

HPD UNIQUE IDENTIFIER: 97843928064

CLASSIFICATION: 09 65 00 Resilient Flooring

PRODUCT DESCRIPTION: Forbo Marmoleum Ohmex is a homogeneous floor covering made from natural ingredients including flax seed oil, rosin binders, wood flour, limestone and dry pigments which are mixed and then calendared onto a natural jute backing. Topshield is a high-performance finish. Its double UV cured double layer technology delivers extraordinary performance and clear and vibrant colors that remain over time. Topshield creates a 'ready to use' Marmoleum that requires no initial maintenance or polymer application. The surface can be repaired or refreshed in cases of accidents or after years of intensive use. Range of Resistance: $1 \times 10^6 < R1 < 1 - 10^8$ ohms surface to ground; Gauge - 1/10" (2.5 mm); Backing - Jute; Width - 79" (2 meters); Length - 105' (32 meters); Roll Size - 77 square yards (64 square meters).

Section 1: Summary

Basic Method / Product Threshold

CONTENT INVENTORY

Table with 4 columns: Inventory Reporting Format, Threshold Level, Residuals/Impurities Evaluation, and screening options (Characterized, Screened, Identified).

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

MARMOLEUM OHMEX | LINSEED OIL NoGS | WOOD FLOUR (HEMICELLULOSE) NoGS | WOOD FLOUR (LIGNIN) NoGS | LIMESTONE (CALCIUM CARBONATE) BM-3dg | GUM ROSIN LT-P1 | SKI | MAM | AQU | REP | RES | JUTE (PECTIN) LT-UNK | JUTE (LIGNIN) NoGS | JUTE (HEMICELLULOSE) NoGS | RECYCLED FORBO LINOLEUM SCRAP NoGS | CARBON BLACK PEARLS 120 BM-1 | CAN | EYE | MAM | PHY | TITANIUM DIOXIDE BM-1 | CAN | END | MAM | SODIUM CHLORIDE LT-UNK | EYE | PEG-5 COCOMONIUM METHOSULFATE LT-P1 | MUL | POLYESTER ACRYLATE LT-UNK | URETHANE ACRYLATE NoGS |

Number of Greenscreen BM-4/BM3 contents ... 4
Contents highest-concern GreenScreen score(s) (BM-1, LT-1, LT-P1) ... LT-P1, BM-1
Nanomaterial ... No

INVENTORY AND SCREENING NOTES:

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

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

CONSISTENCY WITH OTHER PROGRAMS

Pre-checked for LEED v4.1 Option 1.

Table with 3 columns: Third Party Verified?, PREPARER: Self-Prepared, SCREENING DATE: 2024-06-06; VERIFIER:, PUBLISHED DATE: 2024-06-07; VERIFICATION #:, EXPIRY DATE: 2027-06-06

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

MARMOLEUM OHMEX

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES EVALUATION COMPLETED: 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:

LINSEED OIL

ID: 8001-26-1

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2024-06-06 9:27:59**

%: **26.0000 - 30.0000**

GreenScreen: **NoGS**

RC: **None**

NANO: **No**

SUBSTANCE ROLE: **Binder**

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:

WOOD FLOUR (HEMICELLULOSE)

ID: 9034-32-6

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2024-06-06 9:32:57**

%: **0.0000 - 28.0000**

GreenScreen: **NoGS**

RC: **PreC**

NANO: **No**

SUBSTANCE ROLE: **Filler**

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: Wood flour is a pre-consumer recycled bio-based waste product.

WOOD FLOUR (LIGNIN)

ID: 9005-53-2

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2024-06-06 9:33:36**

#: 0.0000 - 28.0000

GreenScreen: NoGS

RC: PreC

NANO: No

SUBSTANCE ROLE: Filler

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: Wood flour is a pre-consumer recycled bio-based waste product.

LIMESTONE (CALCIUM CARBONATE)

ID: 1317-65-3

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2024-06-06 9:35:43**

#: 17.0000 - 21.0000

GreenScreen: BM-3dg

RC: None

NANO: No

SUBSTANCE ROLE: Filler

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:

GUM ROSIN

ID: 8050-09-7

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2024-06-06 9:29:17**

#: 4.0000 - 8.0000

GreenScreen: LT-P1

RC: None

NANO: No

SUBSTANCE ROLE: Binder

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:

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
SKI	MAK	Sensitizing Substance Sh - Danger of skin sensitization
MAM	GHS - Japan	H335 - May cause respiratory irritation [Specific target organ toxicity - Single exposure - Category 3]
SKI	GHS - New Zealand	Skin sensitisation category 1
AQU	GHS - New Zealand	Hazardous to the aquatic environment - chronic category 2
REP	GHS - Japan	H361 - Suspected of damaging fertility or the unborn child [Toxic to reproduction - Category 2]
AQU	GHS - Japan	H401 - Toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 2]
AQU	GHS - Japan	H411 - Toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 2]
RES	GHS - Japan	H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled [Respiratory sensitization - Category 1A]

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
None found		No listings found on Additional Hazard Lists

SUBSTANCE NOTES:

JUTE (PECTIN)

ID: 9000-69-5

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2024-06-06 9:43:06**

#: **0.0000 - 8.0000** GreenScreen: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Carrier**

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:

JUTE (LIGNIN)

ID: 9005-53-2

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2024-06-06 9:42:48**

#: **0.0000 - 8.0000** GreenScreen: **NoGS** RC: **None** NANO: **No** SUBSTANCE ROLE: **Carrier**

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:		

JUTE (HEMICELLULOSE)

ID: 9034-32-6

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2024-06-06 9:42:29	
%: 0.0000 - 8.0000	GreenScreen: NoGS	RC: None	NANO: No SUBSTANCE ROLE: Carrier
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:			

RECYCLED FORBO LINOLEUM SCRAP

ID: 8001-26-1

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2024-06-06 9:34:36	
%: 0.0000 - 5.0000	GreenScreen: NoGS	RC: Both	NANO: No SUBSTANCE ROLE: Filler
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: Scrap closed-loop recycled Marmoleum is used as an additional filler in the production of new Marmoleum. Sourced internally (pre-consumer) or globally (post-consumer from logistics, installation, and End Of Life*).			

MAGNESIUM OXIDE

ID: 1309-48-4

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2024-06-06 9:57:21	
%: 0.0000 - 3.0000 ALT	GreenScreen: BM-3dg	RC: None	NANO: No SUBSTANCE ROLE: Pigment
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS	
CAN	MAK	Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels	
MAM	GHS - Japan	H335 - May cause respiratory irritation [Specific target organ toxicity - Single exposure - Category 3]	

None found

No listings found on Additional Hazard Lists

SUBSTANCE NOTES: ALTERNATE: This substance is an alternate substance to Titanium dioxide.

ZINC OXIDEID: **1314-13-2**HAZARD DATA SOURCE: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2024-06-06 9:57:41**%: **0.0000 - 3.0000 ALT** GreenScreen: **BM-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Pigment**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
MUL	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters
AQU	EU - GHS (H-Statements) Annex 6 Table 3-1	H400 - Very toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 1]
AQU	EU - GHS (H-Statements) Annex 6 Table 3-1	H410 - Very toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 1]
MAM	GHS - Japan	H370 - Causes damage to organs [Specific target organs/systemic toxicity following single exposure - Category 1]
AQU	GHS - New Zealand	Hazardous to the aquatic environment - acute category 1
AQU	GHS - Japan	H400 - Very toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 1]
AQU	GHS - Japan	H410 - Very toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 1]
AQU	GHS - Australia	H410 - Very toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 1]
AQU	GHS - New Zealand	Hazardous to the aquatic environment - chronic category 1
REP	GHS - Japan	H361 - Suspected of damaging fertility or the unborn child [Toxic to reproduction - Category 2]

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes Precautionary List Antimicrobials
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Biological and Environmentally Released Materials
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Children's Products

SUBSTANCE NOTES: ALTERNATE: This substance is an alternate substance to Titanium dioxide.

BLACK PJ3013

ID: 1317-61-9

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2024-06-06 9:56:59		
%: 0.0000 - 3.0000 ALT	GreenScreen: BM-1	RC: None	NANO: No	SUBSTANCE ROLE: Pigment
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
CAN	MAK	Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification**		
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION		
None found		No listings found on Additional Hazard Lists		

SUBSTANCE NOTES: ALTERNATE: This substance is an alternate substance to Carbon Black pearls 120.

**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.

SICOPLAST V BLUE 68-8110

ID: 147-14-8

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2024-06-06 9:56:33		
%: 0.0000 - 3.0000 ALT	GreenScreen: BM-3	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		
POSITIVE LIST	US Environmental Protection Agency (US EPA)	US EPA - DfE Safer Chemicals Ingredients list (SCIL) Colorants - Green Circle (Verified Low Concern)		

SUBSTANCE NOTES: ALTERNATE: This substance is an alternate substance to Carbon Black pearls 120.

BLUE PS 5.1-87

ID: 147-14-8

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2024-06-06 9:56:15**

#: **0.0000 - 3.0000 ALT** GreenScreen: **BM-3** 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
POSITIVE LIST	US Environmental Protection Agency (US EPA)	US EPA - DfE Safer Chemicals Ingredients list (SCIL) Colorants - Green Circle (Verified Low Concern)

SUBSTANCE NOTES: ALTERNATE: This substance is an alternate substance to Carbon Black pearls 120.

BAYFERROX RED 130

ID: 1309-37-1

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2024-06-06 9:55:57**

#: **0.0000 - 3.0000 ALT** GreenScreen: **BM-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Pigment**

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]**
MAM	GHS - Japan	H370 - Causes damage to organs [Specific target organs/systemic toxicity following single exposure - Category 1]**
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
None found		No listings found on Additional Hazard Lists

SUBSTANCE NOTES: ALTERNATE: This substance is an alternate substance to Carbon Black pearls 120.

**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.

IRGALITE RED K 4170 FP C20

ID: 7023-61-2

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2024-06-06 9:55:39**

#: **0.0000 - 3.0000 ALT** 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: ALTERNATE: This substance is an alternate substance to Carbon Black pearls 120.

CROMOPHTAL RED K 3830 C20

ID: 57971-99-0

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2024-06-06 9:55:21		
%: 0.0000 - 3.0000 ALT	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		
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022		
		Core Restrictions		

SUBSTANCE NOTES: ALTERNATE: This substance is an alternate substance to Carbon Black pearls 120.

RED 147008-C20

ID: 2786-76-7

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2024-06-06 9:55:02		
%: 0.0000 - 3.0000 ALT	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: ALTERNATE: This substance is an alternate substance to Carbon Black pearls 120.

OMNICOLOR-ORANGE DW23132006-PN

ID: 15793-73-4

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2024-06-06 9:54:40		
%: 0.0000 - 3.0000 ALT	GreenScreen: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Pigment

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
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 Core Restrictions

SUBSTANCE NOTES: ALTERNATE: This substance is an alternate substance to Carbon Black pearls 120.

IOX YELLOW 02

ID: 51274-00-1

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2024-06-06 9:54:19**

%: **0.0000 - 3.0000 ALT** 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: ALTERNATE: This substance is an alternate substance to Carbon Black pearls 120.

****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.

YELLOW PS 2.1-26

ID: 5567-15-7

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2024-06-06 9:53:56**

%: **0.0000 - 3.0000 ALT** GreenScreen: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Pigment**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
EYE	GHS - New Zealand	Eye irritation category 2
AQU	GHS - New Zealand	Hazardous to the aquatic environment - chronic category 3
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 Core Restrictions

SUBSTANCE NOTES: ALTERNATE: This substance is an alternate substance to Carbon Black pearls 120.

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2024-06-06 9:53:33**%: **0.0000 - 3.0000 ALT** 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: ALTERNATE: This substance is an alternate substance to Carbon Black pearls 120.

CARBON BLACK PEARLS 120

ID: 1333-86-4

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2024-06-06 9:53:14**%: **0.0000 - 3.0000** GreenScreen: **BM-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Pigment**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
CAN	US CDC - Occupational Carcinogens	Occupational Carcinogen**
CAN	MAK	Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification**
CAN	CA EPA - Prop 65	Carcinogen - specific to chemical form or exposure route**
CAN	IARC	Group 2b - Possibly carcinogenic to humans**
EYE	GHS - New Zealand	Eye irritation category 2**
CAN	GHS - New Zealand	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]**
PHY	GHS - Japan	H251 - Self-heating;; may catch fire [Self-heating substances and mixtures - Category 1]**
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
None found		No listings found on Additional Hazard Lists

SUBSTANCE NOTES: **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: **2024-06-06 9:46:12**

#: 0.0000 - 3.0000

GreenScreen: **BM-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	IARC	Group 2b - Possibly carcinogenic to humans**
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]**
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Children's Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Formulated Consumer Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)	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: **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.

SODIUM CHLORIDE

ID: **7647-14-5**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2024-06-06 9:41:53**

#: 0.0000 - 3.0000

GreenScreen: **LT-UNK**

RC: **None**

NANO: **No**

SUBSTANCE ROLE: **Anti-static**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
EYE	GHS - New Zealand	Eye irritation category 2
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
None found		No listings found on Additional Hazard Lists

SUBSTANCE NOTES:

PEG-5 COCOMONIUM METHOSULFATE

ID: 68989-03-7

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2024-06-06 9:41:29**

%: **0.0000 - 3.0000** GreenScreen: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Anti-static**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
MUL	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes Precautionary List Antimicrobials

SUBSTANCE NOTES:

POLYESTER ACRYLATE

ID: 73378-73-1

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2024-06-06 9:44:59**

%: **0.0000 - 0.5000** GreenScreen: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Carrier**

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:

URETHANE ACRYLATE

ID: 68987-79-1

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2024-06-06 9:44:35**

%: **0.0000 - 0.5000** GreenScreen: **NoGS** RC: **None** NANO: **No** SUBSTANCE ROLE: **Coating**

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:

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

CERTIFYING PARTY: Third Party

ISSUE DATE: 2024-05-17 00:00:00

CERTIFIER OR LAB: Berkeley

APPLICABLE FACILITIES: All

EXPIRY DATE: 2027-05-17 00:00:00

Analytical

CERTIFICATE URL:

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 615 EUROSTAR LINO EC ADHESIVE

MANUFACTURER (OR GENERIC): Forbo Flooring Systems

HPD URL: No HPD Available

ACCESSORY TYPE: Adhesive

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES: Forbo 615 Eurostar Lino EC is the standard recommended adhesive for Marmoleum Ohmex ESD installations. Refer to Forbo's Sustain 1195 Technical Data Sheet for full installation recommendations and requirements.

FORBO SUSTAIN 1195 ADHESIVE

MANUFACTURER (OR GENERIC): Forbo Flooring Systems

HPD URL: No HPD Available

ACCESSORY TYPE: Adhesive

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES: Forbo Sustain 1195 can be used as an alternate adhesive for non-ESD Marmoleum Ohmex installations. Refer to Forbo's Sustain 1195 Technical Data Sheet for full installation recommendations and requirements.

FORBO SUSTAIN 100 ADHESIVE

MANUFACTURER (OR GENERIC): Forbo Flooring Systems

HPD URL: No HPD Available

ACCESSORY TYPE: Adhesive

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES: Forbo Sustain 100 can be used as an alternate adhesive for non-ESD Marmoleum Ohmex installations. Refer to Forbo's Sustain 100 Technical Data Sheet for full installation recommendations and requirements.

FORBO L 885 ADHESIVE

MANUFACTURER (OR GENERIC): Forbo Flooring Systems

HPD URL: No HPD Available

ACCESSORY TYPE: Adhesive

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES: Forbo L 885 can be used as an alternate adhesive for non-ESD Marmoleum Ohmex installations. Refer to Forbo's L 885 Technical Data Sheet for full installation recommendations and requirements.

FORBO 660 ADHESIVE

MANUFACTURER (OR GENERIC): Forbo Flooring Systems

HPD URL: No HPD Available

ACCESSORY TYPE: Adhesive

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES: Forbo 660 adhesive can be used as an alternate adhesive for non-ESD Marmoleum Ohmex installations. Refer to Forbo's 660 adhesive Technical Data Sheet for full installation recommendations and requirements.

FORBO ARMORCOVEMANUFACTURER (OR GENERIC): **Forbo Flooring Systems**

HPD URL: No HPD Available

ACCESSORY TYPE: Installation Accessory

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES: Forbo ArmorCove is the recommended coving system for use with Forbo Marmoleum products. It is a fully integrated coving system that is comprised of a 1-piece aluminum cove-former, full vertical backing and cap, with Marmoleum as the finished surface. It is puncture-proof and water resistant. Refer to Forbo's ArmorCove Technical Data Sheet for full installation recommendations and requirements.

FORBO MARMOWELD ETUMANUFACTURER (OR GENERIC): **Forbo Flooring Systems**

HPD URL: No HPD Available

ACCESSORY TYPE: Installation Accessory

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES: Marmoweld ETU is the preferred method of welding seams where seamless or monolithic flooring is required. Marmoweld ETU is a color matching paste weld which can also be used to make minor repairs in Forbo Marmoleum products. Refer to Forbo's Marmoweld ETU Technical Data Sheet for full installation recommendations and requirements.

FORBO ADHESIVE REMOVERMANUFACTURER (OR GENERIC): **Forbo Flooring Systems**

HPD URL: No HPD Available

ACCESSORY TYPE: Cleaning Product

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES: Forbo Adhesive Remover is a recommended cleaning product for use with Forbo Marmoleum Ohmex.

FORBO NEUTRAL PH CLEANERMANUFACTURER (OR GENERIC): **Forbo Flooring Systems**

HPD URL: No HPD Available

ACCESSORY TYPE: Cleaning Product

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES: Forbo Neutral pH Cleaner is a recommended cleaning product for use with Forbo Marmoleum Ohmex.

 **Section 5: General Notes**

Marmoleum Ohmex is only available in select colors. Marmoleum Ohmex meets the following surface to ground ranges when tested in accordance to ASTM F 150, NFPA 99, and/or EOS/ESD S7.1: $1 \times 10^6 < R1 < 1 - 10^8$ ohms surface to ground. Marmoleum Ohmex contains no Isocyanates.

MANUFACTURER INFORMATION

MANUFACTURER: **Forbo Flooring Systems**
 ADDRESS: **8 Maplewood Drive**
Hazleton, PA 18202
 COUNTRY: **United States**

WEBSITE: **www.forboflooringNA.com**
 CONTACT NAME: **Jeff Miller**
 TITLE: **Sustainability & Documentation Administrator**
 PHONE: **570-450-0319**
 EMAIL: **jeff.miller@forbo.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	LAN Land toxicity	PHY Physical hazard (flammable or reactive)
CAN Cancer	MAM Mammalian/systemic/organ toxicity	REP Reproductive
DEV Developmental toxicity	MUL Multiple	RES Respiratory sensitization
END Endocrine activity	NEU Neurotoxicity	SKI Skin sensitization/irritation/corrosivity
EYE Eye irritation/corrosivity	NF Not found on Priority Hazard Lists	UNK Unknown
GEN Gene mutation	OZO Ozone depletion	
GLO Global warming	PBT Persistent, bioaccumulative, and toxic	

GreenScreen (GS)

BM-4 Benchmark 4 (prefer-safer chemical)	LT-P1 List Translator Possible 1 (Possible Benchmark-1)
BM-3 Benchmark 3 (use but still opportunity for improvement)	LT-1 List Translator 1 (Likely Benchmark-1)
BM-2 Benchmark 2 (use but search for safer substitutes)	LT-UNK List Translator Benchmark Unknown
BM-1 Benchmark 1 (avoid - chemical of high concern)	NoGS No GreenScreen.
BM-U Benchmark Unspecified (due to insufficient data)	

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 HPD and

