Extruded Aluminum Louver with Fluropon Pure Finish
by Industrial Louvers Inc.

CLASSIFICATION: 08 90 00

PRODUCT DESCRIPTION: This HPD was based on a model 653XP storm performance louver, 4'0" x 4'0". These products are custom-sized but the material ingredients are the same regardless of size.

Section 1: Summary

CONTENT INVENTORY

<table>
<thead>
<tr>
<th>MATERIAL</th>
<th>SUBSTANCE</th>
<th>RESIDUAL OR IMPURITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>6063 ALUMINUM EXTRUSION</td>
<td>6063 ALUMINUM</td>
<td>LT-P1</td>
</tr>
<tr>
<td>RES</td>
<td>END</td>
<td>PHY</td>
</tr>
<tr>
<td>TYPE 3003 ALUMINUM</td>
<td>3003-H14 ALUMINUM</td>
<td>LT-P1</td>
</tr>
<tr>
<td>RES</td>
<td>PHY</td>
<td>END</td>
</tr>
<tr>
<td>FLUOROPORE - EXTRUSION</td>
<td>POLYVINYLIDENE FLUORIDE</td>
<td>LT-UNK</td>
</tr>
<tr>
<td>(1,1-DIFLUOROETHENE HOMOPOLYMER)</td>
<td>LT-P1</td>
<td></td>
</tr>
<tr>
<td>CAN</td>
<td>END</td>
<td></td>
</tr>
<tr>
<td>ACRYLIC RESIN</td>
<td>TiO2</td>
<td>LT-P1</td>
</tr>
<tr>
<td>C.I. PIGMENT BLUE 28</td>
<td>LT-UNK</td>
<td></td>
</tr>
<tr>
<td>5,12-DIHYDROQUINO(2,3-B)ACRIDINE - 7,14-DIONE</td>
<td>LT-UNK</td>
<td></td>
</tr>
<tr>
<td>PHTHALOCYANINE GREEN</td>
<td>LT-UNK</td>
<td></td>
</tr>
<tr>
<td>5,12-DIHYDROQUINO(2,3-B)ACRIDINE - 7,14-DIONE</td>
<td>LT-UNK</td>
<td></td>
</tr>
<tr>
<td>BISMUTH VANADIM TETRAOXIDE</td>
<td>LT-P1</td>
<td></td>
</tr>
<tr>
<td>MUL C.I. PIGMENT BLUE 15</td>
<td>BM3</td>
<td></td>
</tr>
<tr>
<td>PYRROLO(3,4-C)PYRROLE - 1,4-DIONE</td>
<td>LT-UNK</td>
<td></td>
</tr>
<tr>
<td>3,6-BIS(4-CHLOROPHENYL) - 2,5-DIHYDRO-</td>
<td>LT-UNK</td>
<td></td>
</tr>
<tr>
<td>C.I. PIGMENT GREEN 50</td>
<td>LT-1</td>
<td></td>
</tr>
<tr>
<td>RES</td>
<td>CAN</td>
<td></td>
</tr>
<tr>
<td>RUTILE, ANTIMONY CHROMIUM</td>
<td>BUFF</td>
<td>LT-UNK</td>
</tr>
<tr>
<td>C.I. PIGMENT BLACK 28</td>
<td>LT-UNK</td>
<td></td>
</tr>
<tr>
<td>C.I. PIGMENT BLUE 36</td>
<td>LT-UNK</td>
<td></td>
</tr>
<tr>
<td>HEMATITE, CHROMIUM GREEN BLACK</td>
<td>LT-UNK</td>
<td></td>
</tr>
<tr>
<td>MOYLBDATE (MOO42-)</td>
<td>LT-UNK</td>
<td></td>
</tr>
<tr>
<td>CALCIUM (111), (T-4)</td>
<td>LT-UNK</td>
<td></td>
</tr>
<tr>
<td>NICKEL RUTILE YELLOW</td>
<td>LT-UNK</td>
<td></td>
</tr>
<tr>
<td>2-(2-BUTOXYETHOXY) ETHANOL</td>
<td>LT-P1</td>
<td></td>
</tr>
<tr>
<td>EYE</td>
<td>END</td>
<td></td>
</tr>
<tr>
<td>18-8 TYPE 304 STAINLESS FASTENERS</td>
<td>304 STAINLESS STEEL</td>
<td>304 STAINLESS STEEL</td>
</tr>
<tr>
<td>BM-3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

INVENTORY AND SCREENING NOTES:
Inventory weights are based on a 4'0" x 4'0" louver with a two-coat Kynar finish, Valspar's Fluropon Pure. Note that the product includes a deliberately added sealant that is not present in the product at 1000 ppm.

VOLATILE ORGANIC COMPOUND (VOC) CONTENT
VOC Content data is not applicable for this product category.

CERTIFICATIONS AND COMPLIANCE
VOC emissions: N/A
Multi-attribute: ILFI Declare - LBC Compliant

CONSISTENCY WITH OTHER PROGRAMS
Pre-checked for LEED v4 Material Ingredients, Option 1
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

### 6063 ALUMINUM EXTRUSION

**%:** 92.9354 - 92.9354  
**HPD URL:** No HPD Available

**PRODUCT THRESHOLD:** 1000 ppm  
**RESIDUALS AND IMPURITIES CONSIDERED:** Yes

**RESIDUALS AND IMPURITIES 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 1000ppm. Residuals present at 100ppm would be encapsulated in cured finish. Aluminum extrusions include both pre-and post-consumer recycled content as well as virgin material. Amounts of each vary by lot.

**OTHER MATERIAL NOTES:** Residuals are added as ingredients in the final product.

### 6063 ALUMINUM (6063 ALUMINUM)

**ID:** 7429-90-5

**%:** 100.0000 - 100.0000  
**GS:** LT-P1  
**RC:** Both  
**NANO:** No  
**ROLE:** Extruded Aluminum Blades

**HAZARDS:**

**AGENCY(IES) WITH WARNINGS:**

- **RESPIRATORY**
  - AOEC - Asthmagen
  - Asthmagen (ARs) - sensitizer-induced - inhalable forms only

- **ENDOCRINE**
  - TEDX - Potential Endocrine Disruptors
  - Potential Endocrine Disruptor

**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 1000ppm. Residuals present at 100ppm would be encapsulated in cured finish. Aluminum extrusions include both pre-and post-consumer recycled content as well as virgin material. Amounts of each vary by lot.

### TYPE 3003 ALUMINUM

**%:** 4.5920 - 4.5920  
**HPD URL:** No HPD Available

**PRODUCT THRESHOLD:** 1000 ppm  
**RESIDUALS AND IMPURITIES CONSIDERED:** Yes

**RESIDUALS AND IMPURITIES 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 1000ppm. Residuals present at 100ppm would be encapsulated in cured finish. Aluminum extrusions include both pre-and post-consumer recycled content as well as virgin material. Amounts of each vary by lot.

**OTHER MATERIAL NOTES:** Possible residuals are added as separate substances.

### 3003-H14 ALUMINUM (3003-H14 ALUMINUM)

**ID:** 7429-90-5

**Extruded Aluminum Louver with Fluorpon Pure Finish**

hpdrepository.hpd-collaborative.org  
HPD v2.1 created via HPDC Builder Page 3 of 14
Fluropon Pure Extrusion

%: 1.9435 - 1.9435

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

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

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. Pigments may or may not be present in any one given color. The total coating system weight as applied on the metal substrate is .017lbs/ft2.

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

Polyvinylidene Fluoride (1,1-Difluoroethene Homopolymer)

%: 26.9400 - 32.9300

Polymer

Titanium Dioxide

%: 12.0400 - 18.9400

Pigment

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

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 (OEHHAA) 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

<table>
<thead>
<tr>
<th>ID: 1946811-39-7</th>
</tr>
</thead>
<tbody>
<tr>
<td>%: 9.7700 - 11.9500</td>
</tr>
<tr>
<td>GB: NoGS</td>
</tr>
<tr>
<td>RC: None</td>
</tr>
<tr>
<td>NANO: No</td>
</tr>
<tr>
<td>ROLE: Resin</td>
</tr>
</tbody>
</table>

**HAZARDS:** None Found

**AGENCY(IES) WITH WARNINGS:** None Found

**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

<table>
<thead>
<tr>
<th>ID: 6846-50-0</th>
</tr>
</thead>
<tbody>
<tr>
<td>%: 6.7700 - 8.2700</td>
</tr>
<tr>
<td>GB: LT-P1</td>
</tr>
<tr>
<td>RC: None</td>
</tr>
<tr>
<td>NANO: No</td>
</tr>
<tr>
<td>ROLE: Plasticizer</td>
</tr>
</tbody>
</table>

**HAZARDS:** None Found

**AGENCY(IES) WITH WARNINGS:** None Found on HPD Priority lists

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

### BARIUM SULFATE

<table>
<thead>
<tr>
<th>ID: 7727-43-7</th>
</tr>
</thead>
<tbody>
<tr>
<td>%: 6.4000 - 7.8200</td>
</tr>
<tr>
<td>GB: BM-2</td>
</tr>
<tr>
<td>RC: None</td>
</tr>
<tr>
<td>NANO: No</td>
</tr>
<tr>
<td>ROLE: Extender</td>
</tr>
</tbody>
</table>

**HAZARDS:** None Found

**AGENCY(IES) WITH WARNINGS:** None Found on HPD Priority lists

**SUBSTANCE NOTES:** 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.

### ACRYLIC-MELAMINE RESIN

<table>
<thead>
<tr>
<th>ID: 1947341-00-5</th>
</tr>
</thead>
<tbody>
<tr>
<td>%: 1.0600 - 1.3000</td>
</tr>
<tr>
<td>GB: NoGS</td>
</tr>
<tr>
<td>RC: None</td>
</tr>
<tr>
<td>NANO: No</td>
</tr>
<tr>
<td>ROLE: Resin</td>
</tr>
</tbody>
</table>

**HAZARDS:** None Found

**AGENCY(IES) WITH WARNINGS:** None Found on HPD Priority lists

**SUBSTANCE NOTES:** This substance is present in all finish color options but exact amount varies within the range provided.
TRIPHOSPHORIC ACID, ALUMINUM SALT

ID: 13939-25-8

%: 1.0600 - 1.3000

GS: LT-UNK

RC: None

NANO: No

ROLE: Extender

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority 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

%: 0.8500 - 1.0400

GS: LT-UNK

RC: None

NANO: No

ROLE: Extender

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority 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

%: 0.8000 - 1.0500

GS: LT-P1

RC: None

NANO: No

ROLE: Extender

HAZARDS:

AGENCY(IES) WITH WARNINGS:

CANCER

Japan - GHS

Carcinogenicity - Category 1A

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

---

ALUMINIUM HYDROXIDE OXIDE

ID: 24623-77-6

%: 0.7200 - 0.9100

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

---

WOLLASTONITE

ID: 13983-17-0

%: 0.6400 - 0.7800

GS: LT-UNK

RC: None

NANO: No

ROLE: Extender

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: This substance is present in all finish color options but exact amount varies within the range provided.
<table>
<thead>
<tr>
<th>Substance Note</th>
<th>ID</th>
<th>%</th>
<th>GS</th>
<th>RC</th>
<th>NANO</th>
<th>ROLE</th>
<th>Hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>None Found</td>
<td>None Found</td>
<td>No warnings found on HPD Priority lists</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>This substance is present in all finish color options but exact amount varies within the range provided.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>ZINC 5-NITROISOPHTHALATE</strong></td>
<td>60580-61-2</td>
<td>0.6400 - 0.7800</td>
<td>LT-UNK</td>
<td>None</td>
<td>No</td>
<td>Extender</td>
<td>AGENCY(IES) WITH WARNINGS:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>None Found</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>No warnings found on HPD Priority lists</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>ALUMINA TRIHYDRATE</strong></td>
<td>21645-51-2</td>
<td>0.6200 - 1.0500</td>
<td>BM-2</td>
<td>None</td>
<td>No</td>
<td>Extender</td>
<td>RESPIRATORY</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>AOECAsthmagensis</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Asthagen (ARs) - sensitizer-induced - inhalable forms only</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>CELLULOSE ACETATE BUTANOATE, AVERAGE MOLECULAR WEIGHT 15000 - 65000 G/MOL</strong></td>
<td>9004-36-8</td>
<td>0.2900 - 0.3500</td>
<td>LT-UNK</td>
<td>None</td>
<td>No</td>
<td>resin</td>
<td>AGENCY(IES) WITH WARNINGS:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>None Found</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>No warnings found on HPD Priority lists</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>FUMED SILICA, CRYSTALLINE-FREE</strong></td>
<td>112945-52-5</td>
<td>0.1800 - 0.2200</td>
<td>LT-UNK</td>
<td>None</td>
<td>No</td>
<td>Extender</td>
<td>AGENCY(IES) WITH WARNINGS:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>None Found</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>No warnings found on HPD Priority lists</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>IRON HYDROXIDE OXIDE YELLOW</strong></td>
<td>20344-49-4</td>
<td>0.1200 - 16.4500</td>
<td>LT-UNK</td>
<td>None</td>
<td>No</td>
<td>Pigment</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### CHROMIUM IRON OXIDE

**ID:** 12737-27-8  
**%:** 0.0000 - 24.2800  
**GS:** LT-UNK  
**RC:** None  
**NANO:** No  
**ROLE:** Pigment

**HAZARDS:**  
No warnings found on HPD Priority lists

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

### CHROMIUM (III) OXIDE

**ID:** 1308-38-9  
**%:** 0.0000 - 20.9600  
**GS:** LT-P1  
**RC:** None  
**NANO:** No  
**ROLE:** Pigment

**HAZARDS:**  
No warnings found on HPD Priority lists

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

### FERRIC OXIDE

**ID:** 1309-37-1  
**%:** 0.0000 - 21.8000  
**GS:** BM-2  
**RC:** None  
**NANO:** No  
**ROLE:** Pigment

**HAZARDS:**  
Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification

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

### CARBON BLACK

**ID:** 1333-86-4  
**%:** 0.0000 - 7.0400  
**GS:** LT-1  
**RC:** None  
**NANO:** No  
**ROLE:** Pigment

**HAZARDS:**  
Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification

**SUBSTANCE NOTES:** Group 2B - Possibly carcinogenic to humans - inhaled from occupational sources
SUBSTANCE NOTES: Optional pigment. Only present in certain color options. 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."

C.I. PIGMENT BLUE 28

ID: 1345-16-0

%: 0.0000 - 19.0000
GS: LT-UNK
RC: None
NANO: No
ROLE: Pigment

HAZARDS:
None Found

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

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

ID: 1047-16-1

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

HAZARDS:
None Found

SUBSTANCE NOTES: Optional material based on color.

PHTHALOCYANINE GREEN

ID: 1328-53-6

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

HAZARDS:
None Found

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

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

ID: 1047-16-1

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

HAZARDS:
None Found

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

BISMUTH VANADIUM TETRAOXIDE

ID: 14059-33-7

%: 0.0000 - 16.5700
GS: LT-P1
RC: None
NANO: No
ROLE: Pigment
### C.I. Pigment Blue 15

**ID:** 147-14-8  
**%:** 0.0000 - 3.3300  
**GB:** BM-3  
**RC:** None  
**NANO:** No  
**ROLE:** Pigment

**HAZARDS:**  
Agency(Ies) with warnings:  
None Found  
No warnings found on HPD Priority lists

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

### Pyrrolo[3,4-C]Pyrrole-1,4-dione,3,6-bis(4-Chlorophenyl)-2,5-dihydro-

**ID:** 84632-65-5  
**%:** 0.0000 - 6.9500  
**GB:** LT-UNK  
**RC:** None  
**NANO:** No  
**ROLE:** Pigment

**HAZARDS:**  
Agency(Ies) with warnings:  
None Found  
No warnings found on HPD Priority lists

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

### C.I. Pigment Green 50

**ID:** 68186-85-6  
**%:** 0.0000 - 20.0800  
**GB:** LT-1  
**RC:** None  
**NANO:** No  
**ROLE:** Pigment

**HAZARDS:**  
Agency(Ies) with warnings:  
**Respiratory**  
AOEC - Asthmagens  
Asthmagens (G) - generally accepted  
**Cancer**  
IARC  
Group 1 - Agent is Carcinogenic to humans  
**Cancer**  
CA EPA - Prop 65  
Carcinogen  
**Cancer**  
US CDC - Occupational Carcinogens  
Occupational Carcinogen  
**Respiratory**  
AOEC - Asthmagens  
Asthmagens (ARs) - sensitizer-induced - inhalable forms only  
**Cancer**  
MAK  
Carcinogen Group 1 - Substances that cause cancer in man  
**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:** 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 Extruded Aluminum Louver with Fluropon Pure Finish  
http://hpdrepository.hpd-collaborative.org  
HPD v2.1 created via HPDC Builder Page 10 of 14
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.

### RUTILE, ANTIMONY CHROMIUM BUFF

<table>
<thead>
<tr>
<th>%</th>
<th>ID</th>
<th>GS</th>
<th>RC</th>
<th>NANO</th>
<th>ROLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0000 - 19.9200</td>
<td>68186-90-3</td>
<td>LT-UNK</td>
<td>None</td>
<td>No</td>
<td>Pigment</td>
</tr>
</tbody>
</table>

HAZARDS: None Found

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

### C.I. PIGMENT BLACK 28

<table>
<thead>
<tr>
<th>%</th>
<th>ID</th>
<th>GS</th>
<th>RC</th>
<th>NANO</th>
<th>ROLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0000 - 19.9200</td>
<td>68186-91-4</td>
<td>LT-UNK</td>
<td>None</td>
<td>No</td>
<td>Pigment</td>
</tr>
</tbody>
</table>

HAZARDS: None Found

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

### C.I. PIGMENT BLUE 36

<table>
<thead>
<tr>
<th>%</th>
<th>ID</th>
<th>GS</th>
<th>RC</th>
<th>NANO</th>
<th>ROLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0000 - 17.3900</td>
<td>68187-11-1</td>
<td>LT-UNK</td>
<td>None</td>
<td>No</td>
<td>Pigment</td>
</tr>
</tbody>
</table>

HAZARDS: None Found

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

### HEMATITE, CHROMIUM GREEN BLACK

<table>
<thead>
<tr>
<th>%</th>
<th>ID</th>
<th>GS</th>
<th>RC</th>
<th>NANO</th>
<th>ROLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0000 - 23.6800</td>
<td>68909-79-5</td>
<td>LT-UNK</td>
<td>None</td>
<td>No</td>
<td>Pigment</td>
</tr>
</tbody>
</table>

HAZARDS: None Found

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

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

<table>
<thead>
<tr>
<th>%</th>
<th>ID</th>
<th>GS</th>
<th>RC</th>
<th>NANO</th>
<th>ROLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0000 - 0.3400</td>
<td>7789-82-4</td>
<td>LT-UNK</td>
<td>None</td>
<td>No</td>
<td>Pigment</td>
</tr>
</tbody>
</table>

HAZARDS: None Found

SUBSTANCE NOTES: Optional pigment. Only present in certain color options.
NICKEL RUTILE YELLOW
ID: 8007-18-9

| %: 0.0000 - 22.1100 | 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: Optional pigment. Only present in certain color options.

2-(2-BUTOXYETHOXY)ETHANOL
ID: 112-34-5

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

HAZARDS: AGENCY(IES) WITH WARNINGS:
EYE IRRITATION EU - R-phrases R36 - Irritating to eyes
EYE IRRITATION EU - GHS (H-Statements) H319 - Causes serious eye irritation
ENDOCRINE TEDX - Potential Endocrine Disruptors Potential Endocrine Disruptor

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

18-8 TYPE 304 STAINLESS FASTENERS
HPD URL: No HPD Available

| %: 0.4382 - 0.4382 | PRODUCT THRESHOLD: 1000 ppm |

RESIDUALS AND IMPURITIES CONSIDERED: No
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

| %: 100.0000 - 100.0000 | GS: NoGS | RC: Both | NANO: No | ROLE: Fastener material |

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

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

<table>
<thead>
<tr>
<th>CERTIFYING PARTY:</th>
<th>Self-declared</th>
</tr>
</thead>
<tbody>
<tr>
<td>APPLICABLE FACILITIES:</td>
<td>All</td>
</tr>
<tr>
<td>CERTIFICATE URL:</td>
<td>N/A</td>
</tr>
<tr>
<td>ISSUE DATE:</td>
<td>2017-10-13</td>
</tr>
<tr>
<td>EXPIRY DATE:</td>
<td>N/A</td>
</tr>
<tr>
<td>CERTIFIER OR LAB:</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**CERTIFICATION AND COMPLIANCE NOTES:**

**MULTI-ATTRIBUTE**

<table>
<thead>
<tr>
<th>CERTIFYING PARTY:</th>
<th>Self-declared</th>
</tr>
</thead>
<tbody>
<tr>
<td>APPLICABLE FACILITIES:</td>
<td>All</td>
</tr>
<tr>
<td>ISSUE DATE:</td>
<td>2016-12-01</td>
</tr>
<tr>
<td>EXPIRY DATE:</td>
<td>2017-12-01</td>
</tr>
<tr>
<td>CERTIFIER OR LAB:</td>
<td>International Living Future Institute</td>
</tr>
</tbody>
</table>

**CERTIFICATION AND COMPLIANCE NOTES:** Third party certification is in process.

---

**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 TO ATTACH PRODUCT TO BUILDING STRUCTURE**

| STATUS: | 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 building. Fasteners may be from a variety of material and suppliers and depend on the application and substrate.

---

**Section 5: General Notes**

Notes related to consideration of residuals and impurities are included in material and substance notes. Hazard screening was completed through the HPD builder. Variations on the custom product and scope of the HPD are explained in the product title/description section.

---

**Section 6: References**

**MANUFACTURER INFORMATION**

<table>
<thead>
<tr>
<th>MANUFACTURER:</th>
<th>Industrial Louvers Inc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADDRESS:</td>
<td>511 South 7th Street, Delano Minnesota 55328, United States</td>
</tr>
<tr>
<td>CONTACT NAME:</td>
<td>Lisa Britton</td>
</tr>
<tr>
<td>TITLE:</td>
<td>Director, Sales &amp; Marketing/Sustainability Champion</td>
</tr>
</tbody>
</table>

Extruded Aluminum Louver with Fluropon Pure Finish
hprepository.hpd-collaborative.org

HPD v2.1 created via HPDC Builder Page 13 of 14
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.