MONOLITHIC GLASS by LAURIER GLASS LTD

Health Product Declaration v2.1

created via: HPDC Online Builder

CLASSIFICATION: 08 80 50

PRODUCT DESCRIPTION: Monolithic glass by Laurier Glass Ltd. is a single glass manufactured from the float process. It may be clear or tinted in the mass and available in various thickness from 3 mm to 19 mm. Various coatings may be applied on its surface to confer energetic or aesthetic properties. It may also be thermally treated. This HPD covers all possible variations of Laurier Glass Ltd.'s monolithic glass, except mirrors.

Section 1: Summary

CONTENT INVENTORY

Inventory Reporting Format

- Nested Materials Method
- C Basic Method

Threshold Disclosed Per

C Material

Product

Threshold level C 100 ppm C 1,000 ppm C Per GHS SDS C Per OSHA MSDS C Other **Residuals/Impurities**

Residuals/Impurities Considered in 4 of 5 Materials

Explanation(s) provided for Residuals/Impurities? • Yes O No Are All Substances Above the Threshold Indicated:

Characterized • Yes • No Percent Weight and Role Provided?

Nested Method / Product Threshold

Screened • Yes • No Using Priority Hazard Lists with Results Disclosed?

Identified O Yes O No Name and Identifier Provided?

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.

MATERIAL | SUBSTANCE | *RESIDUAL OR IMPURITY* GREENSCREEN SCORE | HAZARD TYPE

GLASS [SILICA, AMORPHOUS LT-P1 | CAN SODIUM OXIDE LT-UNK CALCIUM OXIDE LT-P1 MAGNESIUM OXIDE LT-UNK | CAN SODIUM SULFATE LT-UNK FERRIC OXIDE BM-2 | CAN CARBON LT-UNK ALUMINUM OXIDE LT-P1 | RES] COATING #1 [SILOXANES AND SILICONES, DI-ME, HYDROXY-TERMINATED BM-2 SILICA, AMORPHOUS LT-P1 | CAN FERRIC OXIDE BM-2 | CAN NICKEL RUTILE YELLOW LT-1 | CAN | RES C.I. PIGMENT GREEN 50 LT-1 | RES | CAN | GEN C.I. PIGMENT YELLOW 227; NIOBIUM SULFUR TIN ZINC OXIDE NoGS C.I. PIGMENT BLUE 28 LT-1 | RES | CAN | GEN FERRIC OXIDE YELLOW LT-UNK CARBON BLACK LT-1 | CAN C.I. PIGMENT GREEN 36 LT-UNK 5,12-DIHYDROQUINO(2,3-B)ACRIDINE-7,14-DIONE LT-UNK C.I. PIGMENT BLUE 15 BM-3 2,2'-((3,3'-DICHLORO(1,1'-BIPHENYL)-4,4'-DIYL)BIS(AZO))BIS(N-(4-C-HORO-2,5-DIMETHOXYPHENYL)-3-OXOBUTYRAMIDE) LT-P1 | MUL TITANIUM DIOXIDE LT-1 | CAN | END C.I. PIGMENT YELLOW 216; RUTILE, TIN ZINC NoGS] COATING #2 [WATER BM-4 2-PROPENOIC ACID, METHYL ESTER, HOMOPOLYMER LT-UNK TITANIUM DIOXIDE LT-1 | CAN | END ETHYLENE GLYCOL MONOBUTYL ETHER (EGBE) BM-2 | SKI | EYE | END POLYETHYLENE LT-UNK FUMED SILICA, CRYSTALLINE-FREE LT-UNK 2-(2-BUTOXYETHOXY)ETHANOL LT-P1 | EYE | END SILICA, AMORPHOUS LT-P1 | CAN TRIETHYLAMINE LT-UNK | SKI | PHY 1,2-BENZISOTHIAZOLIN-3-ONE (BIT) LT-P1 | AQU | SKI | EYE | MUL MONOETHANOLAMINE LT-P1 | RES | SKI | END DIETHYLENE GLYCOL MONOETHYL ETHER LT-UNK] COATING #3 [UNDISCLOSED LT-P1 | MUL UNDISCLOSED LT-1 | CAN | END UNDISCLOSED LT-1 | CAN | RES UNDISCLOSED LT-1 | CAN | PBT | MUL UNDISCLOSED LT-UNK UNDISCLOSED LT-UNK UNDISCLOSED LT-P1 | RES UNDISCLOSED LT-UNK UNDISCLOSED BM-2 | SKI | EYE | END UNDISCLOSED LT-P1 | EYE | END UNDISCLOSED LT-UNK UNDISCLOSED LT-P1 | MUL] COATING #4 [FRITS, CHEMICALS LT-P1 | MUL CYCLOHEXANONE LT-P1 | END | CAN **DIPROPYLENE GLYCOL MONOMETHYL ETHER LT-UNK 2-(2-**BUTOXYETHOXY)ETHANOL LT-P1 | EYE | END C.I. PIGMENT BLUE 28 LT-

Number of Greenscreen BM-4/BM3 contents ... 2

Contents highest concern GreenScreen

Benchmark or List translator Score ... 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.Monolithic glass by Laurier Glass Ltd. contains special conditions materials, reaction products (coatings) and float glass. Guidelines for reporting Special Conditions materials are still under development by the HPDC. Laurier 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 Monolithic Glass [type of glass and type of coating (if present)] introduce ranges in the content inventory section.

1 | RES | CAN | GEN C.I. PIGMENT BLACK 28 LT-UNK RUTILE, ANTIMONY CHROMIUM BUFF LT-UNK C.I. PIGMENT GREEN 50 LT-1 | RES | CAN | GEN TITANIUM DIOXIDE LT-1 | CAN | END NICKEL RUTILE YELLOW LT-1 | CAN | RES ISOBUTYL ALCOHOL BM-2 | SKI | EYE]

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

CERTIFICATIONS AND COMPLIANCE See Section 3 for additional listings. VOC emissions: CDPH Standard Method – Not tested

CONSISTENCY WITH OTHER PROGRAMS

Pre-checked for LEED v4 Material Ingredients, Option 1

Third Party Verified? • Yes • No PREPARER: Self-Prepared VERIFIER: VERIFICATION #: SCREENING DATE: 2018-08-10 PUBLISHED DATE: 2018-08-13 EXPIRY DATE: 2021-08-10 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 2.1, available on the HPDC website at: www.hpd-collaborative.org/hpd-2-1-standard

GLASS

T

%: 95.2000 - 100.0000

HPD URL: N/A

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

RESIDUALS AND IMPURITIES NOTES: Supplier #1: Supplier #1 confirms that there are no residuals or impurities remaining on the acid-etched glass surface following the etching process. Supplier #2: Traces of Carbon, Silicon, Aluminum, Oxygen, Nitrogen, Nickel, Chromium, Silver, Zinc, Zirconium and Titanium are used to form thin layers on Soft Coat glass products; however, those materials are all less than 0.1% by weight and are exempt from hazardous ingredient reporting requirements according to the OSHA Hazard Communication standard. Although present in trace amounts, the primary hazards from the substances present would be the same as for un-coated glass products. Supplier #3: The supplier #3 raw float/flat glass may contain the contaminants chromium, cadmium, and/or lead (derived from very minuscule amounts of mined raw materials such as silica or limestone) at significantly less than the threshold limits for RoHs. These metals are the only RoHS hazardous substances that have the potential to be in the glass -- typically undetected or in the parts par billion range. Supplier #4: No impurities or residuals identified by this supplier. Supplier #5: The supplier #5 declares that Pb, Cr, As, Sb, V and Cd are never present at levels greater than 20ppm.Co, Se and Ni may be added to impart colour to some tinted glasses. Co is never present at a concentration greater than 200ppm and Se at more than 50ppm. Ni is typically not present at levels greater than 200ppm, but may be at 1000ppm in some specific dark grey products.

OTHER MATERIAL NOTES: The main material used is soda-lime glass. The composition disclosed below corresponds to an average and generic composition for soda-lime glass.

SILICA, AMORPHOUS					ID: 7631-86-9
%: 69.0000 - 74.0000	GS: LT-P1	RC: None	NANO: NO	ROLE: Network former	
HAZARDS:	AGENCY(IES) WITH WARNI	NGS:			
CANCER	Japan - GHS		Carcinogenic	ity - Category 1A	
CANCER	Australia - GHS		H350i - May o	cause cancer by inhalation	
SUBSTANCE NOTES: See other mat	erial notes				
SODIUM OXIDE					ID: 1313-59-3
%: 12.0000 - 16.0000	GS: LT-UNK	RC: None	NANO: NO	ROLE: Fluxing agent	
HAZARDS:	AGENCY(IES) WITH WARNI	NGS:			
None Found	No warnings found	on HPD Priority lists			
SUBSTANCE NOTES: See other mat	erial notes				

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CALCIUM OXIDE					ID: 1305-78-8
%: 5.0000 - 12.0000	GS: LT-P1	RC: None	NANO: NO	ROLE: Network modifier	
HAZARDS:	AGENCY(IES) WITH WA	RNINGS:			
None Found	No warnings fou	nd on HPD Priority lists			
SUBSTANCE NOTES: See other i	material notes				
MAGNESIUM OXIDE					ID: 1309-48-4
%: 0.0000 - 6.0000	GS: LT-UNK	RC: None	NANO: NO	ROLE: Network modifier	
HAZARDS:	AGENCY(IES) WITH WA	RNINGS:			
CANCER	МАК			n Group 4 - Non-genotoxic carcin MAK/BAT levels	ogen with low
SUBSTANCE NOTES: See other i	material notes				
l					
SODIUM SULFATE					ID: 7757-82-6
× 0.0000 1.0000		Do None		DOLE Fining agent	

%: 0.0000 - 1.0000	GS: LT-UNK	RC: None	NANO: NO	ROLE: Fining agent
HAZARDS:	AGENCY(IES) WITH WARNINGS:			
None Found	No warnings found on HF	PD Priority lists		

FERRIC OXIDE					ID: 1309-37- 1
%: 0.0000 - 1.0000	GS: BM-2	RC: None	NANO: NO	ROLE: Coloring agent	
HAZARDS:	AGENCY(IES) WITH W	ARNINGS:			
CANCER	МАК			n Group 3B - Evidence of carcino ficient for classification	genic effects
SUBSTANCE NOTES: See other	r material notes				
CARBON					ID: 7440-44-(
%: 0.0000 - 1.0000	GS: LT-UNK	RC: None	NANO: NO	ROLE: Reducing agent	
HAZARDS:	AGENCY(IES) WITH W	ARNINGS:			

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None Found	No warnings	No warnings found on HPD Priority lists				
SUBSTANCE NOTES: See othe	r material notes					
ALUMINUM OXIDE				id: 1344-28-1		
%: 0.0000 - 3.0000	GS: LT-P1	RC: None	NANO: NO	ROLE: Durability/viscocity/ workability enhancer		
HAZARDS:	AGENCY(IES) WIT	TH WARNINGS:				
RESPIRATORY	AOEC - Asth	nmagens		Asthmagen (ARs) - sensitizer-induced - inhalable forms only		
SUBSTANCE NOTES: See othe	r material notes					

COATING #1	%: 0.0000 - 4.5200	HPD URL: N/A
PRODUCT THRESHOLD: 1000 ppm	RESIDUALS AND IMPURITIES CONSIDERED: Yes	

RESIDUALS AND IMPURITIES NOTES: No residuals or impurities are known or expected to be present at or above the Inventory Threshold indicated that have a GS score of BM-1, LT-1, LT-P1 or NoGS, based on direct testing (FTIR and GC/MS).

OTHER MATERIAL NOTES: Alternative coating to coating #2, #3, and #4. Average coating composition. Percent by weight of pigments given represents the absolute maximum possible in the product if only a single pigment is used. However, multiple pigments are routinely blended to create the numerous colors offered; therefore, most pigments listed in this HPD will fall well below the Content Inventory Threshold indicated. Please seek manufacturer assistance if more information is required.

SILOXANES AND SILICONES, TERMINATED	DI-ME, HYDROXY-			ID: 70 *	131-67-8
%: 77.8000 - 85.7100	GS: BM-2	RC: None	NANO: NO	ROLE: Opacification coating for glass	
HAZARDS:	AGENCY(IES) WITH WA	ARNINGS:			
None Found	No warnings fou	nd on HPD Priority lists			
SUBSTANCE NOTES: See other m	aterial notes				
SILICA, AMORPHOUS				ID: 7(631-86-9
%: 11.1100 - 21.4300	GS: LT-P1	RC: None	NANO: NO	ROLE: Reinforcing agent	
HAZARDS:	AGENCY(IES) WITH WA	ARNINGS:			
CANCER	Japan - GHS		Carcino	genicity - Category 1A	
CANCER	Australia - GHS		H350i -	May cause cancer by inhalation	
SUBSTANCE NOTES: See other m	aterial notes				

ID: 1309-37-1

FERRIC OXIDE					ID: 1309-37-1
%: 0.0000 - 14.2900	GS: BM-2	RC: None	NANO: NO	ROLE: Pigment	
HAZARDS:	AGENCY(IES) WITH WA	RNINGS:			
CANCER	МАК		Carcinogen Group but not sufficient	o 3B - Evidence of carcino for classification	genic effects
SUBSTANCE NOTES: See other	material notes				
NICKEL RUTILE YELLOW					ID: 8007-18-9
%: 0.0000 - 14.2900	GS: LT-1	RC: None	NANO: NO	ROLE: Pigment	

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
CANCER	IARC	Group 1 - Agent is Carcinogenic to humans
CANCER	CA EPA - Prop 65	Carcinogen
RESPIRATORY	AOEC - Asthmagens	Asthmagen (ARs) - sensitizer-induced - inhalable forms only
CANCER	US NIH - Report on Carcinogens	Known to be a human Carcinogen

.I. PIGMENT GREEN 50				id: 68186-8		
.: 0.0000 - 14.2900	GS: LT-1	RC: None	NANO: NO	ROLE: Pigment		
HAZARDS:	AGENCY(IES) WITH WA	RNINGS:				
RESPIRATORY	AOEC - Asthmag	AOEC - Asthmagens		enerally accepted		
CANCER	IARC	IARC		Group 1 - Agent is Carcinogenic to humans		
CANCER	CA EPA - Prop 6	CA EPA - Prop 65		Carcinogen		
RESPIRATORY	AOEC - Asthmag	AOEC - Asthmagens		Asthmagen (ARs) - sensitizer-induced - inhalable forms only		
CANCER	МАК	MAK Carcinogen Group 2 - Considered to be ca man		2 - Considered to be carcinogenic for		
RESPIRATORY	МАК		Sensitizing Substance Sah - Danger of airway & skir sensitization			
GENE MUTATION	MAK		Germ Cell Mutage	n 3a		
CANCER	US NIH - Report	US NIH - Report on Carcinogens Known to be a human Carcinogen		man Carcinogen		

6: 0.0000 - 14.2900	GS: NoGS		RC: None	NANO: No	ROLE: Pigr	nent
HAZARDS:	AGENCY(IES) WITH WAI	RNINGS:				
None Found	No warnings four	nd on HPD Priority lists				
SUBSTANCE NOTES: See other I	naterial notes					
C.I. PIGMENT BLUE 28						ID: 1345-16
o: 0.0000 - 14.2900	GS: LT-1	RC: None	NANO: NO	RO	LE: Pigment	
HAZARDS:	AGENCY(IES) WITH WAI	RNINGS:				
RESPIRATORY	AOEC - Asthmag	ens	Asthmager	Asthmagen (G) - generally accepted		
CANCER	MAK	МАК		Carcinogen Group 2 - Considered to be carcinogenic for man		
RESPIRATORY	MAK			Sensitizing Substance Sah - Danger of airway & skin sensitization		
GENE MUTATION	МАК		Germ Cell	Mutagen 3a		
SUBSTANCE NOTES: See other I	naterial notes					
						ID: 51274-00
ERRIC OXIDE YELLOW						

None Found

CARBON BLACK				id: 1333-86-4		
%: 0.0000 - 7.1400	GS: LT-1	RC: None	NANO: NO	ROLE: Pigment		
HAZARDS:	AGENCY(IES) WITH W	ARNINGS:				
CANCER	US CDC - Occu	US CDC - Occupational Carcinogens		Occupational Carcinogen		
CANCER	CA EPA - Prop	CA EPA - Prop 65		Carcinogen - specific to chemical form or exposure route		
CANCER	IARC	IARC		oly carcinogenic to humans - inhaled from rces		
CANCER	МАК		Carcinogen Group but not sufficient f	o 3B - Evidence of carcinogenic effects for classification		

No warnings found on HPD Priority lists

SUBSTANCE NOTES: See other ma	aterial notes					
C.I. PIGMENT GREEN 36						ID: 14302-13-7
%: 0.0000 - 7.1400	GS: LT-UNK	RC: None	NAM	10: No	ROLE: Pigmer	nt
HAZARDS:	AGENCY(IES) WITH WARNI	NGS:				
None Found	No warnings found	on HPD Priority lists				
SUBSTANCE NOTES: See other ma	aterial notes					
5,12-DIHYDROQUINO(2,3-B)A	CRIDINE-7,14-DIONE					ID: 1047-16-1
%: 0.0000 - 7.1400	GS: LT-UNK	R	c: None	NANO: NO	ROLE: Piç	jment
HAZARDS:	AGENCY(IES) WITH WARNI	NGS:				
None Found	No warnings found	on HPD Priority lists				
SUBSTANCE NOTES: See other ma	aterial notes					
C.I. PIGMENT BLUE 15						ID: 147-14-8
%: 0.0000 - 7.1400	GS: BM-3	RC: None	NANO:	No	ROLE: Pigment	
HAZARDS:		NCS.			-	
None Found	AGENCY(IES) WITH WARNI	on HPD Priority lists				
SUBSTANCE NOTES: See other ma	aterial notes					
l						
2,2'-((3,3'-DICHLORO(1,1'-BIPI DIMETHOXYPHENYL)-3-OXOB		(AZO))BIS(N-(4-C-HC)RO-2,5-			ID: 5567-15-7
%: 0.0000 - 7.1400	GS: LT-P1			RC: None	NANO: NO	ROLE: Pigment
HAZARDS:	AGENCY(IES) WITH WARNI	NGS:				
MULTIPLE		stances Hazardous to	Class 3	- Severe Hazard	to Waters	
	Waters					
SUBSTANCE NOTES: See other ma	aterial notes					
1						
TITANIUM DIOXIDE						ID: 13463-67-7
%: 0.0000 - 14.2900	GS: LT-1	RC: None	NANO: N	0	ROLE: Pigment	
HAZARDS:	AGENCY(IES) WITH WARNI	NGS:				

CANCER	US CDC - Occupational Carcinogens	Occupational Carcinogen
CANCER	CA EPA - Prop 65	Carcinogen - specific to chemical form or exposure route
CANCER	IARC	Group 2B - Possibly carcinogenic to humans - inhaled from occupational sources
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
CANCER	МАК	Carcinogen Group 3A - Evidence of carcinogenic effects but not sufficient to establish MAK/BAT value
SUBSTANCE NOTES: See ot	her material notes	

C.I. PIGMENT YELLOW 216; RUTILE, TIN ZINC ID: 85536-73						
%: 0.0000 - 14.2900	GS: NoGS	RC: None	NANO: NO	ROLE: Pigment		
HAZARDS:	AGENCY(IES) WITH WARNINGS	AGENCY(IES) WITH WARNINGS:				
None Found	No warnings found on	No warnings found on HPD Priority lists				
SUBSTANCE NOTES: See other material notes						

COATING #2	%: 0.0000 - 4.7800	HPD URL: N/A
PRODUCT THRESHOLD: 1000 ppm	RESIDUALS AND IMPURITIES CONSIDERED: Yes	

RESIDUALS AND IMPURITIES NOTES: The manufacturer indicated that there were no residuals or impurities.

OTHER MATERIAL NOTES: Alternative to coating #1, #3, and #4. Average composition of acrylic-based coating.

WATER						ID: 7732-18-5	
%: 49.5700 - 57.7900	GS: BM-4	RC: None	NANO: N	O F	ROLE: Solvent		
HAZARDS:	AGENCY(IES) WITH WAR	NINGS:					
None Found	No warnings foun	No warnings found on HPD Priority lists					
SUBSTANCE NOTES: See other	material notes						
2-PROPENOIC ACID, METH	HYL ESTER, HOMOPOL	YMER				ID: 9003-21-8	
%: 23.1200 - 32.3400	GS: LT-UNK		RC: None	NANO: NO	ROLE: Re	esin	
HAZARDS:	AGENCY(IES) WITH WAR	ININGS:					
None Found	No warnings foun	d on HPD Priority lists					
SUBSTANCE NOTES: Approxim	ate for acrylic resin. See	other material notes					

TITANIUM DIOXIDE

%: 17.1900	GS: LT-1	RC: None	NANO: NO	ROLE: Mineral charge		
HAZARDS:	AGENCY(IES) WITH WAR	NINGS:				
CANCER	US CDC - Occupa	tional Carcinogens	Occupatio	Occupational Carcinogen		
CANCER	CA EPA - Prop 65	CA EPA - Prop 65		Carcinogen - specific to chemical form or exposure route		
CANCER	IARC	IARC		- Possibly carcinogenic to humans - inhaled from onal sources		
ENDOCRINE	TEDX - Potential I	Endocrine Disruptors	Potential	Endocrine Disruptor		
CANCER	MAK		•	en Group 3A - Evidence of carcinogenic effects ufficient to establish MAK/BAT value		

SUBSTANCE NOTES: See other material notes

ETHYLENE GLYCOL MONOBUTYL ETHER (EGBE) ID: 111-76-2 %: 3.9000 - 5.5800 GS: BM-2 RC: None NANO: **NO** ROLE: Solvent HAZARDS: AGENCY(IES) WITH WARNINGS: SKIN IRRITATION EU - GHS (H-Statements) H315 - Causes skin irritation EYE IRRITATION EU - GHS (H-Statements) H319 - Causes serious eye irritation ENDOCRINE **TEDX - Potential Endocrine Disruptors** Potential Endocrine Disruptor

SUBSTANCE NOTES: See other material notes

POLYETHYLENE				ID: 9002-88-4	
%: 2.0000	GS: LT-UNK	RC: None	NANO: NO	ROLE: Wax	
HAZARDS:	AGENCY(IES) WITH WARNINGS	:			
None Found	No warnings found on	No warnings found on HPD Priority lists			

SUBSTANCE NOTES: See other material notes

FUMED SILICA, CRYSTALLINE-FREE ID: 112945-52					·52-5		
%: 1.1500	GS: LT-UNK	RC: None	NANO: No	ROLE: Mineral charge			
HAZARDS:	AGENCY(IES) WITH WARNINGS:	AGENCY(IES) WITH WARNINGS:					
None Found	No warnings found on HF	No warnings found on HPD Priority lists					

2-(2-BUTOXYETHOXY)ETHANOL

%: 0.9700 - 1.6000	GS: LT-P1	RC: None	NANO: No	ROLE: Solvent
HAZARDS:	AGENCY(IES) WITH WARNINGS:			
EYE IRRITATION	EU - GHS (H-Statements)		H319 - Causes serious eye	eirritation
ENDOCRINE	TEDX - Potential Endocrine Disruptors		Potential Endocrine Disruptor	

SUBSTANCE NOTES: See other material notes

SILICA, AMORPHOUS					ID: 7631-86-9	
%: 0.5000	GS: LT-P1	RC: None	NANO: NO	ROLE: Mineral charge		
HAZARDS:	AGENCY(IES) WITH WARNI	AGENCY(IES) WITH WARNINGS:				
CANCER	Japan - GHS	Japan - GHS		city - Category 1A		
CANCER	Australia - GHS		H350i - May	cause cancer by inhalation		

SUBSTANCE NOTES: See other material notes

TRIETHYLAMINE				ID: 121-44-8
%: 0.1800	GS: LT-UNK	RC: None	NANO: NO	ROLE: PH modifier & stabilizer
HAZARDS:	AGENCY(IES) WITH WAR	RNINGS:		
SKIN IRRITATION	EU - GHS (H-Stat	EU - GHS (H-Statements)		- Causes severe skin burns and eye damage
PHYSICAL HAZARD (REACTIVE)	EU - GHS (H-Statements)		H225	- Highly flammable liquid and vapour

SUBSTANCE NOTES: See other material notes

1,2-BENZISOTHIAZOLIN-3	-ONE (BIT)		ID:	2634-33-5	
%: 0.1000	GS: LT-P1	RC: None	NANO: NO	ROLE: Preservative	
HAZARDS:	AGENCY(IES) WITH WARNINGS:				
ACUTE AQUATIC	EU - GHS (H-Statements)		H400 - Very toxic to a	quatic life	
SKIN IRRITATION	EU - GHS (H-Statements)		H315 - Causes skin ir	ritation	
SKIN SENSITIZE	EU - GHS (H-Statements)		H317 - May cause an	allergic skin reaction	
EYE IRRITATION	EU - GHS (H-Statements)		H318 - Causes seriou	s eye damage	

ID: 112-34-5

MULTIPLE	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
SKIN SENSITIZE	МАК	Sensitizing Substance Sh - Danger of skin sensitization

MONOETHANOLAMINE				ıd: 141-43 -
%: 0.0000 - 0.1000	GS: LT-P1	RC: None	NANO: NO	ROLE: PH modifier & stabilizer
HAZARDS:	AGENCY(IES) WITH	VARNINGS:		
RESPIRATORY	AOEC - Asthm	agens	Ast	thmagen (Rs) - sensitizer-induced
SKIN IRRITATION	EU - GHS (H-S	EU - GHS (H-Statements)		14 - Causes severe skin burns and eye damage
ENDOCRINE	TEDX - Potenti	al Endocrine Disrup	otors Po	tential Endocrine Disruptor
SKIN SENSITIZE	МАК		Sei	nsitizing Substance Sh - Danger of skin sensitization

DIETHYLENE GLYCOL MO	DNOETHYL ETHER			ID: 11	1-90-0
%: 0.0000 - 0.9900	GS: LT-UNK	RC: None	NANO: NO	ROLE: Solvent	
HAZARDS:	AGENCY(IES) WITH WARNINGS:				
None Found	No warnings found on H	PD Priority lists			
SUBSTANCE NOTES: See other material notes					
-					
COATING #3		%: 0.0000 - 2.8800		HPD URL: N/A	
PRODUCT THRESHOLD: 1000 p	opm	RESIDUALS AND IMPURITIES	considered: No		
RESIDUALS AND IMPURITIES NOTES: The manufacturer indicated that there were no residual substances or impurities.					
OTHER MATERIAL NOTES: Alternative coating to coating #1, #2, and #4. Decorative coating. Composition protected by a NDA. Ranges provided to protect the exact composition.					
UNDISCLOSED					

%: 60.0000 - 77.0000	GS: LT-P1	RC: None	NANO: NO	ROLE: Primary component
HAZARDS:	AGENCY(IES) WITH V	VARNINGS:		
MULTIPLE	German FEA Waters	Substances Hazardous to	o Class 2	2 - Hazard to Waters

UNDISCLOSED

as: LT-1	RC: None	NANO: No	ROLE: Pigment
AGENCY(IES) WITH WARNINGS:			
US CDC - Occupationa	I Carcinogens	Occupational Carcinoge	n
CA EPA - Prop 65		Carcinogen - specific to	chemical form or exposure route
IARC		Group 2B - Possibly carcinogenic to humans - inhaled fron occupational sources	
TEDX - Potential Endoo	crine Disruptors	Potential Endocrine Disr	uptor
МАК		Carcinogen Group 3A - I but not sufficient to esta	Evidence of carcinogenic effects blish MAK/BAT value
	JS CDC - Occupationa CA EPA - Prop 65 ARC FEDX - Potential Endoo	JS CDC - Occupational Carcinogens CA EPA - Prop 65 ARC TEDX - Potential Endocrine Disruptors	JS CDC - Occupational Carcinogens Occupational Carcinoge CA EPA - Prop 65 Carcinogen - specific to ARC Group 2B - Possibly car occupational sources FEDX - Potential Endocrine Disruptors Potential Endocrine Disr MAK Carcinogen Group 3A - I

SUBSTANCE NOTES: See other material notes

UNDISCLOSED

%: 0.0000 - 5.0000	GS: LT-1	RC: None	NANO: NO	ROLE: Pigment
HAZARDS:	AGENCY(IES) WITH WARNIN	GS:		
CANCER	IARC	IARC		cinogenic to humans
CANCER	CA EPA - Prop 65	CA EPA - Prop 65		
RESPIRATORY	AOEC - Asthmagens	AOEC - Asthmagens		sitizer-induced - inhalable forms
CANCER	US NIH - Report on Carcinogens		Known to be a human Carcinogen	

SUBSTANCE NOTES: See other material notes

UNDISCLOSED

%: 0.0000 - 10.0000	GS: LT-1	RC: None	NANO: NO	ROLE: Pigment		
HAZARDS:	AGENCY(IES) WITH WARNIN	NGS:				
CANCER	IARC	IARC		cinogenic to humans		
CANCER	CA EPA - Prop 65	CA EPA - Prop 65				
CANCER	US CDC - Occupation	US CDC - Occupational Carcinogens		ional Carcinogens Occupational Carcinogen		len
CANCER	US NIH - Report on	US NIH - Report on Carcinogens		US NIH - Report on Carcinogens		Carcinogen
РВТ	OR DEQ - Priority P	OR DEQ - Priority Persistent Pollutants		utant - Tier 1		

MULTIPLE	German FEA - Substa Waters	nces Hazardous to	Class 2 - Hazard to	Class 2 - Hazard to Waters		
CANCER	Korea - GHS		Carcinogenicity - Ca	ategory 1 [H350 - May cause cancer]		
CANCER	New Zealand - GHS		6.7A - Known or pre	sumed human carcinogens		
CANCER	Australia - GHS		H350 - May cause ca	ancer		
SUBSTANCE NOTES: See other	r material notes					
JNDISCLOSED						
%: 0.0000 - 8.0000	GS: LT-UNK	RC: None	NANO: NO	ROLE: Pigment		
HAZARDS:	AGENCY(IES) WITH WARNING	S:				
None Found	No warnings found or	HPD Priority lists				
SUBSTANCE NOTES: See other	r material notes					
JNDISCLOSED						
6: 0.0000 - 20.0000	GS: LT-UNK	RC: None	NANO: NO	ROLE: Pigment		
HAZARDS:	AGENCY(IES) WITH WARNING	S:				
None Found	No warnings found or	HPD Priority lists				
SUBSTANCE NOTES: See other	material notes					
JNDISCLOSED						
%: 0.0000 - 10.0000	GS: LT-P1	RC: None	NANO: NO	ROLE: Pigment		
HAZARDS:	AGENCY(IES) WITH WARNING	S:				
RESPIRATORY	AOEC - Asthmagens		Asthmagen (ARs) - s only	sensitizer-induced - inhalable forms		
SUBSTANCE NOTES: See other	r material notes					
JNDISCLOSED						
%: 0.0000 - 15.0000	GS: LT-UNK	RC: None	NANO: NO	ROLE: Solvent		
HAZARDS:	AGENCY(IES) WITH WARNING	S:				
None Found	No warnings found or	HPD Priority lists				
SUBSTANCE NOTES: See other	material notes					

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UNDISCLOSED

%: 0.0000 - 3.0000	GS: BM-2	RC: None	NANO: No	ROLE: Solvent	
HAZARDS:	AGENCY(IES) WITH WARNINGS	:			
SKIN IRRITATION	EU - GHS (H-Statemen	nts)	H315 - Causes skin irritation		
EYE IRRITATION	EU - GHS (H-Statemen	EU - GHS (H-Statements)		us eye irritation	
ENDOCRINE	TEDX - Potential Endocrine Disruptors		Potential Endocrine Disruptor		

SUBSTANCE NOTES: See other material notes

UNDISCLOSED

%: 0.0000 - 17.0000 G	as: LT-P1	RC: None	NANO: NO	ROLE: Solvent
HAZARDS:	AGENCY(IES) WITH WARNINGS:			
EYE IRRITATION	EU - GHS (H-Statements)		H319 - Causes serious eye	irritation
ENDOCRINE	TEDX - Potential Endocrine Disruptors		Potential Endocrine Disruptor	

SUBSTANCE NOTES: See other material notes

UNDISCLOSED

%: 0.0000 - 8.0000	GS: LT-UNK	RC: None	NANO: No	ROLE: Solvent		
HAZARDS:	AGENCY(IES) WITH WARNINGS:					
None Found	No warnings found on HPD	Priority lists				
SUBSTANCE NOTES: See other mate	SUBSTANCE NOTES: See other material notes					
UNDISCLOSED						
%: 0.0000 - 3.0000	GS: LT-P1 R	ac: None	NANO: No	ROLE: Solvent		
HAZARDS:	AGENCY(IES) WITH WARNINGS:					
MULTIPLE	German FEA - Substances Waters	Hazardous to	Class 2 - Hazard to Waters			
SUBSTANCE NOTES: See other material notes						

COATING #4		%: 0.0000 -	0.4700	HPD URL: N/A	4	
PRODUCT THRESHOLD: 1000 ppm RESIDUALS AND IMPURITIES CONSIDERED: Yes						
RESIDUALS AND IMPURITIES NOTES: 7	The manufacture	er indicated that there	e were no residua	al substances or impurit	ies.	
OTHER MATERIAL NOTES: Alternati	ve coating to co	pating #1, #2 and #3.	Decorative coati	ng		
FRITS, CHEMICALS					ID: 65997-18-4	
%: 30.0000 - 50.0000	GS: LT-P1	RC: None	NANO: NO	ROLE: Inorganic binder		
HAZARDS:	AGENCY(IES) WITH W	/ARNINGS:				
MULTIPLE	German FEA - S Waters	Substances Hazardous to	Class 2 - Haz	ard to Waters		
SUBSTANCE NOTES: See other ma	terial notes				id: 108-94-1	
%: 10.0000 - 20.0000	GS: LT-P1	RC: None	NANO: NO	ROLE: Solvent		
HAZARDS:	AGENCY(IES) WITH W	/ARNINGS:				
ENDOCRINE	TEDX - Potentia	al Endocrine Disruptors	Potential End	ocrine Disruptor		
CANCER	МАК			roup 3B - Evidence of carcinog ent for classification	genic effects	
SUBSTANCE NOTES: See other ma	terial notes					
DIPROPYLENE GLYCOL MON	OMETHYL ETHER				ID: 34590-94-8	

%: 10.0000 - 30.0000	GS: LT-UNK	RC: None	NANO: No	ROLE: Solvent
HAZARDS:	AGENCY(IES) WITH WARNINGS:			
None Found	No warnings found on HPD Priority	lists		

2-(2-BUTOXYETHOXY)ETHANOL						
%: 5.0000 - 10.0000	GS: LT-P1	RC: None	NANO: NO	ROLE: Solvent		
HAZARDS:	AGENCY(IES) WITH WARM	NINGS:				
EYE IRRITATION	EU - GHS (H-State	ements)	H319 - Causes serio	us eye irritation		
ENDOCRINE	TEDX - Potential E	TEDX - Potential Endocrine Disruptors		Disruptor		

C.I. PIGMENT BLUE 28 ID: 1345-1						
%: 0.0000 - 30.0000	GS: LT-1	RC: None	NANO: NO	ROLE: Pigment		
HAZARDS:	AGENCY(IES) WITH WA	ARNINGS:				
RESPIRATORY	AOEC - Asthmag	AOEC - Asthmagens		Asthmagen (G) - generally accepted		
CANCER	МАК	МАК		p 2 - Considered to be carcinogenic for		
RESPIRATORY	МАК	МАК		ance Sah - Danger of airway & skin		
GENE MUTATION	MAK		Germ Cell Mutage	en 3a		

C.I. PIGMENT BLACK 28 ID: 68186					
GS: LT-UNK	RC: None	NANO: NO	ROLE: Pigment		
AGENCY(IES) WITH WARNIN	GS:				
No warnings found on HPD Priority lists					
	AGENCY(IES) WITH WARNIN	AGENCY(IES) WITH WARNINGS:	AGENCY(IES) WITH WARNINGS:		

SUBSTANCE NOTES: See other material notes

ID: 68186-90-3 %: 0.0000 - 30.0000 GS: LT-UNK RC: None NANO: No ROLE: Pigment HAZARDS: AGENCY(IES) WITH WARNINGS: VOID WARNINGS VOID WARNINGS VOID WARNINGS None Found No warnings found on HPD Priority lists VOID WARNINGS VOID WARNINGS VOID WARNINGS

SUBSTANCE NOTES: See other material notes

C.I. PIGMENT GREEN 50				id: 68186-85-	
%: 0.0000 - 30.0000	GS: LT-1	RC: None	NANO: NO	ROLE: Pigment	
HAZARDS:	AGENCY(IES) WITH WA	ARNINGS:			
RESPIRATORY	AOEC - Asthmag	AOEC - Asthmagens		Asthmagen (G) - generally accepted	
CANCER	IARC	IARC		Group 1 - Agent is Carcinogenic to humans	
CANCER	CA EPA - Prop 6	CA EPA - Prop 65		Carcinogen	
	AOEC - Asthmag	gens	Asthmagen (ARs)	- sensitizer-induced - inhalable forms	

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only

CANCER	МАК	Carcinogen Group 2 - Considered to be carcinogenic for man
RESPIRATORY	МАК	Sensitizing Substance Sah - Danger of airway & skin sensitization
GENE MUTATION	МАК	Germ Cell Mutagen 3a
CANCER	US NIH - Report on Carcinogens	Known to be a human Carcinogen

SUBSTANCE NOTES: See other material notes

TITANIUM DIOXIDE

ID: 13463-67-7

%: 0.0000 - 30.0000	GS: LT-1	RC: None	NANO: NO	ROLE: Pigment	
HAZARDS:	AGENCY(IES) WITH WARNING	GS:			
CANCER	US CDC - Occupational Carcinogens Occupational Carcinogen		arcinogen		
CANCER	CA EPA - Prop 65		Carcinogen - specific to chemical form or exposure		
CANCER	IARC	ARC		sibly carcinogenic to humans - inhaled from urces	
ENDOCRINE	TEDX - Potential End	TEDX - Potential Endocrine Disruptors		rine Disruptor	
CANCER MAK			•	up 3A - Evidence of carcinogenic effects t to establish MAK/BAT value	

NICKEL RUTILE YELLOW					ID: 8007-18-9	
%: 0.0000 - 30.0000	GS: LT-1	RC: None	NANO: NO	ROLE: Pigment		
HAZARDS:	AGENCY(IES) WITH WARNIN	GS:				
CANCER	IARC	IARC Group 1 - Agent is Carcinogenic to humans				
CANCER	CA EPA - Prop 65		Carcinogen			
RESPIRATORY	AOEC - Asthmagens		Asthmagen (ARs) - only	Asthmagen (ARs) - sensitizer-induced - inhalable forms only		
CANCER	US NIH - Report on (Carcinogens	Known to be a hun	nan Carcinogen		
SUBSTANCE NOTES: See other mate	erial notes					
ISOBUTYL ALCOHOL					ID: 78-83-1	
%: 0.0000 - 5.0000	GS: BM-2	RC: None	NANO: NO	ROLE: Solvent		

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
SKIN IRRITATION	EU - GHS (H-Statements)	H315 - Causes skin irritation
EYE IRRITATION	EU - GHS (H-Statements)	H318 - Causes serious eye damage

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 Applicable facilities: All CERTIFICATE URL:	ISSUE DATE: 2018- 08-10	EXPIRY DATE:	CERTIFIER OR LAB: None
CERTIFICATION AND COMPLIANCE NOTES: Not tested			

😑 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

MANUFACTURER INFORMATION

MANUFACTURER: LAURIER GLASS LTD ADDRESS: 153, Laurier blvd, Laurier-Station Laurier-Station Quebec G0S 1N0, Canada WEBSITE: http://laurier.net/ CONTACT NAME: Guillaume Jacob TITLE: Plant Manager PHONE: 4187282023 EMAIL: gjacob@laurier.net

KEY

OSHA MSDS Occupational Safety and Health Administration Material Safety Data Sheet GHS SDS Globally Harmonized System of Classification and Labeling of Chemicals Safety Data Sheet

Hazard Types

AQU Aquatic toxicity CAN Cancer DEV Developmental toxicity END Endocrine activity EYE Eye irritation/corrosivity GEN Gene mutation

GreenScreen (GS)

BM-4 Benchmark 4 (prefer-safer chemical)
BM-3 Benchmark 3 (use but still opportunity for improvement)
BM-2 Benchmark 2 (use but search for safer substitutes)
BM-1 Benchmark 1 (avoid - chemical of high concern)
BM-U Benchmark Unspecified (insuficient data to benchmark)

Recycled Types

PreC Preconsumer (Post-Industrial) PostC Postconsumer Both Both Preconsumer and Postconsumer Unk Inclusion of recycled content is unknown None Does not include recycled content

Other Terms

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.

GLO Global warming MAM Mammalian/systemic/organ toxicity MUL Multiple hazards NEU Neurotoxicity OZO Ozone depletion

PBT Persistent Bioaccumulative Toxic

PHY Physical Hazard (reactive) REP Reproductive toxicity RES Respiratory sensitization SKI Skin sensitization/irritation/corrosivity LAN Land Toxicity NF Not found on Priority Hazard Lists

LT-P1 List Translator Possible Benchmark 1 LT-1 List Translator Likely Benchmark 1 LT-UNK List Translator Benchmark Unknown (insufficient information from List Translator lists to benchmark) NoGS Unknown (no data on List Translator Lists)