July 2019

RE: Sustainability Statement

Nystrom certifies and provides the following information for use in achieving LEED v4 credit for the specification of Personnel and Hurricane Roof Hatches.

**Product** Personnel Roof Hatch, Hurricane Roof Hatch
**Model(s)** RHPA, RHPB, RHPG, RHUA, RHUB, RHUG, RHHA

**Manufacturing Info**
- Final Assembly Location: Brooklyn Park, MN
- Extraction point is not within 500 miles of manufacturing

**LEED Credit Options**
- MR Credit: Building Product Disclosure and Optimization – Material Ingredients
  - Option 1. Material Ingredient Reporting (1 point) Use at least 20 different permanently installed products from at least five different manufacturers that use any of the following programs to demonstrate the chemical inventory of the product to at least 0.1% (1000 ppm). (10 different permanently installed products from at least three different manufacturers for CS and Warehouses & Distribution Centers)
    - Health Product Declaration. The end use product has a published and complete Health Product Declaration with full disclosure of known hazards in compliance with the Health Product Declaration open Standard.

If you require any further information, please do not hesitate to contact us at (800) 547-2635.
CLASSIFICATION:  07 72 00 Thermal and Moisture Protection: Roof Hatches

PRODUCT DESCRIPTION:  Roof Hatches provide safe and convenient access to commercial building roof areas using interior ladders and stairs. Nystrom’s complete line of Roof Hatch and Safety products meet building codes, fire and life safety requirements. Nystrom’s Personnel Roof Hatches provide safe access to roof areas on your building. The Hurricane Hatch is tested to a higher performance standard. Sized for ladder, ship stair, and service stair access with optional safety railings, grab bars and a variety of materials and finishes. This HPD covers Nystrom’s Personnel Roof Hatch (RHPG), Personnel II Roof Hatch (RHUG) and Hurricane Hatch (RHH) in Steel with multiple insulation options. Roof Hatches also available in Aluminum and Aluminum/Steel.

Section 1: Summary

Basic Method / Product Threshold

CONTENT INVENTORY

Threshold Disclosed Per

| Material
| Product

Threshold level

| 100 ppm
| 1,000 ppm
| Per GHS SDS
| Per OSHA MSDS
| Other

Residuals/Impurities

| Considered
| Partially Considered
| Not Considered

All Substances Above the Threshold Indicated Are:

Characterized

| Yes Ex/SC | Yes | No

% weight and role provided for all substances except SC substances characterized according to SC guidance.

Screened

| Yes Ex/SC | Yes | No

All substances screened using Priority Hazard Lists with results disclosed except SC substances screened according to SC guidance.

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

PERSONNEL AND HURRICANE ROOF HATCH [ STEEL NoGS POLYISOCYANURATE FOAM LT-UNK UNDISCLOSED NoGS LIMESTONE, CALCIUM CARBONATE LT-UNK ZINC LT-P1 | AQU | PHY | END | MUL ETHYLENE/PROPYLENE/DIENE TERPOLYMER (EPDM) LT-UNK SC:CELLULOSE Not Screened CONTINUOUS FILAMENT GLASS FIBER, NON-RESPIRABLE LT-UNK TITANIUM DIOXIDE LT-1 | CAN | END 304 STAINLESS STEEL NoGS PENTANE LT-P1 | AQU | PHY | MAM | MUL CARBON BLACK LT-1 | CAN POLYSTYRENE LT-UNK ALUMINA TRIHYDRATE BM-2 | RES FERRIC OXIDE BM-2 | CAN ]

Number of Greenscreen BM-4/BM3 contents ... 0
Contents highest concern GreenScreen Benchmark or List translator Score ... LT-1
Nanomaterial ... No

INVENTORY AND SCREENING NOTES:

Special conditions applied: BiologicalMaterial

[LEED v4] *Yes ex/SC* result is due only to materials and substances for which Special Conditions were applied. Thus *Yes ex/SC* does not disqualify the product for the LEED v4 Materials and Resources Disclosure and Optimization credit, Option 1.

This Health Product Declaration (HPD) was completed in accordance with the HPD Standard version 2.1.1, and discloses hazards associated with all substances present at or above 1000 parts per million (ppm) in the finished product, along with the role and percent weight. Substances not *Identified* are those considered proprietary to suppliers or those without a registered identifier.

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 – Not tested

CONSISTENCY WITH OTHER PROGRAMS

Pre-checked for LEED v4 Material Ingredients, Option 1

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

**PERSONNEL AND HURRICANE ROOF HATCH**

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

**RESIDUALS AND IMPURITIES NOTES:** Residuals and Impurities were considered by following the suggestions of Emerging Best Practices. More than 90% of this product consists of metal alloys, for which Pharos CML may consider the various alloying elements as “Known or Potential Residuals”. Therefore, these components have been included in the Substance Notes instead of as individual content entries. Components are listed by name, CASRN, percent by weight (as per supplier SDS), and relevant GreenScreen score.

**OTHER PRODUCT NOTES:** Percent by weight of substances given as ranges to account for material differences between product lines.

**STEEL**

<table>
<thead>
<tr>
<th>ID: 12597-69-2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HAZARD SCREENING METHOD:</strong> Pharos Chemical and Materials Library</td>
</tr>
<tr>
<td>%: 92.00 - 96.00</td>
</tr>
<tr>
<td>RC: Both</td>
</tr>
</tbody>
</table>

**HAZARD TYPE**

None found

**AGENCY AND LIST TITLES**

WARNINGS

No warnings found on HPD Priority Hazard Lists

**SUBSTANCE NOTES:** Recycled content estimated by supplier for majority of steel used in product to be 19.8% post-consumer and 14.4% pre-consumer content. Documentation from supplier provides the following composition for alloying elements that may individually exceed the declared threshold: max 2.0% Manganese [7439-96-5; LT-P1]; max 1.0% Silicon [7440-21-3; LT-UNK]; max 1.0% Chromium [7440-47-3; LT-P1]; max 0.4% Nickel [7440-02-0; LT-1]; max 0.2% Vanadium [7440-62-2; LT-1].

**POLYISOCYANURATE FOAM**

<table>
<thead>
<tr>
<th>ID: 9063-78-9</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HAZARD SCREENING METHOD:</strong> Pharos Chemical and Materials Library</td>
</tr>
<tr>
<td>%: 0.50 - 4.60</td>
</tr>
<tr>
<td>RC: None</td>
</tr>
</tbody>
</table>

**HAZARD TYPE**

None found

**AGENCY AND LIST TITLES**

WARNINGS

No warnings found on HPD Priority Hazard Lists

**SUBSTANCE NOTES:** Foam insulation.

**UNDISCLOSED**

Personnel and Hurricane Roof Hatch
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HPD v2.1.1 created via HPDC Builder Page 3 of 10
### Ethylene/Propylene/Diene Terpolymer (EPDM)

**ID:** 25038-36-2

<table>
<thead>
<tr>
<th>HAZARD SCREENING METHOD:</th>
<th>Pharos Chemical and Materials Library</th>
</tr>
</thead>
<tbody>
<tr>
<td>%: 0.40 - 0.50</td>
<td></td>
</tr>
<tr>
<td>GS: LT-UNK</td>
<td></td>
</tr>
<tr>
<td>RC: None</td>
<td></td>
</tr>
<tr>
<td>NANO: No</td>
<td></td>
</tr>
<tr>
<td>ROLE: Base Polymer</td>
<td></td>
</tr>
</tbody>
</table>

**SUBSTANCE NOTES:** Galvannealed steel door and frame, latch, hold open arm, mixed hardware.

### ZINC

**ID:** 7440-66-6

<table>
<thead>
<tr>
<th>HAZARD SCREENING METHOD:</th>
<th>Pharos Chemical and Materials Library</th>
</tr>
</thead>
<tbody>
<tr>
<td>%: 0.50 - 2.00</td>
<td></td>
</tr>
<tr>
<td>GS: LT-P1</td>
<td></td>
</tr>
<tr>
<td>RC: None</td>
<td></td>
</tr>
<tr>
<td>NANO: No</td>
<td></td>
</tr>
<tr>
<td>ROLE: Metallic Coating</td>
<td></td>
</tr>
</tbody>
</table>

**HAZARD TYPE**

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

**ENDOCRINE**

- TEDX - Potential Endocrine Disruptors
  - Potential Endocrine Disruptor

**MULTIPLE**

- German FEA - Substances Hazardous to Waters
  - Class 2 - Hazard to Waters

**SUBSTANCE NOTES:** Galvannealed steel door and frame, latch, hold open arm, mixed hardware.
HAZARD TYPE: None found

AGENCY AND LIST TITLES: No warnings found on HPD Priority Hazard Lists

WARNINGS: None found

SUBSTANCE NOTES: Continuous gasket seal.

SC:CELLULOSE

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library
HAZARD SCREENING DATE: 2019-09-27

%: 0.10 - 1.00
GS: Not Screened
RC: None
NANO: No
ROLE: Substrate

SUBSTANCE NOTES:
Version: SCBioMats/2018-02-23
Category: Tree-based materials
Identifier: 65996-61-4

This disclosure does not provide information on allergens, hyper-accumulation of metals, production of any toxic substances during normal metabolic activities, pesticides, and other potential hazards or sources of hazards which may be found in certain biological materials.

Facer for polyisocyanurate insulation. Identified on the US EPA Safer Chemical Ingredient List (Green Circle - Verified Low Concern).

CONTINUOUS FILAMENT GLASS FIBER, NON-RESPIRABLE

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library
HAZARD SCREENING DATE: 2019-09-27

%: 0.10 - 0.30
GS: LT-UNK
RC: None
NANO: No
ROLE: Facer

Hazard Screening not performed

SUBSTANCE NOTES: Facer for polyisocyanurate insulation.

TITANIUM DIOXIDE

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library
HAZARD SCREENING DATE: 2019-09-27

%: 0.10 - 0.50
GS: LT-1
RC: None
NANO: No
ROLE: Pigment

Hazard Screening not performed

SUBSTANCE NOTES: Facer for polyisocyanurate insulation.
### Substance Notes

**304 Stainless Steel**
- **ID:** 12597-68-1
- **HAZARD SCREENING METHOD:** Pharos Chemical and Materials Library
- **HAZARD SCREENING DATE:** 2019-09-27
- **%:** 0.01 - 0.10
- **GS:** NoGS
- **RC:** Both
- **NANO:** No
- **ROLE:** Base Metal

### Substance Notes

This substance is considered essentially inert for the purposes of Pharos toxics scoring (Pharos CML).

**Pentane**
- **ID:** 109-66-0
- **HAZARD SCREENING METHOD:** Pharos Chemical and Materials Library
- **HAZARD SCREENING DATE:** 2019-09-27
- **%:** Impurity/Residual
- **GS:** LT-P1
- **RC:** None
- **NANO:** No
- **ROLE:** Impurity/Residual

### Substance Notes

Blowing agent used in polyisocyanurate insulation.

**Carbon Black**
- **ID:** 1333-86-4
- **HAZARD SCREENING METHOD:** Pharos Chemical and Materials Library
- **HAZARD SCREENING DATE:** 2019-09-27

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<table>
<thead>
<tr>
<th>Substance</th>
<th>ID</th>
<th>HAZARD SCREENING METHOD</th>
<th>HAZARD SCREENING DATE</th>
<th>%:</th>
<th>GS</th>
<th>RC</th>
<th>NANO</th>
<th>ROLE</th>
<th>HAZARD TYPE</th>
<th>AGENCY AND LIST TITLES</th>
<th>WARNINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLYSTYRENE</td>
<td>9003-53-6</td>
<td>Pharos Chemical and Materials Library</td>
<td>2019-09-27</td>
<td>0.00 - 0.70</td>
<td>LT-UNK</td>
<td>None</td>
<td>No</td>
<td>Insulation</td>
<td>HAZARD SCREENING METHOD: Pharos Chemical and Materials Library</td>
<td>WARNINGS: None found</td>
<td></td>
</tr>
<tr>
<td>ALUMINA TRIHYDRATE</td>
<td>21645-51-2</td>
<td>Pharos Chemical and Materials Library</td>
<td>2019-09-27</td>
<td>0.00 - 0.60</td>
<td>BM-2</td>
<td>None</td>
<td>No</td>
<td>Filler</td>
<td>HAZARD SCREENING METHOD: Pharos Chemical and Materials Library</td>
<td>WARNINGS: Asthmagen (Rs) - sensitizer-induced</td>
<td></td>
</tr>
<tr>
<td>FERRIC OXIDE</td>
<td>1309-37-1</td>
<td>Pharos Chemical and Materials Library</td>
<td>2019-09-27</td>
<td>0.00 - 0.50</td>
<td>BM-2</td>
<td>None</td>
<td>No</td>
<td>Pigment</td>
<td>HAZARD SCREENING METHOD: Pharos Chemical and Materials Library</td>
<td>WARNINGS: Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification</td>
<td></td>
</tr>
</tbody>
</table>

SUBSTANCE NOTES: Continuous gasket seal, foam insulation. Form-specific hazards: airborne particles of respirable size – occupational setting.

SUBSTANCE NOTES: Alternate insulation: 1" polystyrene used in conjunction with 1" polyisocyanurate.

SUBSTANCE NOTES: Powder coating. GreenScreen Benchmark® assessment score of BM-2 was provided by the HPD Builder Tool.
SUBSTANCE NOTES: Powder coating. This substance is considered essentially inert for the purposes of Pharos toxics scoring (Pharos CML). GreenScreen Benchmark® assessment score of BM-2 was provided by the HPD Builder Tool.
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**

<table>
<thead>
<tr>
<th>CERTIFYING PARTY:</th>
<th>Self-declared</th>
</tr>
</thead>
<tbody>
<tr>
<td>APPLICABLE FACILITIES:</td>
<td>N/A</td>
</tr>
<tr>
<td>ISSUE DATE:</td>
<td>2019-08-12</td>
</tr>
<tr>
<td>CERTIFIER OR LAB:</td>
<td>N/A</td>
</tr>
<tr>
<td>HPD URL:</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**CDPH Standard Method – Not tested**

| ISSUE DATE: | 2019-08-12 |
| EXPIRY DATE: | |
| CERTIFIER OR LAB: | N/A |

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.

**SAFETY RAILING**

| HPD URL: | https://www.nystrom.com/products/fall-protection/safety-railings |

| CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES: | OSHA compliant fall protection safety railings and posts specifically designed for Roof Hatches, Smoke Vents and Floor Doors. |

Section 5: General Notes
**MANUFACTURER INFORMATION**

**MANUFACTURER:** Nystrom  
**ADDRESS:** 9300 73rd Avenue North  
Minneapolis MN 55428, United States  
**WEBSITE:** www.Nystrom.com  

**CONTACT NAME:** Sandy McWilliams  
**TITLE:** Director of Business Development  
**PHONE:** (800) 547-2635  
**EMAIL:** SMcWilliams@nystrom.com  

---

### KEY

<table>
<thead>
<tr>
<th>OSHA MSDS</th>
<th>GHS SDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occupational Safety and Health Administration Material Safety Data Sheet</td>
<td>Globally Harmonized System of Classification and Labeling of Chemicals Safety Data Sheet</td>
</tr>
</tbody>
</table>

#### Hazard Types

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

#### GreenScreen (GS)

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

#### Recycled Types

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

#### Other Terms

- **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  

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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.
Aluminum Safety Railing
by Nystrom

CLASSIFICATION: 05 52 00 Metals: Metal Railings

PRODUCT DESCRIPTION: Nystrom offers OSHA compliant fall protection safety railings and posts specifically designed for Roof Hatches, Smoke Vents and Floor Doors. This HPD covers Roof Hatch Safety Railing (SRC), Ladder Post (SP), Grab Bar (SGB). Floor Door Safety Railing (SRTA), and Smoke Vent Safety Railing (SRV, SRTA).

Section 1: Summary

Basic 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
- Considered
- Partially Considered
- Not Considered

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
--- | --- | --- | --- | ---
ALUMINUM SAFETY RAILING | 6061 ALUMINUM LT-P1 | RES | PHY | END
STEEL | NOGS | UNDISCLOSED | NOGS | TITANIUM DIOXIDE LT-2 CAN | END
ZINC LT-P1 | AQU | PHY | END | MUL SOLTENT-DEWAXED HEAVY PARAFFINIC PETROLEUM DISTILLATES LT-2 CAN | MUL

Number of Greenscreen BM-4/BM3 contents ... 0
Contents highest concern GreenScreen Benchmark or List translator Score ... LT-1
Nanomaterial ... No

INVENTORY AND SCREENING NOTES:
This Health Product Declaration (HPD) was completed in accordance with the HPD Standard version 2.1.1, and discloses hazards associated with all substances present at or above 1000 parts per million (ppm) in the finished product, along with the role and percent weight. Substances not "Identified" are those considered proprietary to suppliers.

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: Inherently non-emitting source per LEED®

CONSISTENCY WITH OTHER PROGRAMS

Pre-checked for LEED v4 Material Ingredients, Option 1

Third Party Verified?
- Yes
- No

PREPARER: Self-Prepared

VERIFIER:

VERIFICATION #:

SCREENING DATE: 2019-08-07
PUBLISHED DATE: 2019-09-26
EXPIRY DATE: 2022-08-07
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)

### ALUMINUM SAFETY RAILING

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

**RESIDUALS AND IMPURITIES NOTES:** Residuals and Impurities were considered by following the suggestions of Emerging Best Practices. More than 99% of this product consists of metal alloys, for which Pharos CML may consider the various alloying elements as "Known or Potential Residuals". Therefore, these components have been included in the Substance Notes instead of as individual content entries. Components are listed by name, CASRN, percent by weight (as per supplier SDS), and relevant GreenScreen score.

**OTHER PRODUCT NOTES:** Percent by weight of substances given as ranges to account for material differences between product lines.

### 6061 ALUMINUM

<table>
<thead>
<tr>
<th>HAZARD SCREENING METHOD: Pharos Chemical and Materials Library</th>
<th>HAZARD SCREENING DATE: 2019-08-07</th>
</tr>
</thead>
<tbody>
<tr>
<td>%: 57.50 - 60.00</td>
<td>GS: LT-P1</td>
</tr>
<tr>
<td>HAZARD TYPE</td>
<td>AGENCY AND LIST TITLES</td>
</tr>
<tr>
<td>RESPIRATORY</td>
<td>AOEC - Asthmagens</td>
</tr>
<tr>
<td>PHYSICAL HAZARD (REACTIVE)</td>
<td>EU - GHS (H-Statements)</td>
</tr>
<tr>
<td>PHYSICAL HAZARD (REACTIVE)</td>
<td>EU - GHS (H-Statements)</td>
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<td>PHYSICAL HAZARD (REACTIVE)</td>
<td>EU - GHS (H-Statements)</td>
</tr>
<tr>
<td>ENDOCRINE</td>
<td>TEDX - Potential Endocrine Disruptors</td>
</tr>
<tr>
<td>HAZARD TYPE</td>
<td>AGENCY AND LIST TITLES</td>
</tr>
<tr>
<td>RESPIRATORY</td>
<td>Asthmagen (Rs) - sensitizer-induced</td>
</tr>
<tr>
<td>PHYSICAL HAZARD (REACTIVE)</td>
<td>H228 - Flammable solid</td>
</tr>
<tr>
<td>PHYSICAL HAZARD (REACTIVE)</td>
<td>H250 - Catches fire spontaneously if exposed to air</td>
</tr>
<tr>
<td>PHYSICAL HAZARD (REACTIVE)</td>
<td>H261 - In contact with water releases flammable gases</td>
</tr>
<tr>
<td>ENDOCRINE</td>
<td>Potential Endocrine Disruptor</td>
</tr>
</tbody>
</table>

**SUBSTANCE NOTES:** Rail; gate; post. Recycled content confirmed by suppliers to range from 5% to 80%, with an average recycled content of 35%. Documentation from suppliers provide the following composition for alloying elements that may individually exceed the declared threshold: <6.6% Magnesium [7439-95-4; LT-UNK]; <2.0% Silicon [7440-21-3; LT-UNK]; <1.8% Iron [7439-89-6; LT-P1]; <1.1% Chromium [7440-47-3; LT-P1]; <1.5% Copper [7440-50-8; LT-UNK]; <4.0% Zinc [7440-66-6; LT-P1]; <1.0% Manganese [7439-96-5; LT-P1]; <0.5% Vanadium [7440-62-2; LT-1]; 0.2% Titanium [7440-32-6; LT-UNK]. May also include 5052 Aluminum for gate assembly. Specific guidelines are being created to address known issues related to transparency and disclosure for several materials ("Special Conditions"), including those with Form-Specific Hazards such as Aluminum.

### STEEL

<table>
<thead>
<tr>
<th>HAZARD SCREENING METHOD: Pharos Chemical and Materials Library</th>
<th>HAZARD SCREENING DATE: 2019-08-07</th>
</tr>
</thead>
<tbody>
<tr>
<td>%: 39.50 - 41.00</td>
<td>GS: NoGS</td>
</tr>
<tr>
<td>HAZARD TYPE</td>
<td>AGENCY AND LIST TITLES</td>
</tr>
<tr>
<td>RESPIRATORY</td>
<td></td>
</tr>
<tr>
<td>PHYSICAL HAZARD (REACTIVE)</td>
<td></td>
</tr>
<tr>
<td>PHYSICAL HAZARD (REACTIVE)</td>
<td></td>
</tr>
<tr>
<td>PHYSICAL HAZARD (REACTIVE)</td>
<td></td>
</tr>
<tr>
<td>ENDOCRINE</td>
<td></td>
</tr>
<tr>
<td>HAZARD TYPE</td>
<td>AGENCY AND LIST TITLES</td>
</tr>
<tr>
<td>RESPIRATORY</td>
<td></td>
</tr>
<tr>
<td>PHYSICAL HAZARD (REACTIVE)</td>
<td></td>
</tr>
<tr>
<td>PHYSICAL HAZARD (REACTIVE)</td>
<td></td>
</tr>
<tr>
<td>PHYSICAL HAZARD (REACTIVE)</td>
<td></td>
</tr>
<tr>
<td>ENDOCRINE</td>
<td></td>
</tr>
</tbody>
</table>

**SUBSTANCE NOTES:** Rail; gate; post. Recycled content confirmed by suppliers to range from 5% to 80%, with an average recycled content of 35%. Documentation from suppliers provide the following composition for alloying elements that may individually exceed the declared threshold: <6.6% Magnesium [7439-95-4; LT-UNK]; <2.0% Silicon [7440-21-3; LT-UNK]; <1.8% Iron [7439-89-6; LT-P1]; <1.1% Chromium [7440-47-3; LT-P1]; <1.5% Copper [7440-50-8; LT-UNK]; <4.0% Zinc [7440-66-6; LT-P1]; <1.0% Manganese [7439-96-5; LT-P1]; <0.5% Vanadium [7440-62-2; LT-1]; 0.2% Titanium [7440-32-6; LT-UNK]. May also include 5052 Aluminum for gate assembly. Specific guidelines are being created to address known issues related to transparency and disclosure for several materials ("Special Conditions"), including those with Form-Specific Hazards such as Aluminum.
**HAZARD TYPE**

**AGENCY AND LIST TITLES**

**WARNINGS**

None found

No warnings found on HPD Priority Hazard Lists

---

**SUBSTANCE NOTES:** Chain; clamp; plate; mixed hardware. Recycled content confirmed by suppliers for steel used in product ranges from 18.5% total (14.0% pre-consumer and 4.5% post-consumer recycled scrap) to 97.8% total (36.5% pre-consumer and 61.3% post-consumer recycled scrap). Documentation from suppliers provide the following composition for alloying elements that may individually exceed the declared threshold: <3.1% Silicon [7440-21-3; LT-UNK]; <2.5% Manganese [7439-96-5; LT-P1]; <1.6% Aluminum [7429-90-5; LT-P1]; <4.0% Nickel [7440-02-0; LT-1]; <3.0% Chromium [7440-47-3; LT-P1].

---

**UNDISCLOSED**

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

**HAZARD SCREENING DATE:** 2019-08-07

<table>
<thead>
<tr>
<th>%: 0.50 - 1.50</th>
<th>GS: NoGS</th>
<th>RC: None</th>
<th>NANO: No</th>
<th>ROLE: Pigment Resin</th>
</tr>
</thead>
</table>

---

**TITANIUM DIOXIDE**  

**ID:** 13463-67-7

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

**HAZARD SCREENING DATE:** 2019-08-07

<table>
<thead>
<tr>
<th>%: 0.10 - 0.30</th>
<th>GS: LT-1</th>
<th>RC: None</th>
<th>NANO: No</th>
<th>ROLE: Pigment</th>
</tr>
</thead>
</table>

- **CANCER**  
  - US CDC - Occupational Carcinogens: Occupational Carcinogen
  - CA EPA - Prop 65: Carcinogen - specific to chemical form or exposure route
  - 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
  - MAK: Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels

**SUBSTANCE NOTES:** Yellow powder coating.

---

**ZINC**  

**ID:** 7440-66-6

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

**HAZARD SCREENING DATE:** 2019-08-07

<table>
<thead>
<tr>
<th>%: 0.01 - 0.10</th>
<th>GS: LT-P1</th>
<th>RC: None</th>
<th>NANO: No</th>
<th>ROLE: Metallic Coating</th>
</tr>
</thead>
<tbody>
<tr>
<td>HAZARD TYPE</td>
<td>AGENCY AND LIST TITLES</td>
<td>WARNINGS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------------</td>
<td>--------------------------------------</td>
<td>--------------------------------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACUTE AQUATIC</td>
<td>EU - GHS (H-Statements)</td>
<td>H400 - Very toxic to aquatic life</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHRON AQUATIC</td>
<td>EU - GHS (H-Statements)</td>
<td>H410 - Very toxic to aquatic life with long lasting effects</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHYSICAL HAZARD (REACTIVE)</td>
<td>EU - GHS (H-Statements)</td>
<td>H250 - Catches fire spontaneously if exposed to air</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHYSICAL HAZARD (REACTIVE)</td>
<td>EU - GHS (H-Statements)</td>
<td>H260 - In contact with water releases flammable gases which may ignite spontaneously</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENDOCRINE</td>
<td>TEDX - Potential Endocrine Disruptors</td>
<td>Potential Endocrine Disruptor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MULTIPLE</td>
<td>German FEA - Substances Hazardous to Waters</td>
<td>Class 2 - Hazard to Waters</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SUBSTANCE NOTES:** Chain; mixed hardware.

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**SOLVENT-DEWAXED HEAVY PARAFFINIC PETROLEUM DISTILLATES**

**ID:** 64742-65-0

<table>
<thead>
<tr>
<th>HAZARD SCREENING METHOD: Pharos Chemical and Materials Library</th>
<th>HAZARD SCREENING DATE: 2019-08-07</th>
</tr>
</thead>
<tbody>
<tr>
<td>%: Impurity/Residual</td>
<td>GS: LT-1</td>
</tr>
<tr>
<td>HAZARD TYPE</td>
<td>AGENCY AND LIST TITLES</td>
</tr>
<tr>
<td>CANCER</td>
<td>EU - GHS (H-Statements)</td>
</tr>
<tr>
<td>CANCER</td>
<td>EU - REACH Annex XVII CMRs</td>
</tr>
<tr>
<td>MULTIPLE</td>
<td>ChemSec - SIN List</td>
</tr>
<tr>
<td>CANCER</td>
<td>EU - Annex VI CMRs</td>
</tr>
<tr>
<td>CANCER</td>
<td>GHS - Australia</td>
</tr>
</tbody>
</table>

**SUBSTANCE NOTES:** Potential residual from processing oil. May also include 64742-53-6 (LT-1; CAN | MUL).
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**

<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>CERTIFICATION AND COMPLIANCE NOTES:</td>
<td>This product qualifies as an inherently non-emitting source per LEED, as ~99% of the product consists of powder-coated metal and/or plated or anodized metal. As per LEED, &quot;Products that are inherently nonemitting sources of VOCs (stone, ceramic, powder-coated metals, plated or anodized metal, glass, concrete, clay brick, and unfinished or untreated solid wood) are considered fully compliant without any VOC emissions testing if they do not include integral organic-based surface coatings, binders, or sealants.&quot;</td>
</tr>
<tr>
<td>ISSUE DATE:</td>
<td>2019-08-07</td>
</tr>
<tr>
<td>EXPIRY DATE:</td>
<td></td>
</tr>
<tr>
<td>CERTIFIER OR LAB:</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Section 4: Accessories

This section lists related products or materials that the manufacturer requires or recommends for installation (such as adhesives or fasteners), maintenance, cleaning, or operations. For information relating to the contents of these related products, refer to their applicable Health Product Declarations, if available.

No accessories are required for this product.

Section 5: General Notes
### MANUFACTURER INFORMATION

**MANUFACTURER:** Nystrom  
**ADDRESS:** 9300 73rd Avenue North  
Minneapolis MN 55428, USA  
**WEBSITE:** www.nystrom.com  
**CONTACT NAME:** Sandy McWilliams  
**TITLE:** Director of Business Development  
**PHONE:** (800) 547-2635  
**EMAIL:** SMcWilliams@nystrom.com

### KEY

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

**Hazard Types**

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

**GreenScreen (GS)**

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

**Recycled Types**

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

**Other Terms**

**Inventory Methods:**

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

**Nano**

Composed of nano scale particles or nanotechnology

**Third Party Verified**

Verification by independent certifier approved by HPDC

**Preparer**

Third party preparer, if not self-prepared by manufacturer

**Applicable facilities**

Manufacturing sites to which testing applies

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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.