Eternal Sheet Vinyl by Forbo Flooring Systems

Health Product Declaration v2.1

created via: HPDC Online Builder

CLASSIFICATION: 09 65 16.23 Finishes: Vinyl Sheet Flooring PRODUCT DESCRIPTION: Eternal vinyl sheet floor covering has a highly compressed vinyl wear-layer with a high performance urethane top coat. There is a glass fiber inter-layer to ensure dimensional stability and a calendared CDF backing to support the wear-layer. Guage: .080" (2.0mm) Width: 79" (2 meters) Length: 82' (25 meters) Roll Size: 60 yd2 (50

Section 1: Summary

Basic Method / Product Threshold

CONTENT INVENTORY

Inventory Reporting Format Nested Materials Method Basic Method

Threshold Disclosed Per

C Material

Product

Threshold level

C 100 ppm € 1,000 ppm

C Per GHS SDS C Per OSHA MSDS

C Other

Residuals/Impurities

C Considered C Partially Considered

Not Considered Explanation(s) provided

for Residuals/Impurities? Yes ○ No

Are All Substances Above the Threshold Indicated: Characterized

Percent Weight and Role Provided?

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

ETERNAL SHEET VINYL [POLYVINYL CHLORIDE (PVC) LT-P1 | RES FATTY ACIDS, C14-22, 2-ETHYLHEXYL ESTERS, EPOXIDIZED NoGS GLASS / MINERAL FIBER (POST-CONSUMER RECYCLED) (GLASS / MINERAL FIBER (POST-CONSUMER RECYCLED)) LT-UNK TITANIUM DIOXIDE LT-1 | CAN | END POLYURETHANE FOAMS LT-UNK BIS(2-ETHYLHEXYL) TEREPHTHALATE BM-3 DIPROPYLENE GLYCOL DIBENZOATE LT-P1 | MUL DOLOMITE NoGS CALCIUM CARBONATE BM-3] Number of Greenscreen BM-4/BM3 contents ... 2

Contents highest concern GreenScreen Benchmark or List translator Score ... LT-1

Nanomaterial ... No

INVENTORY AND SCREENING NOTES:

Percentage (%) 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 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?

C Yes No

PREPARER: Self-Prepared

VERIFICATION #:

SCREENING DATE: 2018-02-14 PUBLISHED DATE: 2018-08-29 EXPIRY DATE: 2021-02-14



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

ETERNAL SHEET VINYL 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: POLYVINYL CHLORIDE (PVC) ID: 9002-86-2 %: **47.0000** GS: LT-P1 RC: None ROLE: Polymer Binder NANO: No HAZARDS AGENCY(IES) WITH WARNINGS: RESPIRATORY AOEC - Asthmagens Asthmagen (Rs) - sensitizer-induced SUBSTANCE NOTES FATTY ACIDS, C14-22, 2-ETHYLHEXYL ESTERS, EPOXIDIZED ID: 95370-96-0 ROLE: Stabilizers Binder & Process Additives %: **4.4000** GS: NoGS RC: None NANO: No HAZARDS AGENCY(IES) WITH WARNINGS: None Found No warnings found on HPD Priority lists SUBSTANCE NOTES GLASS / MINERAL FIBER (POST-CONSUMER RECYCLED) (GLASS / MINERAL FIBER (POST-CONSUMER RECYCLED)) ID: 65997-17-3 %: 2,2000 GS: LT-UNK RC: None NANO: No ROLE: Carrier HAZARDS AGENCY(IES) WITH WARNINGS: None Found No warnings found on HPD Priority lists SUBSTANCE NOTES **TITANIUM DIOXIDE** ID: 13463-67-7 %: **0.4000** GS: LT-1 RC: None ROLE: Piament NANO: No 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

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).

POLYURETHANE FOAMS					ID: 9009-54-
%: 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 Iso	cyanates.				
BIS(2-ETHYLHEXYL) TEREPHTHALATE					ID: 6422-86- 2
%: 0.1000 - 21.0000	GS: BM-3	RC: None	nano: No	ROLE: Softner Binders	
HAZARDS:	AGENCY(IES) WITH WARNINGS:				
None Found	No warnings found on HPD	No warnings found on HPD Priority lists			
SUBSTANCE NOTES:					
DIPROPYLENE GLYCOL DIBENZOATE					ID: 27138-31- 4
%: 0.1000 - 21.0000	GS: LT-P1	RC: None	nano: No	ROLE: Softner Binders	
HAZARDS:	AGENCY(IES) WITH WARNINGS:				
MULTIPLE	German FEA - Substances I	German FEA - Substances Hazardous to Waters Class 2 - Hazard to Waters			
SUBSTANCE NOTES:					
DOLOMITE					ID: 16389-88-
%: 0.1000 - 25.0000	GS: NoGS	RC: None	nano: No	ROLE: Filler	
HAZARDS:	AGENCY(IES) WITH WARNINGS:				
None Found	No warnings found on HPD	No warnings found on HPD Priority lists			
SUBSTANCE NOTES:					
CALCIUM CARBONATE					ID: 471-34-
%: 0.1000 - 25.0000	GS: BM-3	RC: None	nano: No	ROLE: Filler	
HAZARDS:	AGENCY(IES) WITH WARNINGS:				
None Found	No warnings found on HPD	No warnings found on HPD Priority lists			
SUBSTANCE NOTES:					

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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.

ISSUE DATE: 2014-11-17

VOC EMISSIONS

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

EXPIRY DATE:

CERTIFYING PARTY: Third Party

APPLICABLE FACILITIES: All

CERTIFICATE URL:

CERTIFICATION AND COMPLIANCE NOTES:

LCA

Environmental Product Declaration (EPD) by UL -Industry Generic

CERTIFIER OR LAB: Berkeley Analytical

CERTIFYING PARTY: Third Party

APPLICABLE FACILITIES: All

CERTIFICATE URL: chrome-

extension://oemmndcbldboiebfnladdacbdfmadadm/https://forbo.blob.core.windows.net/forbodocuments/19694/EPD%20Eternal.pdf

CERTIFICATION AND COMPLIANCE NOTES:

ISSUE EXPIRY CERTIFIER OR DATE: DATE: LAB: **UL**

2013- 2018- Environment, 06-19 06-19 Inc.

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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 V 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 660 ADHESIVE (VOC 12.00 G/L)

HPD URL: No HPD available

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:

Alternate recommended adhesive.

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.

NEUTRAL PH CLEANER

HPD URL: No HPD available

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:

Can be used for routine cleaning.

READY TO USE NEUTRAL PH CLEANER

HPD URL: No HPD available

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:

Can be used for routine cleaning.

FORBO HEAVY DUTY CLEANER

HPD URL: No HPD available

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:

Can be used for interim maintenance.

FORBO MOP ON RESTORER

HPD URL: No HPD available

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:

Can be used for interim maintenance.

FORBO SPRAY BUFF

HPD URL: No HPD available

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:

Can be used for interim maintenance.

FORBO MATTE FINISH

HPD URL: No HPD available

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:

Can be used for interim maintenance.

FORBO GLOSS FINISH

HPD URL: No HPD available

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:

Can be used for interim maintenance.

FORBO WALL BASE

HPD URL: http://www.forboflooringna.com

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:

Can be used with Eternal Sheet Vinyl installation using the recommended adhesive.



Section 5: General Notes

Product lines that fall under Eternal Sheet Vinyl are the following: Eternal Material & Eternal Wood. Eternal contains no Isocyanates.



MANUFACTURER INFORMATION

MANUFACTURER: Forbo Flooring Systems

ADDRESS: 8 Maplewood Drive Hazle Township PA 18202, USA 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 Eve 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-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

BM-4 Benchmark 4 (prefer-safer chemical)

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

noted.

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

Eternal Sheet Vinyl hpdrepository.hpd-collaborative.org