Migrations® and Striations Biobased Tile (BBT™) by Armstrong Flooring, Inc.

Health Product Declaration v2.2

created via: HPDC Online Builder

HPD UNIQUE IDENTIFIER: 25471

CLASSIFICATION: 09 65 00 Resilient Flooring

PRODUCT DESCRIPTION: PVC-free Striations and Migrations™ BBT™ deliver a sustainable tile flooring solution combining biophilic design,

reduced maintenance, and long-term performance.



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 C Per GHS SDS

Other

Residuals/Impurities

Considered

C Partially Considered

C Not Considered

Explanation(s) provided for Residuals/Impurities?

Yes ○ No

All Substances Above the Threshold Indicated Are:

Characterized

% 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.

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

MIGRATIONS® AND STRIATIONS BIOBASED TILE (BBT™) [

CALCIUM CARBONATE (LIMESTONE) LT-UNK BIOSTRIDE®

POLYMER NoGS TITANIUM DIOXIDE LT-1 | CAN | END 2-

NAPHTHALENECARBOXAMIDE, N,N'-(2-CHLORO-1,4-PHENYLENE)

BIS[4-[(2,5-DICHLOROPHENYL)AZO]-3-HYDROXY- LT-UNK C. I.

PIGMENT BLUE 15 BM-3 C.I. PIGMENT YELLOW 42 LT-UNK DIIRON

TRIOXIDE BM-1 | CAN IRON OXIDE (FE3O4) BM-1 | CAN QUINO[2,3-

B]ACRIDINE-7,14-DIONE, 5,12-DIHYDRO- LT-UNK]

Number of Greenscreen BM-4/BM3 contents ... 1

Contents highest concern GreenScreen

Benchmark or List translator Score ... BM-1

Nanomaterial ... No

INVENTORY AND SCREENING NOTES:

Residuals/impurities are quantitatively measured and are displayed in the HPD when greater than 1000 ppm.

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

VOC Content data is not applicable for this product category.

CERTIFICATIONS AND COMPLIANCE See Section 3 for additional

listinas.

VOC emissions: FloorScore®

LCA: Environmental Product Declaration

CONSISTENCY WITH OTHER PROGRAMS

Pre-checked for LEED v4 Material Ingredients Option 1

Third Party Verified?

O Yes

SCREENING DATE: 2021-07-21 PUBLISHED DATE: 2021-07-21

EXPIRY DATE: 2024-07-21

VERIFIER: VERIFICATION #: No

PREPARER: Self-Prepared

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.hpd-collaborative.org/hpd-2-2-standard

MIGRATIONS® AND STRIATIONS BIOBASED TILE (BBT™)

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

RESIDUALS AND IMPURITIES NOTES: Residuals/impurities are quantitatively measured and are displayed in the HPD when greater than 1000 ppm.

OTHER PRODUCT NOTES: For more information on this product visit: https://www.armstrongflooring.com/commercial/en-us/products/bio-flooring.html

CALCIUM CARBONATE (LIMESTONE)

ID: 1317-65-3

HAZARD SCREENING METHOD:	Pharos Chemical and Materials Library	HAZARD SC	REENING DATE: 20	021-07-21 11:50:07
%: 75.0000 - 78.0000	GS: LT-UNK	RC: None	NANO: Unknown	SUBSTANCE ROLE: Filler
HAZARD TYPE	AGENCY AND LIST TITLES	WAR	NINGS	
None found			No warnings found	d on HPD Priority Hazard Lists

SUBSTANCE NOTES: Limestone filler

BIOSTRIDE® POLYMER ID: 2389129-04-6

HAZARD SCREENING METHO	OD: Pharos Chemical and Materials Library	HAZARD SC	REENING DATE	: 2021-07-21 11:50:08
%: 11.0000 - 14.0000	GS: NoGS	RC: None	NANO: No	SUBSTANCE ROLE: Binder
HAZARD TYPE	AGENCY AND LIST TITLES	WARN	IINGS	
None found			No warnings f	found on HPD Priority Hazard Lists
SUBSTANCE NOTES: Bio-b	ased (corn) binder			

CODOTATION TO THE PROPERTY OF THE COMMON CONTRACT

TITANIUM DIOXIDE ID: 13463-67-7

%: 0.5000 - 1.0000 GS: LT-1 RC: None NANO: Unknown SUBSTANCE ROLE: Pigment

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2021-07-21 11:50:08

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CAN	EU - GHS (H-Statements)	H351 - Suspected of causing cancer
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

SUBSTANCE NOTES: Titanium dioxide is listed as a hazard in respirable form. Titanium dioxide is not in a respirable form in the final product.

2-NAPHTHALENECARBOXAMIDE, N,N'-(2-CHLORO-1,4-PHENYLENE) BIS[4-[(2,5-DICHLOROPHENYL)AZO]-3-HYDROXY-

ID: 5280-78-4

HAZARD SCREENING METHOD	Pharos Chemical and Materials Library	HAZARD S	CREENING DATE: 2	2021-07-21 11:50:09
%: 0.0000 - 0.1000	GS: LT-UNK	RC: None	NANO: Unknown	SUBSTANCE ROLE: Pigment
HAZARD TYPE	AGENCY AND LIST TITLES	WAR	NINGS	
None found			No warnings fou	nd on HPD Priority Hazard Lists
SUBSTANCE NOTES: Red pig	ment. Pigments vary based on pattern.			

C. I. PIGMENT BLUE 15				ID: 147-14-8
HAZARD SCREENING METHOD	Pharos Chemical and Materials Library	HAZARD S	CREENING DATE:	2021-07-21 11:50:09
%: 0.0000 - 0.1000	GS: BM-3	RC: None	NANO: Unknown	SUBSTANCE ROLE: Pigment
HAZARD TYPE	AGENCY AND LIST TITLES	WAR	NINGS	
None found			No warnings for	und on HPD Priority Hazard Lists
SUBSTANCE NOTES: Pigment	s vary based on pattern.			

C.I. PIGMENT YELLOW 42 ID: 51274-00-1

HAZARD SCREENING METHO	DD: Pharos Chemical and Materials Library	HAZARD S	CREENING DATE: 2	2021-07-21 11:50:10
%: 0.0000 - 0.1000	GS: LT-UNK	RC: None	NANO: Unknown	SUBSTANCE ROLE: Pigment
HAZARD TYPE	AGENCY AND LIST TITLES	WAR	NINGS	
None found			No warnings fou	nd on HPD Priority Hazard Lists

SUBSTANCE NOTES: Pigments vary based on pattern.

DIIRON TRIOXIDE ID: 1309-37-1

HAZARD SCREENING METHOD:	Pharos Chemical and Materials Library	HAZARD S	CREENING DATE: 2	2021-07-21 11:50:10
%: 0.0000 - 0.1000	GS: BM-1	RC: None	NANO: Unknown	SUBSTANCE ROLE: Pigment
HAZARD TYPE	AGENCY AND LIST TITLES	WAR	NINGS	
CAN	MAK		inogen Group 3B - E ot sufficient for clas	vidence of carcinogenic effects sification

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2021-07-21 11:50:11

%: 0.0000 - 0.1000 GS: BM-1 RC: None NANO: Unknown SUBSTANCE ROLE: Pigment

HAZARD TYPE AGENCY AND LIST TITLES WARNINGS

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

 ${\tt SUBSTANCE\ NOTES:\ Black\ pigmentPigments\ vary\ based\ on\ pattern.}$

SUBSTANCE NOTES: Red pigment. Pigments vary based on pattern.

QUINO[2,3-B]ACRIDINE-7,14-DIONE, 5,12-DIHYDRO-

ID: 1047-16-1

HAZARD SCREENING METHOD:	Pharos Chemical and Materials Library	HAZARD S	CREENING DATE: 2	2021-07-21 11:50:11
%: 0.0000 - 0.1000	GS: LT-UNK	RC: None	NANO: Unknown	SUBSTANCE ROLE: Pigment
HAZARD TYPE	AGENCY AND LIST TITLES	WAR	NINGS	
None found			No warnings fou	nd on HPD Priority Hazard Lists

SUBSTANCE NOTES: Red pigment. Pigments vary based on pattern.



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	FloorScore®		
CERTIFYING PARTY: Third Party APPLICABLE FACILITIES: Jackson, MS CERTIFICATE URL: https://www.armstrongflooring.com/pdbupimages-flr/220314.pdf	ISSUE DATE: 2020-09- 01	EXPIRY DATE: 2021- 08-31	CERTIFIER OR LAB: SCS Global Services
CERTIFICATION AND COMPLIANCE NOTES:			
LCA	Environmental Product	Declaration	
CERTIFYING PARTY: Third Party APPLICABLE FACILITIES: Jackson, MS CERTIFICATE URL: https://www.armstrongflooring.com/pdbupimages-flr/220749.pdf	ISSUE DATE: 2019-12- 20		CERTIFIER OR LAB: ASTM International



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.

ADHESIVES RECOMMENDED FOR INSTALLATION

HPD URL: No HPD available

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:

Full-Spread Adhesives: S-525 or S-700 See www.armstrongflooring.com for more information.

Section 5: General Notes

This HPD is provided solely for the intended recipient in connection with its assessment of products and for no other purpose. In providing information, Armstrong Flooring expresses no opinion and makes no representations as to the applicability, suitability, accuracy or completeness of the declaration form, or the standards, rules, classifications, warnings, or criteria utilized or referenced therein. Information herein is qualified in the entirety by reference to the applicable product Safety Data Sheet (SDS) which can be located at www.armstrongflooring.com, as well as by the additional ingredient information provided for specified substances. Please refer to the Armstrong Flooring website for more information on this product.

MANUFACTURER INFORMATION

MANUFACTURER: Armstrong Flooring, Inc.

ADDRESS: 1085 Hwy 80 West

Jackson Mississippi 39204, United States

WEBSITE: www.armstrongflooring.com

CONTACT NAME: Techl ine **TITLE: Customer Service** PHONE: 1-888-Armstrong

EMAIL: fpotechline@armstrongflooring.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 (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 HPD and for compliance with the HPD standard noted.