

HPD UNIQUE IDENTIFIER: 140272922624

CLASSIFICATION: 08 80 00 Glazing

PRODUCT DESCRIPTION: Glass marker boards are sheets of back-painted glass with a sheet steel backing. The glass is available in regular, low-iron, and dichroic. Low-iron glass is produced with a minimal amount of iron, reducing the greenish tint and improving light transmission. Dichroic glass is a specialized glass that displays multiple colors by reflecting and transmitting light differently, created through the vacuum deposition of thin metal oxide layers. The glass is available as laminated, standard annealed, or safety tempered; annealed glass is glass in its basic form that breaks into jagged pieces, while tempered glass is approximately four times stronger and breaks into small dice-sized pieces. Laminated glass is a safety product; if broken, it remains in place, held together by the interlayer at its core. The magnetic marker boards are offered in monolithic and laminated forms. Monolithic magnetic marker boards are a single piece of back-painted glass with a steel backing. Laminated magnetic marker boards are two pieces of back-painted glass bonded together with a PVB or EVA with a sheet of steel between them to create a marker board with an “A” and a “B” side. A fabrication option is digital printing ceramic inks onto the glass surface, producing high-resolution graphics and images. Another fabrication option is to apply Bendheim’s ZKISS Concealed Glass Cladding System to the marker board to facilitate installation of the board.

Section 1: Summary

Nested Method / Product Threshold

CONTENT INVENTORY

Inventory Reporting Format	Threshold Level	Residuals/Impurities Evaluation	
☒ Nested Materials Method	☐ 100 ppm	Completed in 29 of 29 Materials	<i>For all contents above the threshold, the manufacturer has:</i>
☐ Basic Method	☒ 1,000 ppm	Explanation(s) provided for Residuals/Impurities?	Characterized ☒ Yes ☐ No
Threshold Disclosed Per	☐ Per GHS SDS		<i>Provided weight and role.</i>
☐ Material	☐ Other	☒ Yes ☐ No	Screened ☒ Yes ☐ No
☒ Product			<i>Provided screening results using HPDC-approved methods.</i>
			Identified ☐ Yes ☒ 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.

NESTED MATERIAL | **MATERIAL OR SUBSTANCE** | *RESIDUAL OR IMPURITY*

GREENSCREEN SCORE | HAZARD TYPE

GLASS (FLOAT OR ETCHED) [**SODA-LIME SILICATE GLASS** NoGS]

MAGNETIC INTERLAYER (GALVANIZED STEEL) [**IRON** LT-P1] END **ZINC** LT-P1] MUL | AQU **MANGANESE** LT-P1] END | MUL | REP | MAM | AQU]

PVB LAMINATING FILM [**ACETIC ACID ETHENYL ESTER, POLYMER WITH ETHENOL, CYCLIC ACETAL WITH BUTANAL** LT-UNK **HEXANOIC ACID, 2-ETHYL-, 1,2-ETHANEDIYLBIS(OXY-2,1-ETHANEDIYL) ESTER** LT-UNK]

ALUMINUM Z-CLIPS [**ALUMINUM** BM-1] END | PHY | MAM] **TAPE** [**TAPE** Not Screened] **BACK-PAINTED COLORANT 1** [**WATER** BM-4]

UNDISCLOSED NoGS] **CERAMIC INKS (DIGITAL-PRINTING)** []

Number of Greenscreen BM-4/BM3 contents ... 21

Contents highest-concern GreenScreen score(s) (BM-1, LT-1, LT-P1) ... LT-P1, BM-1

Nanomaterial ... No

INVENTORY AND SCREENING NOTES:

"Proprietary Ingredient Due Diligence Exception"; Method: "Direct entry of data without verifiability of CASRN or other identifier"

This Health Product Declaration (HPD) was completed in accordance with the HPD Standard version 2.3, and discloses hazards associated with all substances present at or above 1000 parts per million (ppm) in the finished product, along with the role and percent weight for each substance. Substances not "Identified" are those considered proprietary to suppliers, and thus are "Undisclosed" on this HPD. The variation in content is due to varying proportions of materials in substances due to the same product being available in different thicknesses and with different options: Glass (Float, Textured and Etched) in 6mm to 12mm total glass thickness, EVA or PVB laminating film with back painted or optional ceramic inks (digital printing), magnetic interlayer, optional Bendheim's proprietary Z-KISS attachment. Metal alloy have been reported by listing the individual alloying elements that, when combined, make up the metal alloy as required by the Metal Alloy Special Condition Document (SCMetalAlloy/2023-07-20). It should be noted that the alloying process modifies the properties of the material, usually providing increased strength, malleability, or resistance to corrosion. For example, steel (CAS RN 12597-69-2) does not have a GreenScreen Score nor hazards (refer to Pharos). Finally, an "Exception for proprietary ingredient" has been used for the Tape Material for which the composition by substances CAS RN has not been identified. The Tape Material represents less than 1.5 wt.% of the product and is a homogenous material. This reporting is compliant with HPDC's Best Practice document "Content Inventory Completeness".

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 - Not tested

CONSISTENCY WITH OTHER PROGRAMS

Third Party Verified?

☐ Yes

☒ No

PREPARER: Vertima

VERIFIER:

VERIFICATION #:

SCREENING DATE: 2024-05-17

PUBLISHED DATE: 2025-08-19

EXPIRY DATE: 2027-05-17

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

GLASS (FLOAT OR ETCHED)		%: 45.0000 - 85.0000	
PRODUCT THRESHOLD: 1000 ppm		RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes	MATERIAL TYPE: Glass
RESIDUALS AND IMPURITIES NOTES: Residuals and impurities were evaluated based on provided supplier data.			
OTHER MATERIAL NOTES: The variation in content is due to varying proportions of materials due to the same product being available in different thicknesses and with different options: glass (Float or Etched) in 6 mm to 12 mm total glass thickness, EVA or PVB laminating film for laminated glass, back-painted, optional ceramic inks (digital printing), magnetic interlayer (galvanized steel), and optional Z-Kiss system. It should be noted that glass by itself is an inherently nonemitting source as defined by LEED.			

SODA-LIME SILICATE GLASS				ID: 2446523-50-6
HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2024-05-17 10:57:27	
%: 100.0000 - 100.0000	GreenScreen: NoGS	RC: Both	NANO: Unknown	SUBSTANCE ROLE: Structure component
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: Post-consumer recycled content may be processed glass and pre-consumer recycled content may come from external cutting plants.				

MAGNETIC INTERLAYER (GALVANIZED STEEL)		%: 14.0000 - 57.0000	
PRODUCT THRESHOLD: 1000 ppm		RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes	MATERIAL TYPE: Metal
RESIDUALS AND IMPURITIES NOTES: Residuals and impurities were evaluated based on provided supplier data.			
OTHER MATERIAL NOTES: The variation in content is due to varying proportions of materials due to the same product being available in different thicknesses and with different options: glass (Float or Etched) in 6 mm to 12 mm total glass thickness, EVA or PVB laminating film for laminated glass, back-painted, optional ceramic inks (digital printing), magnetic interlayer (galvanized steel), and optional Z-Kiss system. This material also includes the galvanized steel part of the Z-Kiss system. It should be noted that steel is a metal alloy and alloys are generally expected to have different hazards than their alloying elements. According to Pharos, steel (CAS RN 12597-69-2) does not have a GreenScreen Score (NoGS) nor hazards. The UNS number for this steel is not known.			

IRON			ID: 7439-89-6	
HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2024-05-17 10:57:27	
%: 95.0000 - 99.9000	GreenScreen: LT-P1	RC: Both	NANO: Unknown	SUBSTANCE ROLE: Alloy element
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
END	TEDX - Potential Endocrine Disruptors		Potential Endocrine Disruptor	

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
REP	GHS - Japan	H360 - May damage fertility or the unborn child [Toxic to reproduction - Category 1B]
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 - Australia	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organ toxicity - repeated exposure - Category 1]
AQU	GHS - New Zealand	Hazardous to the aquatic environment - chronic category 3
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]
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
		Biological and Environmentally Released Materials
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

SUBSTANCE NOTES: It should be noted that manganese is an alloying element of steel, the metal alloy, and that alloys are generally expected to have different hazards than their alloying elements. Weight ranges are used to cover variation in product manufacturing.

PVB LAMINATING FILM

%: 0.0000 - 13.5000

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes

MATERIAL TYPE: Polymeric Material

RESIDUALS AND IMPURITIES NOTES: Residuals and impurities were evaluated based on provided supplier data.

OTHER MATERIAL NOTES: The variation in content is due to varying proportions of materials due to the same product being available in different thicknesses and with different options: glass (Float or Etched) in 6 mm to 12 mm total glass thickness, EVA or PVB laminating film for laminated glass, back-painted, optional ceramic inks (digital printing), magnetic interlayer (galvanized steel), and optional Z-Kiss system. Minimum weight % is zero as the Magnetic Glass Marker Boards are available with back-painted Monolithic Glass or back-painted Laminated Glass. Monolithic Glass has no EVA or PVB laminating film.

POLYVINYL BUTYRAL				ID: 63148-65-2
HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-05-12 13:22:44	
%: 65.0000 - 85.0000 ALT	GreenScreen: LT-UNK	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: The percentage weight range is used to account for product variability and/or to maintain the confidentiality of the material composition in the manufacturing process.				
ALTERNATE: This substance is an alternate substance to Acetic acid ethenyl ester, polymer with 1,1-bis(ethenyloxy)butane and ethenol.				

ACETIC ACID ETHENYL ESTER, POLYMER WITH ETHENOL, CYCLIC ACETAL WITH BUTANAL					ID: 68648-78-2
HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2024-05-17 10:57:27		
%: 72.0000 - 72.0000	GreenScreen: LT-UNK	RC: None	NANO: Unknown	SUBSTANCE ROLE: Polymer species	
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:					

HEXANOIC ACID, 2-ETHYL-, 1,2-ETHANEDIYLBIS(OXY-2,1-ETHANEDIYL) ESTER					ID: 94-28-0
HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2024-05-17 10:57:27		
%: 28.0000 - 28.0000	GreenScreen: LT-UNK	RC: None	NANO: Unknown	SUBSTANCE ROLE: Plasticizer	
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:					

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes

MATERIAL TYPE: Metal

RESIDUALS AND IMPURITIES NOTES: Residuals and impurities were evaluated based on provided supplier data.

OTHER MATERIAL NOTES: The variation in content is due to varying proportions of materials due to the same product being available in different thicknesses and with different options: glass (Float or Etched) in 6 mm to 12 mm total glass thickness, EVA or PVB laminating film for laminated glass, back-painted, optional ceramic inks (digital printing), magnetic interlayer (galvanized steel), and optional Z-Kiss system. This material is only present with the Z-Kiss system. It should be noted that this material is an aluminum alloy and alloys are generally expected to have different hazards than their alloying elements. For the Z-Kiss system, aluminum 6061-T6, 6063-T6 & 6005A-T61 may be used (UNS A96061, UNS A96063 & UNS A96005). According to Pharos, aluminum alloy UNS A96061, UNS A96063 & UNS A96005 do not have a GreenScreen Score (NoGS) nor hazards.

ALUMINUM

ID: 7429-90-5

HAZARD DATA SOURCE: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2024-05-17 10:57:27

%: 96.5000 - 97.3000

GreenScreen: BM-1

RC: Both

NANO: Unknown

SUBSTANCE ROLE: Alloy element

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
PHY	EU - GHS (H-Statements) Annex 6 Table 3-1	H250 - Catches fire spontaneously if exposed to air [Pyrophoric liquids; Pyrophoric solids - Category 1]
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]
PHY	GHS - Japan	H261 - In contact with water releases flammable gas [Substances and mixtures, which in contact with water, emit flammable gases - Category 2]
PHY	GHS - Malaysia	H250 - Catches fire spontaneously if exposed to air [Pyrophoric liquids; Pyrophoric solids - Category 1]
PHY	GHS - Australia	H250 - Catches fire spontaneously if exposed to air [Pyrophoric liquids; Pyrophoric solids - Category 1]
PHY	GHS - New Zealand	Pyrophoric solids category 1
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPH)	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 (C2CPH)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022
		Children's Products

SUBSTANCE NOTES: It should be noted that aluminum is an alloying element of the alluminum alloy, the metal alloy, and that alloys are generally expected to have different hazards than their alloying elements. Weight ranges are used to cover variation in product manufacturing. The aluming alloy contains pre and post consumer recycled content.

TAPE

%: 0.0000 - 1.5000

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES EVALUATION COMPLETED: No

MATERIAL TYPE: Polymeric Material

RESIDUALS AND IMPURITIES NOTES: No data was collected for this material

OTHER MATERIAL NOTES: The variation in content is due to varying proportions of materials due to the same product being available in different thicknesses and with different options: glass (Float or Etched) in 6 mm to 12 mm total glass thickness, EVA or PVB laminating film for laminated glass, back-painted, optional ceramic inks (digital printing), magnetic interlayer (galvanized steel), and optional Z-Kiss system. Tape is used with the Z-Kiss system only.

TAPE					ID: Unknown
HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: Not Screened		
%: 100.0000	GreenScreen: Not Screened		RC: None	NANO: No	SUBSTANCE ROLE: Adhesive
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS		
Proprietary Ingredient Due Diligence Exception					
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION		
Proprietary Ingredient Due Diligence Exception					
SUBSTANCE NOTES: There are no hazards associated with this component according to the manufacturer's product safety data sheet. Note that the "Exception for proprietary ingredient" has been used for this material.					

BACK-PAINTED COLORANT 1		%: 0.1000 - 0.6000
PRODUCT THRESHOLD: 1000 ppm	RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes	MATERIAL TYPE: Polymeric Material
RESIDUALS AND IMPURITIES NOTES: Residuals and impurities were evaluated based on provided supplier data.		
OTHER MATERIAL NOTES: The variation in content is due to varying proportions of materials due to the same product being available in different thicknesses and with different options: glass (Float or Etched) in 6 mm to 12 mm total glass thickness, EVA or PVB laminating film for laminated glass, back-painted, optional ceramic inks (digital printing), magnetic interlayer (galvanized steel), and optional Z-Kiss system.		

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2024-05-17 10:57:28	
%: 30.0000 - 50.0000	GreenScreen: BM-4	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	
EXEMPT	European Union / European Commission (EU EC)		EU - REACH Exemptions	
			Exempted from REACH Annex IV listing due to intrinsic safety	
SUBSTANCE NOTES: Exact percentage (concentration) of composition has been withheld as a trade secret.				

HAZARD DATA SOURCE: 3E Exchange Chemical Hazard Screening Library			HAZARD SCREENING DATE: 2024-04-19 11:49:07	
%: 27.0000 - 47.0000	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: The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.				

CERAMIC INKS (DIGITAL-PRINTING) %: 0.0000 - 0.2000

PRODUCT THRESHOLD: 1000 ppm	RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes	MATERIAL TYPE: Polymeric Material
RESIDUALS AND IMPURITIES NOTES: Residuals and impurities were evaluated based on provided supplier data.		
OTHER MATERIAL NOTES: The variation in content is due to varying proportions of materials due to the same product being available in different thicknesses and with different options: glass (Float or Etched) in 6 mm to 12 mm total glass thickness, EVA or PVB laminating film for laminated glass, back-painted, optional ceramic inks (digital printing), magnetic interlayer (galvanized steel), and optional Z-Kiss system. All substances in this material are below the reportable threshold.		

GLASS (ALT) %: 45.0000 - 85.0000 ALTERNATE

PRODUCT THRESHOLD: 1000 ppm	RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes	MATERIAL TYPE: Glass
RESIDUALS AND IMPURITIES NOTES: Residuals and impurities were evaluated based on provided supplier data.		
OTHER MATERIAL NOTES: This is a dichroic glass. The weight percentage range is used to account for product variability.		
ALTERNATE: This nested material is an alternate nested material to Glass (Float or Etched).		

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-07-04 6:12:38	
%: 95.0000 - 98.0000	GreenScreen: NoGS	RC: PreC	NANO: No	SUBSTANCE ROLE: Structure component
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: According to the supplier, this material contains 16% pre-consumer recycled content. The percentage weight range is used to account for product variability.				

TITANIUM DIOXIDE			ID: 13463-67-7	
HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-07-04 6:13:10	
%: 0.0000 - 3.1000	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 v4.0 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 v4.0 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 v4.0 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)
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025
		Cosmetics and Personal Care Products

SILICON DIOXIDE

ID: 7631-86-9

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-07-04 6:12:45	
%: 0.0000 - 2.0000	GreenScreen: BM-1	RC: None	NANO: No	SUBSTANCE ROLE: Binder
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
CAN	GHS - Japan		H350 - May cause cancer [Carcinogenicity - Category 1A]	
CAN	GHS - Australia		H350i - May cause cancer by inhalation [Carcinogenicity - Category 1A or 1B]	
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]	
MAM	GHS - Australia		H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organ toxicity - repeated exposure - Category 1]	
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION	
RESTRICTED LIST	Green Science Policy Institute (GSPI)		GSPI - Six Classes Precautionary List	
			Antimicrobials	

DICHRONIUM TRIOXIDE

ID: 1308-38-9

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-07-04 6:13:07	
?: 0.0000 - 2.0000	GreenScreen: BM-1	RC: None	NANO: No	SUBSTANCE ROLE: Pigment
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 (C2CP II)		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 (C2CP II)		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 (C2CP II)		C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025	
			Children's Toy Products	
SUBSTANCE NOTES: The percentage weight range is used to account for product variability.				

IRON OXIDE

ID: 1332-37-2

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-07-04 6:13:04	
%: 0.0000 - 1.2000	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Glass component
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: The percentage weight range is used to account for product variability.				

ZIRCONIUM OXIDE (ZRO2), LIME STABLIZED

ID: 68937-53-1

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-07-04 6:13:01	
?: 0.0000 - 1.0000	GreenScreen: NoGS	RC: None	NANO: No	SUBSTANCE ROLE: Glass component
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	

BACK-PAINTED COLORANT 20 %: 0.1000 - 0.6000 ALTERNATE

RESIDUALS AND IMPURITIES NOTES: Residuals and impurities were evaluated based on provided supplier data.

ALTERNATE: This nested material is an alternate nested material to Back-Painted Colorant 1.

ID: 7732-18-5

%: **30.0000 - 50.0000** GreenScreen: **BM-4** RC: **None** NANO: **No** SUBSTANCE ROLE: **Coating**

SUBSTANCE NOTES: Exact percentage (concentration) of composition has been withheld as a trade secret.

ID: Undisclosed

%: 27.0000 - 47.0000 GreenScreen: NoGS RC: None NANO: No SUBSTANCE ROLE: Coating

SUBSTANCE NOTES: The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

PRODUCT THRESHOLD: 1000 ppm RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes MATERIAL TYPE: Polymeric Material

HPD v2.3 created via HPDC Builder Page 13 of 4

OTHER MATERIAL NOTES: The variation in content is due to varying proportions of materials due to the same product being available in different thicknesses and with different options: glass (Float or Etched) in 6 mm to 12 mm total glass thickness, EVA or PVB laminating film for laminated glass, back-painted, optional ceramic inks (digital printing), magnetic interlayer (galvanized steel), and optional Z-Kiss system.

ALTERNATE: This nested material is an alternate nested material to Back-Painted Colorant 1.

WATER				ID: 7732-18-5
HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2024-05-17 10:57:29	
%: 30.0000 - 50.0000	GreenScreen: BM-4	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	
EXEMPT	European Union / European Commission (EU EC)		EU - REACH Exemptions	
			Exempted from REACH Annex IV listing due to intrinsic safety	
SUBSTANCE NOTES: Exact percentage (concentration) of composition has been withheld as a trade secret.				

UNDISCLOSED				ID: Undisclosed	
HAZARD DATA SOURCE: 3E Exchange Chemical Hazard Screening Library			HAZARD SCREENING DATE: 2024-04-19 11:48:58		
%: 27.0000 - 47.0000		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: The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.					

UNDISCLOSED				ID: Undisclosed	
HAZARD DATA SOURCE: 3E Exchange Chemical Hazard Screening Library			HAZARD SCREENING DATE: 2024-04-19 11:49:00		
%: 10.0000 - 25.0000	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: The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.					

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes

MATERIAL TYPE: Polymeric Material

RESIDUALS AND IMPURITIES NOTES: Residuals and impurities were evaluated based on provided supplier data.

OTHER MATERIAL NOTES: The variation in content is due to varying proportions of materials due to the same product being available in different thicknesses and with different options: glass (Float or Etched) in 6 mm to 12 mm total glass thickness, EVA or PVB laminating film for laminated glass, back-painted, optional ceramic inks (digital printing), magnetic interlayer (galvanized steel), and optional Z-Kiss system.

ALTERNATE: This nested material is an alternate nested material to Back-Painted Colorant 1.

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2024-05-17 10:57:29	
%: 30.0000 - 50.0000	GreenScreen: BM-4	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	
EXEMPT	European Union / European Commission (EU EC)		EU - REACH Exemptions	
			Exempted from REACH Annex IV listing due to intrinsic safety	
SUBSTANCE NOTES: Exact percentage (concentration) of composition has been withheld as a trade secret.				

UNDISCLOSED

ID: **Undisclosed**

HAZARD DATA SOURCE: 3E Exchange Chemical Hazard Screening Library			HAZARD SCREENING DATE: 2024-04-19 11:48:52	
%: 27.0000 - 47.0000	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: The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.				

UNDISCLOSED

ID: **Undisclosed**

HAZARD DATA SOURCE: 3E Exchange Chemical Hazard Screening Library			HAZARD SCREENING DATE: 2024-04-19 11:48:55	
%: 10.0000 - 25.0000	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: The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.				

BACK-PAINTED COLORANT 17

%: **0.1000 - 0.6000 ALTERNATE**

PRODUCT THRESHOLD: 1000 ppm	RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes	MATERIAL TYPE: Polymeric Material
-----------------------------	--	-----------------------------------

RESIDUALS AND IMPURITIES NOTES: Residuals and impurities were evaluated based on provided supplier data.

OTHER MATERIAL NOTES: The variation in content is due to varying proportions of materials due to the same product being available in different thicknesses and with different options: glass (Float or Etched) in 6 mm to 12 mm total glass thickness, EVA or PVB laminating film for laminated glass, back-painted, optional ceramic inks (digital printing), magnetic interlayer (galvanized steel), and optional Z-Kiss system.

ALTERNATE: This nested material is an alternate nested material to Back-Painted Colorant 1.

WATER

ID: 7732-18-5

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2024-05-17 10:57:30	
%: 30.0000 - 50.0000	GreenScreen: BM-4	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		
EXEMPT	European Union / European Commission (EU EC)	EU - REACH Exemptions		
		Exempted from REACH Annex IV listing due to intrinsic safety		
SUBSTANCE NOTES: Exact percentage (concentration) of composition has been withheld as a trade secret.				

UNDISCLOSED

ID: Undisclosed

HAZARD DATA SOURCE: 3E Exchange Chemical Hazard Screening Library			HAZARD SCREENING DATE: 2024-04-19 11:48:47	
%: 27.0000 - 47.0000	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: The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.				

TITANIUM DIOXIDE

ID: 13463-67-7

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2024-05-17 10:57:30	
%: 10.0000 - 25.0000	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 (C2CPH)	C2C Certified v4 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 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022
		Formulated Consumer Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPH)	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: Exact percentage (concentration) of composition has been withheld as a trade secret.

BACK-PAINTED COLORANT 16 **%: 0.1000 - 0.6000 ALTERNATE**

PRODUCT THRESHOLD: 1000 ppm RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes MATERIAL TYPE: Polymeric Material

RESIDUALS AND IMPURITIES NOTES: Residuals and impurities were evaluated based on provided supplier data.

OTHER MATERIAL NOTES: The variation in content is due to varying proportions of materials due to the same product being available in different thicknesses and with different options: glass (Float or Etched) in 6 mm to 12 mm total glass thickness, EVA or PVB laminating film for laminated glass, back-painted, optional ceramic inks (digital printing), magnetic interlayer (galvanized steel), and optional Z-Kiss system.

ALTERNATE: This nested material is an alternate nested material to Back-Painted Colorant 1.

WATER

ID: 7732-18-5

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2024-05-17 10:57:30	
%: 30.0000 - 50.0000	GreenScreen: BM-4	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		
EXEMPT	European Union / European Commission (EU EC)	EU - REACH Exemptions		
		Exempted from REACH Annex IV listing due to intrinsic safety		
SUBSTANCE NOTES: Exact percentage (concentration) of composition has been withheld as a trade secret.				

UNDISCLOSED

ID: **Undisclosed**

HAZARD DATA SOURCE: 3E Exchange Chemical Hazard Screening Library			HAZARD SCREENING DATE: 2024-04-19 11:48:42	
%: 27.0000 - 47.0000	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: The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.				

TITANIUM DIOXIDE

ID: **13463-67-7**

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2024-05-17 10:57:30	
%: 10.0000 - 25.0000	GreenScreen: BM-1	RC: None	NANO: Unknown	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 (C2CPH)	C2C Certified v4 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 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Formulated Consumer Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPH)	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: Exact percentage (concentration) of composition has been withheld as a trade secret.		

BACK-PAINTED COLORANT 15

%: 0.1000 - 0.6000 ALTERNATE

PRODUCT THRESHOLD: 1000 ppm	RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes	MATERIAL TYPE: Polymeric Material
RESIDUALS AND IMPURITIES NOTES: Residuals and impurities were evaluated based on provided supplier data.		
OTHER MATERIAL NOTES: The variation in content is due to varying proportions of materials due to the same product being available in different thicknesses and with different options: glass (Float or Etched) in 6 mm to 12 mm total glass thickness, EVA or PVB laminating film for laminated glass, back-painted, optional ceramic inks (digital printing), magnetic interlayer (galvanized steel), and optional Z-Kiss system.		
ALTERNATE: This nested material is an alternate nested material to Back-Painted Colorant 1.		

UNDISCLOSED				ID: Undisclosed		
HAZARD DATA SOURCE: 3E Exchange Chemical Hazard Screening Library		HAZARD SCREENING DATE: 2024-04-19 11:48:37				
%: 27.0000 - 47.0000		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: The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.						

Magnetic Glass Marker Boards HPD v2.3 created via HPDC Builder Page 21 of 42

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 (C2CPH)	C2C Certified v4 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 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Formulated Consumer Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPH)	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: Exact percentage (concentration) of composition has been withheld as a trade secret.

BACK-PAINTED COLORANT 14
 %: 0.1000 - 0.6000 ALTERNATE

PRODUCT THRESHOLD: 1000 ppm
 RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes
 MATERIAL TYPE: Polymeric Material

RESIDUALS AND IMPURITIES NOTES: Residuals and impurities were evaluated based on provided supplier data.

OTHER MATERIAL NOTES: The variation in content is due to varying proportions of materials due to the same product being available in different thicknesses and with different options: glass (Float or Etched) in 6 mm to 12 mm total glass thickness, EVA or PVB laminating film for laminated glass, back-painted, optional ceramic inks (digital printing), magnetic interlayer (galvanized steel), and optional Z-Kiss system.

ALTERNATE: This nested material is an alternate nested material to Back-Painted Colorant 1.

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2024-05-17 10:57:31	
%: 30.0000 - 50.0000	GreenScreen: BM-4	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	
EXEMPT	European Union / European Commission (EU EC)		EU - REACH Exemptions	
			Exempted from REACH Annex IV listing due to intrinsic safety	
SUBSTANCE NOTES: Exact percentage (concentration) of composition has been withheld as a trade secret.				

HAZARD DATA SOURCE: 3E Exchange Chemical Hazard Screening Library			HAZARD SCREENING DATE: 2024-04-19 11:48:33	
%: 27.0000 - 47.0000	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: The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.				

PRODUCT THRESHOLD: 1000 ppm	RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes	MATERIAL TYPE: Polymeric Material
RESIDUALS AND IMPURITIES NOTES: Residuals and impurities were evaluated based on provided supplier data.		
OTHER MATERIAL NOTES: The variation in content is due to varying proportions of materials due to the same product being available in different thicknesses and with different options: glass (Float or Etched) in 6 mm to 12 mm total glass thickness, EVA or PVB laminating film for laminated glass, back-painted, optional ceramic inks (digital printing), magnetic interlayer (galvanized steel), and optional Z-Kiss system.		
ALTERNATE: This nested material is an alternate nested material to Back-Painted Colorant 1.		

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2024-05-17 10:57:31	
%: 30.0000 - 50.0000	GreenScreen: BM-4	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	
EXEMPT	European Union / European Commission (EU EC)		EU - REACH Exemptions	
			Exempted from REACH Annex IV listing due to intrinsic safety	
SUBSTANCE NOTES: Exact percentage (concentration) of composition has been withheld as a trade secret.				

UNDISCLOSED

HAZARD DATA SOURCE: 3E Exchange Chemical Hazard Screening Library			HAZARD SCREENING DATE: 2024-04-19 11:48:29	
%: 27.0000 - 47.0000	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: The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.				

BACK-PAINTED COLORANT 12 %: 0.1000 - 0.6000 ALTERNATE

PRODUCT THRESHOLD: 1000 ppm	RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes	MATERIAL TYPE: Polymeric Material
RESIDUALS AND IMPURITIES NOTES: Residuals and impurities were evaluated based on provided supplier data.		
OTHER MATERIAL NOTES: The variation in content is due to varying proportions of materials due to the same product being available in different thicknesses and with different options: glass (Float or Etched) in 6 mm to 12 mm total glass thickness, EVA or PVB laminating film for laminated glass, back-painted, optional ceramic inks (digital printing), magnetic interlayer (galvanized steel), and optional Z-Kiss system.		
ALTERNATE: This nested material is an alternate nested material to Back-Painted Colorant 1.		

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2024-05-17 10:57:28	
%: 30.0000 - 50.0000	GreenScreen: BM-4	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	
EXEMPT	European Union / European Commission (EU EC)		EU - REACH Exemptions	
			Exempted from REACH Annex IV listing due to intrinsic safety	
SUBSTANCE NOTES: Exact percentage (concentration) of composition has been withheld as a trade secret.				

HAZARD DATA SOURCE: 3E Exchange Chemical Hazard Screening Library			HAZARD SCREENING DATE: 2024-04-19 11:48:25	
%: 27.0000 - 47.0000	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: The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.				

BACK-PAINTED COLORANT 11 %: 0.1000 - 0.6000 ALTERNATE

PRODUCT THRESHOLD: 1000 ppm	RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes	MATERIAL TYPE: Polymeric Material
RESIDUALS AND IMPURITIES NOTES: Residuals and impurities were evaluated based on provided supplier data.		
OTHER MATERIAL NOTES: The variation in content is due to varying proportions of materials due to the same product being available in different thicknesses and with different options: glass (Float or Etched) in 6 mm to 12 mm total glass thickness, EVA or PVB laminating film for laminated glass, back-painted, optional ceramic inks (digital printing), magnetic interlayer (galvanized steel), and optional Z-Kiss system.		
ALTERNATE: This nested material is an alternate nested material to Back-Painted Colorant 1.		

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2024-05-17 10:57:31	
%. 30.0000 - 50.0000	GreenScreen: BM-4	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		
EXEMPT	European Union / European Commission (EU EC)	EU - REACH Exemptions		
		Exempted from REACH Annex IV listing due to intrinsic safety		
SUBSTANCE NOTES: Exact percentage (concentration) of composition has been withheld as a trade secret.				

HAZARD DATA SOURCE: 3E Exchange Chemical Hazard Screening Library			HAZARD SCREENING DATE: 2024-04-19 11:48:21	
%. 27.0000 - 47.0000	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: The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.				

PRODUCT THRESHOLD: 1000 ppm	RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes	MATERIAL TYPE: Polymeric Material
RESIDUALS AND IMPURITIES NOTES: Residuals and impurities were evaluated based on provided supplier data.		
OTHER MATERIAL NOTES: The variation in content is due to varying proportions of materials due to the same product being available in different thicknesses and with different options: glass (Float or Etched) in 6 mm to 12 mm total glass thickness, EVA or PVB laminating film for laminated glass, back-painted, optional ceramic inks (digital printing), magnetic interlayer (galvanized steel), and optional Z-Kiss system.		
ALTERNATE: This nested material is an alternate nested material to Back-Painted Colorant 1.		

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2024-05-17 10:57:31	
%: 30.0000 - 50.0000	GreenScreen: BM-4	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	
EXEMPT	European Union / European Commission (EU EC)		EU - REACH Exemptions	
			Exempted from REACH Annex IV listing due to intrinsic safety	
SUBSTANCE NOTES: Exact percentage (concentration) of composition has been withheld as a trade secret.				

UNDISCLOSED

ID: **Undisclosed**

HAZARD DATA SOURCE: 3E Exchange Chemical Hazard Screening Library			HAZARD SCREENING DATE: 2024-04-19 11:48:16	
%: 27.0000 - 47.0000	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: The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.				

UNDISCLOSED

ID: **Undisclosed**

HAZARD DATA SOURCE: 3E Exchange Chemical Hazard Screening Library			HAZARD SCREENING DATE: 2024-04-19 11:48:19	
%: 10.0000 - 25.0000	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: The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.				

RESIDUALS AND IMPURITIES NOTES: Residuals and impurities were evaluated based on provided supplier data.

OTHER MATERIAL NOTES: The variation in content is due to varying proportions of materials due to the same product being available in different thicknesses and with different options: glass (Float or Etched) in 6 mm to 12 mm total glass thickness, EVA or PVB laminating film for laminated glass, back-painted, optional ceramic inks (digital printing), magnetic interlayer (galvanized steel), and optional Z-Kiss system.

ALTERNATE: This nested material is an alternate nested material to Back-Painted Colorant 1.

WATER

ID: 7732-18-5

HAZARD DATA SOURCE: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2024-05-17 10:57:32

%: 30.0000 - 50.0000	GreenScreen: BM-4	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		
EXEMPT	European Union / European Commission (EU EC)	EU - REACH Exemptions Exempted from REACH Annex IV listing due to intrinsic safety		

SUBSTANCE NOTES: Exact percentage (concentration) of composition has been withheld as a trade secret.

UNDISCLOSED

ID: Undisclosed

HAZARD DATA SOURCE: 3E Exchange Chemical Hazard Screening Library

HAZARD SCREENING DATE: 2024-04-19 11:48:12

%: 27.0000 - 47.0000	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: The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

BACK-PAINTED COLORANT 8

%: 0.1000 - 0.6000 ALTERNATE

RESIDUALS AND IMPURITIES NOTES: Residuals and impurities were evaluated based on provided supplier data.

OTHER MATERIAL NOTES: The variation in content is due to varying proportions of materials due to the same product being available in different thicknesses and with different options: glass (Float or Etched) in 6 mm to 12 mm total glass thickness, EVA or PVB laminating film for laminated glass, back-painted, optional ceramic inks (digital printing), magnetic interlayer (galvanized steel), and optional Z-Kiss system.

ALTERNATE: This nested material is an alternate nested material to Back-Painted Colorant 1.

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2024-05-17 10:57:32	
%: 30.0000 - 50.0000	GreenScreen: BM-4	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	
EXEMPT	European Union / European Commission (EU EC)		EU - REACH Exemptions	
			Exempted from REACH Annex IV listing due to intrinsic safety	
SUBSTANCE NOTES: Exact percentage (concentration) of composition has been withheld as a trade secret.				

HAZARD DATA SOURCE: 3E Exchange Chemical Hazard Screening Library			HAZARD SCREENING DATE: 2024-04-19 11:48:08	
%: 27.0000 - 47.0000	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: The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.				

BACK-PAINTED COLORANT 7

%: 0.1000 - 0.6000 ALTERNATE

PRODUCT THRESHOLD: 1000 ppm	RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes	MATERIAL TYPE: Polymeric Material
RESIDUALS AND IMPURITIES NOTES: Residuals and impurities were evaluated based on provided supplier data.		
OTHER MATERIAL NOTES: The variation in content is due to varying proportions of materials due to the same product being available in different thicknesses and with different options: glass (Float or Etched) in 6 mm to 12 mm total glass thickness, EVA or PVB laminating film for laminated glass, back-painted, optional ceramic inks (digital printing), magnetic interlayer (galvanized steel), and optional Z-Kiss system.		
ALTERNATE: This nested material is an alternate nested material to Back-Painted Colorant 1.		

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2024-05-17 10:57:32	
%: 30.0000 - 50.0000	GreenScreen: BM-4	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
EXEMPT	European Union / European Commission (EU EC)	EU - REACH Exemptions Exempted from REACH Annex IV listing due to intrinsic safety

SUBSTANCE NOTES: Exact percentage (concentration) of composition has been withheld as a trade secret.

UNDISCLOSED

ID: **Undisclosed**

HAZARD DATA SOURCE: 3E Exchange Chemical Hazard Screening Library		HAZARD SCREENING DATE: 2024-04-19 11:48:03		
%: 27.0000 - 47.0000	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: The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

TITANIUM DIOXIDE

ID: **13463-67-7**

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2024-05-17 10:57:32		
%: 10.0000 - 25.0000 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 (C2CPH)	C2C Certified v4 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 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022
		Formulated Consumer Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPH)	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: Exact percentage (concentration) of composition has been withheld as a trade secret.

ALTERNATE: This substance is an alternate substance to Undisclosed.

BACK-PAINTED COLORANT 6 %: 0.1000 - 0.6000 ALTERNATE

PRODUCT THRESHOLD: 1000 ppm RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes MATERIAL TYPE: Polymeric Material

RESIDUALS AND IMPURITIES NOTES: Residuals and impurities were evaluated based on provided supplier data.

OTHER MATERIAL NOTES: The variation in content is due to varying proportions of materials due to the same product being available in different thicknesses and with different options: glass (Float or Etched) in 6 mm to 12 mm total glass thickness, EVA or PVB laminating film for laminated glass, back-painted, optional ceramic inks (digital printing), magnetic interlayer (galvanized steel), and optional Z-Kiss system.

ALTERNATE: This nested material is an alternate nested material to Back-Painted Colorant 1.

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2024-05-17 10:57:32	
%: 30.0000 - 50.0000	GreenScreen: BM-4	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	
EXEMPT	European Union / European Commission (EU EC)		EU - REACH Exemptions	
			Exempted from REACH Annex IV listing due to intrinsic safety	
SUBSTANCE NOTES: Exact percentage (concentration) of composition has been withheld as a trade secret.				

HAZARD DATA SOURCE: 3E Exchange Chemical Hazard Screening Library			HAZARD SCREENING DATE: 2024-04-19 11:47:59	
%: 27.0000 - 47.0000	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: The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.				

PRODUCT THRESHOLD: 1000 ppm	RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes	MATERIAL TYPE: Polymeric Material
RESIDUALS AND IMPURITIES NOTES: Residuals and impurities were evaluated based on provided supplier data.		
OTHER MATERIAL NOTES: The variation in content is due to varying proportions of materials due to the same product being available in different thicknesses and with different options: glass (Float or Etched) in 6 mm to 12 mm total glass thickness, EVA or PVB laminating film for laminated glass, back-painted, optional ceramic inks (digital printing), magnetic interlayer (galvanized steel), and optional Z-Kiss system.		
ALTERNATE: This nested material is an alternate nested material to Back-Painted Colorant 1.		

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2024-05-17 10:57:32	
%: 30.0000 - 50.0000	GreenScreen: BM-4	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	
EXEMPT	European Union / European Commission (EU EC)		EU - REACH Exemptions	
			Exempted from REACH Annex IV listing due to intrinsic safety	
SUBSTANCE NOTES: Exact percentage (concentration) of composition has been withheld as a trade secret.				

UNDISCLOSED

HAZARD DATA SOURCE: 3E Exchange Chemical Hazard Screening Library			HAZARD SCREENING DATE: 2024-04-19 11:47:55	
%: 27.0000 - 47.0000	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: The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.				

BACK-PAINTED COLORANT 4

?: 0.1000 - 0.6000 ALTERNATE

PRODUCT THRESHOLD: 1000 ppm	RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes	MATERIAL TYPE: Polymeric Material
RESIDUALS AND IMPURITIES NOTES: Residuals and impurities were evaluated based on provided supplier data.		
OTHER MATERIAL NOTES: The variation in content is due to varying proportions of materials due to the same product being available in different thicknesses and with different options: glass (Float or Etched) in 6 mm to 12 mm total glass thickness, EVA or PVB laminating film for laminated glass, back-painted, optional ceramic inks (digital printing), magnetic interlayer (galvanized steel), and optional Z-Kiss system.		
ALTERNATE: This nested material is an alternate nested material to Back-Painted Colorant 1.		

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2024-05-17 10:57:32	
%: 30.0000 - 50.0000	GreenScreen: BM-4	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	
EXEMPT	European Union / European Commission (EU EC)		EU - REACH Exemptions	
			Exempted from REACH Annex IV listing due to intrinsic safety	
SUBSTANCE NOTES: Exact percentage (concentration) of composition has been withheld as a trade secret.				

HAZARD DATA SOURCE: 3E Exchange Chemical Hazard Screening Library			HAZARD SCREENING DATE: 2024-04-19 11:47:52	
%: 27.0000 - 47.0000	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: The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.				

BACK-PAINTED COLORANT 3

?: 0.1000 - 0.6000 ALTERNATE

PRODUCT THRESHOLD: 1000 ppm	RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes	MATERIAL TYPE: Polymeric Material
RESIDUALS AND IMPURITIES NOTES: Residuals and impurities were evaluated based on provided supplier data.		
OTHER MATERIAL NOTES: The variation in content is due to varying proportions of materials due to the same product being available in different thicknesses and with different options: glass (Float or Etched) in 6 mm to 12 mm total glass thickness, EVA or PVB laminating film for laminated glass, back-painted, optional ceramic inks (digital printing), magnetic interlayer (galvanized steel), and optional Z-Kiss system.		
ALTERNATE: This nested material is an alternate nested material to Back-Painted Colorant 1.		

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2024-05-17 10:57:32	
%: 30.0000 - 50.0000	GreenScreen: BM-4	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		
EXEMPT	European Union / European Commission (EU EC)	EU - REACH Exemptions		
		Exempted from REACH Annex IV listing due to intrinsic safety		
SUBSTANCE NOTES: Exact percentage (concentration) of composition has been withheld as a trade secret.				

UNDISCLOSED

HAZARD DATA SOURCE: 3E Exchange Chemical Hazard Screening Library			HAZARD SCREENING DATE: 2024-04-19 11:47:48	
%: 27.0000 - 47.0000	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: The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.				

BACK-PAINTED COLORANT 2

?: 0.1000 - 0.6000 ALTERNATE

PRODUCT THRESHOLD: 1000 ppm	RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes	MATERIAL TYPE: Polymeric Material
RESIDUALS AND IMPURITIES NOTES: Residuals and impurities were evaluated based on provided supplier data.		
OTHER MATERIAL NOTES: The variation in content is due to varying proportions of materials due to the same product being available in different thicknesses and with different options: glass (Float or Etched) in 6 mm to 12 mm total glass thickness, EVA or PVB laminating film for laminated glass, back-painted, optional ceramic inks (digital printing), magnetic interlayer (galvanized steel), and optional Z-Kiss system.		
ALTERNATE: This nested material is an alternate nested material to Back-Painted Colorant 1.		

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2024-05-17 10:57:32	
%: 30.0000 - 50.0000	GreenScreen: BM-4	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	
EXEMPT	European Union / European Commission (EU EC)		EU - REACH Exemptions	
			Exempted from REACH Annex IV listing due to intrinsic safety	
SUBSTANCE NOTES: Exact percentage (concentration) of composition has been withheld as a trade secret.				

UNDISCLOSED

ID: **Undisclosed**

HAZARD DATA SOURCE: 3E Exchange Chemical Hazard Screening Library			HAZARD SCREENING DATE: 2024-04-19 11:47:44	
%: 27.0000 - 47.0000	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: The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.				

EVA LAMINATING FILM

%: **0.0000 - 13.5000 ALTERNATE**

PRODUCT THRESHOLD: 1000 ppm	RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes	MATERIAL TYPE: Polymeric Material
RESIDUALS AND IMPURITIES NOTES: Residuals and impurities were evaluated based on provided supplier data.		
OTHER MATERIAL NOTES: The variation in content is due to varying proportions of materials due to the same product being available in different thicknesses and with different options: glass (Float or Etched) in 6 mm to 12 mm total glass thickness, EVA or PVB laminating film for laminated glass, back-painted, optional ceramic inks (digital printing), magnetic interlayer (galvanized steel), and optional Z-Kiss system. Minimum weight % is zero as the Magnetic Glass Marker Boards are available with back-painted Monolithic Glass or back-painted Laminated Glass. Monolithic Glass has no EVA or PVB laminating film.		
ALTERNATE: This nested material is an alternate nested material to PVB Laminating film.		

UNDISCLOSED

ID: **Undisclosed**

HAZARD DATA SOURCE: 3E Exchange Chemical Hazard Screening Library			HAZARD SCREENING DATE: 2024-04-19 11:47:31	
%: 92.0000 - 96.0000	GreenScreen: LT-UNK	RC: Both	NANO: Unknown	SUBSTANCE ROLE: Polymer species

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
MUL	German FEA - Substances Hazardous to Waters	Mult*
	EC - CEPA DSL	Persistence
MUL	EC - CEPA DSL	Mult*
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
None found		No listings found on Additional Hazard Lists
SUBSTANCE NOTES: The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.		

UNDISCLOSED

ID: Undisclosed

HAZARD DATA SOURCE: 3E Exchange Chemical Hazard Screening Library			HAZARD SCREENING DATE: 2024-04-19 11:47:34	
?: 0.1000 - 3.0000	GreenScreen: LT-UNK	RC: Both	NANO: Unknown	SUBSTANCE ROLE: Adhesive
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
MUL	German FEA - Substances Hazardous to Waters		Mult*	
EYE	New Zealand - GHS		Eye Irritation/Corrosivity	
SKI	New Zealand - GHS		Skin Irritation/Corrosivity	
AQU	Korea - GHS		Acute Aquatic Toxicity	
MAM	New Zealand - GHS		Systemic Toxicity/Organ Effects (Single Exposure)	
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION	
None found			No listings found on Additional Hazard Lists	

UNDISCLOSED

ID: Undisclosed

HAZARD DATA SOURCE: 3E Exchange Chemical Hazard Screening Library			HAZARD SCREENING DATE: 2024-04-19 11:47:32	
?: 0.1000 - 3.0000	GreenScreen: LT-UNK	RC: Both	NANO: Unknown	SUBSTANCE ROLE: Curing agent
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		

UNDISCLOSED

ID: Undisclosed

%: 0.0100 - 2.0000	GreenScreen: LT-UNK	RC: Both	NANO: Unknown	SUBSTANCE ROLE: Heat or UV stabilizer
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
MUL	German FEA - Substances Hazardous to Waters	Mult*		
	EC - CEPA DSL	Persistence		
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION		
None found		No listings found on Additional Hazard Lists		

PVB LAMINATING FILM (ALT) %: 0.0000 - 13.5000 ALTERNATE

SUBSTANCE NOTES: The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret. Material is a Polymeric Material.

RESIDUALS AND IMPURITIES NOTES: Residuals and impurities were evaluated based on provided supplier data.

OTHER MATERIAL NOTES: The variation in content is due to varying proportions of materials due to the same product being available in different thicknesses and with different options: glass (Float or Etched) in 6 mm to 12 mm total glass thickness, EVA or PVB laminating film for laminated glass, back-painted, optional ceramic inks (digital printing), magnetic interlayer (galvanized steel), and optional Z-Kiss system. Minimum weight % is zero as the Magnetic Glass Marker Boards are available with back-painted Monolithic Glass or back-painted Laminated Glass. Monolithic Glass has no EVA or PVB laminating film.

ALTERNATE: This nested material is an alternate nested material to PVB Laminating film.

ACETIC ACID ETHENYL ESTER, POLYMER WITH 1,1-BIS(ETHENYLOXY)BUTANE AND ETHENOL ID: 27360-07-2

HAZARD DATA SOURCE: Pharos Chemical and Materials Library	HAZARD SCREENING DATE: 2024-05-17 10:57:28			
%: 70.0000 - 83.0000	GreenScreen: LT-UNK	RC: None	NANO: Unknown	SUBSTANCE ROLE: Polymer species
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: Exact percentage (concentration) of composition has been withheld as a trade secret.

HEXANOIC ACID, 2-ETHYL-, 1,2-ETHANEDIYLBIS(OXY-2,1-ETHANEDIYL) ESTER ID: 94-28-0

HAZARD DATA SOURCE: Pharos Chemical and Materials Library	HAZARD SCREENING DATE: 2024-05-17 10:57:29			
%: 17.0000 - 33.0000	GreenScreen: LT-UNK	RC: None	NANO: Unknown	SUBSTANCE ROLE: Plasticizer
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: Exact percentage (concentration) of composition has been withheld as a trade secret.

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2024-05-17 10:57:29	
%: 0.0000 - 5.0000	GreenScreen: BM-3	RC: None	NANO: Unknown	SUBSTANCE ROLE: Pigment
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: Exact percentage (concentration) of composition has been withheld as a trade secret.				

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2024-05-17 10:57:28	
%: 1.0000 - 2.0000	GreenScreen: BM-1	RC: None	NANO: Unknown	SUBSTANCE ROLE: Opacifier
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: Exact percentage (concentration) of composition has been withheld as a trade secret.

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 - Not tested	
CERTIFYING PARTY: Self-declared	ISSUE DATE: 2024-04-19 00:00:00	CERTIFIER OR LAB: None
APPLICABLE FACILITIES: All.	EXPIRY DATE:	
CERTIFICATE URL:		
CERTIFICATION AND COMPLIANCE NOTES: It should be noted that glass by itself is an inherently nonemitting source as defined by LEED.		

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.

MECHANICAL FASTENERS
MANUFACTURER (OR GENERIC): Generic
HPD URL: No HPD Available
ACCESSORY TYPE: Fastener
CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES: The markerboard can be glued directly to the wall using neutral cure silicones in conjunction with mechanical fasteners to support the weight of the glass.

NEUTRAL CURE SILICONES
MANUFACTURER (OR GENERIC): Generic
HPD URL: No HPD Available
ACCESSORY TYPE: Adhesive
CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES: The markerboard can be glued directly to the wall using neutral cure silicones in conjunction with mechanical fasteners to support the weight of the glass.

Section 5: General Notes

Bendheim is one of the world's foremost resources for specialty architectural glass. Founded in New York City in 1927, the third-generation, family-owned company offers a virtually unlimited range of in-stock and custom architectural glass varieties. Bendheim develops, fabricates, and distributes its products worldwide. The company maintains production facilities in New Jersey and offices in New York City.

MANUFACTURER INFORMATION

MANUFACTURER: **Bendheim LLC**
 ADDRESS: **Bendheim LLC**
82 Totowa Road, NJ 07470
 COUNTRY: **USA**
 LATITUDE: **40.9136000**
 LONGITUDE: **-74.2390000**

WEBSITE: **<https://bendheim.com/>**
 CONTACT NAME: **Uarda Hoti**
 TITLE: **Sustainability Program Manager**
 PHONE: **800-221-7379**
 EMAIL: **uhoti@bendheim.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 for compliance with the HPD standard noted.