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

Nested Method / Product Threshold

CONTENT INVENTORY

Inventory Reporting Format

- (•) Nested Materials Method
- ( ) Basic Method

Threshold Disclosed Per

- ( ) Material
- (•) Product

Threshold level

- ( ) 100 ppm
- (•) 1,000 ppm
- ( ) Per GHS SDS
- ( ) Per OSHA MSDS
- ( ) Other

Residuals/Impurities

Residuals/Impurities Considered in 4 of 5 Materials

Explanation(s) provided for Residuals/Impurities?

(•) Yes ( ) No

Are All Substances Above the Threshold Indicated:

Characterized (•) Yes ( ) No

Percent Weight and Role Provided?

Screened (•) Yes ( ) No

Using Priority Hazard Lists with Results Disclosed?

Identified ( ) Yes (•) 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

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 2.1, available on the HPDC website at: www.hpd-collaborative.org/hpd-2-1-standard

GLASS

%: 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 WARNINGS:	
CANCER	Japan - GHS	Carcinogenicity - Category 1A
CANCER	Australia - GHS	H350i - May cause cancer by inhalation

SUBSTANCE NOTES: See other material 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 WARNINGS:	
None Found	No warnings found on HPD Priority lists	

SUBSTANCE NOTES: See other material notes

CALCIUM OXIDE

ID: 1305-78-8

%: 5.0000 - 12.0000 GS: LT-P1 RC: None NANO: No ROLE: Network modifier

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
None Found	No warnings found on HPD Priority lists	

SUBSTANCE NOTES: See other 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 WARNINGS:	
CANCER	MAK	Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels

SUBSTANCE NOTES: See other material notes

SODIUM SULFATE

ID: 7757-82-6

%: 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 HPD Priority lists	

SUBSTANCE NOTES: See other material notes

FERRIC OXIDE

ID: 1309-37-1

%: 0.0000 - 1.0000 GS: BM-2 RC: None NANO: No ROLE: Coloring agent

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
CANCER	MAK	Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification

SUBSTANCE NOTES: See other material notes

CARBON

ID: 7440-44-0

%: 0.0000 - 1.0000 GS: LT-UNK RC: None NANO: No ROLE: Reducing agent

HAZARDS:	AGENCY(IES) WITH WARNINGS:

None Found	No warnings found on HPD Priority lists

SUBSTANCE NOTES: See other 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) WITH WARNINGS:	
RESPIRATORY	AOEC - Asthmagens	Asthmagen (ARs) - sensitizer-induced - inhalable forms only

SUBSTANCE NOTES: See other 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, DI-ME, HYDROXY-TERMINATED

ID: 70131-67-8

%: **77.8000 - 85.7100** GS: **BM-2** RC: **None** NANO: **No** ROLE: **Opacification coating for glass**

HAZARDS:	AGENCY(IES) WITH WARNINGS:
None Found	No warnings found on HPD Priority lists

SUBSTANCE NOTES: See other material notes

SILICA, AMORPHOUS

ID: 7631-86-9

%: **11.1100 - 21.4300** GS: **LT-P1** RC: **None** NANO: **No** ROLE: **Reinforcing agent**

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
CANCER	Japan - GHS	Carcinogenicity - Category 1A
CANCER	Australia - GHS	H350i - May cause cancer by inhalation

SUBSTANCE NOTES: See other material notes

FERRIC OXIDE

ID: 1309-37-1

%: 0.0000 - 14.2900 GS: BM-2 RC: None NANO: No ROLE: Pigment

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
CANCER	MAK	Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification

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

SUBSTANCE NOTES: See other material notes

C.I. PIGMENT GREEN 50

ID: 68186-85-6

%: 0.0000 - 14.2900 GS: LT-1 RC: None NANO: No ROLE: Pigment

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
RESPIRATORY	AOEC - Asthmagens	Asthmagen (G) - generally accepted
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	MAK	Carcinogen Group 2 - Considered to be carcinogenic for man
RESPIRATORY	MAK	Sensitizing Substance Sah - Danger of airway & skin sensitization
GENE MUTATION	MAK	Germ Cell Mutagen 3a
CANCER	US NIH - Report on Carcinogens	Known to be a human Carcinogen

SUBSTANCE NOTES: See other material notes

C.I. PIGMENT YELLOW 227; NIOBIUM SULFUR TIN ZINC OXIDE

ID: 1374645-21-2

%: 0.0000 - 14.2900 GS: NoGS RC: None NANO: No ROLE: Pigment

HAZARDS:	AGENCY(IES) WITH WARNINGS:
None Found	No warnings found on HPD Priority lists

SUBSTANCE NOTES: See other material notes

C.I. PIGMENT BLUE 28

ID: 1345-16-0

%: 0.0000 - 14.2900 GS: LT-1 RC: None NANO: No ROLE: Pigment

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
RESPIRATORY	AOEC - Asthmagens	Asthmagen (G) - generally accepted
CANCER	MAK	Carcinogen Group 2 - Considered to be carcinogenic for man
RESPIRATORY	MAK	Sensitizing Substance Sah - Danger of airway & skin sensitization
GENE MUTATION	MAK	Germ Cell Mutagen 3a

SUBSTANCE NOTES: See other material notes

FERRIC OXIDE YELLOW

ID: 51274-00-1

%: 0.0000 - 14.2900 GS: LT-UNK RC: None NANO: No ROLE: Pigment

HAZARDS:	AGENCY(IES) WITH WARNINGS:
None Found	No warnings found on HPD Priority lists

SUBSTANCE NOTES: See other material notes

CARBON BLACK

ID: 1333-86-4

%: 0.0000 - 7.1400 GS: LT-1 RC: None NANO: No ROLE: Pigment

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
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
CANCER	MAK	Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification

SUBSTANCE NOTES: See other material notes

C.I. PIGMENT GREEN 36

ID: 14302-13-7

%: 0.0000 - 7.1400 GS: LT-UNK RC: None NANO: No ROLE: Pigment

HAZARDS:	AGENCY(IES) WITH WARNINGS:
None Found	No warnings found on HPD Priority lists

SUBSTANCE NOTES: See other material notes

5,12-DIHYDROQUINO(2,3-B)ACRIDINE-7,14-DIONE

ID: 1047-16-1

%: 0.0000 - 7.1400 GS: LT-UNK RC: None NANO: No ROLE: Pigment

HAZARDS:	AGENCY(IES) WITH WARNINGS:
None Found	No warnings found on HPD Priority lists

SUBSTANCE NOTES: See other material notes

C.I. PIGMENT BLUE 15

ID: 147-14-8

%: 0.0000 - 7.1400 GS: BM-3 RC: None NANO: No ROLE: Pigment

HAZARDS:	AGENCY(IES) WITH WARNINGS:
None Found	No warnings found on HPD Priority lists

SUBSTANCE NOTES: See other material notes

2,2'-((3,3'-DICHLORO(1,1'-BIPHENYL)-4,4'-DIYL)BIS(AZO))BIS(N-(4-C-HORO-2,5-DIMETHOXYPHENYL)-3-OXOBUTYRAMIDE)

ID: 5567-15-7

%: 0.0000 - 7.1400 GS: LT-P1 RC: None NANO: No ROLE: Pigment

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters

SUBSTANCE NOTES: See other material notes

TITANIUM DIOXIDE

ID: 13463-67-7

%: 0.0000 - 14.2900 GS: LT-1 RC: None NANO: No ROLE: Pigment

HAZARDS:	AGENCY(IES) WITH WARNINGS:

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	MAK	Carcinogen Group 3A - Evidence of carcinogenic effects but not sufficient to establish MAK/BAT value

SUBSTANCE NOTES: See other material notes

C.I. PIGMENT YELLOW 216; RUTILE, TIN ZINC

ID: 85536-73-8

%: **0.0000 - 14.2900** GS: **NoGS** RC: **None** NANO: **No** ROLE: **Pigment**

HAZARDS:	AGENCY(IES) WITH WARNINGS:
None Found	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: **No** ROLE: **Solvent**

HAZARDS:	AGENCY(IES) WITH WARNINGS:
None Found	No warnings found on HPD Priority lists

SUBSTANCE NOTES: See other material notes

2-PROPENOIC ACID, METHYL ESTER, HOMOPOLYMER

ID: 9003-21-8

%: **23.1200 - 32.3400** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Resin**

HAZARDS:	AGENCY(IES) WITH WARNINGS:
None Found	No warnings found on HPD Priority lists

SUBSTANCE NOTES: Approximate for acrylic resin. See other material notes

TITANIUM DIOXIDE

ID: 13463-67-7

%: **17.1900** GS: **LT-1** RC: **None** NANO: **No** ROLE: **Mineral charge**

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
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	MAK	Carcinogen Group 3A - Evidence of carcinogenic effects but not sufficient 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 HPD Priority lists

SUBSTANCE NOTES: See other material notes

FUMED SILICA, CRYSTALLINE-FREE

ID: 112945-52-5

%: **1.1500** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Mineral charge**

HAZARDS:	AGENCY(IES) WITH WARNINGS:
None Found	No warnings found on HPD Priority lists

SUBSTANCE NOTES: See other material notes

2-(2-BUTOXYETHOXY)ETHANOL

ID: 112-34-5

%: 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 irritation
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 WARNINGS:	
CANCER	Japan - GHS	Carcinogenicity - 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 WARNINGS:	
SKIN IRRITATION	EU - GHS (H-Statements)	H314 - 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 aquatic life
SKIN IRRITATION	EU - GHS (H-Statements)	H315 - Causes skin irritation
SKIN SENSITIZE	EU - GHS (H-Statements)	H317 - May cause an allergic skin reaction
EYE IRRITATION	EU - GHS (H-Statements)	H318 - Causes serious eye damage

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

SUBSTANCE NOTES: See other material notes

MONOETHANOLAMINE

ID: 141-43-5

%: 0.0000 - 0.1000 GS: LT-P1 RC: None NANO: No ROLE: PH modifier & stabilizer

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
RESPIRATORY	AOEC - Asthmagens	Asthmagen (Rs) - sensitizer-induced
SKIN IRRITATION	EU - GHS (H-Statements)	H314 - Causes severe skin burns and eye damage
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
SKIN SENSITIZE	MAK	Sensitizing Substance Sh - Danger of skin sensitization

SUBSTANCE NOTES: See other material notes

DIETHYLENE GLYCOL MONOETHYL ETHER

ID: 111-90-0

%: 0.0000 - 0.9900 GS: LT-UNK RC: None NANO: No ROLE: Solvent

HAZARDS:	AGENCY(IES) WITH WARNINGS:
None Found	No warnings found on HPD Priority lists

SUBSTANCE NOTES: See other material notes

COATING #3

%: 0.0000 - 2.8800 HPD URL: N/A

PRODUCT THRESHOLD: 1000 ppm 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 WARNINGS:	
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters

SUBSTANCE NOTES: See other material notes

UNDISCLOSED

%: **0.0000 - 8.0000** GS: **LT-1** RC: **None** NANO: **No** ROLE: **Pigment**

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
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	MAK	Carcinogen Group 3A - Evidence of carcinogenic effects but not sufficient to establish MAK/BAT value

SUBSTANCE NOTES: See other material notes

UNDISCLOSED

%: **0.0000 - 5.0000** 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

SUBSTANCE NOTES: See other material notes

UNDISCLOSED

%: **0.0000 - 10.0000** 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
CANCER	US CDC - Occupational Carcinogens	Occupational Carcinogen
CANCER	US NIH - Report on Carcinogens	Known to be a human Carcinogen
PBT	OR DEQ - Priority Persistent Pollutants	Priority Persistent Pollutant - Tier 1

MULTIPLE	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
CANCER	Korea - GHS	Carcinogenicity - Category 1 [H350 - May cause cancer]
CANCER	New Zealand - GHS	6.7A - Known or presumed human carcinogens
CANCER	Australia - GHS	H350 - May cause cancer

SUBSTANCE NOTES: See other material notes

UNDISCLOSED

%: **0.0000 - 8.0000** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Pigment**

HAZARDS:	AGENCY(IES) WITH WARNINGS:
None Found	No warnings found on HPD Priority lists

SUBSTANCE NOTES: See other material notes

UNDISCLOSED

%: **0.0000 - 20.0000** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Pigment**

HAZARDS:	AGENCY(IES) WITH WARNINGS:
None Found	No warnings found on HPD Priority lists

SUBSTANCE NOTES: See other material notes

UNDISCLOSED

%: **0.0000 - 10.0000** GS: **LT-P1** RC: **None** NANO: **No** ROLE: **Pigment**

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
RESPIRATORY	AOEC - Asthmagens	Asthmagen (ARs) - sensitizer-induced - inhalable forms only

SUBSTANCE NOTES: See other material notes

UNDISCLOSED

%: **0.0000 - 15.0000** 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 material notes

UNDISCLOSED

%: **0.0000 - 3.0000** 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)	H319 - Causes serious eye irritation
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor

SUBSTANCE NOTES: See other material notes

UNDISCLOSED

%: **0.0000 - 17.0000** GS: **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 material notes

UNDISCLOSED

%: **0.0000 - 3.0000** GS: **LT-P1** RC: **None** NANO: **No** ROLE: **Solvent**

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters

SUBSTANCE NOTES: See other material notes

COATING #4

%: 0.0000 - 0.4700 HPD URL: N/A

PRODUCT THRESHOLD: 1000 ppm RESIDUALS AND IMPURITIES CONSIDERED: Yes

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 #3. Decorative coating

FRITS, CHEMICALS

ID: 65997-18-4

%: 30.0000 - 50.0000 GS: LT-P1 RC: None NANO: No ROLE: Inorganic binder

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters

SUBSTANCE NOTES: See other material notes

CYCLOHEXANONE

ID: 108-94-1

%: 10.0000 - 20.0000 GS: LT-P1 RC: None NANO: No ROLE: Solvent

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
CANCER	MAK	Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification

SUBSTANCE NOTES: See other material notes

DIPROPYLENE GLYCOL MONOMETHYL 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	

SUBSTANCE NOTES: See other material notes

2-(2-BUTOXYETHOXY)ETHANOL

ID: 112-34-5

%: 5.0000 - 10.0000 GS: 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

C.I. PIGMENT BLUE 28

ID: 1345-16-0

%: 0.0000 - 30.0000 GS: LT-1 RC: None NANO: No ROLE: Pigment

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
RESPIRATORY	AOEC - Asthmagens	Asthmagen (G) - generally accepted
CANCER	MAK	Carcinogen Group 2 - Considered to be carcinogenic for man
RESPIRATORY	MAK	Sensitizing Substance Sah - Danger of airway & skin sensitization
GENE MUTATION	MAK	Germ Cell Mutagen 3a

SUBSTANCE NOTES: See other material notes

C.I. PIGMENT BLACK 28

ID: 68186-91-4

%: 0.0000 - 30.0000 GS: LT-UNK RC: None NANO: No ROLE: Pigment

HAZARDS:	AGENCY(IES) WITH WARNINGS:
None Found	No warnings found on HPD Priority lists

SUBSTANCE NOTES: See other material notes

RUTILE, ANTIMONY CHROMIUM BUFF

ID: 68186-90-3

%: 0.0000 - 30.0000 GS: LT-UNK RC: None NANO: No ROLE: Pigment

HAZARDS:	AGENCY(IES) WITH WARNINGS:
None Found	No warnings found on HPD Priority lists

SUBSTANCE NOTES: See other material notes

C.I. PIGMENT GREEN 50

ID: 68186-85-6

%: 0.0000 - 30.0000 GS: LT-1 RC: None NANO: No ROLE: Pigment

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
RESPIRATORY	AOEC - Asthmagens	Asthmagen (G) - generally accepted
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	MAK	Carcinogen Group 2 - Considered to be carcinogenic for man
RESPIRATORY	MAK	Sensitizing Substance Sah - Danger of airway & skin sensitization
GENE MUTATION	MAK	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 WARNINGS:	
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	MAK	Carcinogen Group 3A - Evidence of carcinogenic effects but not sufficient to establish MAK/BAT value

SUBSTANCE NOTES: See other material notes

NICKEL RUTILE YELLOW

ID: 8007-18-9

%: **0.0000 - 30.0000** 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

SUBSTANCE NOTES: See other material 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

SUBSTANCE NOTES: See other material notes

Section 3: Certifications and Compliance

This section lists applicable certification and standards compliance information for VOC emissions and VOC content. Other types of health or environmental performance testing or certifications completed for the product may be provided.

VOC EMISSIONS — **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

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Section 6: References

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
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

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)
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)

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.