Louver with Sherwin Williams Fluropon Pure Finish by Industrial Louvers Inc.

Health Product Declaration v2.2

created via: HPDC Online Builder

HPD UNIQUE IDENTIFIER: 24522
CLASSIFICATION: 08 90 00 Louvers and Vents
PRODUCT DESCRIPTION: This HPD was based on a model 653XP storm performance louver, 4'0" x 4'0". They are assemblies of aluminum extrusions, fastened with stainless steel fasteners and finished with a factory-applied PVDF finish. As the products are custom-sized, we have selected a typical sample size for purposes of this disclosure document and assumed sealant use. Material ingredients are the same regardless of size.

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
- ( ) Other

Residuals/Impurities

Residuals/Impurities Considered in 3 of 4 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

6063 ALUMINUM EXTRUSION [UNS A96063 ALUMINUM ALLOY NoGS] TYPE 3003 ALUMINUM [UNS A93003 ALUMINUM ALLOY NoGS] FLUROPON PURE - EXTRUSION [POLYVINYLIDENE FLUORIDE (1,1-DIFLUOROETHENE HOMOPOLYMER) LT-UNK TITANIUM DIOXIDE LT-1 | CAN | END ACRYLIC RESIN NoGS 2,2,4-TRIMETHYL-1,3-PENTANEDIOL DIISOBUTYRATE LT-P1 | END BARIUM SULFATE BM-2 | CAN TRIPHOSPHORIC ACID, ALUMINUM SALT LT-UNK ACRYLIC-MELAMINE RESIN NoGS STRONTIUM CARBONATE LT-UNK SILICA, AMORPHOUS BM-1 | CAN ALUMINIUM HYDROXIDE OXIDE LT-UNK WOLLASTONITE LT-UNK ZINC 5-NITROISOPHTHALATE LT-UNK ALUMINA TRIHYDRATE BM-2 | RES CELLULOSE ACETATE BUTANOATE, AVERAGE MOLECULAR WEIGHT 15000 - 65000 G/MOL LT-UNK FUMED SILICA, CRYSTALLINE-FREE BM-1 IRON HYDROXIDE OXIDE YELLOW LT-UNK C.I. PIGMENT BLUE 15 BM-3 2-(2-BUTOXYETHOXY)ETHANOL LT-P1 | END | EYE NICKEL RUTILE YELLOW LT-1 | CAN | RES MOLYBDATE (MOO42#-), CALCIUM (1:1), (T-4)- LT-UNK HEMATITE, CHROMIUM GREEN BLACK LT-UNK C.I. PIGMENT BLUE 36 LT-1 | RES | CAN | GEN C.I. PIGMENT BLACK 28 LT-UNK RUTILE, ANTIMONY CHROMIUM BUFF BM-1 C.I. PIGMENT GREEN 50 LT-1 | RES | CAN | GEN PYRROLO[3,4-C]PYRROLE-1,4-DIONE,3,6-BIS(4-CHLOROPHENYL)-2,5-DIHYDRO- LT-UNK BISMUTH VANADIUM TETRAOXIDE BM-1 | MUL 5,12-DIHYDROQUINO(2,3-B)ACRIDINE-7,14-DIONE LT-UNK PHTHALOCYANINE GREEN LT-UNK 5,12-DIHYDROQUINO(2,3-B)ACRIDINE-7,14-DIONE LT-UNK C.I. PIGMENT BLUE 28 LT-1 | RES | CAN | GEN CARBON BLACK BM-1 | CAN FERRIC OXIDE BM-1 | CAN CHROMIUM (III) OXIDE BM-1 | SKI CHROMIUM IRON OXIDE LT-P1 | SKI] 18-8 TYPE 304 STAINLESS FASTENERS [304 STAINLESS STEEL (304 STAINLESS STEEL) NoGS]

Number of Greenscreen BM-4/BM3 contents ... 1

Contents highest concern GreenScreen Benchmark or List translator Score ... BM-1

Nanomaterial ... No

INVENTORY AND SCREENING NOTES:

Inventory weights are based on a 4'0" x 4'0" louver with a two-coat PVDF finish, Sherwin Williams Fluropon Pure. Residual materials were considered separately. Possible residuals include a pre-wash and pre-treatment for aluminum extrusions. The first of these is rinsed off prior to painting. The second is diluted. Residuals may be present below 100ppm, but any residual material would also be encapsulated under the coating. Identified is marked No because the aluminum alloys used do not have a registered CASRN. Since the CASRN system does not apply to metal alloys, the Unified Numbering System (UNS) alloy number is used as an alternative substance identifier as allowed in the HPD Standard. Therefore, Identified should be marked Yes but the HPDC Builder does not allow this change to occur.

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: N/A

Other: ILFI Declare - LBC Red List Approved - Third Party Verified

CONSISTENCY WITH OTHER PROGRAMS

Pre-checked for LEED v4 Material Ingredients Option 1

Third Party Verified?

- (•) Yes
- ( ) No

PREPARER: Self-Prepared
VERIFIER: WAP Sustainability Consulting
VERIFICATION #: zPr-3665

SCREENING DATE: 2021-04-12
PUBLISHED DATE: 2021-04-21
EXPIRY DATE: 2024-04-12

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

6063 ALUMINUM EXTRUSION

%: 92.9354 - 92.9354

PRODUCT THRESHOLD: 100 ppm | RESIDUALS AND IMPURITIES CONSIDERED: Yes | MATERIAL TYPE: Metal

RESIDUALS AND IMPURITIES NOTES: Possible residuals include a pre-wash and pre-treatment for aluminum extrusions. The first of these is rinsed off prior to painting. The second is diluted. Residuals may be present below 100ppm, but any residual material would also be encapsulated under the coating.

OTHER MATERIAL NOTES:

UNS A96063 ALUMINUM ALLOY

ID: Not registered

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-04-21 8:20:32**

%: **100.0000 - 100.0000** GS: **NoGS** RC: **Both** NANO: **No** SUBSTANCE ROLE: **Structure component**

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

SUBSTANCE NOTES: Potential residuals for the aluminum extrusions include pre-wash and pre-treat chemicals that ensure paint adhesion. The maximum amount of residual material was considered and is less than 100ppm. Residuals present would be encapsulated in cured finish.

Pre- and post-consumer recycled content sourced from beverage containers, industrial scrap, among other sources as well as virgin material.

Since the aluminum alloy does not utilize the CAS RN system, the Unified Numbering System (UNS) alloy number is used as an alternative substance identifier as allowed in the HPD Standard.

TYPE 3003 ALUMINUM

%: 4.5920 - 4.5920

PRODUCT THRESHOLD: 100 ppm | RESIDUALS AND IMPURITIES CONSIDERED: Yes | MATERIAL TYPE: Metal

RESIDUALS AND IMPURITIES NOTES: Possible residuals include a pre-wash and pre-treatment for aluminum extrusions. The first of these is rinsed off prior to painting. The second is diluted. Residuals may be present below 100ppm, but any residual material would also be encapsulated under the coating.

OTHER MATERIAL NOTES:

UNS A93003 ALUMINUM ALLOY

ID: **Not registered**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-04-21 8:21:49**

%: **100.0000 - 100.0000** GS: **NoGS** RC: **Both** NANO: **No** SUBSTANCE ROLE: **Structure component**

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

SUBSTANCE NOTES: Potential residuals for the aluminum extrusions include pre-wash and pre-treat chemicals that ensure paint adhesion. The maximum amount of residual material was considered and is less than 100ppm. Residuals present would be encapsulated in cured finish.

Pre- and post-consumer recycled content sourced from beverage containers, industrial scrap, among other sources as well as virgin material.

Since the aluminum alloy does not utilize the CAS RN system, the Unified Numbering System (UNS) alloy number is used as an alternative substance identifier as allowed in the HPD Standard.

FLUROPON PURE - EXTRUSION

%: 1.9435 - 1.9435

PRODUCT THRESHOLD: 100 ppm RESIDUALS AND IMPURITIES CONSIDERED: Yes MATERIAL TYPE: Other: Coating

RESIDUALS AND IMPURITIES NOTES: Material Notes: Fluropon Pure Extrusion Coating System. HPD represents the coating system as applied after curing/baking including 732X1023FP primer and Fluropon Pure topcoat. This HPD represents all possible topcoat colors. Pigmens may or may not be present in any one given color. The total coatin gsystem weight as applied on the metal substrate is .017lbs/ft2.

HPD URL: https://hpdrepository.hpd-collaborative.org/repository/HPDs/publish_58_Fluropon_Pure_Extrusion_1476885924.pdf

OTHER MATERIAL NOTES: The pigments included in this HPD include thousands of possible colors, and include all standard and most custom color.

POLYVINYLIDENE FLUORIDE (1,1-DIFLUOROETHENE HOMOPOLYMER)

ID: **24937-79-9**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-04-12 14:01:07**

%: **26.9400 - 32.9300** GS: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Polymer species**

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

SUBSTANCE NOTES: This substance is present in all finish color options.

TITANIUM DIOXIDE

ID: **13463-67-7**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-04-12 14:01:07**

%: **12.0400 - 18.9400** GS: **LT-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Pigment**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CAN	EU - GHS (H-Statements)	H351 - Suspected of causing cancer
CAN	US CDC - Occupational Carcinogens	Occupational Carcinogen
CAN	CA EPA - Prop 65	Carcinogen - specific to chemical form or exposure route
CAN	IARC	Group 2B - Possibly carcinogenic to humans - inhaled from occupational sources
CAN	MAK	Carcinogen Group 3A - Evidence of carcinogenic effects but not sufficient to establish MAK/BAT value
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
CAN	MAK	Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels

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

Additional information from IARC Monograph 93 (http://monographs.iarc.fr/ENG/Monographs/vol93/mono93.pdf), p. 274: "No significant exposure to titanium dioxide is thought to occur during the use of products in which titanium dioxide is bound to other materials, such as in paints." The Office of Environmental Health Hazard Assessment (OEHHA) within the California Environmental Protection Agency is adding titanium dioxide (airborne, unbound particles of respirable size) to the list of chemicals known to the State of California to cause cancer for purposes of the Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65). However, the listing does not cover titanium dioxide when it remains bound within a product matrix. In this product's final cured film exposure is extremely unlikely since it is embedded in a solid, continuous polymer matrix and thus no longer exists as isolated particles.

ACRYLIC RESIN

ID: **1946811-39-7**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-04-12 14:01:08**

%: **9.7700 - 11.9500** GS: **NoGS** RC: **None** NANO: **No** SUBSTANCE ROLE: **Binder**

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

SUBSTANCE NOTES: This substance is present in all finish color options but exact amount varies within the range provided.

2,2,4-TRIMETHYL-1,3-PENTANEDIOL DIISOBUTYRATE

ID: **6846-50-0**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-04-12 14:01:08**

%: **6.7700 - 8.2700** GS: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Plasticizer**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor

SUBSTANCE NOTES: This substance is present in all finish color options but exact amount varies within the range provided.

BARIUM SULFATE

ID: 7727-43-7

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-04-12 14:01:09**

%: **6.4000 - 7.8200** GS: **BM-2** RC: **None** NANO: **No** SUBSTANCE ROLE: **Filler**

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

SUBSTANCE NOTES: This substance is present in all finish color options but exact amount varies within the range provided.

The full GreenScreen Assessment can be found at PharosProject.net.

TRIPHOSPHORIC ACID, ALUMINUM SALT

ID: 13939-25-8

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-04-12 14:01:09**

%: **1.0600 - 1.3000** GS: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Corrosion inhibitor**

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

SUBSTANCE NOTES: This substance is present in all finish color options but exact amount varies within the range provided.

ACRYLIC-MELAMINE RESIN

ID: 1947341-00-5

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-04-12 14:01:09**

%: **1.0600 - 1.3000** GS: **NoGS** RC: **None** NANO: **No** SUBSTANCE ROLE: **Binder**

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

SUBSTANCE NOTES: This substance is present in all finish color options but exact amount varies within the range provided.

STRONTIUM CARBONATE

ID: 1633-05-2

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-04-12 14:01:10**

%: **0.8500 - 1.0400** GS: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Corrosion inhibitor**

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

SUBSTANCE NOTES: This substance is present in all finish color options but exact amount varies within the range provided.

SILICA, AMORPHOUS

ID: 7631-86-9

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-04-12 14:01:10**

%: **0.8000 - 1.0500** GS: **BM-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Filler**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CAN	GHS - Australia	H350i - May cause cancer by inhalation
CAN	GHS - Japan	Carcinogenicity - Category 1A [H350]

SUBSTANCE NOTES: This substance is present in all finish color options but exact amount varies within the range provided.

The full GreenScreen Assessment can be found at PharosProject.net.

ALUMINIUM HYDROXIDE OXIDE

ID: 24623-77-6

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-04-12 14:01:11**

%: **0.7200 - 0.9100** GS: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Pigment**

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

SUBSTANCE NOTES: This substance is present in all finish color options but exact amount varies within the range provided.

WOLLASTONITE

ID: 13983-17-0

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-04-12 14:01:11**

%: **0.6400 - 0.7800** GS: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Filler**

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

SUBSTANCE NOTES: This substance is present in all finish color options but exact amount varies within the range provided.

ZINC 5-NITROISOPHTHALATE

ID: 60580-61-2

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-04-12 14:01:12**

%: **0.6400 - 0.7800** GS: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Corrosion inhibitor**

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

SUBSTANCE NOTES: This substance is present in all finish color options but exact amount varies within the range provided.

ALUMINA TRIHYDRATE

ID: 21645-51-2

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-04-12 14:01:12**

%: **0.6200 - 1.0500** GS: **BM-2** RC: **None** NANO: **No** SUBSTANCE ROLE: **Filler**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
RES	AOEC - Asthmagens	Asthmagen (ARs) - sensitizer-induced - inhalable forms only

SUBSTANCE NOTES: This substance is present in all finish color options but exact amount varies within the range provided.

The full GreenScreen Assessment can be found at PharosProject.net.

CELLULOSE ACETATE BUTANOATE, AVERAGE MOLECULAR WEIGHT 15000 - 65000 G/MOL

ID: 9004-36-8

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-04-12 14:01:13**

%: **0.2900 - 0.3500** GS: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Binder**

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

SUBSTANCE NOTES: This substance is present in all finish color options but exact amount varies within the range provided.

FUMED SILICA, CRYSTALLINE-FREE

ID: 112945-52-5

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-04-12 14:01:13**

%: **0.1800 - 0.2200** GS: **BM-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Filler**

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

SUBSTANCE NOTES: This substance is present in all finish color options but exact amount varies within the range provided.

The full GreenScreen Assessment can be found at PharosProject.net.

IRON HYDROXIDE OXIDE YELLOW

ID: 20344-49-4

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-04-12 14:01:14**

%: **0.1200 - 16.4500** GS: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Pigment**

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

SUBSTANCE NOTES: This substance is present in all finish color options but exact amount varies within the range provided.

C.I. PIGMENT BLUE 15

ID: 147-14-8

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2017-10-14 1:38:45**

%: **0.0000 - 3.3300** GS: **BM-3** RC: **None** NANO: **No** SUBSTANCE ROLE: **Pigment**

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

SUBSTANCE NOTES: Optional pigment. Only present in certain color options.

The full GreenScreen Assessment can be found at PharosProject.net.

2-(2-BUTOXYETHOXY)ETHANOL

ID: 112-34-5

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-04-12 14:01:15**

%: **0.0000 - 1.0000** GS: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Solvent**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
EYE	EU - GHS (H-Statements)	H319 - Causes serious eye irritation

SUBSTANCE NOTES: This solvent will likely flash off during the baking/curing process, however, some may remain.

NICKEL RUTILE YELLOW

ID: **8007-18-9**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-04-12 14:01:15**

%: **0.0000 - 22.1100** GS: **LT-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Pigment**

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

SUBSTANCE NOTES: Optional pigment. Only present in certain color options.

MOLYBDATE (MOO42#-), CALCIUM (1:1), (T-4)-

ID: **7789-82-4**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-04-12 14:01:15**

%: **0.0000 - 0.3400** GS: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Pigment**

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

SUBSTANCE NOTES: Optional pigment. Only present in certain colors.

HEMATITE, CHROMIUM GREEN BLACK

ID: **68909-79-5**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-04-12 14:01:16**

%: **0.0000 - 23.6800** GS: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Pigment**

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

SUBSTANCE NOTES: Optional pigment. Only present in certain color options.

C.I. PIGMENT BLUE 36

ID: **68187-11-1**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-04-12 14:01:16**

%: **0.0000 - 17.3900** GS: **LT-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Pigment**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
RES	AOEC - Asthmagens	Asthmagen (G) - generally accepted
CAN	MAK	Carcinogen Group 2 - Considered to be carcinogenic for man
RES	MAK	Sensitizing Substance Sah - Danger of airway & skin sensitization
GEN	MAK	Germ Cell Mutagen 3a

SUBSTANCE NOTES: Optional pigment. Only present in certain color options.

C.I. PIGMENT BLACK 28

ID: 68186-91-4

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-04-12 14:01:17**

%: **0.0000 - 19.9200** GS: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Pigment**

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

SUBSTANCE NOTES: Optional pigment. Only present in certain color options.

RUTILE, ANTIMONY CHROMIUM BUFF

ID: 68186-90-3

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-04-12 14:01:17**

%: **0.0000 - 19.9200** GS: **BM-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Pigment**

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

SUBSTANCE NOTES: Optional pigment. Only present in certain color options.

The full GreenScreen Assessment can be found at PharosProject.net.

C.I. PIGMENT GREEN 50

ID: 68186-85-6

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-04-12 14:01:18**

%: **0.0000 - 20.0800** GS: **LT-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Pigment**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
RES	AOEC - Asthmagens	Asthmagen (G) - generally accepted
CAN	IARC	Group 1 - Agent is Carcinogenic to humans
CAN	CA EPA - Prop 65	Carcinogen
CAN	US NIH - Report on Carcinogens	Known to be a human Carcinogen
RES	AOEC - Asthmagens	Asthmagen (Rs) - sensitizer-induced
CAN	MAK	Carcinogen Group 2 - Considered to be carcinogenic for man
RES	MAK	Sensitizing Substance Sah - Danger of airway & skin sensitization
GEN	MAK	Germ Cell Mutagen 3a

SUBSTANCE NOTES: SUBSTANCE NOTES: Optional pigment. Only present in certain color options. CI Pigment Green 50 (aka Cobalt titanite green spinel) is produced by high temperature calcination of a mixture of oxides of Co and Ti in varying amounts to form a crystalline matrix of inverse spinel. Due to its unique crystalline structure the properties of this pigment do not necessarily reflect the properties of the component metals or oxides. Further, the pigment is of negligible water solubility and bioavailability (under no foreseeable conditions are metal ions able to be released from the crystalline structure). And finally, in the final cured film exposure is extremely unlikely since it is embedded in a solid, continuous polymer matrix and thus no longer exists as isolated particles.

PYRROLO[3,4-C]PYRROLE-1,4-DIONE,3,6-BIS(4-CHLOROPHENYL)-2,5-DIHYDRO- ID: **84632-65-5**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-04-12 14:01:18**

%: **0.0000 - 6.9500** GS: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Pigment**

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

SUBSTANCE NOTES: Optional pigment. Only present in certain color options.

BISMUTH VANADIUM TETRAOXIDE ID: **14059-33-7**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-04-12 14:01:19**

%: **0.0000 - 16.5700** GS: **BM-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Pigment**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
MUL	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters

SUBSTANCE NOTES: Optional pigment. Only present in certain color options.

The full GreenScreen Assessment can be found at PharosProject.net.

5,12-DIHYDROQUINO(2,3-B)ACRIDINE-7,14-DIONE ID: **1047-16-1**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-04-12 14:01:19**

%: **0.0000 - 7.8200** GS: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Pigment**

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

SUBSTANCE NOTES: This is an optional pigment only present in certain color options.

PHTHALOCYANINE GREEN

ID: **1328-53-6**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-04-12 14:01:20**

%: **0.0000 - 4.7000** GS: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Pigment**

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

SUBSTANCE NOTES: Optional pigment. Only present in certain color options.

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

ID: **1047-16-1**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-04-12 14:01:20**

%: **0.0000 - 7.4532** GS: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Pigment**

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

SUBSTANCE NOTES: Optional material based on color.

C.I. PIGMENT BLUE 28

ID: **1345-16-0**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-04-12 14:01:21**

%: **0.0000 - 19.0000** GS: **LT-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Pigment**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
RES	AOEC - Asthmagens	Asthmagen (G) - generally accepted
CAN	MAK	Carcinogen Group 2 - Considered to be carcinogenic for man
RES	MAK	Sensitizing Substance Sah - Danger of airway & skin sensitization
GEN	MAK	Germ Cell Mutagen 3a

SUBSTANCE NOTES: Optional pigment. Only present in certain color options.

CARBON BLACK

ID: **1333-86-4**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-04-12 14:01:21**

%: **0.0000 - 7.0400** GS: **BM-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Pigment**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CAN	US CDC - Occupational Carcinogens	Occupational Carcinogen
CAN	MAK	Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification
CAN	CA EPA - Prop 65	Carcinogen - specific to chemical form or exposure route
CAN	IARC	Group 2B - Possibly carcinogenic to humans - inhaled from occupational sources

SUBSTANCE NOTES: Optional pigment. Only present in certain color options.

The full GreenScreen Assessment can be found at PharosProject.net.

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

Additional information from IARC Monograph 93 (http://monographs.iarc.fr/ENG/Monographs/vol93/mono93.pdf), p.63: "Operators in user industries who handle fluffy or pelleted carbon black during rubber, paint and in production are expected to have significantly lower exposures to carbon black than workers in carbon black production. Other workers in user industries who handle it occasionally have little opportunity for exposure. End-users of these products (rubber, ink or paint) are unlikely to be exposed to airborne carbon black particles, which are bound within the product matrix"

FERRIC OXIDE

ID: **1309-37-1**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-04-12 14:01:21**

%: **0.0000 - 21.8000** GS: **BM-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Pigment**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CAN	MAK	Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification

SUBSTANCE NOTES: Optional pigment. Only present in certain color options.

The full GreenScreen Assessment can be found at PharosProject.net.

CHROMIUM (III) OXIDE

ID: **1308-38-9**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-04-12 14:01:22**

%: **0.0000 - 20.9600** GS: **BM-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Pigment**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
SKI	MAK	Sensitizing Substance Sh - Danger of skin sensitization

SUBSTANCE NOTES: Optional pigment. Only present in certain color options.

The full GreenScreen Assessment can be found at PharosProject.net.

CHROMIUM IRON OXIDE

ID: **12737-27-8**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-04-12 14:01:22**

%: **0.0000 - 24.2800** GS: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Pigment**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
SKI	MAK	Sensitizing Substance Sh - Danger of skin sensitization

SUBSTANCE NOTES: Optional pigment. Only present in certain color options.

18-8 TYPE 304 STAINLESS FASTENERS **%: 0.4382 - 0.4382**

PRODUCT THRESHOLD: 100 ppm RESIDUALS AND IMPURITIES CONSIDERED: No MATERIAL TYPE: Metal

RESIDUALS AND IMPURITIES NOTES: Stainless steel screws are a commodity product and residulas or impurities may not be consistent.

OTHER MATERIAL NOTES: These are fasteners that are used to assemble the product.

304 STAINLESS STEEL (304 STAINLESS STEEL) ID: **12597-68-1**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-04-12 14:01:06**

%: **100.0000 - 100.0000** GS: **NoGS** RC: **Both** NANO: **No** SUBSTANCE ROLE: **Hardware**

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

SUBSTANCE NOTES: There is a varying amount of recycled content in this material.

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 — **N/A**

CERTIFYING PARTY: Self-declared
APPLICABLE FACILITIES: All
CERTIFICATE URL:

ISSUE DATE: 2021-04-02

EXPIRY DATE:

CERTIFIER OR LAB: N/A

CERTIFICATION AND COMPLIANCE NOTES:

OTHER — **ILFI Declare - LBC Red List Approved - Third Party Verified**

CERTIFYING PARTY: Third Party
APPLICABLE FACILITIES: All
CERTIFICATE URL: https://declare.living-future.org/products/aluminum-extruded-louver-with-fluropon-pure-finish

ISSUE DATE: 2016-02-01

EXPIRY DATE: 2022-02-01

CERTIFIER OR LAB: WAP Sustainability

CERTIFICATION AND COMPLIANCE NOTES:

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.

FASTENERS — HPD URL: **No HPD available**

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:
ILI does not provide the metal fasteners that attach our products to the buliding. Fasteners may be from a variety of material and suppliers and depnd on the application and substrate.

Section 5: General Notes

Variations on the custom product and scope of the HPD are explained in the product title/description section.

Section 6: References

MANUFACTURER INFORMATION

MANUFACTURER: **Industrial Louvers Inc.**
ADDRESS: **511 South 7th Street**
Delano Minnesota 55328, United States
WEBSITE: **www.industriallouvers.com**

CONTACT NAME: **Lisa Britton**
TITLE: **Director, Sales & Marketing/Sustainability Champion**
PHONE: **7639727011**
EMAIL: **lisab@industriallouvers.com**

The listed contact is responsible for the validity of this HPD and attests that it is accurate and complete to the best of his or her knowledge.

KEY

Hazard Types

AQU Aquatic toxicity
CAN Cancer
DEV Developmental toxicity
END Endocrine activity
EYE Eye irritation/corrosivity
GEN Gene mutation
GLO Global warming
LAN Land toxicity
MAM Mammalian/systemic/organ toxicity
MUL Multiple
NEU Neurotoxicity
NF Not found on Priority Hazard Lists
OZO Ozone depletion
PBT Persistent, bioaccumulative, and toxic
PHY Physical hazard (flammable or reactive)
REP Reproductive
RES Respiratory sensitization
SKI Skin sensitization/irritation/corrosivity
UNK Unknown

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 (due to insufficient data)
LT-P1 List Translator Possible 1 (Possible Benchmark-1)
LT-1 List Translator 1 (Likely Benchmark-1)
LT-UNK List Translator Benchmark Unknown (the chemical is present on at least one GreenScreen Specified List, but the information contained within the list did not result in a clear mapping to a LT-1 or LTP1 score.)
NoGS No GreenScreen.

Recycled Types

PreC Pre-consumer recycled content
PostC Post-consumer recycled content
UNK Inclusion of recycled content is unknown
None Does not include recycled content

Other Terms:

GHS SDS Globally Harmonized System of Classification and Labeling of Chemicals Safety Data Sheet

Inventory Methods:

Nested Method / Material Threshold Substances listed within each material per threshold indicated per material
Nested Method / Product Threshold Substances listed within each material per threshold indicated per product
Basic Method / Product Threshold Substances listed individually per threshold indicated per product

Nano Composed of nano scale particles or nanotechnology
Third Party Verified Verification by independent certifier approved by HPDC
Preparer Third party preparer, if not self-prepared by manufacturer
Applicable facilities Manufacturing sites to which testing applies

The Health Product Declaration (HPD) Open Standard provides for the disclosure of product contents and potential associated human and environmental health hazards. Hazard associations are based on the HPD Priority Hazard Lists, the GreenScreen List Translator™, and when available, full GreenScreen® assessments. The HPD Open Standard v2.1 is not:

- *a method for the assessment of exposure or risk associated with product handling or use,*
- *a method for assessing potential health impacts of: (i) substances used or created during the manufacturing process or (ii) substances created after the product is delivered for end use.*

Information about life cycle, exposure and/or risk assessments performed on the product may be reported by the manufacturer in appropriate Notes sections, and/or, where applicable, in the Certifications section.

The HPD Open Standard was created and is supported by the Health Product Declaration Collaborative (the HPD Collaborative), a customer-led organization composed of stakeholders throughout the building industry that is committed to the continuous improvement of building products through transparency, openness, and innovation throughout the product supply chain.

The product manufacturer and any applicable independent verifier are solely responsible for the accuracy of statements and claims made in this HPD and for compliance with the HPD standard noted.