

HPD UNIQUE IDENTIFIER: 1372288230400

CLASSIFICATION: 09 65 16.23 Vinyl Sheet Flooring

PRODUCT TYPE: Static-Control, Vinyl Sheet Floor Covering (Resilient)

PRODUCT DESCRIPTION: Forbo Sphera SD | EC is a homogeneous conductive vinyl sheet floorcovering that is made of low emitting, 100% phthalate free materials. It has a uniquely embossed SMART-top surface, which provides a high resistance to chemicals, scratches and stains. Conductive polymer granules are added to the PVC mix to make the conductive chips in the material.

Section 1: Summary

Basic Method / Product Threshold

CONTENT INVENTORY

<b>Inventory Reporting Format</b>	<b>Threshold Level</b>	<b>Residuals/Impurities Evaluation</b>	<i>For all contents above the threshold, the manufacturer has:</i>
<input type="radio"/> Nested Materials Method	<input type="radio"/> 100 ppm	<input type="radio"/> Completed	<b>Characterized</b> <input checked="" type="radio"/> Yes <input type="radio"/> No
<input checked="" type="radio"/> Basic Method	<input checked="" type="radio"/> 1,000 ppm	<input type="radio"/> Partially Completed	<i>Provided weight and role.</i>
<b>Threshold Disclosed Per</b>	<input type="radio"/> Per GHS SDS	<input checked="" type="radio"/> Not Completed	<b>Screened</b> <input checked="" type="radio"/> Yes <input type="radio"/> No
<input type="radio"/> Material	<input type="radio"/> Other	<b>Explanation(s) provided :</b>	<i>Provided screening results using HPDC-approved methods.</i>
<input checked="" type="radio"/> Product		<input checked="" type="radio"/> Yes <input type="radio"/> No	<b>Identified</b> <input checked="" type="radio"/> Yes <input type="radio"/> No
			<i>Provided name and CAS RN or other identifier.</i>

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

SPHERA SD | EC [ PVC (POLYVINYL CHLORIDE) LT-P1 | MAM CHALK (CALCIUM CARBONATE) BM-3 | EYE PLASTICIZER OILS, DOTP (BIS(2-ETHYLHEXYL) TEREPHTHALATE) BM-3dg CONDUCTIVE CHIPS (TITANIUM DIOXIDE) BM-1 \* | CAN | END | MAM PROPRIETARY MIXTURES & LUBRICANTS (FATTY ACIDS, C14-22, 2-ETHYLHEXYL ESTERS, EPOXIDIZED) NoGS BARIUM SULFATE BM-2 | CAN | MAM ACRYLATED ALIPHATIC URETHANE NoGS POLYURETHANE LACQUER NoGS CONDUCTIVE COATING (WATER) BM-4 CONDUCTIVE COATING (CARBON BLACK) BM-1 \* | CAN | EYE | MAM | PHY CONDUCTIVE COATING (PROPYLENE GLYCOL) BM-2 | END | MAM ]

Number of Greenscreen BM-4/BM3 contents ... 5

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: ClearChem Standard BkA-CC-01.3

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

LCA: Environmental Product Declaration (EPD) by UL

CONSISTENCY WITH OTHER PROGRAMS

Pre-checked for LEED v4.1 Option 1.

Third Party Verified?

- Yes
- No

PREPARER: Self-Prepared

VERIFIER:

VERIFICATION #:

SCREENING DATE: 2024-07-16

PUBLISHED DATE: 2024-07-18

EXPIRY DATE: 2027-07-16

## 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](http://www.hpd-collaborative.org/hpd-2-3-standard)

### SPHERA SD | EC

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:

#### PVC (POLYVINYL CHLORIDE)

ID: 9002-86-2

HAZARD DATA SOURCE: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2024-07-17 12:16:03

%: 40.0000 - 44.0000

GreenScreen: LT-P1

RC: None

NANO: No

SUBSTANCE ROLE: Binder

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
MAM	GHS - Japan	H335 - May cause respiratory irritation [Specific target organ toxicity - Single exposure - Category 3]
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	Perkins+Will (P+W)	P&W - Precautionary List  Precautionary list of substances recommended for avoidance
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022  Core Restrictions
RESTRICTED LIST	International Living Future Institute (ILFI)	Living Building Challenge 4.0 - Red List of Materials & Chemicals - Effective April 1, 2024  Red List substances to avoid in Living Building Challenge V4.0 projects

SUBSTANCE NOTES:

#### CHALK (CALCIUM CARBONATE)

ID: 471-34-1

HAZARD DATA SOURCE: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2024-07-17 12:30:13

%: 30.0000 - 35.0000

GreenScreen: BM-3

RC: None

NANO: No

SUBSTANCE ROLE: Filler

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:

**PLASTICIZER OILS, DOTP (BIS(2-ETHYLHEXYL) TEREPHTHALATE)**

ID: 6422-86-2

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2024-07-17 12:19:05**

%: **17.0000 - 21.0000** GreenScreen: **BM-3dg** RC: **None** NANO: **No** SUBSTANCE ROLE: **Softener**

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	Green Science Policy Institute (GSPI)	GSPI - Six Classes Precautionary List Some Solvents

SUBSTANCE NOTES:

**CONDUCTIVE CHIPS (TITANIUM DIOXIDE)**

ID: 13463-67-7

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2024-07-17 12:22:42**

%: **0.0000 - 10.0000** GreenScreen: **BM-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Conductor**

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 (C2CPII)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022  Children's Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022  Formulated Consumer Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.0 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.

**CONDUCTIVE CHIPS (RED)**

ID: **5280-78-4**

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

HAZARD SCREENING DATE: **2024-07-17 12:23:45**

%: **0.0000 - 10.0000 ALT**

GreenScreen: **LT-UNK**

RC: **None**

NANO: **No**

SUBSTANCE ROLE: **Conductor**

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 Conductive Chips (Titanium dioxide).

### CONDUCTIVE CHIPS (YELLOW)

ID: 51274-00-1

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2024-07-17 12:24:26**

%: **0.0000 - 10.0000 ALT** GreenScreen: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Conductor**

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 Conductive Chips (Titanium dioxide).

\*\*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.

### CONDUCTIVE CHIPS (BLUE)

ID: 147-14-8

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2024-07-17 12:24:59**

%: **0.0000 - 10.0000 ALT** GreenScreen: **BM-3** RC: **None** NANO: **No** SUBSTANCE ROLE: **Conductor**

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 Conductive Chips (Titanium dioxide).

### CONDUCTIVE CHIPS (CARBON BLACK)

ID: 1333-86-4

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2024-07-17 12:25:34**

%: **0.0000 - 10.0000 ALT** GreenScreen: **BM-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Conductor**

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: ALTERNATE: This substance is an alternate substance to Conductive Chips (Titanium dioxide).  
 \*\*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.

**PROPRIETARY MIXTURES & LUBRICANTS (FATTY ACIDS, C14-22, 2-ETHYLHEXYL ESTERS, EPOXIDIZED)** ID: 95370-96-0

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: 2024-07-17 12:21:47

%: **2.5000 - 3.5000** GreenScreen: **NoGS** RC: **None** NANO: **No** SUBSTANCE ROLE: **Stabilizer**

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:

**SILICIC ACID, ALUMINUM SODIUM SALT, SULFURIZED** ID: 101357-30-6

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: 2024-07-17 12:27:23

%: **0.0000 - 1.5000 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 v4.0 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 v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022  Children's Products

SUBSTANCE NOTES: ALTERNATE: This substance is an alternate substance to Barium sulfate.

**PIGMENT BLUE 15**

ID: 147-14-8

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2024-07-17 12:28:59**

%: **0.0000 - 1.5000 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 Barium sulfate.

**TITANIUM DIOXIDE**

ID: 13463-67-7

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2024-07-17 12:28:39**

%: **0.0000 - 1.5000 ALT** 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 (C2CPII)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022  Children's Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022  Formulated Consumer Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.0 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: ALTERNATE: This substance is an alternate substance to Barium sulfate.

\*\*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.

## CARBON BLACK

ID: 1333-86-4

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

HAZARD SCREENING DATE: **2024-07-17 12:28:20**

#: **0.0000 - 1.5000 ALT**

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: ALTERNATE: This substance is an alternate substance to Barium sulfate.  
 \*\*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.

**FERRIC OXIDE**

ID: **1309-37-1**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library**      HAZARD SCREENING DATE: **2024-07-17 12:27:59**

%: **0.0000 - 1.5000 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 Barium sulfate.

\*\*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.

### DICHRONIUM TRIOXIDE

ID: 1308-38-9

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2024-07-17 12:27:41**

%: <b>0.0000 - 1.5000 ALT</b>	GreenScreen: <b>BM-1</b>	RC: <b>None</b>	NANO: <b>No</b>	SUBSTANCE ROLE: <b>Pigment</b>
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
SKI	MAK	Sensitizing Substance Sh - Danger of skin sensitization		
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 (C2CPII)	C2C Certified v4.0 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 v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022		
		Children's Products		

SUBSTANCE NOTES: ALTERNATE: This substance is an alternate substance to Barium sulfate.

### PIGMENT YELLOW 180

ID: 85497-06-9

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2024-07-17 12:27:00**

%: <b>0.0000 - 1.5000 ALT</b>	GreenScreen: <b>LT-UNK</b>	RC: <b>None</b>	NANO: <b>No</b>	SUBSTANCE ROLE: <b>Pigment</b>
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 Barium sulfate.

### CHROME RUTILE YELLOW

ID: 68186-90-3

%: **0.0000 - 1.5000 ALT**      GreenScreen: **BM-1**      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 (C2CPH)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022  Biological and Environmentally Released Materials
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPH)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022  Children's Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPH)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022  Cosmetics & Personal Care Products

SUBSTANCE NOTES: ALTERNATE: This substance is an alternate substance to Barium sulfate.

## BARIUM SULFATE

ID: **7727-43-7**

%: **0.0000 - 1.5000**      GreenScreen: **BM-2**      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	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 (C2CPH)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022  Biological and Environmentally Released Materials
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPH)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022  Children's Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPH)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022  Cosmetics & Personal Care Products

SUBSTANCE NOTES:

**ACRYLATED ALIPHATIC URETHANE**

ID: 68987-79-1

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2024-07-17 12:31:40**%: **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:

**POLYURETHANE LACQUER**

ID: 52404-33-8

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2024-07-17 12:32:15**%: **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:

**CONDUCTIVE COATING (WATER)**

ID: 7732-18-5

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2024-07-17 12:32:55**%: **0.0000 - 0.5000** GreenScreen: **BM-4** 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
EXEMPT	European Union / European Commission (EU EC)	EU - REACH Exemptions  Exempted from REACH Annex IV listing due to intrinsic safety

SUBSTANCE NOTES:

**CONDUCTIVE COATING (CARBON BLACK)**

ID: 1333-86-4

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2024-07-17 12:33:26**

%: **0.0000 - 0.5000**      GreenScreen: **BM-1**      RC: **None**      NANO: **No**      SUBSTANCE ROLE: **Carrier**

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.

**CONDUCTIVE COATING (PROPYLENE GLYCOL)**

ID: **57-55-6**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library**      HAZARD SCREENING DATE: **2024-07-17 12:34:11**

%: **0.0000 - 0.5000**      GreenScreen: **BM-2**      RC: **None**      NANO: **No**      SUBSTANCE ROLE: **Carrier**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
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
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes Precautionary List  Antimicrobials
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes Precautionary List  Some Solvents
POSITIVE LIST	US Environmental Protection Agency (US EPA)	US EPA - DfE Safer Chemicals Ingredients list (SCIL)  Enzymes and Stabilizers - Green Circle (Verified Low Concern)

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

#### ClearChem Standard BkA-CC-01.3

CERTIFYING PARTY: Self-declared

ISSUE DATE: 2024-06-20 00:00:00

CERTIFIER OR LAB: Berkeley

APPLICABLE FACILITIES: Classroom and Office

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

Analytical

CERTIFICATE URL:

CERTIFICATION AND COMPLIANCE NOTES:

### 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: Classroom and Office

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

Analytical

CERTIFICATE URL:

CERTIFICATION AND COMPLIANCE NOTES:

### LCA

#### Environmental Product Declaration (EPD) by UL

CERTIFYING PARTY: Third Party

ISSUE DATE: 2024-06-21 00:00:00

CERTIFIER OR LAB: UL

APPLICABLE FACILITIES: All

EXPIRY DATE: 2029-06-21 00:00:00

Environment

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 C 930 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 C 930 is the standard recommended adhesive for installation of the copper grounding strap for conductive Sphera SD | EC installations. Refer to Forbo's C 930 Technical Data Sheet for full installation recommendations and requirements.

### FORBO FST 1299 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 FST 1299 is the standard recommended adhesive for conductive Sphera SD | EC installations. Note: Forbo C 930 is to be used for installation of the copper grounding strap. Forbo FST 1299 is to be used for the remainder of the installation. Refer to Forbo's FST 1299 Technical Data Sheet for full installation recommendations and requirements.

### COPPER GROUNDING STRAP

MANUFACTURER (OR GENERIC): Forbo Flooring Systems

HPD URL: No HPD Available

ACCESSORY TYPE: Installation Accessory

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES: A copper grounding strap is required in conjunction with the Forbo C 930 Adhesive if the customer needs a conductive floor.

**FORBO WALL BASE**MANUFACTURER (OR GENERIC): **Forbo Flooring Systems**

HPD URL: No HPD Available

ACCESSORY TYPE: Installation Accessory

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES: Forbo Wall Base is an optional accessory for use with Sphera SD | EC. Forbo Wall Base is produced in roll form and constructed from high grade resins, thermoplastic binders, fillers, and pigments.

**FORBO ADHESIVE REMOVER**MANUFACTURER (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 Sphera SD | EC.

**FORBO NEUTRAL PH CLEANER**MANUFACTURER (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 Sphera SD | EC.

**FORBO HEAVY DUTY CLEANER**MANUFACTURER (OR GENERIC): **Forbo Flooring Systems**

HPD URL: No HPD Available

ACCESSORY TYPE: Cleaning Product

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES: Forbo Heavy Duty Cleaner is a recommended cleaning product for use with Sphera SD | EC.

**FORBO SPHERA WELD ROD**MANUFACTURER (OR GENERIC): **Forbo Flooring Systems**

HPD URL: No HPD Available

ACCESSORY TYPE: Installation Accessory

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES: The Forbo Sphera Weld Rod is the recommended weld rod for seaming Forbo Sphera SD | EC.

 **Section 5: General Notes**

Sphera SD | EC 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: **5704500319**  
 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**

<b>AQU</b> Aquatic toxicity	<b>LAN</b> Land toxicity	<b>PHY</b> Physical hazard (flammable or reactive)
<b>CAN</b> Cancer	<b>MAM</b> Mammalian/systemic/organ toxicity	<b>REP</b> Reproductive
<b>DEV</b> Developmental toxicity	<b>MUL</b> Multiple	<b>RES</b> Respiratory sensitization
<b>END</b> Endocrine activity	<b>NEU</b> Neurotoxicity	<b>SKI</b> Skin sensitization/irritation/corrosivity
<b>EYE</b> Eye irritation/corrosivity	<b>NF</b> Not found on Priority Hazard Lists	<b>UNK</b> Unknown
<b>GEN</b> Gene mutation	<b>OZO</b> Ozone depletion	
<b>GLO</b> Global warming	<b>PBT</b> Persistent, bioaccumulative, and toxic	

**GreenScreen (GS)**

<b>BM-4</b> Benchmark 4 (prefer-safer chemical)	<b>LT-P1</b> List Translator Possible 1 (Possible Benchmark-1)
<b>BM-3</b> Benchmark 3 (use but still opportunity for improvement)	<b>LT-1</b> List Translator 1 (Likely Benchmark-1)
<b>BM-2</b> Benchmark 2 (use but search for safer substitutes)	<b>LT-UNK</b> List Translator Benchmark Unknown
<b>BM-1</b> Benchmark 1 (avoid - chemical of high concern)	<b>NoGS</b> No GreenScreen.
<b>BM-U</b> 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](http://www.greenscreenchemicals.org), and Best Practices for Hazard Screening on the HPDC website ([hpd-collaborative.org](http://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*

