Classic Architectural Pavers, Wall Blocks & Vertices by Unilock

Health Product Declaration v2.3

created via: HPDC Online Builder

HPD UNIQUE IDENTIFIER: 31475 CLASSIFICATION: 32 14 00 Unit Paving

PRODUCT DESCRIPTION: Unilock's manufacturing teams have an unrelenting commitment to shipping only top quality products. Every Unilock product is durable, made with colorfast pigments, slip resistant, resistant to salt erosion, and designed to tolerate oil and gas spills. This HPD covers all Classic Pavers from Unilock. Also includes CSI MasterFormats 32 14 13 Precast Concrete Unit Paving; 32 32 00 Retaining Walls; 32 32 23 Segmental Retaining Walls.

Section 1: Summary

Basic Method / Product Threshold

CONTENT INVENTORY

Inventory Reporting Format

C Nested Materials Method

Basic Method

Threshold Disclosed Per

Material

Product

Threshold Level

C 100 ppm ⊙ 1,000 ppm

O Per GHS SDS

Other

Residuals/Impurities Evaluation

Completed

C Partially Completed

O Not Completed

Explanation(s) provided:

Yes O No.

For all contents above the threshold, the manufacturer has: Characterized Yes ○ No

Provided weight and role.

Screened ⊙ Yes ○ No

Provided screening results using HPDC-approved

methods.

 Yes ○ No Identified

Provided name and CAS RN or other identifier.

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.

PRODUCT | MATERIAL OR SUBSTANCE | RESIDUAL OR IMPURITY

GREENSCREEN SCORE | HAZARD TYPE

CLASSIC ARCHITECTURAL PAVERS, WALL BLOCKS & VERTICES [PORTLAND CEMENT LT-P1 | CAN | END | MAM BLAST FURNACE SLAG LT-UNK FERROSOFERRIC OXIDE BM-1* | CAN FERRIC OXIDE YELLOW LT-UNK QUARTZ BM-1* | CAN | MAM | GEN FERRIC OXIDE BM-1* | CAN | MAM | EYE | SKI TITANIUM DIOXIDE LT-1* | CAN | END | **MAM NATURAL SAND MIXED AGGREGATE]**

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

Contents highest-concern GreenScreen score(s) (BM-1, LT-1, LT-P1) ... LT-P1

Nanomaterial ... No

INVENTORY AND SCREENING NOTES:

Special Conditions applied: [GeologicalMaterial]

This Health Product Declaration (HPD) was completed in accordance with the HPD Standard version 2.3, and discloses hazards associated with all substances present at or above 1000 parts per million (ppm) in the finished product, along with the role and percent weight.

*Form-Specific Hazard: This substance's GreenScreen Benchmark or List Translator score and the applicable hazards are related to particulate inhalation, which is expected to occur only during manufacture, installation, maintenance, or demolition, due to activities such as sawing, sanding, grinding, or intensive cleaning. For this reason, this score is intentionally omitted from the "Contents highest concern" line above. See HPDC's Special Conditions policy for more information.

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 Option 1. Pre-checked for LEED v4.1 Option 1.

Third Party Verified?

O Yes

No

PREPARER: Self-Prepared

VERIFIER:

VERIFICATION #:

SCREENING DATE: 2023-02-21 PUBLISHED DATE: 2023-02-21

EXPIRY DATE: 2026-02-21



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 2.3, available on the HPDC website at: www.hpd-collaborative.org/hpd-2-3-standard

CLASSIC ARCHITECTURAL PAVERS, WALL BLOCKS & VERTICES

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes

RESIDUALS AND IMPURITIES NOTES: Residuals or impurities with the potential to be present at or above the Content Inventory Threshold indicated that return a GS score of BM-1, LT-1, LT-P1 or NoGS have been disclosed, based on information provided in supplier documentation and as predicted by process chemistry (Pharos CML).

OTHER PRODUCT NOTES: Percent by weight of substances reported as range to account for formulation variations between product lines and manufacturing facilities.

NATURAL SAND ID: Geological Material

HAZARD DATA SOURCE: HPDC Special Conditions Policy

MATERIAL ROLE: Filler %: 40.0000 - 80.0000 GreenScreen: Not Required **RC: None** NANO: No

AGENCY AND LIST TITLES **HAZARD TYPE** WARNINGS

Hazard Screening is not applicable to this Special Condition

INGREDIENT DESCRIPTION AND COMPOSITION: Quartz/Silica (14808-60-7): 50-99%; Limestone (1317-65-3): 0-15%

COUNTRY OF ORIGIN: Varies by supplier. Please contact manufacturer if more information is required.

RADIOACTIVE ELEMENTS: According to supplier provided information and/or internal testing, it is determined that no radioactive elements are found in this material.

POTENTIAL PRESENCE OF TOXIC METALS: According to supplier provided information and/or internal testing, it is determined that no toxic metals are found in this material.

MATERIAL CONTENT NOTES: Includes sand from multiple suppliers.

MIXED AGGREGATE ID: Geological Material

HAZARD DATA SOURCE: HPDC Special Conditions Policy

%: 15.0000 - 35.0000 GreenScreen: Not Required RC: PreC NANO: No MATERIAL ROLE: Filler

AGENCY AND LIST TITLES **HAZARD TYPE** WARNINGS

Hazard Screening is not applicable to this Special Condition

INGREDIENT DESCRIPTION AND COMPOSITION: Limestone (1317-65-3): 0-15%; Silicon dioxide (14808-60-7): >1%; Other composition information: Aggregate from limestone, granite, sand and gravel are naturally occurring mineral complexes that contain varying quantities of quartz (crystalline silica). Other forms of Crystalline Silica (e.g., tridymite and cristobalite) may also be present or formed under certain industrial processes

COUNTRY OF ORIGIN: Varies by supplier. Please contact manufacturer if more information is required.

RADIOACTIVE ELEMENTS: According to supplier provided information and/or internal testing, it is determined that no radioactive elements are found in this material.

POTENTIAL PRESENCE OF TOXIC METALS: According to supplier provided information and/or internal testing, it is determined that no toxic metals are found in this material.

MATERIAL CONTENT NOTES: Aggregate materials used in the manufacture of bricks, mortar, cement, concrete, plasters, paving materials and other constructions materials. Other means of identification: Limestone; Sand & Gravel; Granite; Recycled Concrete Aggregate (RCA). Recycled Concrete Aggregate (RCA) is a granular base material produced by reclaiming existing hydraulic cement concrete and processing the materials to make a new aggregate.

PORTLAND CEMENT ID: 65997-15-1

HAZARD DATA SOURCE:	Pharos Chemical and Materials Library	HAZARD SO	CREENING DATE: 2	023-02-21 10:52:00	
%: 5.0000 - 20.0000	GreenScreen: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Binder	
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS		
CAN	MAK	MAK		Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification	
END	TEDX - Potential Endocrine Disr	TEDX - Potential Endocrine Disruptors		Potential Endocrine Disruptor	
MAM	GHS - Japan	GHS - Japan		H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1]	
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION		
None found			No lis	tings found on Additional Hazard Lists	

SUBSTANCE NOTES: Includes Portland cement and white cement from multiple suppliers. From supplier documentation: "Cement is made from materials mined from the earth and processed using energy provided by fuels. Additional materials, such as fly ash, kiln dust and slag may also be introduced into the cement manufacturing process. A chemical analysis of cement may reveal trace amounts of naturally occurring but potentially harmful chemical compounds such as free crystalline silica, organic compounds, potassium and sodium compounds, heavy metals including cadmium, chromium (including hexavalent chromium), nickel and lead. Other trace constituents may include calcium oxide (also known as free lime or quick lime) and organic compounds from grinding aids such as amine acetate salts, glycols and 1,2-ethanediol."

BLAST FURNACE SLAG				ID: 65996-69-2
HAZARD DATA SOURCE:	Pharos Chemical and Materials Library	HAZARD SO	CREENING DATE:	2023-02-21 10:52:00
%: 0.0000 - 10.0000	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Binder
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
None found			No wari	nings found on HPD Priority Hazard Lists
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION	
None found			No	listings found on Additional Hazard Lists

SUBSTANCE NOTES: Slag cement. Other means of identification: GGBFS; Ground Granulated Blast Furnace Cement. Industrial uses in manufacture of concrete, portland cement, blended cement and other building and construction materials. Supplier documentation states: The majority of components in Granulated Blast Furnace Slag are various glassy Metallic Silicates (Iron, Calcium, Magnesium, Aluminum, and Titanium Silicates), including: Dicalcium Silicate (Ca2SiO4) 14284-23-2, Merwinite (Ca3MgSi2O8) 13813-64-4, and Gehlenite (Ca2Al2SiO7) 1302-56-3. Granulated blast-furnace slag is a co-product of the steel industry produced by adding a limestone flux to the ore to remove non-ferrous contaminants. As such, it may contain small quantities of hazardous heavy metals, including trace amounts of chromium, usually in solution in the glass. Ground granulated blast-furnace slag (GGBFS) is a vitreous material containing silica, alumina, magnesia and calcium oxides. It also contains a small quantity of iron, sodium, titanium and manganese oxides. The oxides do not actually occur in free form but as complexed silica-based glasses. Substance not used in every formulation; contact manufacturer if more information is required.

FERROSOFERRIC OXIDE					ID: 1317-61-9
HAZARD DATA SOURCE:	Pharos Chemical and Materials Library	HAZARD SC	CREENING DATE:	2023-02-21 10:57:27	
%: 0.0000 - 2.0000	GreenScreen: BM-1	RC: None	NANO: No	SUBSTANCE ROLE:	Pigment
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS		
CAN	MAK		•	up 3B - Evidence of carcir at for classification**	nogenic effects
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION		
None found			No	listings found on Addition	al Hazard Lists

SUBSTANCE NOTES: GreenScreen Benchmark® assessment score of BM-1 was provided by the HPD Builder Tool. Percent by weight of substance reported as a range due to different colors available. Substance not used in every formulation; contact manufacturer if more information is required.

FERRIC OXIDE YELLOW

ID: 51274-00-1

HAZARD DATA SOURCE: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2023-02-21 10:52:02

%: 0.0000 - 1.0000 GreenScreen: LT-UNK RC: None NANO: No SUBSTANCE ROLE: Pigment

HAZARD TYPE LIST NAME AND SOURCE WARNINGS

None found No warnings found on HPD Priority Hazard Lists

ADDITIONAL LISTINGS LIST NAME AND SOURCE NOTIFICATION

None found No listings found on Additional Hazard Lists

SUBSTANCE NOTES: Percent by weight of substance reported as a range due to different colors available. Substance not used in every formulation; contact manufacturer if more information is required.

QUARTZ ID: 14808-60-7

HAZARD DATA SOURCE: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2023-02-21 10:55:04

%: Impurity/Residual GreenScreen: BM-1 RC: None NANO: No SUBSTANCE ROLE: Impurity/Residual

^{**}Form-Specific Hazard: This substance's GreenScreen Benchmark or List Translator score and the applicable hazards are related to particulate inhalation, which is expected to occur only during manufacture, installation, maintenance, or demolition, due to activities such as sawing, sanding, grinding, or intensive cleaning. See HPDC's Special Conditions policy for more information. Manufacturer's Safety Data Sheet (SDS), if applicable, may offer occupational health and safety information.

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
CAN	US CDC - Occupational Carcinogens	Occupational Carcinogen**
CAN	CA EPA - Prop 65	Carcinogen - specific to chemical form or exposure route**
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	IARC	Group 1 - Agent is carcinogenic to humans - inhaled from occupational sources**
CAN	IARC	Group 1 - Agent is Carcinogenic to humans**
CAN	GHS - Japan	H350 - May cause cancer [Carcinogenicity - Category 1A]**
CAN	GHS - Australia	H350i - May cause cancer by inhalation [Carcinogenicity - Category 1A or 1B]**
CAN	GHS - New Zealand	Carcinogenicity category 1**
MAM	GHS - Japan	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1]**
GEN	GHS - Japan	H341 - Suspected of causing genetic defects [Germ cell mutagenicity - Category 2]**
MAM	GHS - Australia	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organ toxicity - repeated exposure - Category 1]**
MAM	GHS - New Zealand	Specific target organ toxicity - repeated exposure category 1**
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
None found		No listings found on Additional Hazard Lists

SUBSTANCE NOTES: GreenScreen Benchmark® assessment score of BM-1 was provided by the HPD Builder Tool. Sources: Natural Sand; Mixed Aggregate; Portland cement (65997-15-1); Slag Cement (65996-69-2).

FERRIC OXIDE ID: 1309-37-1

HAZARD DATA SOURCE: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2023-02-21 10:58:27

%: 0.0000 - 1.0000 GreenScreen: BM-1 RC: None NANO: No SUBSTANCE ROLE: Pigment

^{**}Form-Specific Hazard: This substance's GreenScreen Benchmark or List Translator score and the applicable hazards are related to particulate inhalation, which is expected to occur only during manufacture, installation, maintenance, or demolition, due to activities such as sawing, sanding, grinding, or intensive cleaning. See HPDC's Special Conditions policy for more information. Manufacturer's Safety Data Sheet (SDS), if applicable, may offer occupational health and safety information.

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
CAN	MAK	Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification**
MAM	GHS - Japan	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1]**
EYE	GHS - Japan	H318 - Causes serious eye damage [Serious eye damage / eye irritation - Category 1]**
SKI	GHS - Japan	H315 - Causes skin irritation [Skin corrosion / irritation - Category 2]**
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
None found		No listings found on Additional Hazard Lists

SUBSTANCE NOTES: GreenScreen Benchmark® assessment score of BM-1 was provided by the HPD Builder Tool. Percent by weight of substance reported as a range due to different colors available. Substance not used in every formulation; contact manufacturer if more information is required.

**Form-Specific Hazard: This substance's GreenScreen Benchmark or List Translator score and the applicable hazards are related to particulate inhalation, which is expected to occur only during manufacture, installation, maintenance, or demolition, due to activities such as sawing, sanding, grinding, or intensive cleaning. See HPDC's Special Conditions policy for more information. Manufacturer's Safety Data Sheet (SDS), if applicable, may offer occupational health and safety information.

TITANIUM DIOXIDE ID: 13463-67-7

HAZARD DATA SOURCE: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2023-02-21 10:59:04
%: 0.0000 - 1.0000 GreenScreen: LT-1 RC: None NANO: No SUBSTANCE ROLE: Pigment

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
CAN	US CDC - Occupational Carcinogens	Occupational Carcinogen**
CAN	CA EPA - Prop 65	Carcinogen - specific to chemical form or exposure route**
CAN	IARC	Group 2B - Possibly carcinogenic to humans - inhaled from occupational sources**
CAN	MAK	Carcinogen Group 3A - Evidence of carcinogenic effects but not sufficient to establish MAK/BAT value**
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor**
CAN	MAK	Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels**
CAN	EU - GHS (H-Statements) Annex 6 Table 3-1	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]**
CAN	GHS - Japan	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]**
MAM	GHS - Japan	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1]**
CAN	EU - Annex VI CMRs	Carcinogen Category 2 - Suspected human Carcinogen**
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022
		Cosmetics & Personal Care Products
POSITIVE LIST	US Environmental Protection Agency (US EPA)	US EPA - DfE Safer Chemicals Ingredients list (SCIL)
		Colorants - Green Circle (Verified Low Concern)

SUBSTANCE NOTES: Percent by weight of substance reported as a range due to different colors available. Substance not used in every formulation; contact manufacturer if more information is required.

^{**}Form-Specific Hazard: This substance's GreenScreen Benchmark or List Translator score and the applicable hazards are related to particulate inhalation, which is expected to occur only during manufacture, installation, maintenance, or demolition, due to activities such as sawing, sanding, grinding, or intensive cleaning. See HPDC's Special Conditions policy for more information. Manufacturer's Safety Data Sheet (SDS), if applicable, may offer occupational health and safety information.



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: Brewster, New York; Aurora,

Illinois; Marengo, Illinois; Elkhorn, Wisconsin; Brighton, Michigan; Rittman, Ohio; Uxbridge, Massachusetts; Pickering, Ontario; Gormley, Ontario; Georgetown,

Ontario; Ayr, Ontario. **CERTIFICATE URL:**

CERTIFICATION AND COMPLIANCE NOTES:

ISSUE DATE: 2023-02-21 **EXPIRY DATE:**

CERTIFIER OR LAB: None



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

Classic Architectural Pavers, Wall Blocks & Vertices are manufactured at the following Unilock facilities: Brewster, New York; Aurora, Illinois; Marengo, Illinois; Elkhorn, Wisconsin; Brighton, Michigan; Rittman, Ohio; Uxbridge, Massachusetts; Pickering, Ontario; Gormley, Ontario; Georgetown, Ontario; Ayr, Ontario.

MANUFACTURER INFORMATION

MANUFACTURER: Unilock
ADDRESS: 401 The West Mall

Suite 610

Toronto ON M9C 5J5, CANADA

WEBSITE: www.unilock.com

CONTACT NAME: Brad Swanson
TITLE: Director of Commercial Sales

PHONE: 800-864-5625

EMAIL: Brad.Swanson@unilock.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

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

NoGS No GreenScreen.

GreenScreen Benchmark scores sometimes also carry subscripts, which provide more context for how the score was determined. These are DG (data gap), TP (transformation product), and CoHC (chemical of high concern). For more information, see 2.2.2.4 GreenScreen® for Safer Chemicals, www.greenscreenchemicals.org, and Best Practices for Hazard Screening on the HPDC website (hpd-collaborative.org).

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

