

July 2019

RE: Sustainability Statement

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

Product Sunlit Roof Hatch
Model(s) RHL

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 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. Nystrom's Sunlit Roof Hatch provides safe access to roof areas on your building utilizing a translucent dome. Available with ladder and ship stair access and optional safety railings, grab bars and a variety of materials and finishes. The Sunlit Roof Hatch allows light into the building and improves visibility for employees accessing the roof. This HPD covers the single door model RHL with multiple insulation options.

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

Explanation(s) provided for Residuals/Impurities?

- Yes No

All Substances Above the Threshold Indicated Are:

Characterized Yes Ex/SC Yes No

% weight and role provided for all substances.

Screened Yes Ex/SC Yes No

All substances screened using Priority Hazard Lists with results disclosed.

Identified Yes Ex/SC Yes No

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

CONTENT IN DESCENDING ORDER OF QUANTITY

Summary of product contents and results from screening individual chemical substances against HPD Priority Hazard Lists and the GreenScreen for Safer Chemicals®. The HPD does not assess whether using or handling this product will expose individuals to its chemical substances or any health risk. Refer to Section 2 for further details.

MATERIAL | SUBSTANCE | RESIDUAL OR IMPURITY
GREENSCREEN SCORE | HAZARD TYPE

DAYLIGHTING ROOF HATCH [3003-H14 ALUMINUM LT-P1 | RES | PHY | END STEEL NoGS POLYCARBONATE LT-UNK POLYISOCYANURATE FOAM LT-UNK ETHYLENE/PROPYLENE/DIENE TERPOLYMER (EPDM) LT-UNK LIMESTONE, CALCIUM CARBONATE LT-UNK SILOXANES AND SILICONES, DI-ME, HYDROXY-TERMINATED BM-2 FUMED SILICA, CRYSTALLINE-FREE LT-P1 | CAN CELLULOSE PULP NoGS CONTINUOUS FILAMENT GLASS FIBER, NON-RESPIRABLE LT-UNK CARBON BLACK LT-1 | CAN BUTYL RUBBER LT-UNK KAOLIN CLAY LT-UNK | CAN ANOX 20 LT-UNK DISTILLATES (PETROLEUM), HYDROTREATED MIDDLE LT-1 | CAN | MUL POLYBUTENE LT-UNK TALC BM-1 | CAN ZINC LT-P1 | AQU | PHY | END | MUL POLYVINYL CHLORIDE (PVC) LT-P1 | RES PENTANE LT-P1 | AQU | PHY | MAM | MUL TRIGLYCIDYL ISOCYANURATE (TGIC) LT-1 | RES | GEN | MAM | SKI | EYE | MUL POLYSTYRENE LT-UNK PIGMENT RESIN NoGS ALUMINA TRIHYDRATE BM-2 | RES FERRIC OXIDE BM-2 | CAN TITANIUM DIOXIDE LT-1 | CAN | END]

Number of Greenscreen BM-4/BM3 contents ... 0

Contents highest concern GreenScreen Benchmark or List translator Score ... BM-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: CDPH Standard Method - Not tested

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: 2019-09-27

PUBLISHED DATE: 2019-09-29

EXPIRY DATE: 2022-09-27



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

DAYLIGHTING 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. Approximately 80-85% 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 material differences of various product options.

3003-H14 ALUMINUM

ID: 7429-90-5

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2019-09-27

#: 64.00 - 67.00 GS: LT-P1 RC: Both NANO: No ROLE: Base Metal

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: Standard material for curb and cover. Recycled content estimated by supplier to range from 5% to about 60%, with an average recycled content of about 35%. Documentation from supplier provides the following composition for alloying elements that may individually exceed the declared threshold: Max 2.8% Zinc [7440-66-6; LT-P1]; Max 2.0% Manganese [7439-96-5; LT-P1]; Max 1.6% Magnesium [7439-95-4; LT-UNK]; Max 1.9% Silicon [7440-21-3; 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 ("Special Conditions"), including those with Form-Specific Hazards such as Aluminum.

STEEL

ID: 12597-69-2

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2019-09-27

#: 14.00 - 17.00 GS: NoGS RC: Both NANO: No ROLE: Base Metal

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
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None found

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: Hold-open arm, support, brackets, latch, hasp, various hardware. Galvannealed steel is alternate material available for body of Roof Hatch (constitutes approximately 85% of product when used as alternate material). 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].

POLYCARBONATE

ID: 25037-45-0

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

HAZARD SCREENING DATE: **2019-09-27**

#: **4.00 - 5.00**

GS: **LT-UNK**

RC: **None**

NANO: **No**

ROLE: **Base Polymer**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
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None found

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: Translucent dome cover. May also include the following CASRN: 25971-63-5 [LT-UNK | NO]; 24936-68-3 [NoGS | NO].

POLYISOCYANURATE FOAM

ID: 9063-78-9

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

HAZARD SCREENING DATE: **2019-09-27**

#: **2.00 - 4.00**

GS: **LT-UNK**

RC: **None**

NANO: **No**

ROLE: **Insulation**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
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None found

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: Foam insulation.

ETHYLENE/PROPYLENE/DIENE TERPOLYMER (EPDM)

ID: 25038-36-2

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

HAZARD SCREENING DATE: **2019-09-27**

#: **0.50 - 1.00**

GS: **LT-UNK**

RC: **None**

NANO: **No**

ROLE: **Polymer**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
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None found

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: Gasket.

LIMESTONE, CALCIUM CARBONATE

ID: 1317-65-3

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

HAZARD SCREENING DATE: **2019-09-27**

#: **0.50 - 2.50**

GS: **LT-UNK**

RC: **None**

NANO: **No**

ROLE: **Filler; Extender**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists
SUBSTANCE NOTES: Sealant, sealant tape, powder coating, vinyl handle. Identified on the US EPA Safer Chemical Ingredient List (Green Circle - Verified Low Concern).		

SILOXANES AND SILICONES, DI-ME, HYDROXY-TERMINATED

ID: 70131-67-8

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2019-09-27		
%: 0.20 - 0.50	GS: BM-2	RC: None	NANO: No	ROLE: Polymer
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS		
None found		No warnings found on HPD Priority Hazard Lists		
SUBSTANCE NOTES: Sealant.				

FUMED SILICA, CRYSTALLINE-FREE

ID: 112945-52-5

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2019-09-27		
%: 0.10 - 0.30	GS: LT-P1	RC: None	NANO: No	ROLE: Filler
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS		
CANCER	GHS - Japan	Carcinogenicity - Category 1A [H350]		
CANCER	GHS - Australia	H350i - May cause cancer by inhalation		
SUBSTANCE NOTES: Sealant.				

CELLULOSE PULP

ID: 65996-61-4

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2019-09-27		
%: 0.10 - 1.00	GS: NoGS	RC: None	NANO: No	ROLE: Insulation Facer
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS		
None found		No warnings found on HPD Priority Hazard Lists		
SUBSTANCE NOTES:				

CONTINUOUS FILAMENT GLASS FIBER, NON-RESPIRABLE

ID: 65997-17-3

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2019-09-27		
%: 0.10 - 1.00	GS: LT-UNK	RC: None	NANO: No	ROLE: Insulation Facer

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

SUBSTANCE NOTES:

CARBON BLACK

ID: 1333-86-4

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

SUBSTANCE NOTES: Gasket, sealant tape, insulation. Form-specific hazards: airborne particles of respirable size – occupational setting.

BUTYL RUBBER

ID: 9010-85-9

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

HAZARD SCREENING DATE: **2019-09-27**

#: **0.10 - 0.50** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Base Polymer**

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

SUBSTANCE NOTES: Sealant tape.

KAOLIN CLAY

ID: 1332-58-7

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

HAZARD SCREENING DATE: **2019-09-27**

#: **0.10 - 1.00** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Filler; Extender**

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

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

ANOX 20

ID: 6683-19-8

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2019-09-27**%: **0.10 - 0.50**GS: **LT-UNK**RC: **None**NANO: **No**ROLE: **Antioxidant**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

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), HYDROTREATED MIDDLE

ID: 64742-46-7

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2019-09-27**%: **0.10 - 0.30**GS: **LT-1**RC: **None**NANO: **No**ROLE: **Solvent**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

CANCER

EU - GHS (H-Statements)

H350 - May cause cancer

CANCER

EU - REACH Annex XVII CMRs

Carcinogen Category 2 - Substances which should be regarded as if they are Carcinogenic to man

MULTIPLE

ChemSec - SIN List

CMR - Carcinogen, Mutagen &/or Reproductive Toxicant

MULTIPLE

German FEA - Substances Hazardous to Waters

Class 2 - Hazard to Waters

CANCER

EU - Annex VI CMRs

Carcinogen Category 1B - Presumed Carcinogen based on animal evidence

CANCER

GHS - Australia

H350 - May cause cancer

SUBSTANCE NOTES: Sealant and sealant tape. May also include CASRN 64741-88-4 (LT-1 | CAN).

POLYBUTENE

ID: 9003-29-6

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2019-09-27**%: **0.05 - 0.20**GS: **LT-UNK**RC: **None**NANO: **No**ROLE: **Base Polymer**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

None found

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: Sealant tape.

TALC

ID: 14807-96-6

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2019-09-27**%: **0.05 - 0.15**GS: **BM-1**RC: **None**NANO: **No**ROLE: **Filler**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CANCER	IARC	Group 2b - Possibly carcinogenic to humans
CANCER	MAK	Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification

SUBSTANCE NOTES: Sealant tape. GreenScreen Benchmark® assessment score of BM-1 was provided by the HPD Builder Tool. GreenScreen® Assessment for Talc (CAS# 14807-96-6) assigns the following GreenScreen® Benchmark Scores for Relevant Routes of Exposure: Inhalation (BM-1); Oral (BM-3DG); Dermal (BM-U).

ZINC ID: 7440-66-6

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

#: **0.03 - 1.70** GS: **LT-P1** RC: **None** NANO: **No** ROLE: **Metallic Coating**

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

SUBSTANCE NOTES: Alternate galvanized steel body, brackets, latch, hasp, various hardware.

POLYVINYL CHLORIDE (PVC) ID: 9002-86-2

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

#: **0.01 - 0.10** GS: **LT-P1** RC: **None** NANO: **No** ROLE: **Polymer**

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

SUBSTANCE NOTES: Vinyl grip handle.

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**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CHRON AQUATIC	EU - GHS (H-Statements)	H411 - Toxic to aquatic life with long lasting effects
PHYSICAL HAZARD (REACTIVE)	EU - GHS (H-Statements)	H225 - Highly flammable liquid and vapour
MAMMALIAN	EU - GHS (H-Statements)	H304 - May be fatal if swallowed and enters airways
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters

SUBSTANCE NOTES: Blowing agent used in polyisocyanurate foam.

TRIGLYCIDYL ISOCYANURATE (TGIC)

ID: 2451-62-9

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

HAZARD SCREENING DATE: **2019-09-27**

#: **0.00 - 0.10** GS: **LT-1** RC: **None** NANO: **No** ROLE: **Crosslinking Agent**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
RESPIRATORY	AOEC - Asthmagens	Asthmagen (Rs) - sensitizer-induced
GENE MUTATION	EU - SVHC Authorisation List	Mutagenic - Candidate list
MAMMALIAN	EU - GHS (H-Statements)	H301 - Toxic if swallowed
SKIN SENSITIZE	EU - GHS (H-Statements)	H317 - May cause an allergic skin reaction
EYE IRRITATION	EU - GHS (H-Statements)	H318 - Causes serious eye damage
MAMMALIAN	EU - GHS (H-Statements)	H331 - Toxic if inhaled
GENE MUTATION	EU - GHS (H-Statements)	H340 - May cause genetic defects
GENE MUTATION	EU - REACH Annex XVII CMRs	Mutagen Category 2 - Substances which should be regarded as if they are Mutagenic to man
MULTIPLE	ChemSec - SIN List	CMR - Carcinogen, Mutagen &/or Reproductive Toxicant
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters
RESPIRATORY	MAK	Sensitizing Substance Sah - Danger of airway & skin sensitization
GENE MUTATION	GHS - Korea	Germ cell mutagenicity - Category 1 [H340 - May cause genetic defects]
GENE MUTATION	EU - Annex VI CMRs	Mutagen - Category 1B
GENE MUTATION	GHS - New Zealand	6.6A - Known or presumed human mutagens
GENE MUTATION	GHS - Japan	Germ cell mutagenicity - Category 1B [H340]

SUBSTANCE NOTES: Powder coating for alternate galvanized steel body.

POLYSTYRENE

ID: 9003-53-6

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2019-09-27**%: **0.00 - 1.50**GS: **LT-UNK**RC: **None**NANO: **No**ROLE: **Insulation**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

None found

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: **Alternate insulation for cover.****PIGMENT RESIN**ID: **Undisclosed**HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2019-09-27**%: **0.00 - 1.50**GS: **NoGS**RC: **None**NANO: **No**ROLE: **Resin Binder**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

None found

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: Powder coating available on alternate galvanized steel body. 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. Substance is not included on the Living Building Challenge (LBC) Red List Chemical Guide Version 3.1.

ALUMINA TRIHYDRATEID: **21645-51-2**HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2019-09-27**%: **0.00 - 1.00**GS: **BM-2**RC: **None**NANO: **No**ROLE: **Filler; Pigment**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

RESPIRATORY

AOEC - Asthmagens

Asthmagen (Rs) - sensitizer-induced

SUBSTANCE NOTES: Powder coating for alternate galvanized steel body. GreenScreen Benchmark® assessment score of BM-2 was provided by the HPD Builder Tool.

FERRIC OXIDEID: **1309-37-1**HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2019-09-27**%: **0.00 - 1.00**GS: **BM-2**RC: **None**NANO: **No**ROLE: **Pigment**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

CANCER

MAK

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

SUBSTANCE NOTES: Powder coating for alternate galvanized steel body. GreenScreen Benchmark® assessment score of BM-2 was provided by the HPD Builder Tool.

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

HAZARD SCREENING DATE: **2019-09-27**

%: **0.00 - 1.00** GS: **LT-1** RC: **None** NANO: **No** ROLE: **Pigment**

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

SUBSTANCE NOTES: Powder coating for alternate galvanized steel body. Identified on the US EPA Safer Chemical Ingredient List (Green Circle - Verified Low Concern). Form-specific hazards: airborne particles of respirable size – occupational setting.

Section 3: Certifications and Compliance

This section lists applicable certification and standards compliance information for VOC emissions and VOC content. Other types of health or environmental performance testing or certifications completed for the product may be provided.

VOC EMISSIONS

CDPH Standard Method – Not tested

CERTIFYING PARTY: **Self-declared**

ISSUE DATE: **2019-**

EXPIRY DATE:

CERTIFIER OR LAB: **N/A**

APPLICABLE FACILITIES: **N/A**

09-27

CERTIFICATE URL:

CERTIFICATION AND COMPLIANCE NOTES:

Section 4: Accessories

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

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, 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 information from List Translator lists to benchmark)
BM-1 Benchmark 1 (avoid - chemical of high concern)	NoGS Unknown (no data on List Translator Lists)
BM-U Benchmark Unspecified (insufficient data to benchmark)	

Recycled Types

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

Other Terms**Inventory Methods:**

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

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

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

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

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

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

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

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

Explanation(s) provided
for Residuals/Impurities?

- Yes No

All Substances Above the Threshold Indicated Are:

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

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

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

CONTENT IN DESCENDING ORDER OF QUANTITY

Summary of product contents and results from screening individual chemical substances against HPD Priority Hazard Lists and the GreenScreen for Safer Chemicals®. The HPD does not assess whether using or handling this product will expose individuals to its chemical substances or any health risk. Refer to Section 2 for further details.

MATERIAL | SUBSTANCE | RESIDUAL OR IMPURITY

GREENSCREEN SCORE | HAZARD TYPE

**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.

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



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

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

ID: 7429-90-5

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2019-08-07

#: 57.50 - 60.00 GS: LT-P1 RC: Both NANO: No ROLE: Base Metal

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

ID: 12597-69-2

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2019-08-07

#: 39.50 - 41.00 GS: NoGS RC: Both NANO: No ROLE: Base Metal

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**

#: **0.50 - 1.50**

GS: **NoGS**

RC: **None**

NANO: **No**

ROLE: **Pigment Resin**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
-------------	------------------------	----------

None found

No warnings found on HPD Priority Hazard Lists

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**

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

#: **0.10 - 0.30**

GS: **LT-1**

RC: **None**

NANO: **No**

ROLE: **Pigment**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
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CANCER

US CDC - Occupational Carcinogens

Occupational Carcinogen

CANCER

CA EPA - Prop 65

Carcinogen - specific to chemical form or exposure route

CANCER

IARC

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

ENDOCRINE

TEDX - Potential Endocrine Disruptors

Potential Endocrine Disruptor

CANCER

MAK

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

CANCER

MAK

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

SUBSTANCE NOTES: Yellow powder coating.

ZINC

ID: **7440-66-6**

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

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

#: **0.01 - 0.10**

GS: **LT-P1**

RC: **None**

NANO: **No**

ROLE: **Metallic Coating**

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

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**

#: **Impurity/Residual** GS: **LT-1** RC: **None** NANO: **No** ROLE: **Impurity/Residual**

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

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®

CERTIFYING PARTY: **Self-declared**

ISSUE DATE: **2019-**

EXPIRY DATE:

CERTIFIER OR LAB: **N/A**

APPLICABLE FACILITIES: **All**

08-07

CERTIFICATE URL:

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



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)

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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 information from List Translator lists to benchmark)
BM-1 Benchmark 1 (avoid - chemical of high concern)	NoGS Unknown (no data on List Translator Lists)
BM-U Benchmark Unspecified (insufficient data to benchmark)	

Recycled Types

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

Other Terms

Inventory Methods:

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