Marmoleum Sport by Forbo Flooring Systems

Health Product Declaration v2.1

created via: HPDC Online Builder

CLASSIFICATION: 09 65 00.00 Finishes: Resilient Flooring

PRODUCT DESCRIPTION: [10/ 18/ 2018 4:21 PM] Becky Hudock: Marmoleum Sport 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 Sport comes unfinished and ready for the application of sport lines, which is then sealed with a sports floor finish. The standard thickness is 3.2mm (1/18"). Marmoleum sheet is packaged on a roll that is 79" (2 meters) wide with a maximum length of 92' (28 meters).

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| _ |
| _ |
| _ |

Section 1: Summary

Basic Method / Product Threshold

CONTENT INVENTORY

| Inventory Reporting Format | Threshold level |
|----------------------------|---------------------------|
| Nested Materials Method | C 100 ppm |
| Basic Method | 1 ,000 ppm |
| Threshold Disclosed Per | Per GHS SDS Per OSHA MSDS |
| C Material | C Other |
| Product | |

| Residuals/Impurities | Are All Substances Abo | ve the Threshold Indicated: |
|--|---------------------------------------|---------------------------------------|
| Considered Partially Considered Not Considered | Characterized Percent Weight and Rol | ⊙ Yes ○ No le Provided? |
| explanation(s) provided | Screened | |
| or Residuals/Impurities? | Using Priority Hazard Li | ists with Results Disclosed? |
| Yes C No | Identified | ⊙ Yes ○ No |
| | Name and Identifier Pro | vided? |

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 SPORT [CELLULOSE PULP (CELLULOSE PULP (SC: WOOD FLOUR)) Nogs Linseed Oil Nogs Tall Oil LT-P1 | RES | MUL | SKI LIMESTONE; CALCIUM CARBONATE LT-UNK ALUMINA TRIHYDRATE BM-2 | RES CELLULOSE, MICROCRYSTALLINE (CELLULOSE, MICROCRYSTALLINE (SC: JUTE)) Nogs GUM ROSIN LT-P1 | SKI IRON OXIDE LT-UNK | CAN FERRIC OXIDE YELLOW LT-UNK FERRIC OXIDE BM-

2 | CAN TITANIUM DIOXIDE LT-1 | CAN | END]

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 V1.2 (Section 01350/CHPS) - Classroom & Office scenario

CONSISTENCY WITH OTHER PROGRAMS

Pre-checked for LEED v4 Material Ingredients, Option 1

Third Party Verified?

C Yes

No

PREPARER: Self-Prepared VERIFIER:

VERIFICATION #:

SCREENING DATE: 2018-10-18

PUBLISHED DATE:

EXPIRY DATE: 2021-10-18



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 SPORT

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

| %: 34.7300 | GS: NoGS | RC: UNK | NANO: No | ROLE: Filler |
|------------|---|---------|-----------------|---------------------|
| 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 | |
|-------------------|----------------------|---|-----------------|---------------------|-------|--|
| %: 24.2300 | gs: NoGS | RC: None | nano: No | ROLE: Binder | | |
| HAZARDS: | AGENCY(IES) WITH WAR | NINGS: | | | | |
| None Found | No warnings found | No warnings found on HPD Priority lists | | | | |
| SUBSTANCE NOTES: | | | | | | |

| TALL OIL | | | | | -26-4 |
|----------------------------|-----------------------|----------|-----------------|--------------|-------|
| %: 9.0000 - 13.0000 | GS: LT-P1 | RC: PreC | nano: No | ROLE: Binder | |
| HAZARDS: | AGENCY(IES) WITH WARN | NINGS: | | | |

| 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: | | |

LIMESTONE; CALCIUM CARBONATE

ID: 1317-65-3

| %: 8.4800 | GS: LT-UNK | RC: None | nano: No | ROLE: Filler |
|------------------|----------------------------|---|-----------------|--------------|
| HAZARDS: | AGENCY(IES) WITH WARNINGS: | | | |
| None Found | No warnings found on HPD I | No warnings found on HPD Priority lists | | |
| SUBSTANCE NOTES: | | | | |

RESPIRATORY

SUBSTANCE NOTES:

ALUMINA TRIHYDRATE ID: 21645-51-2

%: 7.4300 GS: BM-2 RC: None NANO: No ROLE: Filler

HAZARDS: AGENCY(IES) WITH WARNINGS:

Asthmagen (Rs) - sensitizer-induced

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

AOEC - Asthmagens

ID: 9004-34-6

%: 6.0000 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

%: **2.7000** GS: **LT-P1** RC: **None** NANO: **No** ROLE: **Binder**

AGENCY(IES) WITH WARNINGS:

HAZARDS:

Marmoleum Sport hpdrepository.hpd-collaborative.org

| 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: | | |

| IRON OXIDE | ID: 1317-61- 9 |
|------------|-----------------------|

| %: 0.1000 - 3.7500 | GS: LT-UNK | RC: None | nano: No | ROLE: Pigment |
|--------------------|----------------------------|----------|--|---------------|
| HAZARDS: | AGENCY(IES) WITH WARNINGS: | | | |
| CANCER | MAK | | Carcinogen Group 3B - Evidence of carcinogenic effective but not sufficient for classification | |
| | | | | |

SUBSTANCE NOTES:

FERRIC OXIDE YELLOW ID: 51274-00-1

| %: 0.1000 - 3.7500 | GS: LT-UNK | RC: None | nano: No | ROLE: Pigment | |
|--------------------|---|----------------------------|-----------------|----------------------|--|
| HAZARDS: | AGENCY(IES) WITH WARNINGS: | AGENCY(IES) WITH WARNINGS: | | | |
| None Found | No warnings found on HPD Priority lists | | | | |
| | | | | | |

SUBSTANCE NOTES:

FERRIC OXIDE ID: 1309-37-1

| %: 0.1000 - 3.7500 | 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 - 3.7500 | GS: LT-1 | RC: None | NANO: No | ROLE: Pigment | | |
|---------------------------|--------------------|-----------------------------------|-----------------|--|--|--|
| HAZARDS: | AGENCY(IES) WITH W | AGENCY(IES) WITH WARNINGS: | | | | |
| CANCER | US CDC - Occu | US CDC - Occupational Carcinogens | | Occupational Carcinogen | | |
| CANCER | CA EPA - Prop | CA EPA - Prop 65 | | Carcinogen - specific to chemical form or exposure route | | |
| CANCER | IARC | 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).



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 V1.2 (Section 01350/CHPS) - Classroom &

Office scenario

ISSUE DATE: 2017-

CERTIFYING PARTY: Third Party

APPLICABLE FACILITIES: All

CERTIFICATE URI:

07-05

EXPIRY DATE:

CERTIFIER OR LAB: Berkeley

Analytical

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 REMOVER

HPD URL: No HPD available

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:

Can be used for adhesive residue removal post installation.

PRO-LINK LEVEL 7 HPD URL: No HPD available

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:

Recommended neutral pH cleaner for the Marmoleum Sport.

PRO-LINK SYNTHETIC SPORTS FINISH

HPD URL: No HPD available

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:

Recommended finish for the Marmoleum Sport.



Section 5: General Notes

Marmoleum Sport contains no Isocyanates.

MANUFACTURER INFORMATION

MANUFACTURER: Forbo Flooring Systems

ADDRESS: 8 Maplewood Drive

Hazle Township PA 18202, United States

WEBSITE: www.forboflooringna.com

CONTACT NAME: Shannon Wolski

TITLE: Product Support and Education Services

Administrator

PHONE: **570-450-0319**

EMAIL: shannon.wolski@forbo.com

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

CAN Cancer

DEV Developmental toxicity

END Endocrine activity

EYE Eye irritation/corrosivity

GEN Gene mutation

GLO Global warming

MAM Mammalian/systemic/organ toxicity

MUL Multiple hazards

NEU Neurotoxicity **OZO** Ozone depletion

PBT Persistent Bioaccumulative Toxic

PHY Physical Hazard (reactive)
REP Reproductive toxicity

RES Respiratory sensitization

SKI Skin sensitization/irritation/corrosivity

LAN Land Toxicity

NF Not found on Priority Hazard Lists

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 (insuficient 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

LT-P1 List Translator Possible Benchmark 1 LT-1 List Translator Likely Benchmark 1

LT-UNK List Translator Benchmark Unknown (insufficient information from List Translator lists to benchmark)
NoGS Unknown (no data on List Translator Lists)

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.