July 2019

RE: Sustainability Statement

Nystrom certifies and provides the following information for use in achieving LEED v4 credit for the specification of Nystrom Thermally Broken Roof Hatch.

Product: ThermalMAX™
Model(s): RHTA

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.
Thermally Broken Roof Hatch
by Nystrom

CLASSIFICATION: 07 72 33 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. The ThermalMAX Roof Hatch sets the new standard for thermally efficient roof hatches. Designed with a thermal break to keep cool-cool and hot-hot, this hatch boasts an R-20 insulation rating making it today's most energy efficient hatch. Condensation typically occurs on inside surfaces or roof hatches whenever the exterior surface temperature falls below the dew point temperature of the interior space. The thermal break provides a barrier between heat and cold reducing the potential for condensation. This HPD covers Nystrom’s ThermalMAX Roof Hatch (RHTA).

Section 1: Summary

CONTENT INVENTORY

<table>
<thead>
<tr>
<th>Inventory Reporting Format</th>
<th>Threshold level</th>
<th>Residuals/Impurities</th>
<th>All Substances Above the Threshold Indicated Are:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nested Materials Method</td>
<td>100 ppm</td>
<td>Considered</td>
<td>Characterized</td>
</tr>
<tr>
<td>Basic Method</td>
<td>1,000 ppm</td>
<td>Partially Considered</td>
<td>Yes Ex/SC Yes No</td>
</tr>
<tr>
<td>Material</td>
<td>Per GHS SDS</td>
<td>Not Considered</td>
<td>% weight and role provided for all substances.</td>
</tr>
<tr>
<td>Product</td>
<td>Per OSHA MSDS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>Other</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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
---|---|---|---|---
THERMALLY BROKEN ROOF HATCH | 6061 ALUMINUM | LT-P1 | RES | PHY
| END STEEL | NGS POLYSOXYANURATE FOAM | LT-UNK | ETHYLENE/PROPYLENE/DIENE TERPOLYMER (EPDM) | LT-UNK
| CONTINUOUS FILAMENT GLASS FIBER, NON-RESPIRABLE | LT-UNK | CELLULOSE PULP | NGS LIMESTONE, CALCIUM CARBONATE | LT-UNK
| BUTYL RUBBER | LT-UNK | KAOLIN CLAY | LT-UNK | CAN CARBON BLACK
| LT-1 | CAN POLYVINY ChlorIDE (PVC) | LT-P1 | RES | ANOX 20 | LT-UNK
| DISTILLATES (PETROLEUM), SOLVENT-REFINED (MILD) | HEAVY PARAFFINIC (9CI) | LT-1 | CAN | MUL ZINC
| LT-P1 | AQU | PHY | END | MUL
| PENTANE | LT-P1 | AQU | PHY | MAM | MUL |

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

VOC Content data is not applicable for this product category.

CERTIFICATIONS AND COMPLIANCE

VOC emissions: CDPH Standard Method – Not tested

CONSISTENCY WITH OTHER PROGRAMS

Pre-checked for LEED v4 Material Ingredients, Option 1
## THERMALLY BROKEN 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 85% 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 variations in product manufacturing, and due to disclosure preference of suppliers.

<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>Compositions</th>
</tr>
</thead>
<tbody>
<tr>
<td>6061 ALUMINUM</td>
<td>7429-90-5</td>
<td>Pharos Chemical and Materials Library</td>
<td>2019-07-10</td>
<td>80.00 - 82.00</td>
<td>LT-P1</td>
<td>Both</td>
<td>NoGS</td>
<td>Base Metal</td>
<td>Max 2.8% Zinc [7440-66-6; LT-P1]; Max 2.0% Manganese [7439-96-5; LT-P1]; Max 1.9% Silicon [7440-21-3; LT-UNK]; Max 1.6% Magnesium [7439-95-4; LT-UNK]; Max 1.1% Iron [7439-89-6; LT-P1]; Max 0.5% Chromium [7440-47-3; LT-P1]. Specific guidelines are being created to address known issues related to transparency and disclosure for several materials (&quot;Special Conditions&quot;), including those with Form-Specific Hazards such as Aluminum.</td>
</tr>
<tr>
<td>STEEL</td>
<td>12597-69-2</td>
<td>Pharos Chemical and Materials Library</td>
<td>2019-07-10</td>
<td>6.50 - 6.60</td>
<td>NoGS</td>
<td>UNK</td>
<td>No</td>
<td>Base Metal</td>
<td></td>
</tr>
<tr>
<td>Substance</td>
<td>ID</td>
<td>Hazards</td>
<td>AGENCY AND LIST TITLES</td>
<td>WARNINGS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------</td>
<td>-------------</td>
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<td>------------------------</td>
<td>----------</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Polyisocyanurate Foam</strong></td>
<td>9063-78-9</td>
<td>None found</td>
<td>Pharos Chemical and Materials Library</td>
<td>No warnings found on HPD Priority Hazard Lists</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Ethylene/Propylene/Diene Terpolymer (EPDM)</strong></td>
<td>25038-36-2</td>
<td>None found</td>
<td>Pharos Chemical and Materials Library</td>
<td>No warnings found on HPD Priority Hazard Lists</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Continuous Filament Glass Fiber, Non-Respirable</strong></td>
<td>65997-17-3</td>
<td>None found</td>
<td>Pharos Chemical and Materials Library</td>
<td>No warnings found on HPD Priority Hazard Lists</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Cellulose Pulp</strong></td>
<td>65996-61-4</td>
<td>None found</td>
<td>Pharos Chemical and Materials Library</td>
<td>No warnings found on HPD Priority Hazard Lists</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Substance Notes:**
- **Polyisocyanurate Foam:** Various mixed hardware/fasteners. Documentation from supplier provides the following composition for alloying elements that may individually exceed the declared threshold: max 3.1% Silicon [7440-21-3; LT-UNK]; max 2.5% Manganese [7439-96-5; LT-P1]; max 1.6% Aluminum [7429-90-5; LT-P1]; max 1.8% Nickel [7440-02-0; LT-1]; max 1.0% Chromium [7440-47-3; LT-P1]; max 0.2% Vanadium [7440-62-2; LT-1].
- **Ethylene/Propylene/Diene Terpolymer (EPDM):** Foam insulation.
- **Continuous Filament Glass Fiber, Non-Respirable:** Foam insulation.
- **Cellulose Pulp:** Foam insulation.
<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>
</tr>
</thead>
<tbody>
<tr>
<td>LIMESTONE, CALCIUM CARBONATE</td>
<td>1317-65-3</td>
<td>Pharos Chemical and Materials Library</td>
<td>2019-07-10</td>
<td>0.10 - 1.00</td>
<td>LT-UNK</td>
<td>None</td>
<td>No</td>
<td>Filler, Extender</td>
</tr>
<tr>
<td>BUTYL RUBBER</td>
<td>9010-85-9</td>
<td>Pharos Chemical and Materials Library</td>
<td>2019-07-10</td>
<td>0.10 - 0.30</td>
<td>LT-UNK</td>
<td>None</td>
<td>No</td>
<td>Base Polymer</td>
</tr>
<tr>
<td>KAOLIN CLAY</td>
<td>1332-58-7</td>
<td>Pharos Chemical and Materials Library</td>
<td>2019-07-10</td>
<td>0.10 - 0.30</td>
<td>LT-UNK</td>
<td>None</td>
<td>No</td>
<td>Filler, Extender</td>
</tr>
<tr>
<td>CARBON BLACK</td>
<td>1333-86-4</td>
<td>Pharos Chemical and Materials Library</td>
<td>2019-07-10</td>
<td>0.10 - 0.40</td>
<td>LT-1</td>
<td>None</td>
<td>No</td>
<td>Pigment</td>
</tr>
</tbody>
</table>

SUBSTANCE NOTES:
- LIMESTONE, CALCIUM CARBONATE: Foam insulation. Identified on the US EPA Safer Chemical Ingredient List (Green Circle - Verified Low Concern).
- BUTYL RUBBER: Sealant tape; red vinyl grip handle. Identified on the US EPA Safer Chemical Ingredient List (Green Circle - Verified Low Concern).
- KAOLIN CLAY: Sealant tape; gasket.
- CARBON BLACK: Sealant tape; gasket.

WARNING:
- CANCER: MAK - Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification.
<table>
<thead>
<tr>
<th>HAZARD TYPE</th>
<th>AGENCY AND LIST TITLES</th>
<th>WARNINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CANCER</td>
<td>US CDC - Occupational Carcinogens</td>
<td>Occupational Carcinogen</td>
</tr>
<tr>
<td>CANCER</td>
<td>CA EPA - Prop 65</td>
<td>Carcinogen - specific to chemical form or exposure route</td>
</tr>
<tr>
<td>CANCER</td>
<td>IARC</td>
<td>Group 2B - Possibly carcinogenic to humans - inhaled from occupational sources</td>
</tr>
<tr>
<td>CANCER</td>
<td>MAK</td>
<td>Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification</td>
</tr>
</tbody>
</table>

**SUBSTANCE NOTES:** Rubber curb; rubber washer; gasket; sealant tape. Carbon black is one of several compounds with warnings restricted to unbound/respirable forms.

**POLYVINYL CHLORIDE (PVC)**

<table>
<thead>
<tr>
<th>HAZARD SCREENING METHOD</th>
<th>Pharos Chemical and Materials Library</th>
<th>HAZARD SCREENING DATE: 2019-07-10</th>
</tr>
</thead>
<tbody>
<tr>
<td>%: 0.05 - 0.10</td>
<td>GS: LT-P1</td>
<td>RC: None</td>
</tr>
</tbody>
</table>

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

**HAZARD SCREENING DATE:** 2019-07-10

**%:** 0.05 - 0.10

**GS:** LT-P1

**RC:** None

**NANO:** No

**ROLE:** Base Polymer

**RESPIRATORY**

**AOEC - Asthmagens**

**Asthmagen (Rs) - sensitizer-induced**

**SUBSTANCE NOTES:** Red vinyl grip handle.

**ANOX 20**

<table>
<thead>
<tr>
<th>HAZARD SCREENING METHOD</th>
<th>Pharos Chemical and Materials Library</th>
<th>HAZARD SCREENING DATE: 2019-07-10</th>
</tr>
</thead>
<tbody>
<tr>
<td>%: 0.05 - 0.20</td>
<td>GS: LT-UNK</td>
<td>RC: None</td>
</tr>
</tbody>
</table>

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

**HAZARD SCREENING DATE:** 2019-07-10

**%:** 0.05 - 0.20

**GS:** LT-UNK

**RC:** None

**NANO:** No

**ROLE:** Antioxidant

**None found**

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

**SUBSTANCE NOTES:** Sealant tape. Identified on the US EPA Safer Chemical Ingredient List (Green Circle - Verified Low Concern).

**DISTILLATES (PETROLEUM), SOLVENT-REFINED (MILD) HEAVY PARAFFINIC (9CI)**

<table>
<thead>
<tr>
<th>HAZARD SCREENING METHOD</th>
<th>Pharos Chemical and Materials Library</th>
<th>HAZARD SCREENING DATE: 2019-07-10</th>
</tr>
</thead>
<tbody>
<tr>
<td>%: 0.01 - 0.10</td>
<td>GS: LT-1</td>
<td>RC: None</td>
</tr>
</tbody>
</table>

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

**HAZARD SCREENING DATE:** 2019-07-10

**%:** 0.01 - 0.10

**GS:** LT-1

**RC:** None

**NANO:** No

**ROLE:** Raw Material
### ZINC

**HAZARD SCREENING METHOD:** Pharos Chemical and Materials Library  
**HAZARD SCREENING DATE:** 2019-07-10

<table>
<thead>
<tr>
<th>HAZARD TYPE</th>
<th>AGENCY AND LIST TITLES</th>
<th>WARNINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACUTE AQUATIC</td>
<td>EU - GHS (H-Statements)</td>
<td>H400 - Very toxic to aquatic life</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>
</tr>
<tr>
<td>PHYSICAL HAZARD (REACTIVE)</td>
<td>EU - GHS (H-Statements)</td>
<td>H250 - Catches fire spontaneously if exposed to air</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>
</tr>
<tr>
<td>ENDOCRINE</td>
<td>TEDX - Potential Endocrine Disruptors</td>
<td>Potential Endocrine Disruptor</td>
</tr>
<tr>
<td>MULTIPLE</td>
<td>German FEA - Substances Hazardous to Waters</td>
<td>Class 2 - Hazard to Waters</td>
</tr>
</tbody>
</table>

**SUBSTANCE NOTES:** Zinc plated steel for various hardware/fasteners. 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 Zinc.

---

### PENTANE

**HAZARD SCREENING METHOD:** Pharos Chemical and Materials Library  
**HAZARD SCREENING DATE:** 2019-07-10

<table>
<thead>
<tr>
<th>HAZARD TYPE</th>
<th>AGENCY AND LIST TITLES</th>
<th>WARNINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACUTE AQUATIC</td>
<td>EU - GHS (H-Statements)</td>
<td>H400 - Very toxic to aquatic life</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>
</tr>
<tr>
<td>PHYSICAL HAZARD (REACTIVE)</td>
<td>EU - GHS (H-Statements)</td>
<td>H250 - Catches fire spontaneously if exposed to air</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>
</tr>
<tr>
<td>ENDOCRINE</td>
<td>TEDX - Potential Endocrine Disruptors</td>
<td>Potential Endocrine Disruptor</td>
</tr>
<tr>
<td>MULTIPLE</td>
<td>German FEA - Substances Hazardous to Waters</td>
<td>Class 2 - Hazard to Waters</td>
</tr>
</tbody>
</table>

**SUBSTANCE NOTES:** Pentane is an impurity/residual in various materials. 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 Pentane.
<table>
<thead>
<tr>
<th>HAZARD TYPE</th>
<th>AGENCY AND LIST TITLES</th>
<th>WARNINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHRON AQUATIC</td>
<td>EU - GHS (H-Statements)</td>
<td>H411 - Toxic to aquatic life with long lasting effects</td>
</tr>
<tr>
<td>PHYSICAL HAZARD (REACTIVE)</td>
<td>EU - GHS (H-Statements)</td>
<td>H225 - Highly flammable liquid and vapour</td>
</tr>
<tr>
<td>MAMMALIAN</td>
<td>EU - GHS (H-Statements)</td>
<td>H304 - May be fatal if swallowed and enters airways</td>
</tr>
<tr>
<td>MULTIPLE</td>
<td>German FEA - Substances Hazardous to Waters</td>
<td>Class 2 - Hazard to Waters</td>
</tr>
</tbody>
</table>

**SUBSTANCE NOTES:** Blowing agent for foam insulation.
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.

<table>
<thead>
<tr>
<th>VOC EMISSIONS</th>
<th>CDPH Standard Method – Not tested</th>
</tr>
</thead>
<tbody>
<tr>
<td>CERTIFYING PARTY: Self-declared</td>
<td>ISSUE DATE: 2019-05-20</td>
</tr>
<tr>
<td>APPLICABLE FACILITIES: N/A</td>
<td>EXPIRY DATE:</td>
</tr>
<tr>
<td>CERTIFICATE URL:</td>
<td>CERTIFIER OR LAB: N/A</td>
</tr>
<tr>
<td>CERTIFICATION AND COMPLIANCE NOTES:</td>
<td></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.

SAFETY RAILING


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
Section 6: References

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

GreenScreen (GS)

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

Recycled Types

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

Other Terms

Inventory Methods:

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

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

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

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

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

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

The product manufacturer and any applicable independent verifier are solely responsible for the accuracy of statements and claims made in this HPD and for compliance with the HPD standard noted.
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), Floor Door Safety Railing (SRTA), and Smoke Vent Safety Railing (SRV, SRTA).

Section 1: Summary

Brief Method / Product Threshold

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

Explanation(s) provided for Residuals/Impurities?
- Yes
- No

All Substances Above the Threshold Indicated Are:
- Characterized
- Screened
- Identified

Percentage weight and role provided for all substances.

All substances screened using Priority Hazard Lists with results disclosed.

One or more substances not disclosed by Name (Specific or Generic) and Identifier and/or one or more Special Condition did not follow guidance.

Inventory Reporting Format:
- Nested Materials Method
- Basic Method

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-1 | CAN | END
Zinc | LT-P1 | AQU | PHY | END | MUL | SOLVENT-DEWAXED HEAVY PARAFFINIC PETROLEUM DISTILLATES | LT-1 | 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.

VOC Content data is not applicable for this product category.

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.

VOC Content data is not applicable for this product category.

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

CERTIFICATIONS AND COMPLIANCE
See Section 3 for additional listings.
VOC emissions: Inherently non-emitting source per LEED®
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

**HAZARD SCREENING METHOD:** Pharos Chemical and Materials Library  
**HAZARD SCREENING DATE:** 2019-08-07

<table>
<thead>
<tr>
<th>%</th>
<th>GS</th>
<th>RC</th>
<th>NANO</th>
<th>ROLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>57.50 - 60.00</td>
<td>LT-P1</td>
<td>Both</td>
<td>NoGS</td>
<td>Base Metal</td>
</tr>
</tbody>
</table>

**HAZARD TYPE**  
**AGENCY AND LIST TITLES**  
**WARNINGS**

**RESPIRATORY**  
AOEC - Asthmagens  
Asthmagen (Rs) - sensitizer-induced

**PHYSICAL HAZARD (REACTIVE)**  
EU - GHS (H-Statements)  
H228 - Flammable solid

**PHYSICAL HAZARD (REACTIVE)**  
EU - GHS (H-Statements)  
H250 - Catches fire spontaneously if exposed to air

**PHYSICAL HAZARD (REACTIVE)**  
EU - GHS (H-Statements)  
H261 - In contact with water releases flammable gases

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

**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

**HAZARD SCREENING METHOD:** Pharos Chemical and Materials Library  
**HAZARD SCREENING DATE:** 2019-08-07

<table>
<thead>
<tr>
<th>%</th>
<th>GS</th>
<th>RC</th>
<th>NANO</th>
<th>ROLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>39.50 - 41.00</td>
<td>NoGS</td>
<td>Both</td>
<td>NoGS</td>
<td>Base Metal</td>
</tr>
</tbody>
</table>

**HAZARD SCREENING METHOD:** Pharos Chemical and Materials Library  
**HAZARD SCREENING DATE:** 2019-08-07
<table>
<thead>
<tr>
<th>HAZARD TYPE</th>
<th>AGENCY AND LIST TITLES</th>
<th>WARNINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>None found</td>
<td></td>
<td>No warnings found on HPD Priority Hazard Lists</td>
</tr>
</tbody>
</table>

**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

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

HAZARD SCREENING DATE: 2019-08-07

**SUBSTANCE NOTES:** Yellow powder coating. Supplier has shared substance identity under the terms of a non-disclosure agreement; substance to remain proprietary to supplier. Substance has been screened against HPD Priority Lists using the HPD Builder with results disclosed.

---

**TITANIUM DIOXIDE**

ID: 13463-67-7

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

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

HAZARD SCREENING DATE: 2019-08-07

**SUBSTANCE NOTES:** Yellow powder coating.

---

**CANCER**

US CDC - Occupational Carcinogens

Occupational Carcinogen

**CANCER**

CA EPA - Prop 65

Carcinogen - specific to chemical form or exposure route

**CANCER**

IARC

Group 2B - Possibly carcinogenic to humans - inhaled from occupational sources

**ENDOCRINE**

TEDX - Potential Endocrine Disruptors

Potential Endocrine Disruptor

**CANCER**

MAK

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

**CANCER**

MAK

Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels

---

**ZINC**

ID: 7440-66-6

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

<table>
<thead>
<tr>
<th>%: 0.01 - 0.10</th>
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</thead>
<tbody>
<tr>
<td>GS: LT-P1</td>
</tr>
<tr>
<td>RC: None</td>
</tr>
<tr>
<td>NANO: No</td>
</tr>
<tr>
<td>ROLE: Metallic Coating</td>
</tr>
</tbody>
</table>

HAZARD SCREENING DATE: 2019-08-07
### HAZARD TYPE

<table>
<thead>
<tr>
<th>HAZARD TYPE</th>
<th>AGENCY AND LIST TITLES</th>
<th>WARNINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACUTE AQUATIC</td>
<td>EU - GHS (H-Statements)</td>
<td>H400 - Very toxic to aquatic life</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>
</tr>
<tr>
<td>PHYSICAL HAZARD (REACTIVE)</td>
<td>EU - GHS (H-Statements)</td>
<td>H250 - Catches fire spontaneously if exposed to air</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>
</tr>
<tr>
<td>ENDOCRINE</td>
<td>TEDX - Potential Endocrine Disruptors</td>
<td>Potential Endocrine Disruptor</td>
</tr>
<tr>
<td>MULTIPLE</td>
<td>German FEA - Substances Hazardous to Waters</td>
<td>Class 2 - Hazard to Waters</td>
</tr>
</tbody>
</table>

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

### SOLVENT-DEWAXED HEAVY PARAFFINIC PETROLEUM DISTILLATES

**ID:** 64742-65-0

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

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

<table>
<thead>
<tr>
<th>%: Impurity/Residual</th>
<th>GS: LT-1</th>
<th>GS: LT-1</th>
<th>RC: None</th>
<th>RC: None</th>
<th>NANO: No</th>
<th>NANO: No</th>
<th>ROLE: Impurity/Residual</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Impurity/Residual</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HAZARD TYPE</th>
<th>AGENCY AND LIST TITLES</th>
<th>WARNINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CANCER</td>
<td>EU - GHS (H-Statements)</td>
<td>H350 - May cause cancer</td>
</tr>
<tr>
<td>CANCER</td>
<td>EU - REACH Annex XVII CMRs</td>
<td>Carcinogen Category 2 - Substances which should be regarded as if they are Carcinogenic to man</td>
</tr>
<tr>
<td>MULTIPLE</td>
<td>ChemSec - SIN List</td>
<td>CMR - Carcinogen, Mutagen &amp;/or Reproductive Toxicant</td>
</tr>
<tr>
<td>CANCER</td>
<td>EU - Annex VI CMRs</td>
<td>Carcinogen Category 1B - Presumed Carcinogen based on animal evidence</td>
</tr>
<tr>
<td>CANCER</td>
<td>GHS - Australia</td>
<td>H350 - May cause cancer</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**

Inherently non-emitting source per LEED®

<table>
<thead>
<tr>
<th>CERTIFYING PARTY:</th>
<th>Self-declared</th>
<th>ISSUE DATE:</th>
<th>2019-08-07</th>
<th>CERTIFIER OR LAB:</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>APPLICABLE FACILITIES:</td>
<td>All</td>
<td>EXPIRY DATE:</td>
<td></td>
<td>CERTIFICATE URL:</td>
<td></td>
</tr>
</tbody>
</table>

CERTIFICATION AND COMPLIANCE NOTES: 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, "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."

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
Section 6: References

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

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.