LT-UNK FELDSPAR LT-UNK | RES TALC BM-
1 | CAN MICA LT-UNK]

Number of Greenscreen BM-4/BM3 contents ... 0
Contents highest concern GreenScreen Benchmark or List translator Score ... BM-1
Nanomaterial ... No

INVENTORY AND SCREENING NOTES:

"Ceramic" is regarded as a special condition by the HPD collaborative and not screened. Ceramic tile is considered as a single component resulting from the vitrification process in the high temperature kiln process. since individual chemical components are not made available from the finished product, residuals and impurities have no separate impact in the preparation of this HPD. No warnings or hazards are associated with the final, finished product.

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

Pre-checked for LEED v4 Material Ingredients, Option 1

Third Party Verified?

- Yes
- No

PREPARER: Self-Prepared

VERIFIER:

VERIFICATION #:

SCREENING DATE: 2020-05-20

PUBLISHED DATE: 2020-05-22

EXPIRY DATE: 2023-05-20



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

41ZERO42 S.R.L. - CERAMIC TILES GROUP BIA - ISO 13006 - EN14411

PRODUCT THRESHOLD: 100 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

RESIDUALS AND IMPURITIES NOTES: "Ceramic" is regarded as a special condition by the HPD collaborative and not screened. Ceramic tile is considered as a single component resulting from the vitrification process in the high temperature kiln process. Since individual chemical components are not made available from the finished product, residuals and impurities have no separate impact in the preparation of this HPD. No warnings or hazards are associated with the final, finished product.

OTHER PRODUCT NOTES: Porcelain stoneware tiles do not release VOCs, are nonflammable, are flame retardant, and do not release toxic fumes or gases when exposed to high temperatures, do not absorb liquids, vapors or toxic substances; are not affected by household chemicals in low and high concentration: frequent sanitizing intervention (as per Covid19 prevention) do not damage the ceramic surfaces. Porcelain stoneware tiles have a durability equal to the average life of the building (50 years).

We recommend wet cutting ore the score and snap method during the installation process. if dust is produced during installation, demolition or removal process are necessary respiratory, hand and eye protections to prevent excess exposure, to avoid the danger inhale crystalline silica. This hazard is associated to occupational use ONLY, not with the standard use of the costumers.

KAOLIN CLAY (PRIMARY CASRN IS 1332-58-7)

ID: 12198-85-5

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2020-05-20

#: 20.0000 - 55.0000

GS: LT-UNK

RC: PreC

NANO: No

SUBSTANCE 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: Hazard is associated to occupational use only, not to installed product

QUARTZ

ID: 14808-60-7

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2020-05-20

#: 10.0000 - 25.0000

GS: LT-1

RC: PreC

NANO: No

SUBSTANCE 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: Hazard is associated to occupational use only, not to installed product

NEPHELINE SYENITE

ID: 37244-96-5

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

HAZARD SCREENING DATE: **2020-05-20**

#: **5.0000 - 50.0000**

GS: **LT-UNK**

RC: **PreC**

NANO: **No**

SUBSTANCE ROLE: **Structure component**

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

SUBSTANCE NOTES: Hazard is associated to occupational use only, not to installed product

FELDSPAR

ID: 68476-25-5

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

HAZARD SCREENING DATE: **2020-05-20**

#: **0.0000 - 15.0000**

GS: **LT-UNK**

RC: **PreC**

NANO: **No**

SUBSTANCE ROLE: **Structure component**

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

SUBSTANCE NOTES: Hazard is associated to occupational use only, not to installed product

TALC

ID: 14807-96-6

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

HAZARD SCREENING DATE: **2020-05-20**

%: **0.0000 - 30.0000**

GS: **BM-1**

RC: **PreC**

NANO: **No**

SUBSTANCE ROLE: **Structure component**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CANCER	IARC	Group 2b - Possibly carcinogenic to humans
CANCER	MAK	Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification

SUBSTANCE NOTES: **Hazard is associated to occupational use only, not to installed product**

MICA

ID: **12001-26-2**

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

HAZARD SCREENING DATE: **2020-05-20**

%: **0.0000 - 5.0000**

GS: **LT-UNK**

RC: **PreC**

NANO: **No**

SUBSTANCE ROLE: **Structure component**

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

SUBSTANCE NOTES: **BIOTITE**

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

Emission Classification of Building Materials - M1

CERTIFYING PARTY: **Self-declared**

ISSUE DATE: **2020-05-20**

EXPIRY DATE:

CERTIFIER OR LAB: **Modena Centro Prove - Italy**

APPLICABLE FACILITIES: **As per LEED: "Products that are inherently nonemitting sources of VOCs (stone, ceramic, powder-coated metals, plated or anodized metal, glass, concrete, clay brick, and unfinished or untreated solid wood) are considered fully compliant without any VOC emissions testing if they do not include integral organic-based surface coatings, binders, or sealants.**

CERTIFICATE URL:

CERTIFICATION AND COMPLIANCE NOTES:

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 the accessories required for the bedded installation . Voc contents depends on the selected products

Section 5: General Notes

This HPD applies to all impervious tiles of 41zero42 srl collections.



MANUFACTURER INFORMATION

MANUFACTURER: **41zero42 srl**

ADDRESS: **m.zucchi@colli.it**

martino.m@41zero42.it

Fiorano Modenese Modena 41042, Italy

WEBSITE: **www.41zero42.com**

CONTACT NAME: **info@41zero42.it**

TITLE: **quality manager**

PHONE: **+39 3494716795**

EMAIL: **m.zucchi@colli.it**

The listed contact is responsible for the validity of this HPD and attests that it is accurate and complete to the best of his or her knowledge.

KEY

Hazard Types

AQU Aquatic toxicity

CAN Cancer

DEV Developmental toxicity

END Endocrine activity

EYE Eye irritation/corrosivity

GEN Gene mutation

GLO Global warming

LAN Land toxicity

MAM Mammalian/systemic/organ toxicity

MUL Multiple

NEU Neurotoxicity

NF Not found on Priority Hazard Lists

OZO Ozone depletion

PBT Persistent, bioaccumulative, and toxic

PHY Physical hazard (flammable or reactive)

REP Reproductive

RES Respiratory sensitization

SKI Skin sensitization/irritation/corrosivity

UNK Unknown

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 (due to insufficient data)

LT-P1 List Translator Possible 1 (Possible Benchmark-1)

LT-1 List Translator 1 (Likely Benchmark-1)

LT-UNK List Translator Benchmark Unknown (the chemical is present on at least one GreenScreen Specified List, but the information contained within the list did not result in a clear mapping to a LT-1 or LTP1 score.)

NoGS No GreenScreen.

Recycled Types

PreC Pre-consumer recycled content

PostC Post-consumer recycled content

UNK Inclusion of recycled content is unknown

None Does not include recycled content

Other Terms:

GHS SDS Globally Harmonized System of Classification and Labeling of Chemicals Safety Data Sheet

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

