

HPD UNIQUE IDENTIFIER: 95567744000

CLASSIFICATION: 08 80 00 Glazing

PRODUCT DESCRIPTION: Magnetic Glass Marker Boards (Float and Etched): Glass marker boards are sheets of back painted glass with a sheet steel backing. The glass is available in regular and low-iron. Low-iron glass is produced with a minimal amount of iron, reducing the greenish tint and improving light transmission. 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 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	
<input checked="" type="radio"/> Nested Materials Method	<input type="radio"/> 100 ppm	Completed in 28 of 28 Materials	<i>For all contents above the threshold, the manufacturer has:</i>
<input type="radio"/> Basic Method	<input checked="" type="radio"/> 1,000 ppm	Explanation(s) provided for Residuals/Impurities?	Characterized <input checked="" type="radio"/> Yes <input type="radio"/> No
Threshold Disclosed Per	<input type="radio"/> Per GHS SDS	<input checked="" type="radio"/> Yes <input type="radio"/> No	<i>Provided weight and role.</i>
<input type="radio"/> Material	<input type="radio"/> Other		Screened <input checked="" type="radio"/> Yes <input type="radio"/> No
<input checked="" type="radio"/> Product			<i>Provided screening results using HPDC-approved methods.</i>
			Identified <input type="radio"/> Yes <input checked="" 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.

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 variability 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.

CONSISTENCY WITH OTHER PROGRAMS

Pre-checked for LEED v4 Option 1.

Pre-checked for LEED v4.1 Option 1.

Third Party Verified?

Yes

No

PREPARER: **Vertima**

VERIFIER:

VERIFICATION #:

SCREENING DATE: 2024-05-17

PUBLISHED DATE: 2024-05-17

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: Other: Not Set

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

SUBSTANCE NOTES: It should be noted that iron 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. Steel contains pre and post consumer recycled content.

ZINC

ID: 7440-66-6

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2024-05-17 10:57:27**

%: **0.1000 - 4.0000** GreenScreen: **LT-P1** RC: **None** NANO: **Unknown** SUBSTANCE ROLE: **Coating**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
MUL	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters
AQU	GHS - New Zealand	Hazardous to the aquatic environment - acute category 1
AQU	GHS - New Zealand	Hazardous to the aquatic environment - chronic category 1
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes Precautionary List Antimicrobials
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Biological and Environmentally Released Materials
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Children's Products

SUBSTANCE NOTES: Zinc is part of the galvanized coating of the steel metal alloy. It is bonded to the steel. Hazard related to the galvanized coated steel are generally expected to have different hazards than their composing elements. Weight ranges are used to cover variation in product manufacturing.

MANGANESE

ID: 7439-96-5

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2024-05-17 10:57:27**

%: **0.0000 - 0.6000** GreenScreen: **LT-P1** RC: **None** NANO: **Unknown** SUBSTANCE ROLE: **Alloy element**

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 (C2CPII)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Biological and Environmentally Released Materials
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Children's Products

SUBSTANCE NOTES: 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.

**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:

ALUMINUM Z-CLIPS

%: **0.0000 - 4.8000**

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes

MATERIAL TYPE: Other: Not Set

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.

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 (C2CPII)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Biological and Environmentally Released Materials
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Children's Products

SUBSTANCE NOTES: 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.

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	

Proprietary Ingredient Due Diligence Exception

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
	Proprietary Ingredient Due Diligence Exception	

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
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None found		No warnings found on HPD Priority Hazard Lists
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ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
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EXEMPT	European Union / European Commission (EU EC)	EU - REACH Exemptions Exempted from REACH Annex IV listing due to intrinsic safety
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SUBSTANCE NOTES: Exact percentage (concentration) of composition has been withheld as a trade secret.

UNDISCLOSED

HAZARD DATA SOURCE: **Toxnot 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
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None found		No warnings found on HPD Priority Hazard Lists
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ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
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None found		No listings found on Additional Hazard Lists
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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.

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.

WATER

ID: 7732-18-5

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.

UNDISCLOSED

ID: **Undisclosed**

HAZARD DATA SOURCE: **Toxnot 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.

PVB LAMINATING FILM (ALT)

%: **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.

ACETIC ACID ETHENYL ESTER, POLYMER WITH 1,1-BIS(ETHENYLOXY)BUTANE AND ETHENOL

ID: 27360-07-2

%: **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) ESTERID: **94-28-0**%: **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.

CALCIUM CARBONATEID: **471-34-1**%: **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.

TITANIUM DIOXIDEID: **13463-67-7**

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.

BACK-PAINTED COLORANT 20

%: 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 10:57:29**

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

UNDISCLOSED

ID: **Undisclosed**

HAZARD DATA SOURCE: **Toxnot Chemical Hazard Screening Library** HAZARD SCREENING DATE: **2024-04-19 11:49:03**

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

BACK-PAINTED COLORANT 19 %: **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 10:57:29**%: **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.

UNDISCLOSEDID: **Undisclosed**HAZARD DATA SOURCE: **Toxnot 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.

UNDISCLOSEDID: **Undisclosed**HAZARD DATA SOURCE: **Toxnot 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
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None found		No warnings found on HPD Priority Hazard Lists
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ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
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EXEMPT	European Union / European Commission (EU EC)	EU - REACH Exemptions Exempted from REACH Annex IV listing due to intrinsic safety
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SUBSTANCE NOTES: Exact percentage (concentration) of composition has been withheld as a trade secret.

UNDISCLOSED

ID: **Undisclosed**

HAZARD DATA SOURCE: **Toxnot 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
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None found		No warnings found on HPD Priority Hazard Lists
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ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
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None found		No listings found on Additional Hazard Lists
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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: **Toxnot 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
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None found		No warnings found on HPD Priority Hazard Lists
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ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
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None found		No listings found on Additional Hazard Lists
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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 10:57:30**

%: **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: **Toxnot 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 (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.

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: **Toxnot 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 (C2CPII)	C2C Certified v4 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 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 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.

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: **Toxnot 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.

TITANIUM DIOXIDE

ID: 13463-67-7

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2024-05-17 10:57:31**

#: **10.0000 - 25.0000** GreenScreen: **BM-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Coating**

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.

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.

UNDISCLOSED

ID: **Undisclosed**

HAZARD DATA SOURCE: **Toxnot 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.

BACK-PAINTED COLORANT 13 %: 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.

UNDISCLOSED

ID: **Undisclosed**

HAZARD DATA SOURCE: **Toxnot 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.

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: **Toxnot 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: Toxnot 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		

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: Toxnot 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		

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: **Toxnot Chemical Hazard Screening Library** HAZARD SCREENING DATE: **2024-04-19 11:47:35**

%: **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

BACK-PAINTED COLORANT 11 %: **0.1000 - 0.6000 ALTERNATE**

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.

WATER

ID: 7732-18-5

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
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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.

UNDISCLOSEDID: **Undisclosed**HAZARD DATA SOURCE: **Toxnot 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
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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 10**#: 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 10:57:31**

#: 30.0000 - 50.0000	GreenScreen: BM-4	RC: None	NANO: No	SUBSTANCE ROLE: Coating
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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: **Toxnot 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: **Toxnot 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.

BACK-PAINTED COLORANT 9 %: **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 10:57:32**

%: **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: **Toxnot 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**

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 10:57:32**%: **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.

UNDISCLOSEDID: **Undisclosed**HAZARD DATA SOURCE: **Toxnot 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.

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: **Toxnot 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 (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.

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.

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: **Toxnot 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.

BACK-PAINTED COLORANT 5 #: **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: **Toxnot 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.

UNDISCLOSED

ID: **Undisclosed**

HAZARD DATA SOURCE: **Toxnot 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

ID: **Undisclosed**

HAZARD DATA SOURCE: **Toxnot 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
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None found		No warnings found on HPD Priority Hazard Lists
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ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
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EXEMPT	European Union / European Commission (EU EC)	EU - REACH Exemptions Exempted from REACH Annex IV listing due to intrinsic safety
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SUBSTANCE NOTES: Exact percentage (concentration) of composition has been withheld as a trade secret.

UNDISCLOSED

HAZARD DATA SOURCE: **Toxnot 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
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None found		No warnings found on HPD Priority Hazard Lists
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ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
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None found		No listings found on Additional Hazard Lists
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SUBSTANCE NOTES: The specific chemical identity and/or 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**

WEBSITE: **https://bendheim.com/**
 CONTACT NAME: **Uarda Hoti**
 TITLE: **Sustainability Program Manager**
 PHONE: **800-221-7379**
 EMAIL: **uhorti@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.