

**CLASSIFICATION:** 08 80 50

**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**

- 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 8 of 12 Materials
- Explanation(s) provided for Residuals/Impurities?
  - Yes  No

*All Substances Above the Threshold Indicated Are:*

**Characterized**  Yes Ex/SC  Yes  No  
% weight and role provided for all substances.

**Screened**  Yes Ex/SC  Yes  No  
All substances screened using Priority Hazard Lists with results disclosed.

**Identified**  Yes Ex/SC  Yes  No  
One or more substances not disclosed by Name (Specific or Generic) and Identifier and/ or one or more Special Condition did not follow guidance.

**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 ] DESICCANT [ ZEOLITE LT-UNK QUARTZ  
LT-1 | CAN ] 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-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 ] COATING #3 [ UNDISCLOSED LT-P1 | MUL  
UNDISCLOSED LT-1 | CAN | END UNDISCLOSED LT-1 | RES | CAN  
UNDISCLOSED LT-1 | CAN | PBT | MUL UNDISCLOSED LT-UNK  
UNDISCLOSED LT-UNK UNDISCLOSED BM-2 | RES UNDISCLOSED LT-  
UNK UNDISCLOSED BM-2 | SKI | EYE | END UNDISCLOSED LT-P1 | EYE |  
END UNDISCLOSED LT-UNK UNDISCLOSED LT-P1 | MUL ] SECONDARY  
SEAL #1 - POLYSULFIDE SUPPLIER #1 [ 1-PROPENE, 2-METHYL-,  
HOMOPOLYMER LT-UNK CARBON BLACK LT-1 | CAN ] SECONDARY  
SEAL #1 - POLYSULFIDE SUPPLIER #2 [ CALCIUM CARBONATE BM-3  
ALIPHATIC POLYSULFIDE-POLYMERS, MOLECULAR WEIGHT >=1800 LT-  
P1 | MUL 1,2-BENZENEDICARBOXYLIC ACID, BENZYL C7-9-BRANCHED  
AND LINEAR ALKYL ESTERS LT-UNK TEXANOL BENZYL PHTHALATE LT-  
UNK MANGANESE DIOXIDE LT-P1 CARBON BLACK LT-1 | CAN ((3-  
(TRIMETHOXSILYL)PROPOXY)METHYL)OXIRANE LT-P1 | MUL 1,3-  
DIFENYLGUANID LT-P1 | AQU | SKI | EYE | REP | MUL DISULFIRAM LT-P1 |  
AQU | SKI | MUL ] SECONDARY SEAL #2 [ SILOXANES AND SILICONES, DI-  
ME, HYDROXY-TERMINATED BM-2 CALCIUM CARBONATE BM-3

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. 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 [type of glass, sealant, spacer bar and type of coating (if present)] introduce ranges in the content inventory section.

STEARIC ACID [LT-P1] | END MAGNESITE [LT-UNK] QUARTZ [LT-1] | CAN  
CALCIUM STEARATE [LT-UNK] ] SPACER BAR #1 [ POLYPROPYLENE [LT-  
UNK] STAINLESS STEEL [NoGS] ] SPACER BAR #2 [ STYRENE-  
ACRYLONITRILE COPOLYMERS [LT-UNK] ] SPACER BAR #3 - SUPPLIER #1  
[ ALUMINUM [LT-P1] | RES | END | PHY ZINC [LT-P1] | AQU | END | MUL | PHY  
MAGNESIUM [LT-UNK] | PHY SILICON [LT-UNK] MANGANESE [LT-P1] | END |  
MUL | REP CHROMIUM [LT-P1] | RES | END | SKI ] SPACER BAR #3 -  
SUPPLIER #2 [ ALUMINUM [LT-P1] | RES | END | PHY ] PRIMARY SEAL - PIB  
[ 1-PROPENE, 2-METHYL-, HOMOPOLYMER [LT-UNK] CARBON BLACK [LT-  
1] | CAN ANOX 20 [LT-UNK] ]

### VOLATILE ORGANIC COMPOUND (VOC) CONTENT

VOC Content data is not applicable for this product category.

### CERTIFICATIONS AND COMPLIANCE See Section 3 for additional listings.

VOC emissions: CDPH Standard Method – N/A

### CONSISTENCY WITH OTHER PROGRAMS

Pre-checked for LEED v4 Material Ingredients, Option 1

Third Party Verified?

- Yes
- No

PREPARER: Vertima

VERIFIER:

VERIFICATION #:

SCREENING DATE: 2018-08-10

PUBLISHED DATE: 2020-02-04

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 2.1.1, available on the HPDC website at: [www.hpd-collaborative.org/hpd-2-1-1-standard](http://www.hpd-collaborative.org/hpd-2-1-1-standard)

### GLASS

#: 97.40 - 98.72

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 per 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.

HPD URL: N/A

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

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2018-08-10

#: 69.00 - 74.00

GS: LT-P1

RC: None

NANO: No

ROLE: Network former

HAZARD TYPE

AGENCY AND LIST TITLES

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

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2018-08-10

#: 12.00 - 16.00

GS: LT-UNK

RC: None

NANO: No

ROLE: Fluxing agent

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists
SUBSTANCE NOTES: See other material notes		

### CALCIUM OXIDE

ID: 1305-78-8

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2018-08-10		
%: 5.00 - 12.00	GS: LT-P1	RC: None	NANO: No	ROLE: Network modifier
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS		
None found		No warnings found on HPD Priority Hazard Lists		
SUBSTANCE NOTES: See other material notes				

### MAGNESIUM OXIDE

ID: 1309-48-4

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2018-08-10		
%: 0.00 - 6.00	GS: LT-UNK	RC: None	NANO: No	ROLE: Network modifier
HAZARD TYPE	AGENCY AND LIST TITLES	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

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2018-08-10		
%: 0.00 - 1.00	GS: LT-UNK	RC: None	NANO: No	ROLE: Fining agent
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS		
None found		No warnings found on HPD Priority Hazard Lists		
SUBSTANCE NOTES: See other material notes				

### FERRIC OXIDE

ID: 1309-37-1

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2018-08-10		
%: 0.00 - 1.00	GS: BM-2	RC: None	NANO: No	ROLE: Coloring agent

HAZARD TYPE	AGENCY AND LIST TITLES	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

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2018-08-10

#: 0.00 - 1.00 GS: LT-UNK RC: None NANO: No ROLE: Reducing agent

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: See other material notes

## ALUMINUM OXIDE

ID: 1344-28-1

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2018-08-10

#: 0.00 - 3.00 GS: LT-P1 RC: None NANO: No ROLE: Durability/viscosity/ workability enhancer

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
RESPIRATORY	AOEC - Asthmagens	Asthmagen (Rs) - sensitizer-induced

SUBSTANCE NOTES: See other material notes

## DESICCANT

#: 0.11 - 0.23

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: No

RESIDUALS AND IMPURITIES NOTES: Information about residuals and impurities not provided by manufacturer.

HPD URL: N/A

OTHER MATERIAL NOTES: Synthetic zeolite.

**ZEOLITE**

ID: 1318-02-1

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2018-08-10**

#: **70.00**

GS: **LT-UNK**

RC: **None**

NANO: **No**

ROLE: **Main ingredient**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

None found

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: **See other material notes**

**QUARTZ**

ID: 14808-60-7

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2018-08-10**

#: **30.00**

GS: **LT-1**

RC: **None**

NANO: **No**

ROLE: **Ingredient**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

CANCER

US CDC - Occupational Carcinogens

Occupational Carcinogen

CANCER

CA EPA - Prop 65

Carcinogen - specific to chemical form or exposure route

CANCER

IARC

Group 1 - Agent is carcinogenic to humans - inhaled from occupational sources

CANCER

US NIH - Report on Carcinogens

Known to be Human Carcinogen (respirable size - occupational setting)

CANCER

MAK

Carcinogen Group 1 - Substances that cause cancer in man

CANCER

New Zealand - GHS

6.7A - Known or presumed human carcinogens

CANCER

Japan - GHS

Carcinogenicity - Category 1A

CANCER

Australia - GHS

H350i - May cause cancer by inhalation

SUBSTANCE NOTES: **Approximate for Clay**

**COATING #4**

#: **0.09 - 0.12**

PRODUCT THRESHOLD: **1000 ppm**

RESIDUALS AND IMPURITIES CONSIDERED: **Yes**

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

HPD URL: **N/A**

OTHER MATERIAL NOTES: **Alternative coating to coating #3. Decorative coating. Ceramic ink. Includes all color options.**

**FRITS, CHEMICALS**

ID: 65997-18-4

%: **30.00 - 50.00**GS: **LT-P1**RC: **None**NANO: **No**ROLE: **Inorganic binder**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

**MULTIPLE**

German FEA - Substances Hazardous to Waters

Class 2 - Hazard to Waters

SUBSTANCE NOTES: **See other material notes****CYCLOHEXANONE**ID: **108-94-1**%: **10.00 - 20.00**GS: **LT-P1**RC: **None**NANO: **No**ROLE: **Solvent**

HAZARD TYPE

AGENCY AND LIST TITLES

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**%: **10.00 - 30.00**GS: **LT-UNK**RC: **None**NANO: **No**ROLE: **Solvent**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

**None found**

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: **See other material notes****2-(2-BUTOXYETHOXY)ETHANOL**ID: **112-34-5**%: **5.00 - 10.00**GS: **LT-P1**RC: **None**NANO: **No**ROLE: **Solvent**

HAZARD TYPE

AGENCY AND LIST TITLES

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

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2018-08-10**%: **0.00 - 30.00**GS: **LT-1**RC: **None**NANO: **No**ROLE: **Pigment**

HAZARD TYPE

AGENCY AND LIST TITLES

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 &amp; skin sensitization

**GENE MUTATION**

MAK

Germ Cell Mutagen 3a

SUBSTANCE NOTES: **See other material notes****C.I. PIGMENT BLACK 28**

ID: 68186-91-4

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2018-08-10**%: **0.00 - 30.00**GS: **LT-UNK**RC: **None**NANO: **No**ROLE: **Pigment**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

**None found**

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: **See other material notes****RUTILE, ANTIMONY CHROMIUM BUFF**

ID: 68186-90-3

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2018-08-10**%: **0.00 - 30.00**GS: **LT-UNK**RC: **None**NANO: **No**ROLE: **Pigment**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

**None found**

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: **See other material notes****C.I. PIGMENT GREEN 50**

ID: 68186-85-6

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2018-08-10**%: **0.00 - 30.00**GS: **LT-1**RC: **None**NANO: **No**ROLE: **Pigment**



HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
RESPIRATORY	AOEC - Asthmagens	Asthmagen (G) - generally accepted
CANCER	IARC	Group 1 - Agent is Carcinogenic to humans
CANCER	CA EPA - Prop 65	Carcinogen
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
RESPIRATORY	AOEC - Asthmagens	Asthmagen (Rs) - sensitizer-induced

SUBSTANCE NOTES: See other material notes

## TITANIUM DIOXIDE

ID: 13463-67-7

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2018-08-10**

#: **0.00 - 30.00**

GS: **LT-1**

RC: **None**

NANO: **No**

ROLE: **Pigment**

HAZARD TYPE	AGENCY AND LIST TITLES	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
CANCER	MAK	Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels

SUBSTANCE NOTES: See other material notes

## NICKEL RUTILE YELLOW

ID: 8007-18-9

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2018-08-10**

#: **0.00 - 30.00**

GS: **LT-1**

RC: **None**

NANO: **No**

ROLE: **Pigment**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CANCER	IARC	Group 1 - Agent is Carcinogenic to humans
CANCER	CA EPA - Prop 65	Carcinogen
CANCER	US NIH - Report on Carcinogens	Known to be a human Carcinogen
RESPIRATORY	AOEC - Asthmagens	Asthmagen (Rs) - sensitizer-induced

SUBSTANCE NOTES: See other material notes

## ISOBUTYL ALCOHOL

ID: 78-83-1

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2018-08-10**

#: **0.00 - 5.00**

GS: **BM-2**

RC: **None**

NANO: **No**

ROLE: **Solvent**

HAZARD TYPE	AGENCY AND LIST TITLES	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

## COATING #3

#: **0.00 - 0.72**

PRODUCT THRESHOLD: **1000 ppm**

RESIDUALS AND IMPURITIES CONSIDERED: **No**

RESIDUALS AND IMPURITIES NOTES: **The manufacturer indicated that there were no residual substances or impurities.**

HPD URL: **N/A**

OTHER MATERIAL NOTES: **Alternative coating to coating #4. Decorative coating. Composition protected by a NDA. Ranges provided to protect the exact composition.**

## UNDISCLOSED

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2018-08-10**

#: **60.00 - 77.00**

GS: **LT-P1**

RC: **None**

NANO: **No**

ROLE: **Primary component**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters

SUBSTANCE NOTES: Please refer to other material notes.

**UNDISCLOSED**HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2018-08-10**%: **0.00 - 8.00** GS: **LT-1** RC: **None** NANO: **No** ROLE: **Pigment**

HAZARD TYPE	AGENCY AND LIST TITLES	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
CANCER	MAK	Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels

SUBSTANCE NOTES: Please refer to other material notes.

**UNDISCLOSED**HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2018-08-10**%: **0.00 - 5.00** GS: **LT-1** RC: **None** NANO: **No** ROLE: **Pigment**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
RESPIRATORY	AOEC - Asthmagens	Asthmagen (Rs) - sensitizer-induced
CANCER	IARC	Group 1 - Agent is Carcinogenic to humans
CANCER	CA EPA - Prop 65	Carcinogen
CANCER	US NIH - Report on Carcinogens	Known to be a human Carcinogen

SUBSTANCE NOTES: Please refer to other material notes.

**UNDISCLOSED**HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2018-08-10**%: **0.00 - 10.00** GS: **LT-1** RC: **None** NANO: **No** ROLE: **Pigment**

HAZARD TYPE	AGENCY AND LIST TITLES	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: Please refer to other material notes.

### UNDISCLOSED

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2018-08-10**

#: **0.00 - 8.00**

GS: **LT-UNK**

RC: **None**

NANO: **No**

ROLE: **Pigment**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: Please refer to other material notes.

### UNDISCLOSED

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2018-08-10**

#: **0.00 - 20.00**

GS: **LT-UNK**

RC: **None**

NANO: **No**

ROLE: **Pigment**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: Please refer to other material notes.

### UNDISCLOSED

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2018-08-10**

#: **0.00 - 10.00**

GS: **BM-2**

RC: **None**

NANO: **No**

ROLE: **Pigment**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
RESPIRATORY	AOEC - Asthmagens	Asthmagen (Rs) - sensitizer-induced

SUBSTANCE NOTES: Please refer to other material notes.

### UNDISCLOSED

HAZARD SCREENING METHOD: <b>Pharos Chemical and Materials Library</b>		HAZARD SCREENING DATE: <b>2018-08-10</b>		
%: <b>0.00 - 15.00</b>	GS: <b>LT-UNK</b>	RC: <b>None</b>	NANO: <b>No</b>	ROLE: <b>Solvent</b>
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS		

None found No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: Please refer to other material notes.

### UNDISCLOSED

HAZARD SCREENING METHOD: <b>Pharos Chemical and Materials Library</b>		HAZARD SCREENING DATE: <b>2018-08-10</b>		
%: <b>0.00 - 3.00</b>	GS: <b>BM-2</b>	RC: <b>None</b>	NANO: <b>No</b>	ROLE: <b>Solvent</b>
HAZARD TYPE	AGENCY AND LIST TITLES	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: Please refer to other material notes.

### UNDISCLOSED

HAZARD SCREENING METHOD: <b>Pharos Chemical and Materials Library</b>		HAZARD SCREENING DATE: <b>2018-08-10</b>		
%: <b>0.00 - 17.00</b>	GS: <b>LT-P1</b>	RC: <b>None</b>	NANO: <b>No</b>	ROLE: <b>Solvent</b>
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS		
EYE IRRITATION	EU - GHS (H-Statements)	H319 - Causes serious eye irritation		
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor		

SUBSTANCE NOTES: Please refer to other material notes.

### UNDISCLOSED

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2018-08-10**

#: **0.00 - 8.00**

GS: **LT-UNK**

RC: **None**

NANO: **No**

ROLE: **Solvent**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

**None found**

**No warnings found on HPD Priority Hazard Lists**

SUBSTANCE NOTES: **Please refer to other material notes.**

### UNDISCLOSED

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2018-08-10**

#: **0.00 - 3.00**

GS: **LT-P1**

RC: **None**

NANO: **No**

ROLE: **Solvent**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

**MULTIPLE**

**German FEA - Substances Hazardous to Waters**

**Class 2 - Hazard to Waters**

SUBSTANCE NOTES: **Please refer to other material notes.**

### SECONDARY SEAL #1 - POLYSULFIDE SUPPLIER #1

#: **0.00 - 1.60**

PRODUCT THRESHOLD: **1000 ppm**

RESIDUALS AND IMPURITIES CONSIDERED: **Yes**

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

HPD URL: **N/A**

OTHER MATERIAL NOTES: **Alternative to Secondary seal #1 -Polysulfide supplier #2 and Secondary seal #2. Airtight seal for the space between panes that provides additional protection for the primary seal**

1-PROPENE, 2-METHYL-, HOMOPOLYMER

ID: 9003-27-4

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2018-08-10

#: 40.00 - 80.00

GS: LT-UNK

RC: None

NANO: No

ROLE: Main ingredient

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

None found

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: See other material notes

CARBON BLACK

ID: 1333-86-4

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2018-08-10

#: 10.00 - 30.00

GS: LT-1

RC: None

NANO: No

ROLE: Ingredient

HAZARD TYPE

AGENCY AND LIST TITLES

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

SECONDARY SEAL #1 - POLYSULFIDE SUPPLIER #2

#: 0.00 - 1.60

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

RESIDUALS AND IMPURITIES NOTES: According to the manufacturer, there isn't any impurities or residual substances that could be classified as hazardous in the product. There would be trace amounts of impurities in the form of quartz at a negligible concentration below the disclosure threshold.

HPD URL: N/A

OTHER MATERIAL NOTES: Alternative to Secondary seal #1 -Polysulfide supplier #1 and Secondary seal #2. Sealant is a two-part polysulfide especially formulated for sealing insulating glass units.

CALCIUM CARBONATE

ID: 471-34-1

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2018-08-10

#: 38.50 - 59.00

GS: BM-3

RC: None

NANO: No

ROLE: Main ingredient

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: See other material notes

### ALIPHATIC POLYSULFIDE-POLYMERS, MOLECULAR WEIGHT >=1800

ID: 68611-50-7

HAZARD SCREENING METHOD: <b>Pharos Chemical and Materials Library</b>		HAZARD SCREENING DATE: <b>2018-08-10</b>		
%: <b>22.50 - 45.00</b>	GS: <b>LT-P1</b>	RC: <b>None</b>	NANO: <b>No</b>	ROLE: <b>Ingredient</b>

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
<b>MULTIPLE</b>	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters

SUBSTANCE NOTES: See other material notes

### 1,2-BENZENEDICARBOXYLIC ACID, BENZYL C7-9-BRANCHED AND LINEAR ALKYL ESTERS

ID: 68515-40-2

HAZARD SCREENING METHOD: <b>Pharos Chemical and Materials Library</b>		HAZARD SCREENING DATE: <b>2018-08-10</b>		
%: <b>15.00 - 35.00</b>	GS: <b>LT-UNK</b>	RC: <b>None</b>	NANO: <b>No</b>	ROLE: <b>Ingredient</b>

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: See other material notes

### TEXANOL BENZYL PHTHALATE

ID: 16883-83-3

HAZARD SCREENING METHOD: <b>Pharos Chemical and Materials Library</b>		HAZARD SCREENING DATE: <b>2018-08-10</b>		
%: <b>2.50 - 5.00</b>	GS: <b>LT-UNK</b>	RC: <b>None</b>	NANO: <b>No</b>	ROLE: <b>Ingredient</b>

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: See other material notes

### MANGANESE DIOXIDE

ID: 1313-13-9

HAZARD SCREENING METHOD: <b>Pharos Chemical and Materials Library</b>		HAZARD SCREENING DATE: <b>2018-08-10</b>		
%: <b>1.50 - 3.50</b>	GS: <b>LT-P1</b>	RC: <b>None</b>	NANO: <b>No</b>	ROLE: <b>Ingredient</b>



HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
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None found

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: See other material notes

### CARBON BLACK

ID: 1333-86-4

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2018-08-10**

#: **0.20 - 1.20**

GS: **LT-1**

RC: **None**

NANO: **No**

ROLE: **Pigment**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
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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

### ((3-(TRIMETHOXYSILYL)PROPOXY)METHYL)OXIRANE

ID: 2530-83-8

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2018-08-10**

#: **0.00 - 2.25**

GS: **LT-P1**

RC: **None**

NANO: **No**

ROLE: **Ingredient**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
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MULTIPLE

German FEA - Substances Hazardous to Waters

Class 2 - Hazard to Waters

SUBSTANCE NOTES: See other material notes

### 1,3-DIFENYLGUANID

ID: 102-06-7

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2018-08-10**

#: **0.00 - 0.25**

GS: **LT-P1**

RC: **None**

NANO: **No**

ROLE: **Ingredient**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CHRON AQUATIC	EU - GHS (H-Statements)	H411 - Toxic to aquatic life with long lasting effects
SKIN IRRITATION	EU - GHS (H-Statements)	H315 - Causes skin irritation
EYE IRRITATION	EU - GHS (H-Statements)	H319 - Causes serious eye irritation
REPRODUCTIVE	EU - GHS (H-Statements)	H361f - Suspected of damaging fertility
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters

SUBSTANCE NOTES: See other material notes

## DISULFIRAM

ID: 97-77-8

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2018-08-10**

#: **0.00 - 0.25**

GS: **LT-P1**

RC: **None**

NANO: **No**

ROLE: **Ingredient**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
ACUTE AQUATIC	EU - GHS (H-Statements)	H400 - Very toxic to aquatic life
CHRON AQUATIC	EU - GHS (H-Statements)	H410 - Very toxic to aquatic life with long lasting effects
SKIN SENSITIZE	EU - GHS (H-Statements)	H317 - May cause an allergic skin reaction
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters
SKIN SENSITIZE	MAK	Sensitizing Substance Sh - Danger of skin sensitization

SUBSTANCE NOTES: See other material notes

## SECONDARY SEAL #2

#: **0.00 - 1.15**

PRODUCT THRESHOLD: **1000 ppm**

RESIDUALS AND IMPURITIES CONSIDERED: **Yes**

RESIDUALS AND IMPURITIES NOTES: The manufacturer has reported impurities below the disclosure threshold for Siloxane polymer, such as: CAS # :69430-24-6 (Dimethylcyclosiloxanes) and CAS # 63148-62-9 (Dimethyl Siloxane, Trimethylsiloxy-terminated)

HPD URL: **N/A**

OTHER MATERIAL NOTES: Alternative to Secondary seal #1 -Polysulfide supplier #1 and Secondary seal #1 -Polysulfide supplier #2. Two-part silicone sealant for use as a secondary sealant in insulating glass units.

## SILOXANES AND SILICONES, DI-ME, HYDROXY-TERMINATED

ID: 70131-67-8

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2018-08-10**

#: **45.00 - 60.00** GS: **BM-2** RC: **None** NANO: **No** ROLE: **Base polymer**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists
SUBSTANCE NOTES: See other material notes		

### CALCIUM CARBONATE

ID: **471-34-1**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2018-08-10**

#: **40.00 - 55.00** GS: **BM-3** RC: **None** NANO: **No** ROLE: **Filler**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists
SUBSTANCE NOTES: See other material notes		

### STEARIC ACID

ID: **57-11-4**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2018-08-10**

#: **1.00 - 5.00** GS: **LT-P1** RC: **None** NANO: **No** ROLE: **Filler treatment**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
SUBSTANCE NOTES: See other material notes		

### MAGNESITE

ID: **546-93-0**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2018-08-10**

#: **1.00** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **from Calcium carbonate**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists
SUBSTANCE NOTES: See other material notes		

### QUARTZ

ID: **14808-60-7**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2018-08-10**

#: **1.00** GS: **LT-1** RC: **None** NANO: **No** ROLE: **from Calcium carbonate**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CANCER	US CDC - Occupational Carcinogens	Occupational Carcinogen
CANCER	CA EPA - Prop 65	Carcinogen - specific to chemical form or exposure route
CANCER	IARC	Group 1 - Agent is carcinogenic to humans - inhaled from occupational sources
CANCER	US NIH - Report on Carcinogens	Known to be Human Carcinogen (respirable size - occupational setting)
CANCER	MAK	Carcinogen Group 1 - Substances that cause cancer in man
CANCER	New Zealand - GHS	6.7A - Known or presumed human carcinogens
CANCER	Japan - GHS	Carcinogenicity - Category 1A
CANCER	Australia - GHS	H350i - May cause cancer by inhalation

SUBSTANCE NOTES: See other material notes

## CALCIUM STEARATE

ID: 1592-23-0

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2018-08-10**

#: **1.00**

GS: **LT-UNK**

RC:

**None**

NANO:

**No**

ROLE: **from reaction Calcium carbonate with Stearic acid**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: See other material notes

## SPACER BAR #1

#: **0.00 - 0.30**

PRODUCT THRESHOLD: **1000 ppm**

RESIDUALS AND IMPURITIES CONSIDERED: **No**

RESIDUALS AND IMPURITIES NOTES: **Information from manufactured not available.**

HPD URL: **N/A**

OTHER MATERIAL NOTES: **Alternative to spacer bar #2, spacer bar #3 - supplier #1 and spacer bar #3 - supplier #2. The product has other components (tie layer + coloring agent), but they are below the reporting threshold.**

**POLYPROPYLENE**

ID: 9003-07-0

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2018-08-10**

#: **45.80 - 49.50**

GS: **LT-UNK**

RC: **None**

NANO: **No**

ROLE: **Ingredient**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

None found

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: See other material notes

**STAINLESS STEEL**

ID: 12597-68-1

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2018-08-10**

#: **43.30 - 48.90**

GS: **NoGS**

RC: **None**

NANO: **No**

ROLE: **Main ingredient**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

None found

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: See other material notes

**SPACER BAR #2**

#: **0.00 - 0.30**

PRODUCT THRESHOLD: **1000 ppm**

RESIDUALS AND IMPURITIES CONSIDERED: **Yes**

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

HPD URL: **N/A**

OTHER MATERIAL NOTES: **Alternative to spacer bar #1, spacer bar #3 - supplier #1 and spacer bar #3 - supplier #2. Warm-edge spacer bars for insulated glazing. The remaining ingredients are not disclosed because below the reporting threshold (aluminum gas barrier foil and isocyanate-based adhesive)**

**STYRENE-ACRYLONITRILE COPOLYMERS**

ID: 9003-54-7

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2018-08-10**

#: **93.06**

GS: **LT-UNK**

RC: **None**

NANO: **No**

ROLE: **Main ingredient**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

None found

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: See other material notes

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

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

HPD URL: N/A

OTHER MATERIAL NOTES: Alternative to spacer bar #1, spacer bar #2 and spacer bar #3 - supplier #2. Aluminum spacer.

**ALUMINUM**

ID: 7429-90-5

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2018-08-10

%: 92.00 - 100.00

GS: LT-P1

RC: None

NANO: No

ROLE: Main ingredient

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
RESPIRATORY	AOEC - Asthmagens	Asthmagen (ARs) - sensitizer-induced - inhalable forms only
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
PHYSICAL HAZARD (REACTIVE)	EU - GHS (H-Statements)	H228 - Flammable solid
PHYSICAL HAZARD (REACTIVE)	EU - GHS (H-Statements)	H250 - Catches fire spontaneously if exposed to air
PHYSICAL HAZARD (REACTIVE)	EU - GHS (H-Statements)	H261 - In contact with water releases flammable gases

SUBSTANCE NOTES: See other material notes

**ZINC**

ID: 7440-66-6

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2018-08-10

%: 0.00 - 5.85

GS: LT-P1

RC: None

NANO: No

ROLE: Ingredient

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
ACUTE AQUATIC	EU - GHS (H-Statements)	H400 - Very toxic to aquatic life
CHRON AQUATIC	EU - GHS (H-Statements)	H410 - Very toxic to aquatic life with long lasting effects
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
PHYSICAL HAZARD (REACTIVE)	EU - GHS (H-Statements)	H250 - Catches fire spontaneously if exposed to air
PHYSICAL HAZARD (REACTIVE)	EU - GHS (H-Statements)	H260 - In contact with water releases flammable gases which may ignite spontaneously

SUBSTANCE NOTES: See other material notes

**MAGNESIUM**

ID: 7439-95-4

#: **0.00 - 5.50**                      GS: **LT-UNK**                      RC: **None**                      NANO: **No**                      ROLE: **Ingredient**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
PHYSICAL HAZARD (REACTIVE)	EU - GHS (H-Statements)	H250 - Catches fire spontaneously if exposed to air
PHYSICAL HAZARD (REACTIVE)	EU - GHS (H-Statements)	H260 - In contact with water releases flammable gases which may ignite spontaneously

SUBSTANCE NOTES: **See other material notes**

## SILICON

ID: **7440-21-3**

#: **0.00 - 2.00**                      GS: **LT-UNK**                      RC: **None**                      NANO: **No**                      ROLE: **Additif**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: **See other material notes**

## MANGANESE

ID: **7439-96-5**

#: **0.00 - 1.50**                      GS: **LT-P1**                      RC: **None**                      NANO: **No**                      ROLE: **Ingredient**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
REPRODUCTIVE	Japan - GHS	Toxic to reproduction - Category 1B

SUBSTANCE NOTES: **See other material notes**

## CHROMIUM

ID: **7440-47-3**

#: **0.00 - 0.35**                      GS: **LT-P1**                      RC: **None**                      NANO: **No**                      ROLE: **Ingredient**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
RESPIRATORY	AOEC - Asthmagens	Asthmagen (ARs) - sensitizer-induced - inhalable forms only
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
SKIN SENSITIZE	MAK	Sensitizing Substance Sh - Danger of skin sensitization

SUBSTANCE NOTES: See other material notes

### SPACER BAR #3 - SUPPLIER #2

%: 0.00 - 1.40

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: No

RESIDUALS AND IMPURITIES NOTES: Information about residuals and impurities not provided by manufacturer.

HPD URL: N/A

OTHER MATERIAL NOTES: Aluminum profile for insulating glass. Raw aluminum finish (no coating). If anodized aluminum, presence of aluminum oxide (CAS 1344-28-1, <1%)

### ALUMINUM

ID: 7429-90-5

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2018-08-10

%: 0.00 - 97.00

GS: LT-P1

RC: None

NANO: No

ROLE: Main ingredient

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
RESPIRATORY	AOEC - Asthmagens	Asthmagen (ARs) - sensitizer-induced - inhalable forms only
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
PHYSICAL HAZARD (REACTIVE)	EU - GHS (H-Statements)	H228 - Flammable solid
PHYSICAL HAZARD (REACTIVE)	EU - GHS (H-Statements)	H250 - Catches fire spontaneously if exposed to air
PHYSICAL HAZARD (REACTIVE)	EU - GHS (H-Statements)	H261 - In contact with water releases flammable gases

SUBSTANCE NOTES: See other material notes

### PRIMARY SEAL - PIB

%: 0.00 - 0.10

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes



RESIDUALS AND IMPURITIES NOTES: According to the manufacturer, the sealant doesn't have any residues left over once the material hardens. According to the manufacturer's tests, no VOC flashes off the material during hardening.. The material is considered inert once it hardens.

HPD URL: **N/A**

OTHER MATERIAL NOTES: Polyisobutylene-based material solvent-free and especially formulated for use as the primary seal in double sealed units. Allows for minimum water vapor and gas permeation.

### 1-PROPENE, 2-METHYL-, HOMOPOLYMER

ID: **9003-27-4**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2018-08-10**

#: **55.00 - 75.00** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Main ingredient**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

None found

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: **See other material notes**

### CARBON BLACK

ID: **1333-86-4**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2018-08-10**

#: **10.00 - 20.00** GS: **LT-1** RC: **None** NANO: **No** ROLE: **Ingredient**

HAZARD TYPE

AGENCY AND LIST TITLES

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**

### ANOX 20

ID: **6683-19-8**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2018-08-10**

#: **0.10 - 0.20** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Ingredient**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

None found

No warnings found on HPD Priority Hazard Lists

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 – N/A

CERTIFYING PARTY: **Self-declared**

ISSUE DATE: **2018-**

EXPIRY DATE:

CERTIFIER OR LAB: **None**

APPLICABLE FACILITIES: -

**08-10**

CERTIFICATE URL:

CERTIFICATION AND COMPLIANCE NOTES: **According to LEED® v4, sealed units are exempt from CDPH requirements if they are part of the building envelope.**

## 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

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MANUFACTURER: **LAURIER ARCHITECTURAL INC.**  
 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

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**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

<b>AQU</b> Aquatic toxicity	<b>GLO</b> Global warming	<b>PHY</b> Physical Hazard (reactive)
<b>CAN</b> Cancer	<b>MAM</b> Mammalian/systemic/organ toxicity	<b>REP</b> Reproductive toxicity
<b>DEV</b> Developmental toxicity	<b>MUL</b> Multiple hazards	<b>RES</b> Respiratory sensitization
<b>END</b> Endocrine activity	<b>NEU</b> Neurotoxicity	<b>SKI</b> Skin sensitization/irritation/corrosivity
<b>EYE</b> Eye irritation/corrosivity	<b>OZO</b> Ozone depletion	<b>LAN</b> Land Toxicity
<b>GEN</b> Gene mutation	<b>PBT</b> Persistent Bioaccumulative Toxic	<b>NF</b> Not found on Priority Hazard Lists

### GreenScreen (GS)

<b>BM-4</b> Benchmark 4 (prefer-safer chemical)	<b>LT-P1</b> List Translator Possible Benchmark 1
<b>BM-3</b> Benchmark 3 (use but still opportunity for improvement)	<b>LT-1</b> List Translator Likely Benchmark 1
<b>BM-2</b> Benchmark 2 (use but search for safer substitutes)	<b>LT-UNK</b> List Translator Benchmark Unknown (insufficient information from List Translator lists to benchmark)
<b>BM-1</b> Benchmark 1 (avoid - chemical of high concern)	<b>NoGS</b> Unknown (no data on List Translator Lists)
<b>BM-U</b> Benchmark Unspecified (insufficient 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.*