

HPD UNIQUE IDENTIFIER: 31266

CLASSIFICATION: 08 81 00 Glass Glazing

PRODUCT DESCRIPTION: This HPD covers sealed units manufactured by Laurier Architectural Inc. Laurier offers a vast range of energy efficient glass, high quality interlayers and multiple options to customize insulating glazing. All sealed units are double sealed using a sealer robot.

Section 1: Summary

Nested Method / Product Threshold

CONTENT INVENTORY

Inventory Reporting Format	Threshold Level	Residuals/Impurities Evaluation	<i>For all contents above the threshold, the manufacturer has:</i>
<input checked="" type="radio"/> Nested Materials Method	<input type="radio"/> 100 ppm	Completed in 19 of 19 Materials	Characterized <input checked="" type="radio"/> Yes <input type="radio"/> No
<input type="radio"/> Basic Method	<input checked="" type="radio"/> 1,000 ppm	Explanation(s) provided for Residuals/Impurities?	<i>Provided weight and role.</i>
Threshold Disclosed Per	<input type="radio"/> Per GHS SDS	<input checked="" type="radio"/> Yes <input type="radio"/> No	Screened <input checked="" type="radio"/> Yes <input type="radio"/> No
<input type="radio"/> Material	<input type="radio"/> Other		<i>Provided screening results using HPDC-approved methods.</i>
<input checked="" type="radio"/> Product			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 [GLASS, OXIDE, CHEMICALS LT-UNK] LAMINATED FILM #1 [ACETIC ACID ETHENYL ESTER, POLYMER WITH 1,1-BIS(ETHENYLOXY)BUTANE AND ETHENOL LT-UNK] HEXANOIC ACID, 2-ETHYL-, 1,2-ETHANEDIYLBIS(OXY-2,1-ETHANEDIYL) ESTER LT-UNK] CALCIUM CARBONATE BM-3] EYE TITANIUM DIOXIDE LT-1] CAN | MAM] SECONDARY SEAL - POLYSULFIDE #1 [UNDISCLOSED LT-UNK] UNDISCLOSED BM-1*] CAN | EYE | MAM UNDISCLOSED LT-UNK] UNDISCLOSED LT-UNK] DESSICANT [ZEOLITES LT-UNK] MAM CLAY NoGS] SPACER BAR #1 [STAINLESS STEEL NoGS] POLYPROPYLENE LT-P1] STEEL NoGS] UNDISCLOSED LT-UNK] COATING #1 [SILANOL TERMINATED POLYDIMETHYLSILOXANE BM-2] EYE AMORPHOUS SILICA BM-1] CAN | MAM RUTILE, TIN ZINC NoGS] C.I. PIGMENT GREEN 50 LT-1] CAN | RES | GEN C.I. PIGMENT YELLOW 53 LT-1] CAN DIIRON TRIOXIDE BM-1] CAN | MAM | EYE | SKI NIOBIUM SULFUR TIN ZINC OXIDE NoGS] TITANIUM DIOXIDE LT-1] CAN | END | MAM C.I. PIGMENT YELLOW 42 LT-UNK] C.I. PIGMENT BLUE 28 LT-1] CAN | RES | GEN C. I. PIGMENT BLUE 15 BM-3] CARBON BLACK BM-1] CAN | EYE | MAM COPPER, [1,3,8,16,18,24-HEXABROMO- 2,4,9,10,11,15,17,22,23,25-DECACHLORO-29H,31H-PHTHALOCYANINATO (2--N29,N30,N31,N32)-, (SP-4-2)- LT-UNK] QUINO[2,3-B]ACRIDINE-7,14-DIONE, 5,12-DIHYDRO- LT-UNK] BUTANAMIDE, 2,2'-[(3,3'-DICHLORO[1,1'-BIPHENYL]-4,4'-DIYL)BIS(AZO)]BIS[N-(4-CHLORO-2,5-DIMETHOXYPHENYL)-3-OXO- LT-P1] EYE | AQU] MIRROR BASE COAT [XYLENE BM-1] END | MUL | REP | SKI | EYE | MAM | AQU] MIRROR TOP COAT [XYLENE BM-1] END | MUL | REP | SKI | EYE | MAM | AQU] ISOBUTYL ALCOHOL BM-2] SKI | EYE] PRIMARY SEAL #1 [POLYISOBUTYLENE LT-UNK] POLYBUTENE LT-UNK]

Number of Greenscreen BM-4/BM3 contents ... 6

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

Nanomaterial ... No

INVENTORY AND SCREENING NOTES:

This Health Product Declaration (HPD) discloses hazards associated with all substances present at or above 1000 parts per million (ppm) in the finished product. Sealed Units by Laurier Architectural Inc. contains special conditions materials, metal alloy, reaction products (coatings) and float glass. Guidelines for reporting Special Conditions materials are still under development by the HPDC. Laurier Architectural Inc. will update the HPD accordingly once these guidelines get published. Known residuals and impurities; have been disclosed at 1,000 ppm. More details about how residuals and impurities were considered available in the appropriate section. Variations in the composition of Sealed Units [glass thickness, choice of sealant, choice of spacer bar, coated or uncoated glass, clear glass, acid-etched glass or mirror] introduce ranges in the content inventory section. Undisclosed substances are proprietary.

*Form-Specific Hazard: This substance's GreenScreen Benchmark or List Translator score and the applicable hazards are related to particulate inhalation, which is expected to occur only during manufacture, installation, maintenance, or demolition, due to activities such as sawing, sanding, grinding, or intensive cleaning. For this reason, this score is intentionally omitted from the "Contents highest concern" line above. See HPDC's Special Conditions policy for more information.

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

CERTIFICATIONS AND COMPLIANCE See Section 3 for additional

VOC Content data is not applicable for this product category.

listings.

VOC emissions: CDPH Standard Method - Not tested

LCA: ISO 14040:2006 Environmental management -- Life cycle assessment

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: 2023-02-02

PUBLISHED DATE: 2023-02-02

EXPIRY DATE: 2026-02-02

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 %: 86.0000 - 93.0000

PRODUCT THRESHOLD: 1000 ppm RESIDUALS AND IMPURITIES EVALUATION COMPLETED: No MATERIAL TYPE: Glass

RESIDUALS AND IMPURITIES NOTES: No residuals or impurities are present in float glass above 1000 ppm.

OTHER MATERIAL NOTES: Laurier Architectural offers a wide range of float glass (ultraclear, tinted, low-E coating, reflective coating, acid-etched glass, mirror, acid-etched mirror). Those types of glasses are essentially soda-lime glasses. Low-E and reflective coatings are not inventoried since both coatings are way below the reportable threshold. Mirrors have a base and top coat. A weight interval is used to cover all product configurations (e.g. with and without laminated glass, coated or uncoated glass, float glass or mirrors,...)

GLASS, OXIDE, CHEMICALS

ID: 65997-17-3

HAZARD DATA SOURCE: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2023-02-02 8:28:26

%: 100.0000 - 100.0000 GreenScreen: LT-UNK RC: PreC 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
EXEMPT	European Union / European Commission (EU EC)	EU - REACH Exemptions Exempted from REACH Annex V listing due to intrinsic safety

SUBSTANCE NOTES: Soda Lime Float Glass (CAS number 65997-17-3) is made by melting various substances such as silicon dioxide, sodium oxide, calcium oxide, magnesium oxide and trace elements together. Tinted glasses are similar to clear glass; however, the composition varies slightly. In all cases, clear, tinted or low-iron glass, the product as delivered is 100% Soda Lime Float Glass.

LAMINATED FILM #1 %: 0.0000 - 6.0000

PRODUCT THRESHOLD: 1000 ppm RESIDUALS AND IMPURITIES EVALUATION COMPLETED: No MATERIAL TYPE: Polymeric Material

RESIDUALS AND IMPURITIES NOTES: There are no residuals or impurities at or above the declaration threshold.

OTHER MATERIAL NOTES: A weight interval is used to account for multiple glass thicknesses, laminated film thicknesses and glass without laminated film . Alternative to laminated film #2 and #3.

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: 2023-02-02 8:28:27

%: 65.0000 - 80.0000 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: Weight interval is used to keep exact recipe confidential.		

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:	2023-02-02 8:28:28		
%: 15.0000 - 35.0000	GreenScreen: LT-UNK	RC: None	NANO: No	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 of Problematic Chemicals Some Solvents			
SUBSTANCE NOTES: Weight interval is used to keep exact recipe confidential.					

CALCIUM CARBONATE

ID: 471-34-1

HAZARD DATA SOURCE:	Pharos Chemical and Materials Library	HAZARD SCREENING DATE:	2023-02-02 8:28:28		
%: 0.0000 - 5.0000	GreenScreen: BM-3	RC: None	NANO: No	SUBSTANCE ROLE: Filler	
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS			
EYE	GHS - New Zealand	Eye irritation category 2			
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION			
POSITIVE LIST	US Environmental Protection Agency (US EPA)	US EPA - DfE SCIL Green Circle - Verified Low Concern			
SUBSTANCE NOTES: Weight interval is used to keep exact recipe confidential.					

TITANIUM DIOXIDE

ID: 1317-70-0

HAZARD DATA SOURCE:	Pharos Chemical and Materials Library	HAZARD SCREENING DATE:	2023-02-02 8:28:29		
%: 0.0000 - 2.0000	GreenScreen: LT-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
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 Cosmetics & Personal Care Products

SUBSTANCE NOTES: Weight interval is used to keep exact recipe confidential.

SECONDARY SEAL - POLYSULFIDE #1 %: 1.5000 - 6.0000

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

RESIDUALS AND IMPURITIES NOTES: There are no residuas or impurities at or above the declaration threshold.

OTHER MATERIAL NOTES: Weight interval is used to account for multiple product configuration (e.g. glass thickness, laminated glass or not,...). This material is an alternative to secondary seal - polysulfide #2 and secondary seal - silicone #1 and #2.

UNDISCLOSED

ID: **Undisclosed**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2023-02-02 8:28:27**

%: **55.0000 - 65.0000** GreenScreen: **LT-UNK** RC: **None** NANO: **No** 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: Weight percent interval used to protect product exact recipe. Furthermore, this substance is undisclosed as it is proprietary.

UNDISCLOSED

ID: **Undisclosed**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2023-02-02 8:28:28**

%: 20.0000 - 30.0000

GreenScreen: **BM-1**

RC: **None**

NANO: **No**

SUBSTANCE ROLE: **Pigment**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
CAN	US CDC - Occupational Carcinogens	Occupational Carcinogen**
CAN	MAK	Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification**
CAN	CA EPA - Prop 65	Carcinogen - specific to chemical form or exposure route**
CAN	IARC	Group 2B - Possibly carcinogenic to humans - inhaled from occupational sources**
EYE	GHS - New Zealand	Eye irritation category 2**
CAN	GHS - New Zealand	Carcinogenicity category 2**
CAN	GHS - Japan	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]**
MAM	GHS - Japan	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1]**
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
None found		No listings found on Additional Hazard Lists

SUBSTANCE NOTES: Weight percent interval used to protect product exact recipe. Furthermore, this substance is undisclosed as it is proprietary.

**Form-Specific Hazard: This substance's GreenScreen Benchmark or List Translator score and the applicable hazards are related to particulate inhalation, which is expected to occur only during manufacture, installation, maintenance, or demolition, due to activities such as sawing, sanding, grinding, or intensive cleaning. See HPDC's Special Conditions policy for more information. Manufacturer's Safety Data Sheet (SDS), if applicable, may offer occupational health and safety information.

UNDISCLOSED

ID: **Undisclosed**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2023-02-02 8:28:28**

%: 1.0000 - 10.0000

GreenScreen: **LT-UNK**

RC: **None**

NANO: **No**

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: Weight percent interval used to protect product exact recipe. Furthermore, this substance is undisclosed as it is proprietary.

UNDISCLOSED

ID: **Undisclosed**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2023-02-02 8:28:29**

%: 1.0000 - 10.0000

GreenScreen: **LT-UNK**

RC: **None**

NANO: **No**

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: Weight percent interval used to protect product exact recipe. Furthermore, this substance is undisclosed as it is proprietary.

DESSICANT

%: 1.5000 - 5.0000

PRODUCT THRESHOLD: 1000 ppm	RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes	MATERIAL TYPE: Geologically Derived Material
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RESIDUALS AND IMPURITIES NOTES: There are no residuals or impurities at or above the declaration threshold.

OTHER MATERIAL NOTES: Weight interval is used to account for multiple product configuration (e.g. glass thickness, laminated glass or not,...).

ZEOLITES

ID: 1318-02-1

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2023-02-02 8:28:30**%: **70.0000 - 100.0000** GreenScreen: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Humectant**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
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
POSITIVE LIST	US Environmental Protection Agency (US EPA)	US EPA - DfE SCIL Green Circle - Verified Low Concern

SUBSTANCE NOTES: Weight percent interval used to cover multiple product composition.

CLAY

ID: 1302-87-0

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2023-02-02 8:28:29**%: **0.0010 - 30.0000** GreenScreen: **NoGS** RC: **None** NANO: **No** SUBSTANCE ROLE: **Filler**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
None found		No listings found on Additional Hazard Lists

SUBSTANCE NOTES: Weight percent interval used to cover multiple product composition.

SPACER BAR #1%: **1.1000 - 4.0000**PRODUCT THRESHOLD: 1000 ppm RESIDUALS AND IMPURITIES EVALUATION COMPLETED: **Yes** MATERIAL TYPE: **Polymeric Material**

RESIDUALS AND IMPURITIES NOTES: There are no residuals or impurities at or above the declaration threshold.

OTHER MATERIAL NOTES: Weight interval is used to account for multiple product configuration (e.g. glass thickness, laminated glass or not,...). This material is an alternative to spacer bar #2 and #3.

STAINLESS STEEL

ID: 12597-68-1

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2023-02-02 8:28:30**%: **40.0000 - 50.0000** GreenScreen: **NoGS** RC: **None** 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: 301 stainless steel. Percent weight interval is used to preserve exact product recipe.

POLYPROPYLENE

ID: 9003-07-0

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2023-02-02 8:28:31		
%: 40.0000 - 50.0000	GreenScreen: LT-P1	RC: None	NANO: No	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		
POSITIVE LIST	US Environmental Protection Agency (US EPA)	US EPA - DfE SCIL Green Circle - Verified Low Concern		

SUBSTANCE NOTES: Percent weight interval is used to preserve exact product recipe.

STEEL

ID: 12597-69-2

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2023-02-02 8:28:32		
%: 3.0000 - 5.0000	GreenScreen: NoGS	RC: None	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: Percent weight interval is used to preserve exact product recipe. Type and grade of steel is unknown.

UNDISCLOSED

ID: **Undisclosed**

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2023-02-02 8:28:33		
%: 2.0000 - 5.0000	GreenScreen: LT-UNK	RC: None	NANO: No	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: Percent weight interval is used to preserve exact product recipe. Furthermore, this substance is undisclosed as it is proprietary.

COATING #1

%: 0.0000 - 2.0000

PRODUCT THRESHOLD: 1000 ppm RESIDUALS AND IMPURITIES EVALUATION COMPLETED: No MATERIAL TYPE: Polymeric Material

RESIDUALS AND IMPURITIES NOTES: No residuals or impurities are known or expected to be present at or above the Content Inventory Threshold.

OTHER MATERIAL NOTES: Material weight interval used to account for glass with or without coatings. Alternative to coating #1 and #4. Note that two coatings may be used in the same sealed unit.

SILANOL TERMINATED POLYDIMETHYLSILOXANE

ID: 70131-67-8

HAZARD DATA SOURCE: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2023-02-02 8:28:30

%: 0.0000 - 85.0000 GreenScreen: BM-2 RC: None NANO: No SUBSTANCE ROLE: Coating

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
EYE	GHS - New Zealand	Eye irritation category 2
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
POSITIVE LIST	US Environmental Protection Agency (US EPA)	US EPA - DfE SCIL Green Half-Circle - Expected Low Concern

SUBSTANCE NOTES: Identified on the US EPA Safer Chemical Ingredient List. Crosslinked Polydimethylsiloxane. Water-based silicone coating that is fully cured to a tack-free silicone elastomeric film providing opacification in any color to glass and related construction materials. Weight interval used to protect product exact recipe.

AMORPHOUS SILICA

ID: 7631-86-9

HAZARD DATA SOURCE: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2023-02-02 8:28:31

%: 0.0000 - 20.0000 GreenScreen: BM-1 RC: None NANO: No SUBSTANCE ROLE: Tensile strength additive

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	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 of Problematic Chemicals Antimicrobials

SUBSTANCE NOTES: Weight interval used to protect product exact recipe. Form-specific hazards not expected to apply when substance is bound in the matrix of the cured and dried product.

RUTILE, TIN ZINC

ID: 85536-73-8

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2023-02-02 8:28:32**

#: 0.0000 - 12.0000 GreenScreen: **NoGS** RC: **None** NANO: **No** SUBSTANCE ROLE: **Pigment**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

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

SUBSTANCE NOTES: Weight interval used to protect product exact recipe and account for multiple colors. Substance not present in all colors.

C.I. PIGMENT GREEN 50

ID: 68186-85-6

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2023-02-02 8:28:32**

#: 0.0000 - 12.0000 GreenScreen: **LT-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Pigment**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
CAN	US CDC - Occupational Carcinogens	Occupational Carcinogen
CAN	IARC	Group 1 - Agent is Carcinogenic to humans
CAN	CA EPA - Prop 65	Carcinogen
CAN	US NIH - Report on Carcinogens	Known to be a human Carcinogen
CAN	MAK	Carcinogen Group 2 - Considered to be carcinogenic for man
RES	MAK	Sensitizing Substance Sah - Danger of airway & skin sensitization
GEN	MAK	Germ Cell Mutagen 3a

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
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPH)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Footwear, Apparel & Jewelry Products
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes of Problematic Chemicals Certain Metals

SUBSTANCE NOTES: Weight interval used to protect product exact recipe and account for multiple colors. Form-specific hazards not expected to apply when substance is bound in the matrix of the cured and dried product.
Substance not present in all colors.

C.I. PIGMENT YELLOW 53

ID: 8007-18-9

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2023-02-02 8:28:33		
%: 0.0000 - 12.0000	GreenScreen: LT-1	RC: None	NANO: No	SUBSTANCE ROLE: Pigment
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
CAN	IARC	Group 1 - Agent is Carcinogenic to humans		
CAN	CA EPA - Prop 65	Carcinogen		
CAN	US NIH - Report on Carcinogens	Known to be a human Carcinogen		
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		
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPH)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Footwear, Apparel & Jewelry Products		

SUBSTANCE NOTES: Weight interval used to protect product exact recipe and account for multiple colors. Form-specific hazards not expected to apply when substance is bound in the matrix of the cured and dried product.
Substance not present in all colors.

DIIRON TRIOXIDE

ID: 1309-37-1

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2023-02-02 8:28:34**%: **0.0000 - 12.0000** GreenScreen: **BM-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Pigment**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
CAN	MAK	Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification
MAM	GHS - Japan	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1]
EYE	GHS - Japan	H318 - Causes serious eye damage [Serious eye damage / eye irritation - Category 1]
SKI	GHS - Japan	H315 - Causes skin irritation [Skin corrosion / irritation - Category 2]
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
None found		No listings found on Additional Hazard Lists

SUBSTANCE NOTES: Weight interval used to protect product exact recipe and account for multiple colors. Form-specific hazards not expected to apply when substance is bound in the matrix of the cured and dried product. Substance not present in all colors.

NIOBIUM SULFUR TIN ZINC OXIDE

ID: 1374645-21-2

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2023-02-02 8:28:31**%: **0.0000 - 12.0000** GreenScreen: **NoGS** RC: **None** NANO: **No** SUBSTANCE ROLE: **Pigment**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
None found		No listings found on Additional Hazard Lists

SUBSTANCE NOTES: Weight interval used to protect product exact recipe and account for multiple colors. Substance not present in all colors.

TITANIUM DIOXIDE

ID: 13463-67-7

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2023-02-02 8:28:33**%: **0.0000 - 12.0000** GreenScreen: **LT-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	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]
CAN	EU - Annex VI CMRs	Carcinogen Category 2 - Suspected human Carcinogen

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 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: Weight interval used to protect product exact recipe and account for multiple colors available. Form-specific hazards not expected to apply when substance is bound in the matrix of the cured and dried product. Substance not present in all colors.

C.I. PIGMENT YELLOW 42

ID: 51274-00-1

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2023-02-02 8:28:35		
#: 0.0000 - 10.0000	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Pigment
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
None found		No warnings found on HPD Priority Hazard Lists		
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION		
None found		No listings found on Additional Hazard Lists		

SUBSTANCE NOTES: Weight interval used to protect product exact recipe and account for multiple colors. Substance not present in all colors.

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2023-02-02 8:28:34**%: **0.0000 - 10.0000** GreenScreen: **LT-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Pigment**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
CAN	MAK	Carcinogen Group 2 - Considered to be carcinogenic for man
RES	MAK	Sensitizing Substance Sah - Danger of airway & skin sensitization
GEN	MAK	Germ Cell Mutagen 3a
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: Weight interval used to protect product exact recipe and account for multiple colors. Form-specific hazards not expected to apply when substance is bound in the matrix of the cured and dried product.
Substance not present in all colors.

C. I. PIGMENT BLUE 15

ID: 147-14-8

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2023-02-02 8:28:34**%: **0.0000 - 6.0000** GreenScreen: **BM-3** RC: **None** NANO: **No** SUBSTANCE ROLE: **Pigment**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
POSITIVE LIST	US Environmental Protection Agency (US EPA)	US EPA - DfE Safer Chemicals Ingredients list (SCIL) Colorants - Green Circle (Verified Low Concern)

SUBSTANCE NOTES: Weight interval used to protect product exact recipe and account for multiple colors. Substance not present in all colors.

CARBON BLACK

ID: 1333-86-4

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2023-02-02 8:28:35**%: **0.0000 - 6.0000** GreenScreen: **BM-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Pigment**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
CAN	US CDC - Occupational Carcinogens	Occupational Carcinogen
CAN	MAK	Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification
CAN	CA EPA - Prop 65	Carcinogen - specific to chemical form or exposure route
CAN	IARC	Group 2B - Possibly carcinogenic to humans - inhaled from occupational sources
EYE	GHS - New Zealand	Eye irritation category 2
CAN	GHS - New Zealand	Carcinogenicity category 2
CAN	GHS - Japan	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]
MAM	GHS - Japan	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1]

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

SUBSTANCE NOTES: Weight interval used to protect product exact recipe and account for multiple colors. Form-specific hazards not expected to apply when substance is bound in the matrix of the cured and dried product.
Substance not present in all colors.

COPPER, [1,3,8,16,18,24-HEXABROMO-2,4,9,10,11,15,17,22,23,25-DECACHLORO-29H,31H-PHTHALOCYANINATO (2-)-N29,N30,N31,N32]-, (SP-4-2)-

ID: 14302-13-7

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2023-02-02 8:28:36		
%: 0.0000 - 6.0000	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Pigment
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
None found		No warnings found on HPD Priority Hazard Lists		
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION		
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022		
		Core Restrictions		

SUBSTANCE NOTES: Weight interval used to protect product exact recipe and account for multiple colors. Substance not present in all colors.

QUINO[2,3-B]ACRIDINE-7,14-DIONE, 5,12-DIHYDRO-

ID: 1047-16-1

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2023-02-02 8:28:36		
%: 0.0000 - 6.0000	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Pigment

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
None found		No listings found on Additional Hazard Lists

SUBSTANCE NOTES: Weight interval used to protect product exact recipe and account for multiple colors. Substance not present in all colors.

BUTANAMIDE, 2,2'-[(3,3'-DICHLORO[1,1'- BIPHENYL]-4,4'-DIYL)BIS(AZO)]BIS[N-(4-CHLORO-2,5 -DIMETHOXYPHENYL)-3-OXO- ID: 5567-15-7

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2023-02-02 8:28:33**

%: **0.0000 - 6.0000** GreenScreen: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Pigment**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
EYE	GHS - New Zealand	Eye irritation category 2
AQU	GHS - New Zealand	Hazardous to the aquatic environment - chronic category 3
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Core Restrictions

SUBSTANCE NOTES: Weight interval used to protect product exact recipe. Form-specific hazards not expected to apply when substance is bound in the matrix of the cured and dried product. Substance not present in all colors.

MIRROR BASE COAT %: **0.0000 - 1.2500**

PRODUCT THRESHOLD: 1000 ppm RESIDUALS AND IMPURITIES EVALUATION COMPLETED: No MATERIAL TYPE: Polymeric Material

RESIDUALS AND IMPURITIES NOTES: Residuals and impurities are considered and reported if present at or above product declaration threshold.

OTHER MATERIAL NOTES: A weight interval is used to account for float glass only or mirrors.

XYLENE ID: 1330-20-7

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2023-02-02 8:28:34**

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

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
REP	GHS - Japan	H360 - May damage fertility or the unborn child [Toxic to reproduction - Category 1B]
SKI	EU - GHS (H-Statements) Annex 6 Table 3-1	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
SKI	GHS - New Zealand	Skin irritation category 2
EYE	GHS - New Zealand	Eye irritation category 2
SKI	GHS - Australia	H315 - Causes skin irritation [Skin corrosion/irritation - 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]
MAM	GHS - Japan	H370 - Causes damage to organs [Specific target organs/systemic toxicity following single exposure - Category 1]
SKI	GHS - Japan	H315 - Causes skin irritation [Skin corrosion / irritation - Category 2]
REP	GHS - New Zealand	Reproductive toxicity category 2
EYE	GHS - Korea	H319 - Causes serious eye irritation [Serious eye damage/irritation - Category 2]
SKI	GHS - Korea	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
MAM	GHS - Korea	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organ toxicity - Repeated exposure - Category 1]
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]
SKI	GHS - Malaysia	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes of Problematic Chemicals Some Solvents
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes of Problematic Chemicals Antimicrobials

SUBSTANCE NOTES: Weight percentage interval is used to add confidentiality to the composition of the product.

PRODUCT THRESHOLD: 1000 ppm RESIDUALS AND IMPURITIES EVALUATION COMPLETED: No MATERIAL TYPE: Polymeric Material

RESIDUALS AND IMPURITIES NOTES: Residuals and impurities are considered and reported if present at or above product declaration threshold.

OTHER MATERIAL NOTES: A weight interval is used to account for float glass only or mirrors.

XYLENE

ID: 1330-20-7

HAZARD DATA SOURCE: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2023-02-02 8:28:36

%: 0.0000 - 13.0000 GreenScreen: BM-1 RC: None NANO: No SUBSTANCE ROLE: Solvent

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
REP	GHS - Japan	H360 - May damage fertility or the unborn child [Toxic to reproduction - Category 1B]
SKI	EU - GHS (H-Statements) Annex 6 Table 3-1	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
SKI	GHS - New Zealand	Skin irritation category 2
EYE	GHS - New Zealand	Eye irritation category 2
SKI	GHS - Australia	H315 - Causes skin irritation [Skin corrosion/irritation - 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]
MAM	GHS - Japan	H370 - Causes damage to organs [Specific target organs/systemic toxicity following single exposure - Category 1]
SKI	GHS - Japan	H315 - Causes skin irritation [Skin corrosion / irritation - Category 2]
REP	GHS - New Zealand	Reproductive toxicity category 2
EYE	GHS - Korea	H319 - Causes serious eye irritation [Serious eye damage/irritation - Category 2]
SKI	GHS - Korea	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
MAM	GHS - Korea	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organ toxicity - Repeated exposure - Category 1]
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]
SKI	GHS - Malaysia	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes of Problematic Chemicals Some Solvents
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes of Problematic Chemicals Antimicrobials

SUBSTANCE NOTES: Weight percentage interval is used to add confidentiality to the composition of the product.

ISOBUTYL ALCOHOL

ID: 78-83-1

HAZARD DATA SOURCE: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2023-02-02 8:28:35

%: 0.0000 - 13.0000 GreenScreen: BM-2 RC: None NANO: No SUBSTANCE ROLE: Solvent

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
SKI	EU - GHS (H-Statements) Annex 6 Table 3-1	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
EYE	EU - GHS (H-Statements) Annex 6 Table 3-1	H318 - Causes serious eye damage [Serious eye damage/eye irritation - Category 1]
EYE	GHS - New Zealand	Eye irritation category 2
SKI	GHS - Australia	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
EYE	GHS - Japan	H318 - Causes serious eye damage [Serious eye damage / eye irritation - Category 1]
SKI	GHS - Japan	H315 - Causes skin irritation [Skin corrosion / irritation - Category 2]
SKI	GHS - Malaysia	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
EYE	GHS - Malaysia	H318 - Causes serious eye damage [Serious eye damage/eye irritation - Category 1]
EYE	GHS - Australia	H318 - Causes serious eye damage [Serious eye damage/eye irritation - Category 1]

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes of Problematic Chemicals Some Solvents

SUBSTANCE NOTES: Weight percentage interval is used to add confidentiality to the composition of the product.

PRIMARY SEAL #1

%: 0.0500 - 0.2000

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

RESIDUALS AND IMPURITIES NOTES: There are no residuals or impurities at or above the declaration threshold.

OTHER MATERIAL NOTES: Weight interval is used to account for multiple product configuration (e.g. glass thickness, laminated glass or not,...). This material is an alternative to primary seal #2.

POLYISOBUTYLENE

ID: 9003-27-4

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2023-02-02 8:28:37**

%: **20.0000 - 40.0000** GreenScreen: **LT-UNK** RC: **None** NANO: **No** 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: Weight percent interval used to protect product exact recipe.

POLYBUTENE

ID: 9003-29-6

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2023-02-02 8:28:38**

%: **10.0000 - 30.0000** GreenScreen: **LT-UNK** RC: **None** NANO: **No** 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
POSITIVE LIST	US Environmental Protection Agency (US EPA)	US EPA - DfE SCIL Green Circle - Verified Low Concern

SUBSTANCE NOTES: Weight percent interval used to protect product exact recipe.

SECONDARY SEAL - SILICONE#2 %: **1.5000 - 6.0000 ALTERNATE**

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

RESIDUALS AND IMPURITIES NOTES: There are no residuals or impurities at or above the declaration threshold.

OTHER MATERIAL NOTES: Weight interval is used to account for multiple product configuration (e.g. glass thickness, laminated glass or not,...). This material is an alternative to secondary seal - polysulfide #1 and #2, as well as secondary seal - silicone #1.

ALTERNATE: This nested material is an alternate nested material to Secondary seal - Polysulfide #1.

LIMESTONE

ID: 1317-65-3

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2023-02-02 8:28:37**

%: **15.0000 - 50.0000** GreenScreen: **BM-3dg** RC: **None** NANO: **No** SUBSTANCE ROLE: **Filler**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
POSITIVE LIST	US Environmental Protection Agency (US EPA)	US EPA - DfE SCIL Green Circle - Verified Low Concern
SUBSTANCE NOTES: Weight percent interval used to protect product exact recipe.		

UNDISCLOSED

ID: **Undisclosed**

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2023-02-02 8:28:38		
%: 30.0000 - 50.0000	GreenScreen: BM-2	RC: None	NANO: No	SUBSTANCE ROLE: Polymer species
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: Range entered for proprietary reasons. CAS# hidden to proprietary reasons.				

CALCIUM CARBONATE (PRIMARY CASRN IS 471-34-1)

ID: **114453-69-9**

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2023-02-02 8:28:35		
%: 15.0000 - 50.0000	GreenScreen: BM-3	RC: None	NANO: No	SUBSTANCE ROLE: Filler
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
EYE	GHS - New Zealand	Eye irritation category 2		
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION		
POSITIVE LIST	US Environmental Protection Agency (US EPA)	US EPA - DfE SCIL Green Circle - Verified Low Concern		
SUBSTANCE NOTES: Weight percent interval used to protect product exact recipe.				

UNDISCLOSED

ID: **Undisclosed**

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2023-02-02 8:28:39		
%: 1.0000 - 10.0000	GreenScreen: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Polymer species

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
PBT	EC - CEPA DSL	Persistent, Bioaccumulative and inherently Toxic (PBiTH) to humans
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
None found		No listings found on Additional Hazard Lists
SUBSTANCE NOTES: Range is used to protect product recipe. Substance is undisclosed to to being proprietary.		

3-(TRIETHOXYSILYL)PROPYLAMINE

ID: 919-30-2

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2023-02-02 8:28:40		
%: 0.5000 - 2.0000	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Tackifier
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
SKI	EU - GHS (H-Statements) Annex 6 Table 3-1	H314 - Causes severe skin burns and eye damage [Skin corrosion/irritation - Category 1A or 1B or 1C]		
SKI	GHS - New Zealand	Skin corrosion category 1C		
EYE	GHS - New Zealand	Serious eye damage category 1		
EYE	GHS - Japan	H318 - Causes serious eye damage [Serious eye damage / eye irritation - Category 1]		
SKI	GHS - Japan	H314 - Causes severe skin burns and eye damage [Skin corrosion / irritation - Category 1]		
SKI	GHS - Australia	H314 - Causes severe skin burns and eye damage [Skin corrosion/irritation - Category 1A or 1B or 1C]		
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION		
None found		No listings found on Additional Hazard Lists		
SUBSTANCE NOTES: Weight percent interval used to protect product exact recipe.				

TETRAPROPYL ORTHOSILICATE

ID: 682-01-9

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2023-02-02 8:28:36		
%: 0.5000 - 2.0000	GreenScreen: NoGS	RC: None	NANO: No	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: Weight percent interval used to protect product exact recipe.				

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2023-02-02 8:28:37**

%: **0.2000 - 1.0000** GreenScreen: **BM-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Pigment**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
CAN	US CDC - Occupational Carcinogens	Occupational Carcinogen**
CAN	MAK	Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification**
CAN	CA EPA - Prop 65	Carcinogen - specific to chemical form or exposure route**
CAN	IARC	Group 2B - Possibly carcinogenic to humans - inhaled from occupational sources**
EYE	GHS - New Zealand	Eye irritation category 2**
CAN	GHS - New Zealand	Carcinogenicity category 2**
CAN	GHS - Japan	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]**
MAM	GHS - Japan	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1]**
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
None found		No listings found on Additional Hazard Lists

SUBSTANCE NOTES: Weight percent interval used to protect product exact recipe.

**Form-Specific Hazard: This substance's GreenScreen Benchmark or List Translator score and the applicable hazards are related to particulate inhalation, which is expected to occur only during manufacture, installation, maintenance, or demolition, due to activities such as sawing, sanding, grinding, or intensive cleaning. See HPDC's Special Conditions policy for more information. Manufacturer's Safety Data Sheet (SDS), if applicable, may offer occupational health and safety information.

UNDISCLOSED

ID: **Undisclosed**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2023-02-02 8:28:38**

%: **0.1000 - 1.0000** GreenScreen: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Surface modifier**

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: CAS# undisclosed and range utilized for proprietary reasons.

SECONDARY SEAL - SILICONE#1 %: 1.5000 - 6.0000 ALTERNATE

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

RESIDUALS AND IMPURITIES NOTES: There are no residulats or impurities at or above the declaration threshold.

OTHER MATERIAL NOTES: Weight interval is used to account for multiple product configuration (e.g. glass thickness, laminated glass or not,...). This material is an alternative to secondary seal - polysulfide #1 and #2, as well as secondary seal - silicone#2.

ALTERNATE: This nested material is an alternate nested material to Secondary seal - Polysulfide #1.

SILOXANES AND SILICONES, DI-ME, HYDROXY-TERMINATED

ID: 70131-67-8

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2023-02-02 8:28:39**

#: **35.0000 - 75.0000** GreenScreen: **BM-2** RC: **None** NANO: **No** SUBSTANCE ROLE: **Polymer species**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
EYE	GHS - New Zealand	Eye irritation category 2
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
POSITIVE LIST	US Environmental Protection Agency (US EPA)	US EPA - DfE SCIL Green Half-Circle - Expected Low Concern

SUBSTANCE NOTES: Weight percent interval used to protect product exact recipe.

CALCIUM CARBONATE

ID: 471-34-1

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2023-02-02 8:28:40**

#: **25.0000 - 55.0000** GreenScreen: **BM-3** RC: **None** NANO: **No** SUBSTANCE ROLE: **Filler**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
EYE	GHS - New Zealand	Eye irritation category 2
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
POSITIVE LIST	US Environmental Protection Agency (US EPA)	US EPA - DfE SCIL Green Circle - Verified Low Concern

SUBSTANCE NOTES: Weight percent interval used to protect product exact recipe.

TETRAETHYL SILICATE

ID: 78-10-4

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2023-02-02 8:28:37**

#: **0.2000 - 2.0000** GreenScreen: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Curing agent**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
EYE	EU - GHS (H-Statements) Annex 6 Table 3-1	H319 - Causes serious eye irritation [Serious eye damage/eye irritation - Category 2A]
EYE	GHS - New Zealand	Eye irritation category 2
EYE	GHS - Australia	H319 - Causes serious eye irritation [Serious eye damage/eye irritation - Category 2A]
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]
SKI	GHS - Japan	H315 - Causes skin irritation [Skin corrosion / irritation - Category 2]
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes of Problematic Chemicals Some Solvents

SUBSTANCE NOTES: Weight percent interval used to protect product exact recipe.

SECONDARY SEAL - POLYSULFIDE#2

#: 1.5000 - 6.0000 ALTERNATE

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

RESIDUALS AND IMPURITIES NOTES: There are no residuals or impurities at or above the declaration threshold.

OTHER MATERIAL NOTES: Weight interval is used to account for multiple product configuration (e.g. glass thickness, laminated glass or not,...). This material is an alternative to secondary seal - polysulfide #1 and secondary seal - silicone #1 and #2.

ALTERNATE: This nested material is an alternate nested material to Secondary seal - Polysulfide #1.

CALCIUM CARBONATE

ID: 471-34-1

HAZARD DATA SOURCE: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2023-02-02 8:28:38

#: 15.0000 - 35.0000 GreenScreen: BM-3 RC: None NANO: No SUBSTANCE ROLE: Filler

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
EYE	GHS - New Zealand	Eye irritation category 2
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
POSITIVE LIST	US Environmental Protection Agency (US EPA)	US EPA - DfE SCIL Green Circle - Verified Low Concern

SUBSTANCE NOTES: Weight percent interval used to protect product exact recipe.

HAZARD DATA SOURCE: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2023-02-02 8:28:39

%: 15.0000 - 35.0000 GreenScreen: LT-P1 RC: None NANO: No SUBSTANCE ROLE: Polymer species

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Core Restrictions

SUBSTANCE NOTES: Weight percent interval used to protect product exact recipe.

MANGANESE DIOXIDE

ID: 1313-13-9

HAZARD DATA SOURCE: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2023-02-02 8:28:40

%: 15.0000 - 35.0000 GreenScreen: BM-1 RC: None NANO: No SUBSTANCE ROLE: Filler

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
EYE	GHS - New Zealand	Eye irritation 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]
GEN	GHS - Japan	H341 - Suspected of causing genetic defects [Germ cell mutagenicity - Category 2]
MAM	GHS - Australia	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organ toxicity - repeated exposure - Category 1]
MAM	GHS - New Zealand	Specific target organ toxicity - repeated exposure category 1
MAM	GHS - Japan	H370 - Causes damage to organs [Specific target organs/systemic toxicity following single exposure - Category 1]
MAM	GHS - New Zealand	Acute inhalation toxicity category 2
REP	GHS - New Zealand	Reproductive toxicity category 2
REP	GHS - New Zealand	Effects on or via lactation

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: Weight percent interval used to protect product exact recipe.		

CARBON BLACK

ID: 1333-86-4

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2023-02-02 8:28:41		
%: 2.0000 - 12.0000	GreenScreen: BM-1	RC: None	NANO: No	SUBSTANCE ROLE: Pigment
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
CAN	US CDC - Occupational Carcinogens	Occupational Carcinogen**		
CAN	MAK	Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification**		
CAN	CA EPA - Prop 65	Carcinogen - specific to chemical form or exposure route**		
CAN	IARC	Group 2B - Possibly carcinogenic to humans - inhaled from occupational sources**		
EYE	GHS - New Zealand	Eye irritation category 2**		
CAN	GHS - New Zealand	Carcinogenicity category 2**		
CAN	GHS - Japan	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]**		
MAM	GHS - Japan	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1]**		
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION		
None found		No listings found on Additional Hazard Lists		

SUBSTANCE NOTES: Weight percent interval used to protect product exact recipe.

**Form-Specific Hazard: This substance's GreenScreen Benchmark or List Translator score and the applicable hazards are related to particulate inhalation, which is expected to occur only during manufacture, installation, maintenance, or demolition, due to activities such as sawing, sanding, grinding, or intensive cleaning. See HPDC's Special Conditions policy for more information. Manufacturer's Safety Data Sheet (SDS), if applicable, may offer occupational health and safety information.

ALKANES, C24-28, CHLORO

ID: 1402738-52-6

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2023-02-02 8:28:38		
%: 0.0000 - 3.5000	GreenScreen: NoGS	RC: None	NANO: No	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: Weight percent interval used to protect product exact recipe.

N,N'-DIPHENYLGUANIDINE

ID: 102-06-7

HAZARD DATA SOURCE: Pharos Chemical and Materials Library	HAZARD SCREENING DATE: 2023-02-02 8:28:41			
%: 0.0000 - 2.5000	GreenScreen: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Activator

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
MUL	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters
SKI	EU - GHS (H-Statements) Annex 6 Table 3-1	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
EYE	EU - GHS (H-Statements) Annex 6 Table 3-1	H319 - Causes serious eye irritation [Serious eye damage/eye irritation - Category 2A]
AQU	EU - GHS (H-Statements) Annex 6 Table 3-1	H411 - Toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 2]
REP	EU - GHS (H-Statements) Annex 6 Table 3-1	H361f - Suspected of damaging fertility [Reproductive toxicity - Category 2]
SKI	GHS - New Zealand	Skin irritation category 2
EYE	GHS - New Zealand	Eye irritation category 2
SKI	GHS - Australia	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
EYE	GHS - Australia	H319 - Causes serious eye irritation [Serious eye damage/eye irritation - Category 2A]
AQU	GHS - New Zealand	Hazardous to the aquatic environment - chronic category 2
REP	GHS - New Zealand	Reproductive toxicity category 2
AQU	GHS - Australia	H411 - Toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 2]
REP	GHS - Japan	H361 - Suspected of damaging fertility or the unborn child [Toxic to reproduction - Category 2]
REP	EU - Annex VI CMRs	Reproductive Toxicity - Category 2
AQU	GHS - Japan	H401 - Toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 2]
AQU	GHS - Japan	H411 - Toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 2]
MAM	GHS - New Zealand	Acute oral toxicity category 3
MAM	GHS - Japan	H301 - Toxic if swallowed [Acute Toxicity (oral) - Category 3]
REP	GHS - Australia	H361f - Suspected of damaging fertility [Reproductive toxicity - Category 2]
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
None found		No listings found on Additional Hazard Lists

SUBSTANCE NOTES: Weight percent interval used to protect product exact recipe.

%: **0.0000 - 2.5000**GreenScreen: **LT-P1**RC: **None**NANO: **No**SUBSTANCE ROLE: **Accelerator**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
SKI	MAK	Sensitizing Substance Sh - Danger of skin sensitization
MUL	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters
AQU	EU - GHS (H-Statements) Annex 6 Table 3-1	H400 - Very toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 1]
AQU	EU - GHS (H-Statements) Annex 6 Table 3-1	H410 - Very toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 1]
MAM	GHS - Japan	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1]
GEN	GHS - Australia	H341 - Suspected of causing genetic defects [Germ cell mutagenicity - Category 2]
MAM	GHS - New Zealand	Specific target organ toxicity - repeated exposure category 1
MAM	GHS - Japan	H370 - Causes damage to organs [Specific target organs/systemic toxicity following single exposure - Category 1]
SKI	GHS - New Zealand	Skin sensitisation category 1
AQU	GHS - New Zealand	Hazardous to the aquatic environment - acute category 1
AQU	GHS - Japan	H400 - Very toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 1]
AQU	GHS - Japan	H410 - Very toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 1]
AQU	GHS - Australia	H410 - Very toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 1]
AQU	GHS - New Zealand	Hazardous to the aquatic environment - chronic category 1
REP	GHS - Japan	H361 - Suspected of damaging fertility or the unborn child [Toxic to reproduction - Category 2]
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	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
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes of Problematic Chemicals Antimicrobials

SUBSTANCE NOTES: Weight percent interval used to protect product exact recipe.

GAMMA-GLYCIDOXYPROPYLTRIMETHOXYSILANE

ID: 2530-83-8

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2023-02-02 8:28:39**

%: **0.0000 - 2.5000** GreenScreen: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Tackifier**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
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: Weight percent interval used to protect product exact recipe.

PRIMARY SEAL #2

%: **0.0500 - 0.2000 ALTERNATE**

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

RESIDUALS AND IMPURITIES NOTES: There are no residuals or impurities at or above the declaration threshold.

OTHER MATERIAL NOTES: Weight interval is used to account for multiple product configuration (e.g. glass thickness, laminated glass or not,...). This material is an alternative to primary seal #1.

ALTERNATE: This nested material is an alternate nested material to Primary Seal #1.

UNDISCLOSED

ID: **Undisclosed**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2023-02-02 8:28:42**

%: **50.0000 - 60.0000** GreenScreen: **LT-UNK** RC: **None** NANO: **No** 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: Weight percent interval used to protect product exact recipe. Furthermore, this substance is undisclosed as it is proprietary.

SPACER BAR #3

%: **1.1000 - 4.0000 ALTERNATE**

PRODUCT THRESHOLD: 1000 ppm RESIDUALS AND IMPURITIES EVALUATION COMPLETED: **Yes** MATERIAL TYPE: **Metal**

RESIDUALS AND IMPURITIES NOTES: There are no residuals or impurities at or above the declaration threshold.

OTHER MATERIAL NOTES: Weight interval is used to account for multiple product configuration (e.g. glass thickness, laminated glass or not,...). This material is an alternative to spacer bar #1 and #2.

ALTERNATE: This nested material is an alternate nested material to Spacer Bar #1.

UNS A93105 ALUMINUM ALLOY

ID: **Not registered**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2023-02-02 8:28:39**

%: **100.0000 - 100.0000** GreenScreen: **NoGS** RC: **None** 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: Pure aluminum (CAS RN 7429-90-5) has a GS score of BM-1. Aluminium alloy A93105 contains Manganese (Mn) and Magnesium (Mg). Manganse (CAS RN 7439-96-5) has a GS score of LT-P1 and Magnesium (CAS RN 7439-95-4) has a GS score of LT-UNK.

SPACER BAR #2

%: **1.1000 - 4.0000 ALTERNATE**

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

RESIDUALS AND IMPURITIES NOTES: There are no residuals or impurities at or above the declaration threshold.

OTHER MATERIAL NOTES: Weight interval is used to account for multiple product configuration (e.g. glass thickness, laminated glass or not,...). This material is an alternative to spacer bar #1 and #3.

ALTERNATE: This nested material is an alternate nested material to Spacer Bar #1.

AS RESIN

ID: 9003-54-7

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2023-02-02 8:28:40**%: **60.0000 - 70.0000** GreenScreen: **LT-UNK** RC: **None** NANO: **No** 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: Percent weight interval is used to preserve exact product recipe.

CONTINUOUS FILAMENT GLASS FIBER, NON-RESPIRABLE

ID: 65997-17-3

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2023-02-02 8:28:41**%: **30.0000 - 40.0000** GreenScreen: **LT-UNK** RC: **None** 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
POSITIVE LIST	US Environmental Protection Agency (US EPA)	US EPA - DfE SCIL Green Circle - Verified Low Concern

SUBSTANCE NOTES: Percent weight interval is used to preserve exact product recipe.

COATING #4%: **0.0000 - 0.1000 ALTERNATE**

PRODUCT THRESHOLD: 1000 ppm RESIDUALS AND IMPURITIES EVALUATION COMPLETED: No MATERIAL TYPE: Glass

RESIDUALS AND IMPURITIES NOTES: There are no residuals or impurities at or above the declaration threshold.

OTHER MATERIAL NOTES: Material weight interval used to account for glass with or without coatings. Alternative to coating #1 and #4. Note that two coatings may be used in the same sealed unit.

ALTERNATE: This nested material is an alternate nested material to Coating #1.

FRITS, CHEMICALS

ID: 65997-18-4

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2023-02-02 8:28:43**%: **0.0000 - 50.0000 ALT** GreenScreen: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Glass component**

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

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

SUBSTANCE NOTES: Weight interval is used to protect product exact recipe.

ALTERNATE: This substance is an alternate substance to Dipropylene Glycol Methyl Ether.

DIPROPYLENE GLYCOL METHYL ETHER

ID: 34590-94-8

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2023-02-02 8:28:42**

#: **0.0000 - 50.0000** GreenScreen: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Solvent**

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 of Problematic Chemicals Some Solvents
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes of Problematic Chemicals Antimicrobials

SUBSTANCE NOTES: Weight interval is used to protect product exact recipe and cover multiple coating colors.

TITANIUM DIOXIDE

ID: 13463-67-7

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2023-02-02 8:28:40**

#: **0.0000 - 30.0000 ALT** GreenScreen: **LT-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	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]
CAN	EU - Annex VI CMRs	Carcinogen Category 2 - Suspected human Carcinogen

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 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: Weight interval is used to protect product exact recipe and cover multiple coating colors.

ALTERNATE: This substance is an alternate substance to Dipropylene Glycol Methyl Ether.

CYCLOHEXANONE

ID: 108-94-1

HAZARD DATA SOURCE: Pharos Chemical and Materials Library	HAZARD SCREENING DATE: 2023-02-02 8:28:42			
#: 0.0000 - 20.0000 ALT	GreenScreen: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Solvent

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
CAN	MAK	Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
EYE	GHS - New Zealand	Eye irritation 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]
GEN	GHS - Japan	H341 - Suspected of causing genetic defects [Germ cell mutagenicity - Category 2]
MAM	GHS - Japan	H370 - Causes damage to organs [Specific target organs/systemic toxicity following single exposure - Category 1]
MAM	GHS - Japan	H331 - Toxic if inhaled [Acute toxicity (inhalation: vapor) - Category 3]
SKI	GHS - Japan	H315 - Causes skin irritation [Skin corrosion / irritation - Category 2]
REP	GHS - Japan	H361 - Suspected of damaging fertility or the unborn child [Toxic to reproduction - Category 2]
MAM	GHS - Japan	H311 - Toxic in contact with skin [Acute Toxicity (dermal) - Category 3]
MAM	GHS - New Zealand	Acute dermal toxicity category 3
EYE	GHS - Japan	H319 - Causes serious eye irritation [Serious eye damage / eye irritation - Category 2A]
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes of Problematic Chemicals Some Solvents

SUBSTANCE NOTES: Weight interval is used to protect product exact recipe.

ALTERNATE: This substance is an alternate substance to Dipropylene Glycol Methyl Ether.

C.I. PIGMENT GREEN 50

ID: 68186-85-6

HAZARD DATA SOURCE: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2023-02-02 8:28:44

%: 0.0000 - 20.0000 ALT GreenScreen: LT-1 RC: None NANO: No SUBSTANCE ROLE: Pigment

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
CAN	US CDC - Occupational Carcinogens	Occupational Carcinogen
CAN	IARC	Group 1 - Agent is Carcinogenic to humans
CAN	CA EPA - Prop 65	Carcinogen
CAN	US NIH - Report on Carcinogens	Known to be a human Carcinogen
CAN	MAK	Carcinogen Group 2 - Considered to be carcinogenic for man
RES	MAK	Sensitizing Substance Sah - Danger of airway & skin sensitization
GEN	MAK	Germ Cell Mutagen 3a

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPPII)	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 (C2CPPII)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Children's Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPPII)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Footwear, Apparel & Jewelry Products
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes of Problematic Chemicals Certain Metals

SUBSTANCE NOTES: Weight interval is used to protect product exact recipe and cover multiple coating colors.

ALTERNATE: This substance is an alternate substance to Dipropylene Glycol Methyl Ether.

C.I. PIGMENT BROWN 24

ID: **68186-90-3**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2023-02-02 8:28:43**

%: **0.0000 - 20.0000 ALT** GreenScreen: **BM-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Pigment**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (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
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

SUBSTANCE NOTES: Weight interval is used to protect product exact recipe and cover multiple coating colors. Furthermore, the substance is undisclosed as it is proprietary.

ALTERNATE: This substance is an alternate substance to Dipropylene Glycol Methyl Ether.

C.I. PIGMENT BLACK 28

ID: 68186-91-4

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2023-02-02 8:28:41		
%: 0.0000 - 20.0000 ALT	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Pigment
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
None found		No warnings found on HPD Priority Hazard Lists		
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION		
None found		No listings found on Additional Hazard Lists		

SUBSTANCE NOTES: Weight interval is used to protect product exact recipe and cover multiple coating colors.

ALTERNATE: This substance is an alternate substance to Dipropylene Glycol Methyl Ether.

C.I. PIGMENT BLUE 28

ID: 1345-16-0

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2023-02-02 8:28:42		
%: 0.0000 - 20.0000 ALT	GreenScreen: LT-1	RC: None	NANO: No	SUBSTANCE ROLE: Pigment
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
CAN	MAK	Carcinogen Group 2 - Considered to be carcinogenic for man		
RES	MAK	Sensitizing Substance Sah - Danger of airway & skin sensitization		
GEN	MAK	Germ Cell Mutagen 3a		

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: Weight interval is used to protect product exact recipe and cover multiple coating colors.

ALTERNATE: This substance is an alternate substance to Dipropylene Glycol Methyl Ether.

COATING #3

%: 0.0000 - 0.6000 ALTERNATE

PRODUCT THRESHOLD: 1000 ppm RESIDUALS AND IMPURITIES EVALUATION COMPLETED: No MATERIAL TYPE: Glass

RESIDUALS AND IMPURITIES NOTES: There are no residuals or impurities at or above the declaration threshold.

OTHER MATERIAL NOTES: Material weight interval used to account for glass with or without coatings. Alternative to coating #1 and #4. Note that two coatings may be used in the same sealed unit.

ALTERNATE: This nested material is an alternate nested material to Coating #1.

TITANIUM DIOXIDE

ID: 13463-67-7

HAZARD DATA SOURCE: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2023-02-02 8:28:43

%: 0.0000 - 15.0000 GreenScreen: LT-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	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]
CAN	EU - Annex VI CMRs	Carcinogen Category 2 - Suspected human Carcinogen

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 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: Weight interval is used to protect product exact recipe and cover multiple coating colors.

ALUMINUM OXIDE

ID: 1344-28-1

HAZARD DATA SOURCE: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2023-02-02 8:28:44

%: 0.0000 - 10.0000 ALT GreenScreen: BM-2 RC: None NANO: No SUBSTANCE ROLE: Pigment

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
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 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: Weight interval is used to protect product exact recipe and cover multiple coating colors.

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

LAMINATED FILM #3

%: 0.0000 - 6.0000 ALTERNATE

PRODUCT THRESHOLD: 1000 ppm RESIDUALS AND IMPURITIES EVALUATION COMPLETED: No MATERIAL TYPE: Polymeric Material

RESIDUALS AND IMPURITIES NOTES: There are no residuals or impurities at or above the declaration threshold.

OTHER MATERIAL NOTES: A weight interval is used to account for multiple glass thicknesses, laminated film thicknesses and glass without laminated film . Alternative to laminated film #1 and #2.

ALTERNATE: This nested material is an alternate nested material to Laminated film #1.

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2023-02-02 8:28:44**

?: **0.0000 - 100.0000** 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: Weight interval is used to account for product variability.

LAMINATED FILM #2 %: **0.0000 - 6.0000 ALTERNATE**

PRODUCT THRESHOLD: 1000 ppm RESIDUALS AND IMPURITIES EVALUATION COMPLETED: No MATERIAL TYPE: Polymeric Material

RESIDUALS AND IMPURITIES NOTES: There are no residuals or impurities at or above the declaration threshold.

OTHER MATERIAL NOTES: A weight interval is used to account for multiple glass thicknesses, laminated film thicknesses and glass without laminated film . Aternative to laminated film #1 and #3.

ALTERNATE: This nested material is an alternate nested material to Laminated film #1.

POLYVINYLBUTYRAL

ID: 63148-65-2

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2023-02-02 8:28:45**%: **0.0000 - 75.0000** 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: Weight interval is used to keep exact recipe confidential.

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: **2023-02-02 8:28:42**%: **0.0000 - 35.0000 ALT** GreenScreen: **LT-UNK** RC: **None** NANO: **No** 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 of Problematic Chemicals Some Solvents

SUBSTANCE NOTES: Weight interval is used to keep exact recipe confidential.

ALTERNATE: This substance is an alternate substance to Polyvinylbutyral.

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: 2022-11-29	CERTIFIER OR LAB: None
APPLICABLE FACILITIES: All	EXPIRY DATE:	
CERTIFICATE URL:		
CERTIFICATION AND COMPLIANCE NOTES:		

LCA	ISO 14040:2006 Environmental management -- Life cycle assessment	
CERTIFYING PARTY: Third Party	ISSUE DATE: 2018-11-19	CERTIFIER OR LAB: Athena
APPLICABLE FACILITIES: Laurier Station	EXPIRY DATE: 2023-11-18	Sustainable Materials Institute
CERTIFICATE URL: https://www.csaregistries.ca/GHG_VR_Listing/EPD_ProjectDetail?ProjectId=408		
CERTIFICATION AND COMPLIANCE NOTES: The Environmental Product Declaration (EPD) is published by CSA Group (EPD registration number: 8939-3810).		

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.

No accessories are required for this product.

Section 5: General Notes

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MANUFACTURER INFORMATION

MANUFACTURER: LAURIER ARCHITECTURAL INC.
ADDRESS: 153, Laurier blvd, Laurier-Station
Laurier-Station QC G0S 1N0, Canada
WEBSITE: www.laurier.net

CONTACT NAME: Nadine Tardif
TITLE: Estimation Project Manager
PHONE: 418-728-2023
EMAIL: ntartif@laurier.net

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.