

CLASSIFICATION: 09 65 00.00 Finishes: Resilient Flooring

PRODUCT DESCRIPTION: Marmoleum Sheet is a homogeneous floor covering made from natural ingredients including linseed oil, rosin binders, wood flour, limestone, and dry pigments which are mixed and calendared onto a natural jute backing. Marmoleum features Topshield2, which is a high performance, double UV cured factory applied finish that makes the product “occupancy ready” after installation. The double UV cured layer technology delivers color clarity and vibrancy, along with extraordinary wear performance by providing a surface that can be repaired after accidents or restored after years of intensive use. The thickness of Marmoleum Sheet varies by collection. The standard thickness is 2.5mm (1/10”). Marmoleum Composition Sheet (MCS) is available in 2.0mm (0.08”). Marmoleum sheet is packaged on a roll that is 79” (2 meters) wide with a maximum length of 105’ (32 meters).

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

Are All Substances Above the Threshold Indicated:

Characterized Yes No

Percent Weight and Role Provided?

Screened Yes No

Using Priority Hazard Lists with Results Disclosed?

Identified Yes No

Name and Identifier Provided?

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

MARMOLEUM SHEET WITH TOPSHIELD2 | CELLULOSE PULP (CELLULOSE PULP (SC: WOOD FLOUR)) NoGS LINSEED OIL NoGS LIMESTONE; CALCIUM CARBONATE LT-UNK TALL OIL LT-P1 | RES | MUL | SKI CELLULOSE, MICROCRYSTALLINE (CELLULOSE, MICROCRYSTALLINE (SC: JUTE)) NoGS GUM ROSIN LT-P1 | SKI POLYURETHANE FOAMS LT-UNK IRON OXIDE LT-UNK | CAN FERRIC OXIDE YELLOW LT-UNK FERRIC OXIDE BM-2 | CAN TITANIUM DIOXIDE LT-1 | CAN | END 2-PROPENOIC ACID, 2-METHYL-, POLYMER WITH ETHYL 2-PROPENOATE AND METHYL 2-METHYL-2-PROPENOATE LT-UNK]

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:

(%) ranges for ingredients are used as a means of keeping the exact formulations proprietary.

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: CDPH Standard Method V1.1 (Section 01350/CHPS) - Classroom & Office scenario

LCA: Environmental Product Declaration (EPD) by UL - Industry Generic

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: 2018-10-08

PUBLISHED DATE:

EXPIRY DATE: 2021-10-08



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

MARMOLEUM SHEET WITH TOPSHIELD2

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: No

RESIDUALS AND IMPURITIES NOTES: No residuals or impurities are expected to be present in the product at or above the reporting threshold.

OTHER PRODUCT NOTES:

CELLULOSE PULP (CELLULOSE PULP (SC: WOOD FLOUR))

ID: 65996-61-4

%: 22.0000 - 35.0000	GS: NoGS	RC: UNK	NANO: No	ROLE: Filler
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HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: Category = Tree-based materials – wood planks/strips/pieces, bark, wood chips, and other wood products. This disclosure does not provide information on allergens, hyper-accumulation of metals, production of any toxic substances during normal metabolic activities, pesticides, and other potential hazards or sources of hazards which may be found in certain biological materials. Cellulose is mix of different species of wood. The specific brand name that Forbo Flooring Systems uses in Marmoleum is Lignocel C 120. LIGNOCEL® C 120 is not classified as dangerous according to directive 67/548/EEC, directive 1999/45/EC and regulation 1272/2008 (CLP). Information pertaining to special dangers for human and environment: Adverse physiochemical effects: Capable of causing dust explosions. Adverse human health effects and symptoms: N/A Adverse environmental effects: N/A Other adverse hazards: Substance is combustible. Substance related information: EC-No: N/A INDEX-NO: N/A REACH Registration No: N/A Purity: 100 % Synonyms: N/A Stabilizers: N/A Hazardous Impurities: N/A

LINSEED OIL

ID: 8001-26-1

%: 19.0000 - 26.0000	GS: NoGS	RC: None	NANO: No	ROLE: Binder
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HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES:

LIMESTONE; CALCIUM CARBONATE

ID: 1317-65-3

%: 15.0000 - 20.0000	GS: LT-UNK	RC: None	NANO: No	ROLE: Filler
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HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES:

TALL OIL

ID: 8002-26-4

%: **9.0000 - 13.0000** GS: **LT-P1** RC: **PreC** NANO: **No** ROLE: **Binder**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

RESPIRATORY AOEC - Asthmagens Asthmagen (Rs) - sensitizer-induced

MULTIPLE German FEA - Substances Hazardous to Waters Class 2 - Hazard to Waters

SKIN SENSITIZE MAK Sensitizing Substance Sh - Danger of skin sensitization

SUBSTANCE NOTES:

CELLULOSE, MICROCRYSTALLINE (CELLULOSE, MICROCRYSTALLINE (SC: JUTE))

ID: 9004-34-6

%: **9.0000 - 10.0000** GS: **NoGS** RC: **UNK** NANO: **No** ROLE: **Backing**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found No warnings found on HPD Priority lists

SUBSTANCE NOTES: Category = Plant-based materials – plant based fibers such as cotton, hemp, ramie, rice husks, and coconut fiber This disclosure does not provide information on allergens, hyper-accumulation of metals, production of any toxic substances during normal metabolic activities, pesticides, and other potential hazards or sources of hazards which may be found in certain biological materials. Cellulose is mix of different species of wood. The specific brand name that Forbo Flooring Systems uses in Marmoleum is Lignocel C 120. LIGNOCEL® C 120 is not classified as dangerous according to directive 67/548/EEC, directive 1999/45/EC and regulation 1272/2008 (CLP). Information pertaining to special dangers for human and environment: Adverse physiochemical effects: Capable of causing dust explosions. Adverse human health effects and symptoms: N/A Adverse environmental effects: N/A Other adverse hazards: Substance is combustible. Substance related information: EC-No: N/A INDEX-NO: N/A REACH Registration No: N/A Purity: 100 % Synonyms: N/A Stabilizers: N/A Hazardous Impurities: N/A

GUM ROSIN

ID: 8050-09-7

%: **1.5000 - 2.5000** GS: **LT-P1** RC: **None** NANO: **No** ROLE: **Binder**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

SKIN SENSITIZE EU - GHS (H-Statements) H317 - May cause an allergic skin reaction

SKIN SENSITIZE MAK Sensitizing Substance Sh - Danger of skin sensitization

SUBSTANCE NOTES:

POLYURETHANE FOAMS

ID: 9009-54-5

#: 0.1000 - 0.3000

GS: LT-UNK

RC: None

NANO: No

ROLE: Finish

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: Finish contains no Isocyanates.

IRON OXIDE

ID: 1317-61-9

#: 0.1000 - 4.0000

GS: LT-UNK

RC: None

NANO: No

ROLE: Pigment

HAZARDS:

AGENCY(IES) WITH WARNINGS:

CANCER

MAK

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

SUBSTANCE NOTES:

FERRIC OXIDE YELLOW

ID: 51274-00-1

#: 0.1000 - 4.0000

GS: LT-UNK

RC: None

NANO: No

ROLE: Pigment

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES:

FERRIC OXIDE

ID: 1309-37-1

#: 0.1000 - 4.0000

GS: BM-2

RC: None

NANO: No

ROLE: Pigment

HAZARDS:

AGENCY(IES) WITH WARNINGS:

CANCER

MAK

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

SUBSTANCE NOTES:

TITANIUM DIOXIDE

ID: 13463-67-7

#: 0.1000 - 4.0000

GS: LT-1

RC: None

NANO: No

ROLE: Pigment

HAZARDS:

AGENCY(IES) WITH WARNINGS:

CANCER

US CDC - Occupational Carcinogens

Occupational Carcinogen

CANCER

CA EPA - Prop 65

Carcinogen - specific to chemical form or exposure route

CANCER

IARC

Group 2B - Possibly carcinogenic to humans - inhaled from

occupational sources

ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
CANCER	MAK	Carcinogen Group 3A - Evidence of carcinogenic effects but not sufficient to establish MAK/BAT value
CANCER	MAK	Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels

SUBSTANCE NOTES: The titanium dioxide (TiO₂) is bound within the product, requiring no further labeling. Identified on the US EPA Safer Chemical Ingredient List. Form-specific hazards: airborne particles of respirable size – occupational setting. Specific guidelines are being created to address known issues related to transparency and disclosure for several materials (“Special Conditions”), including those with Form-Specific Hazards such as Titanium Dioxide. This HPD will be updated as appropriate when these guidelines become available. The Material Health Harmonization Task Group convened by the USGBC states that pigmentary titanium dioxide was “determined to be Benchmark 2 using the full GS (GreenScreen) method” hpdrepository.hpd-collaborative.org HPD v2.1 created via HPDC Builder Page 2 of 12 (<http://ow.ly/Z5ken>).

2-PROPENOIC ACID, 2-METHYL-, POLYMER WITH ETHYL 2-PROPENOATE AND METHYL 2-METHYL-2-PROPENOATE

ID: 25133-97-5

%: **0.1000 - 0.3000** GS: **LT-UNK** RC: **UNK** NANO: **No** ROLE: **Finish**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: **Finish contains no Isocyanates.**

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

CDPH Standard Method V1.1 (Section 01350/CHPS) - Classroom & Office scenario

CERTIFYING PARTY: **Third Party**

ISSUE DATE: **2014-11-17**

EXPIRY DATE:

CERTIFIER OR LAB: **Berkeley Analytical**

APPLICABLE FACILITIES: **All**

CERTIFICATE URL:

CERTIFICATION AND COMPLIANCE NOTES:

LCA

Environmental Product Declaration (EPD) by UL - Industry Generic

CERTIFYING PARTY: **Self-declared**

ISSUE DATE: **2018-01-05**

EXPIRY DATE:

CERTIFIER OR LAB: **UL Environment**

APPLICABLE FACILITIES: **The Green Standard**

CERTIFICATE URL:

<https://www.forbo.com/flooring/en-us/environment/pm wz1i>

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.

FORBO L 885 ADHESIVE (VOC 0.00 G/L)

HPD URL: **No HPD available**

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:

Standard recommended adhesive used for installation.

FORBO SUSTAIN 885M ADHESIVE (VOC 0.00 G/L)

HPD URL: **No HPD available**

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:

Alternative adhesive that can be used for installation.

FORBO SUSTAIN 1195 ADHESIVE (VOC 0.00 G/L)

HPD URL: **No HPD available**

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:

Alternative adhesive that can be used with installation.

FORBO SUSTAIN 1299 ADHESIVE (VOC 0.00 G/L)

HPD URL: **No HPD available**

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:

Alternative adhesive that can be used with installation.

FORBO 660 ADHESIVE (VOC 12.00 G/L)HPD URL: **No HPD available**

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:

Alternative adhesive that can be used with installation.

FORBO ADHESIVE REMOVERHPD URL: **No HPD available**

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:

Can be used for adhesive residue removal post installation.

NEUTRAL PH CLEANERHPD URL: **No HPD available**

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:

Can be used for routine cleaning.

READY TO USE NEUTRAL PH CLEANERHPD URL: **No HPD available**

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:

Can be used for routine cleaning.

HEAVY DUTY CLEANERHPD URL: **No HPD available**

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:

Can be used for interim maintenance.

FORBO MOP ON RESTORERHPD URL: **No HPD available**

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:

Can be used for interim maintenance.

FORBO SPRAY BUFFHPD URL: **No HPD available**

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:

Can be used for interim maintenance.

FORBO MATTE FINISHHPD URL: **No HPD available**

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:

Can be used for interim maintenance.

FORBO GLOSS FINISHHPD URL: **No HPD available**

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:

Can be used for interim maintenance.

FORBO WALL BASEHPD URL: **<http://www.forboflooringna.com>**

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:

Section 5: General Notes

Products lines that fall under the category of Marmoleum Sheet are the following: Real, Fresco, Concrete, Slate, Vivace, Striato, Striato Color, Striato Textura, Piano, Graphic, Walton Uni, Walton Cirrus, Marmoleum Composition Sheet (MCS). Marmoleum Sheet contains no Isocyanates.



MANUFACTURER INFORMATION

MANUFACTURER: **Forbo Flooring Systems**
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Hazle Township PA 18202, United States
WEBSITE: **www.forboflooringna.com**

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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	GLO Global warming	PHY Physical Hazard (reactive)
CAN Cancer	MAM Mammalian/systemic/organ toxicity	REP Reproductive toxicity
DEV Developmental toxicity	MUL Multiple hazards	RES Respiratory sensitization
END Endocrine activity	NEU Neurotoxicity	SKI Skin sensitization/irritation/corrosivity
EYE Eye irritation/corrosivity	OZO Ozone depletion	LAN Land Toxicity
GEN Gene mutation	PBT Persistent Bioaccumulative Toxic	NF Not found on Priority Hazard Lists

GreenScreen (GS)

BM-4 Benchmark 4 (prefer-safer chemical)	LT-P1 List Translator Possible Benchmark 1
BM-3 Benchmark 3 (use but still opportunity for improvement)	LT-1 List Translator Likely Benchmark 1
BM-2 Benchmark 2 (use but search for safer substitutes)	LT-UNK List Translator Benchmark Unknown (insufficient information from List Translator lists to benchmark)
BM-1 Benchmark 1 (avoid - chemical of high concern)	NoGS Unknown (no data on List Translator Lists)
BM-U Benchmark Unspecified (insufficient data to benchmark)	

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.