

HPD UNIQUE IDENTIFIER: 23278

CLASSIFICATION: 32 14 00 Unit Paving

PRODUCT DESCRIPTION: Versatile with unrivaled durability, ORCO manufactured concrete pavingstones (commonly called pavers) are simultaneously aesthetically pleasing yet offering an exceptionally long life cycle. Complementary sized shapes create modules and unique patterns, bringing both simple and complex designs to life. Wide palette of colors – blends, solids, and high SRI values – promote mixing to create exceptional personalization for designers and homeowners alike. Aged (also called tumbled), shot blast, and burnish paver finishes further enhance the final product design.

Section 1: Summary

Basic Method / Product Threshold

CONTENT INVENTORY

Table with 4 columns: Inventory Reporting Format, Threshold level, Residuals/Impurities, and Explanation(s) provided for Residuals/Impurities? Each column contains radio button options and descriptive text.

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 PAVERSTONES [ SC:NATURAL SAND Not Screened
SC:CRUSHED ROCK Not Screened PORTLAND CEMENT LT-P1 | END |
CAN LIMESTONE LT-UNK CALCIUM SULFATE LT-UNK FLUE DUST,
PORTLAND CEMENT LT-UNK QUARTZ LT-1 | CAN ]

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:

Special conditions applied: GeologicalMaterial

[LEED v4] "Yes ex/SC" result is due only to materials and substances for which Special Conditions were applied. Thus "Yes ex/SC" does not disqualify the product for the LEED v4 Materials and Resources Disclosure and Optimization credit, Option 1.

This Health Product Declaration (HPD) was completed in accordance with the HPD Standard version 2.2, and discloses hazards associated with all substances present at or above 100 parts per million (ppm) in the finished product, along with the role and percent weight.

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: Inherently non-emitting source per LEED®

CONSISTENCY WITH OTHER PROGRAMS

Pre-checked for LEED v4 Material Ingredients Option 1

Summary table with 3 columns: Third Party Verified?, PREPARER: Self-Prepared, VERIFIER:, VERIFICATION #:, SCREENING DATE: 2020-12-23, PUBLISHED DATE: 2020-12-30, EXPIRY DATE: 2023-12-23

## 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 2.2, available on the HPDC website at: [www.hpdc-collaborative.org/hpd-2-2-standard](http://www.hpdc-collaborative.org/hpd-2-2-standard)

### CONCRETE PAVERSTONES

PRODUCT THRESHOLD: 100 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

RESIDUALS AND IMPURITIES NOTES: Residuals and Impurities were "Considered", as outlined in Emerging Best Practices. Pharos CML lists component substances of Portland cement and various geological materials as "Known or Potential Residuals", thus these components have been included in the relevant Substance Notes; components are listed by name, CASRN, percent by weight, and associated GreenScreen score. Additional residuals/impurities disclosed by suppliers or listed by Pharos CML are included as individual substances.

OTHER PRODUCT NOTES: Percent by weight of substances reported as range in order to account for possible variations between product color and collections, and between manufacturing plants.

#### SC:NATURAL SAND

ID: SC:GeoMat

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2020-12-23

#: 65.2000 - 65.3000 GS: Not Screened RC: None NANO: No SUBSTANCE ROLE: Filler

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
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Hazard Screening not performed

#### SUBSTANCE NOTES:

Version: SCGeoMats/2019-06-20

Origin: Corona, CA USA

Typical Composition: Silica sand

Potential presence of toxic metals: Supplier states that material is free of contaminants

Presence of Radioactive Elements: Supplier states that material is free of contaminants

Fine aggregate. Supplier states "Our products are produced from virgin materials that are native to the deposit and processed on site... material is washed, free of organic matter, contains no clay or deleterious substances, and is free of contaminants."

#### SC:CRUSHED ROCK

ID: SC:GeoMat

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2020-12-23

#: 17.9000 - 18.0000 GS: Not Screened RC: None NANO: No SUBSTANCE ROLE: Filler

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
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Hazard Screening not performed

#### SUBSTANCE NOTES:

Version: SCGeoMats/2019-06-20

Origin: Corona, CA USA

Typical Composition: Natural Sand and Gravel

Potential presence of toxic metals: Supplier states that material is free of contaminants

Presence of Radioactive Elements: Supplier states that material is free of contaminants

Course aggregate. Supplier states "Our products are produced from virgin materials that are native to the deposit and processed on site... material is washed, free of organic matter, contains no clay or deleterious substances, and is free of contaminants."

**PORTLAND CEMENT**

ID: 65997-15-1

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-12-23**%: **12.2000 - 15.2000** GS: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Binder**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
CAN	MAK	Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification

SUBSTANCE NOTES: NIST lists the composition of Portland Cement as including: Calcium Oxide (64%) [1305-78-8; LT-P1]; Silicon Dioxide (20%) [7631-86-9; BM-1]; Aluminum Oxide (5%) [1344-28-1; BM-2]; Iron III Oxide (4%) [1309-37-1; BM-1]; Sulfur Trioxide (3%) [7446-11-9; LT-P1]; and Magnesium Oxide (1%) [1309-48-4; LT-UNK].

**LIMESTONE**

ID: 1317-65-3

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-12-23**%: **1.0000 - 3.0000** GS: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Filler**

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

SUBSTANCE NOTES: Component of blended cement, as per supplier disclosure. Identified on the US EPA Safer Chemical Ingredient List (Green Circle - Verified Low Concern).

**CALCIUM SULFATE**

ID: 7778-18-9

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-12-23**%: **0.5000 - 2.0000** GS: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Processing regulator**

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

SUBSTANCE NOTES: Gypsum. Component of blended cement, as per supplier disclosure.

**FLUE DUST, PORTLAND CEMENT**

ID: 68475-76-3

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-12-23**%: **0.0000 - 1.7000** GS: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Binder**

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

SUBSTANCE NOTES: Potential component of blended cement, as per supplier disclosure.

**QUARTZ**

ID: 14808-60-7

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-12-23**%: **Impurity/Residual** GS: **LT-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Impurity/Residual**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CAN	IARC	Group 1 - Agent is Carcinogenic to humans
CAN	US CDC - Occupational Carcinogens	Occupational Carcinogen
CAN	CA EPA - Prop 65	Carcinogen - specific to chemical form or exposure route
CAN	IARC	Group 1 - Agent is carcinogenic to humans - inhaled from occupational sources
CAN	US NIH - Report on Carcinogens	Known to be Human Carcinogen (respirable size - occupational setting)
CAN	MAK	Carcinogen Group 1 - Substances that cause cancer in man
CAN	GHS - New Zealand	6.7A - Known or presumed human carcinogens
CAN	GHS - Japan	Carcinogenicity - Category 1A [H350]
CAN	GHS - Australia	H350i - May cause cancer by inhalation

**SUBSTANCE NOTES:** Potential impurity of blended cement and various geological materials, based on supplier disclosures and information from Pharos CML. Quartz is one of several compounds with warnings restricted to respirable forms (Silica, crystalline - airborne particles of respirable size).

## 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	Inherently non-emitting source per LEED®
CERTIFYING PARTY: Self-declared APPLICABLE FACILITIES: All CERTIFICATE URL:	ISSUE DATE: 2020-11-03 EXPIRY DATE: CERTIFIER OR LAB: N/A
CERTIFICATION AND COMPLIANCE NOTES: Product is an inherently nonemitting source of VOCs (stone, ceramic, powder-coated metals, plated or anodized metal, glass, concrete, clay brick, and unfinished or untreated solid wood) and has no integral organic-based surface coatings, binders, or sealants.	

## 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.*

ORCO BLENDED PRODUCTS VBM	HPD URL: No HPD available
CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES: Use for installation of Concrete Paverstones.	
ORCO BLENDED PRODUCTS POLY VBM	HPD URL: No HPD available
CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES: Use for installation of Concrete Paverstones.	
ORCO BLENDED PRODUCTS JOINT SAND	HPD URL: No HPD available
CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES: Use for installation of Concrete Paverstones.	

## Section 5: General Notes

**MANUFACTURER INFORMATION**

**MANUFACTURER:** ORCO Block & Hardscape  
**ADDRESS:** 4510 Rutile Street  
 Riverside CA 92509, USA  
**WEBSITE:** <https://www.orco.com/>

**CONTACT NAME:** Juan Tejada  
**TITLE:** Special Projects Manager  
**PHONE:** (951) 685-1521  
**EMAIL:** [juan.tejada@orco.com](mailto:juan.tejada@orco.com)

*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**

<b>AQU</b> Aquatic toxicity	<b>LAN</b> Land toxicity	<b>PHY</b> Physical hazard (flammable or reactive)
<b>CAN</b> Cancer	<b>MAM</b> Mammalian/systemic/organ toxicity	<b>REP</b> Reproductive
<b>DEV</b> Developmental toxicity	<b>MUL</b> Multiple	<b>RES</b> Respiratory sensitization
<b>END</b> Endocrine activity	<b>NEU</b> Neurotoxicity	<b>SKI</b> Skin sensitization/irritation/corrosivity
<b>EYE</b> Eye irritation/corrosivity	<b>NF</b> Not found on Priority Hazard Lists	<b>UNK</b> Unknown
<b>GEN</b> Gene mutation	<b>OZO</b> Ozone depletion	
<b>GLO</b> Global warming	<b>PBT</b> Persistent, bioaccumulative, and toxic	

**GreenScreen (GS)**

<b>BM-4</b> Benchmark 4 (prefer-safer chemical)	<b>LT-1</b> List Translator 1 (Likely Benchmark-1)
<b>BM-3</b> Benchmark 3 (use but still opportunity for improvement)	<b>LT-UNK</b> 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.)
<b>BM-2</b> Benchmark 2 (use but search for safer substitutes)	<b>NoGS</b> No GreenScreen.
<b>BM-1</b> Benchmark 1 (avoid - chemical of high concern)	
<b>BM-U</b> Benchmark Unspecified (due to insufficient data)	
<b>LT-P1</b> List Translator Possible 1 (Possible Benchmark-1)	

**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 HPD and for compliance with the HPD standard noted.*