

CLASSIFICATION: 08 91 26

PRODUCT DESCRIPTION: Door louvers are constructed of cold rolled steel, stainless steel, aluminum or galvanized steel and have a powder coat finish, #4 stainless steel finish or mill finish aluminum. Door louvers provide air flow and ventilation through the door without sacrificing privacy and security. This HPD includes all door louvers manufactured by Activar Construction Products Group – Air Louvers. This HPD serves to disclose the chemical ingredients of our door louvers. For a HPD of a specific configuration not disclosed here, please contact Activar Construction Products Group - Air Louvers using the contact information listed at the end of this document.

Section 1: Summary

Nested Method / Product Threshold

CONTENT INVENTORY

Inventory Reporting Format

- Nested Materials Method
- Basic Method

Threshold Disclosed Per

- Material
- Product

Threshold level

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

Residuals/Impurities

Residuals/Impurities Considered in 7 of 10 Materials

Explanation(s) provided for Residuals/Impurities?

- Yes
- No

All Substances Above the Threshold Indicated Are:

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

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

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

CONTENT IN DESCENDING ORDER OF QUANTITY

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

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

STAINLESS STEEL [IRON LT-P1 | END CHROMIUM LT-P1 | RES | END | SKI
NICKEL LT-1 | RES | CAN | SKI | MAM | MUL MANGANESE LT-P1 | END |
MUL | REP SILICON LT-UNK MOLYBDENUM LT-UNK COBALT LT-1 | RES |
CAN | SKI | MUL | GEN | REP COPPER LT-UNK TUNGSTEN METAL LT-UNK
] ALUMINUM [3003-H14 ALUMINUM LT-P1 | RES | PHY | END]
GALVANIZED STEEL WOVEN MESH (SCREEN) [IRON LT-P1 | END
MANGANESE LT-P1 | END | MUL | REP CARBON LT-UNK CHROMIUM LT-
P1 | RES | END | SKI] BRASS ALLOY MESH (SCREEN) [COPPER LT-UNK
ZINC LT-P1 | AQU | PHY | END | MUL LEAD LT-1 | DEL | CAN | PBT | REP |
MUL | END | GEN IRON LT-P1 | END] COLD ROLLED STEEL [IRON LT-P1 |
END MANGANESE LT-P1 | END | MUL | REP CHROMIUM LT-P1 | RES | END |
SKI NICKEL LT-1 | RES | CAN | SKI | MAM | MUL CARBON LT-UNK
MOLYBDENUM LT-UNK COPPER LT-UNK] STEEL GALVANNEAL [IRON
LT-P1 | END 3003-H14 ALUMINUM LT-P1 | RES | PHY | END NICKEL LT-1 |
RES | CAN | SKI | MAM | MUL CARBON LT-UNK MOLYBDENUM LT-UNK
MANGANESE LT-P1 | END | MUL | REP TIN LT-UNK CHROMIUM LT-P1 |
RES | END | SKI COPPER LT-UNK SILICON LT-UNK] STAINLESS STEEL
ALLOY MESH (SCREEN) [CHROMIUM LT-P1 | RES | END | SKI NICKEL LT-
1 | RES | CAN | SKI | MAM | MUL MANGANESE LT-P1 | END | MUL | REP
CARBON LT-UNK SILICON LT-UNK] ALUMINUM ALLOY MESH (SCREEN) [
3003-H14 ALUMINUM LT-P1 | RES | PHY | END NICKEL LT-1 | RES | CAN |
SKI | MAM | MUL COPPER LT-UNK MANGANESE LT-P1 | END | MUL | REP]
FUSIBLE LINK AND SPRING [COPPER LT-UNK STEEL MANUFACTURE,
CHEMICALS LT-UNK TIN LT-UNK BISMUTH LT-UNK SELENIUM LT-P1 |

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 HPD is prepared using the Nested Materials Inventory with product threshold at 1,000 ppm. Activar Construction Products Group - Air Louvers door louvers are manufactured in steel, aluminum, stainless steel or galvanized steel.

PBT | MAM | MUL | CAN **NICKEL** **LT-1** | RES | CAN | SKI | MAM | MUL]
POWDER COAT | **UNDISCLOSED** **NoGS** **UNDISCLOSED** **LT-UNK**
UNDISCLOSED **LT-1** | RES | GEN | MAM | SKI | EYE | MUL **UNDISCLOSED**
LT-1 | CAN | END **UNDISCLOSED** **LT-UNK** **UNDISCLOSED** **BM-2** | CAN
UNDISCLOSED **LT-1** | CAN **UNDISCLOSED** **LT-UNK**]

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

No pre-checks completed or disclosed.

Third Party Verified?

- Yes
- No

PREPARER: **Self-Prepared**

VERIFIER:

VERIFICATION #:

SCREENING DATE: **2019-12-20**

PUBLISHED DATE: **2019-12-20**

EXPIRY DATE: **2022-12-20**



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

STAINLESS STEEL

%: 98.00 - 100.00

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: No

RESIDUALS AND IMPURITIES NOTES: Other trace elements (less than 0.1%) may also be present per the manufacturer. These trace elements generally originate in the raw material used.

OTHER MATERIAL NOTES: The ingredients listed are the elements used in alloying stainless steel. Stainless steel contains chromium metal in the zero valence state. As such per the manufacturer, chromium metal does not present any unusual health risk. All vision lites manufactured by Activar Construction Product Group - Air Louvers are #4 stainless steel finish.

IRON

ID: 7439-89-6

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2019-12-20

%: 45.00 - 90.00

GS: LT-P1

RC: Both

NANO: No

ROLE: Main element

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

ENDOCRINE

TEDX - Potential Endocrine Disruptors

Potential Endocrine Disruptor

SUBSTANCE NOTES: Main ingredient in stainless steel.

CHROMIUM

ID: 7440-47-3

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2019-12-20

%: 10.00 - 30.00

GS: LT-P1

RC: UNK

NANO: No

ROLE: Alloying element

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

RESPIRATORY

AOEC - Asthmagens

Asthmagen (Rs) - sensitizer-induced

ENDOCRINE

TEDX - Potential Endocrine Disruptors

Potential Endocrine Disruptor

SKIN SENSITIZE

MAK

Sensitizing Substance Sh - Danger of skin sensitization

SUBSTANCE NOTES: Ingredient used in manufacture of stainless steel.

NICKEL

ID: 7440-02-0

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2019-12-20**%: **0.00 - 40.00**GS: **LT-1**RC: **UNK**NANO: **No**ROLE: **Alloying element**

| HAZARD TYPE | AGENCY AND LIST TITLES | WARNINGS |
|----------------|---|---|
| RESPIRATORY | AOEC - Asthmagens | Asthmagen (Rs) - sensitizer-induced |
| CANCER | IARC | Group 1 - Agent is Carcinogenic to humans |
| CANCER | IARC | Group 2b - Possibly carcinogenic to humans |
| CANCER | CA EPA - Prop 65 | Carcinogen |
| CANCER | US CDC - Occupational Carcinogens | Occupational Carcinogen |
| CANCER | US NIH - Report on Carcinogens | Known to be a human Carcinogen |
| CANCER | US NIH - Report on Carcinogens | Reasonably Anticipated to be Human Carcinogen |
| SKIN SENSITIZE | EU - GHS (H-Statements) | H317 - May cause an allergic skin reaction |
| CANCER | EU - GHS (H-Statements) | H351 - Suspected of causing cancer |
| ORGAN TOXICANT | EU - GHS (H-Statements) | H372 - Causes damage to organs through prolonged or repeated exposure |
| MULTIPLE | German FEA - Substances Hazardous to Waters | Class 2 - Hazard to Waters |
| CANCER | MAK | Carcinogen Group 1 - Substances that cause cancer in man |
| RESPIRATORY | MAK | Sensitizing Substance Sah - Danger of airway & skin sensitization |

SUBSTANCE NOTES: **Ingredient used in manufacture of stainless steel.****MANGANESE**

ID: 7439-96-5

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2019-12-20**%: **0.00 - 15.00**GS: **LT-P1**RC: **UNK**NANO: **No**ROLE: **Alloying element**

| HAZARD TYPE | AGENCY AND LIST TITLES | WARNINGS |
|--------------|---|--|
| ENDOCRINE | TEDX - Potential Endocrine Disruptors | Potential Endocrine Disruptor |
| MULTIPLE | German FEA - Substances Hazardous to Waters | Class 2 - Hazard to Waters |
| REPRODUCTIVE | GHS - Japan | Toxic to reproduction - Category 1B [H360] |

SUBSTANCE NOTES: **Ingredient used in manufacture of stainless steel.****SILICON**

ID: 7440-21-3

#: **0.00 - 9.50**

GS: **LT-UNK**

RC: **UNK**

NANO: **No**

ROLE: **Alloying element**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

None found

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: **Ingredient used in manufacture of stainless steel.**

MOLYBDENUM

ID: **7439-98-7**

#: **0.00 - 7.00**

GS: **LT-UNK**

RC: **UNK**

NANO: **No**

ROLE: **Alloying element**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

None found

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: **Ingredient used in manufacture of stainless steel.**

COBALT

ID: **7440-48-4**

#: **0.00 - 5.00**

GS: **LT-1**

RC: **UNK**

NANO: **No**

ROLE: **Alloying element**

| HAZARD TYPE | AGENCY AND LIST TITLES | WARNINGS |
|----------------|---|--|
| RESPIRATORY | AOEC - Asthmagens | Asthmagen (Rs) - sensitizer-induced |
| RESPIRATORY | AOEC - Asthmagens | Asthmagen (G) - generally accepted |
| CANCER | IARC | Group 2a - Agent is probably Carcinogenic to humans |
| CANCER | IARC | Group 2b - Possibly carcinogenic to humans |
| CANCER | CA EPA - Prop 65 | Carcinogen |
| CANCER | US NIH - Report on Carcinogens | Reasonably Anticipated to be Human Carcinogen |
| SKIN SENSITIZE | EU - GHS (H-Statements) | H317 - May cause an allergic skin reaction |
| RESPIRATORY | EU - GHS (H-Statements) | H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled |
| MULTIPLE | ChemSec - SIN List | CMR - Carcinogen, Mutagen &/or Reproductive Toxicant |
| MULTIPLE | German FEA - Substances Hazardous to Waters | Class 3 - Severe Hazard to Waters |
| CANCER | MAK | Carcinogen Group 2 - Considered to be carcinogenic for man |
| RESPIRATORY | MAK | Sensitizing Substance Sah - Danger of airway & skin sensitization |
| GENE MUTATION | MAK | Germ Cell Mutagen 3a |
| CANCER | GHS - Australia | H350i - May cause cancer by inhalation |
| REPRODUCTIVE | GHS - Australia | H360F - May damage fertility |

SUBSTANCE NOTES: Ingredient used in manufacture of stainless steel.

COPPER

ID: 7440-50-8

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

HAZARD SCREENING DATE: **2019-12-20**

#: **0.00 - 5.00**

GS: **LT-UNK**

RC: **UNK**

NANO: **No**

ROLE: **Alloying element**

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

SUBSTANCE NOTES: Ingredient used in manufacture of stainless steel.

TUNGSTEN METAL

ID: 7440-33-7

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

HAZARD SCREENING DATE: **2019-12-20**

#: **0.00 - 4.00**

GS: **LT-UNK**

RC: **UNK**

NANO: **No**

ROLE: **Alloying element**

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

SUBSTANCE NOTES: Ingredient used in manufacture of stainless steel.

ALUMINUM

#: 98.00 - 100.00

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

RESIDUALS AND IMPURITIES NOTES: Information not provided by the supplier.

OTHER MATERIAL NOTES: Mill finished aluminum is used in the 1300 all-aluminum louver and the 1400 storm proof aluminum Z-blade louver.

3003-H14 ALUMINUM

ID: 7429-90-5

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2019-12-20

#: 90.00 - 99.00

GS: LT-P1

RC: UNK

NANO: No

ROLE: Main Ingredient

| 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: Ingredient used in the manufacturer of mill finish aluminum louvers.

GALVANIZED STEEL WOVEN MESH (SCREEN)

#: 2.00 - 2.50

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

RESIDUALS AND IMPURITIES NOTES: Information not provided by the supplier.

OTHER MATERIAL NOTES: Galvanized steel woven mesh screen used to prevent insects or birds from getting through a louver on an exterior door.

IRON

ID: 7439-89-6

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2019-12-20

#: 95.00 - 97.00

GS: LT-P1

RC: UNK

NANO: No

ROLE: Main Ingredient

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

SUBSTANCE NOTES: Ingredient used in the manufacturer of galvanized steel mesh screen.

MANGANESE

ID: 7439-96-5

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2019-12-20**

#: **0.50 - 1.30** GS: **LT-P1** RC: **UNK** NANO: **No** ROLE: **Ingredient**

| HAZARD TYPE | AGENCY AND LIST TITLES | WARNINGS |
|--------------|---|--|
| ENDOCRINE | TEDX - Potential Endocrine Disruptors | Potential Endocrine Disruptor |
| MULTIPLE | German FEA - Substances Hazardous to Waters | Class 2 - Hazard to Waters |
| REPRODUCTIVE | GHS - Japan | Toxic to reproduction - Category 1B [H360] |

SUBSTANCE NOTES: Ingredient used in the manufacturer of galvanized steel mesh screen.

CARBON

ID: 7440-44-0

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2019-12-20**

#: **0.10 - 0.87** GS: **LT-UNK** RC: **UNK** NANO: **No** ROLE: **Ingredient**

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

SUBSTANCE NOTES: Ingredient used in the manufacturer of galvanized steel mesh screen.

CHROMIUM

ID: 7440-47-3

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2019-12-20**

#: **0.00 - 0.15** GS: **LT-P1** RC: **UNK** NANO: **No** ROLE: **Ingredient**

| HAZARD TYPE | AGENCY AND LIST TITLES | WARNINGS |
|----------------|---------------------------------------|---|
| RESPIRATORY | AOEC - Asthmagen | Asthmagen (Rs) - sensitizer-induced |
| ENDOCRINE | TEDX - Potential Endocrine Disruptors | Potential Endocrine Disruptor |
| SKIN SENSITIZE | MAK | Sensitizing Substance Sh - Danger of skin sensitization |

SUBSTANCE NOTES: Ingredient used in the manufacturer of galvanized steel mesh screen.

BRASS ALLOY MESH (SCREEN)

%: 2.00 - 2.50

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

RESIDUALS AND IMPURITIES NOTES: Information not provided by the supplier.

OTHER MATERIAL NOTES: Brass mesh screen is made from copper alloys.

COPPER

ID: 7440-50-8

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2019-12-20

%: 89.00 - 92.00

GS: LT-UNK

RC: UNK

NANO: No

ROLE: Main Ingredient

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

None found

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: Ingredient used in the manufacturer of brass alloy mesh screen.

ZINC

ID: 7440-66-6

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2019-12-20

%: 1.00 - 2.00

GS: LT-P1

RC: UNK

NANO: No

ROLE: Ingredient

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: Ingredient used in the manufacturer of brass alloy mesh screen.

LEAD

ID: 7439-92-1

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2019-12-20

%: 0.00 - 0.05

GS: LT-1

RC: UNK

NANO: No

ROLE: Ingredient

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

DEVELOPMENTAL

G&L - Neurotoxic Chemicals

Developmental Neurotoxicant

| | | |
|---------------|--|---|
| CANCER | US EPA - IRIS Carcinogens | (1986) Group B2 - Probable human Carcinogen |
| CANCER | IARC | Group 2a - Agent is probably Carcinogenic to humans |
| CANCER | IARC | Group 2b - Possibly carcinogenic to humans |
| CANCER | CA EPA - Prop 65 | Carcinogen |
| DEVELOPMENTAL | CA EPA - Prop 65 | Developmental toxicity |
| PBT | US EPA - Priority PBTs (NWMP) | Priority PBT |
| PBT | WA DoE - PBT | PBT |
| REPRODUCTIVE | CA EPA - Prop 65 | Reproductive Toxicity - Female |
| REPRODUCTIVE | CA EPA - Prop 65 | Reproductive Toxicity - Male |
| CANCER | US NIH - Report on Carcinogens | Reasonably Anticipated to be Human Carcinogen |
| PBT | US EPA - Toxics Release Inventory PBTs | PBT |
| REPRODUCTIVE | EU - SVHC Authorisation List | Toxic to reproduction - Candidate list |
| PBT | OSPAR - Priority PBTs & EDs & equivalent concern | PBT - Chemical for Priority Action |
| PBT | OR DEQ - Priority Persistent Pollutants | Priority Persistent Pollutant - Tier 1 |
| DEVELOPMENTAL | US NIH - Reproductive & Developmental Monographs | Clear Evidence of Adverse Effects - Developmental Toxicity |
| REPRODUCTIVE | US NIH - Reproductive & Developmental Monographs | Clear Evidence of Adverse Effects - Reproductive Toxicity |
| REPRODUCTIVE | EU - GHS (H-Statements) | H360FD - May damage fertility. May damage the unborn child |
| DEVELOPMENTAL | EU - GHS (H-Statements) | H362 - May cause harm to breast-fed children |
| REPRODUCTIVE | EU - REACH Annex XVII CMRs | Toxic to Reproduction Category 1 - Substances known to impair fertility or cause Developmental Toxicity in humans |
| MULTIPLE | ChemSec - SIN List | CMR - Carcinogen, Mutagen &/or Reproductive Toxicant |
| ENDOCRINE | TEDX - Potential Endocrine Disruptors | Potential Endocrine Disruptor |
| CANCER | MAK | Carcinogen Group 2 - Considered to be carcinogenic for man |
| CANCER | GHS - Korea | Carcinogenicity - Category 1 [H350 - May cause cancer] |
| REPRODUCTIVE | GHS - Korea | Reproductive toxicity - Category 1 [H360 - May damage fertility or the unborn child] |
| REPRODUCTIVE | GHS - New Zealand | 6.8A - Known or presumed human reproductive or developmental toxicants |
| REPRODUCTIVE | GHS - Japan | Toxic to reproduction - Category 1A [H360] |
| GENE MUTATION | MAK | Germ Cell Mutagen 3a |
| REPRODUCTIVE | EU - Annex VI CMRs | Reproductive Toxicity - Category 1A |
| DEVELOPMENTAL | GHS - Australia | H360Df - May damage the unborn child. Suspected of damaging fertility |

SUBSTANCE NOTES: Ingredient used in the manufacturer of brass alloy mesh screen.

IRON

ID: 7439-89-6

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

HAZARD SCREENING DATE: **2019-12-20**

#: **0.00 - 0.05** GS: **LT-P1** RC: **UNK** NANO: **No** ROLE: **Ingredient**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

ENDOCRINE

TEDX - Potential Endocrine Disruptors

Potential Endocrine Disruptor

SUBSTANCE NOTES: Ingredient used in the manufacturer of brass alloy mesh screen.

COLD ROLLED STEEL

#: **1.00 - 100.00**

PRODUCT THRESHOLD: **1000 ppm**

RESIDUALS AND IMPURITIES CONSIDERED: **No**

RESIDUALS AND IMPURITIES NOTES: **Residuals and impurities not considered. Only intentionally added ingredients are detailed in this HPD.**

OTHER MATERIAL NOTES: **Cold rolled steel is the standard material used to manufacture vision lites. Vision lites are also available in galvanized steel and stainless steel.**

IRON

ID: 7439-89-6

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

HAZARD SCREENING DATE: **2019-12-20**

#: **96.00 - 99.00** GS: **LT-P1** RC: **Both** NANO: **No** ROLE: **Main element**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

ENDOCRINE

TEDX - Potential Endocrine Disruptors

Potential Endocrine Disruptor

SUBSTANCE NOTES: **Cold rolled steel formed into louvers.**

MANGANESE

ID: 7439-96-5

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

HAZARD SCREENING DATE: **2019-12-20**

#: **0.00 - 2.00** GS: **LT-P1** RC: **UNK** NANO: **No** ROLE: **Alloying element**

| HAZARD TYPE | AGENCY AND LIST TITLES | WARNINGS |
|--------------|---|--|
| ENDOCRINE | TEDX - Potential Endocrine Disruptors | Potential Endocrine Disruptor |
| MULTIPLE | German FEA - Substances Hazardous to Waters | Class 2 - Hazard to Waters |
| REPRODUCTIVE | GHS - Japan | Toxic to reproduction - Category 1B [H360] |

SUBSTANCE NOTES: Alloy included in steel.

CHROMIUM

ID: 7440-47-3

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

HAZARD SCREENING DATE: **2019-12-20**

#: **0.00 - 1.00** GS: **LT-P1** RC: **UNK** NANO: **No** ROLE: **Alloying element**

| HAZARD TYPE | AGENCY AND LIST TITLES | WARNINGS |
|----------------|---------------------------------------|---|
| RESPIRATORY | AOEC - Asthmagens | Asthmagen (Rs) - sensitizer-induced |
| ENDOCRINE | TEDX - Potential Endocrine Disruptors | Potential Endocrine Disruptor |
| SKIN SENSITIZE | MAK | Sensitizing Substance Sh - Danger of skin sensitization |

SUBSTANCE NOTES: Alloy used in steel.

NICKEL

ID: 7440-02-0

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

HAZARD SCREENING DATE: **2019-12-20**

#: **0.00 - 1.00** GS: **LT-1** RC: **UNK** NANO: **No** ROLE: **Alloying element**

| HAZARD TYPE | AGENCY AND LIST TITLES | WARNINGS |
|----------------|---|---|
| RESPIRATORY | AOEC - Asthmagens | Asthmagen (Rs) - sensitizer-induced |
| CANCER | IARC | Group 1 - Agent is Carcinogenic to humans |
| CANCER | IARC | Group 2b - Possibly carcinogenic to humans |
| CANCER | CA EPA - Prop 65 | Carcinogen |
| CANCER | US CDC - Occupational Carcinogens | Occupational Carcinogen |
| CANCER | US NIH - Report on Carcinogens | Known to be a human Carcinogen |
| CANCER | US NIH - Report on Carcinogens | Reasonably Anticipated to be Human Carcinogen |
| SKIN SENSITIZE | EU - GHS (H-Statements) | H317 - May cause an allergic skin reaction |
| CANCER | EU - GHS (H-Statements) | H351 - Suspected of causing cancer |
| ORGAN TOXICANT | EU - GHS (H-Statements) | H372 - Causes damage to organs through prolonged or repeated exposure |
| MULTIPLE | German FEA - Substances Hazardous to Waters | Class 2 - Hazard to Waters |
| CANCER | MAK | Carcinogen Group 1 - Substances that cause cancer in man |
| RESPIRATORY | MAK | Sensitizing Substance Sah - Danger of airway & skin sensitization |

SUBSTANCE NOTES: Alloy used in steel.

CARBON

ID: 7440-44-0

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

HAZARD SCREENING DATE: **2019-12-20**

#: **0.00 - 0.60**

GS: **LT-UNK**

RC: **UNK**

NANO: **No**

ROLE: **Alloying element**

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

SUBSTANCE NOTES: Alloy used in steel.

MOLYBDENUM

ID: 7439-98-7

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

HAZARD SCREENING DATE: **2019-12-20**

#: **0.00 - 0.60**

GS: **LT-UNK**

RC: **UNK**

NANO: **No**

ROLE: **Alloying element**

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

SUBSTANCE NOTES: Alloy used in steel.

COPPER

ID: 7440-50-8

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

HAZARD SCREENING DATE: **2019-12-20**

?: **0.00 - 0.60**

GS: **LT-UNK**

RC: **UNK**

NANO: **No**

ROLE: **Alloying element**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

None found

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: Alloy used in steel.

STEEL GALVANNEAL

?: **1.00 - 100.00**

PRODUCT THRESHOLD: **1000 ppm**

RESIDUALS AND IMPURITIES CONSIDERED: **No**

RESIDUALS AND IMPURITIES NOTES: **Residuals and impurities not considered. Only intentionally added ingredients are detailed in this HPD.**

OTHER MATERIAL NOTES: **Galvanneal steel is more corrosion resistant option and is an alternative to standard steel. All steel vision lites are then powder coated.**

IRON

ID: 7439-89-6

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

HAZARD SCREENING DATE: **2019-12-20**

?: **90.00 - 99.00**

GS: **LT-P1**

RC: **PostC**

NANO: **No**

ROLE: **Main element**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

ENDOCRINE

TEDX - Potential Endocrine Disruptors

Potential Endocrine Disruptor

SUBSTANCE NOTES: Ingredient of galvanneal steel.

3003-H14 ALUMINUM

ID: 7429-90-5

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

HAZARD SCREENING DATE: **2019-12-20**

?: **0.10 - 10.50**

GS: **LT-P1**

RC: **UNK**

NANO: **No**

ROLE: **Alloying element**

| 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: Ingredient in galvaneal steel.

NICKEL

ID: 7440-02-0

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

HAZARD SCREENING DATE: **2019-12-20**

#: **0.10 - 9.70**

GS: **LT-1**

RC: **UNK**

NANO: **No**

ROLE: **Alloying element**

| HAZARD TYPE | AGENCY AND LIST TITLES | WARNINGS |
|----------------|---|---|
| RESPIRATORY | AOEC - Asthmagens | Asthmagen (Rs) - sensitizer-induced |
| CANCER | IARC | Group 1 - Agent is Carcinogenic to humans |
| CANCER | IARC | Group 2b - Possibly carcinogenic to humans |
| CANCER | CA EPA - Prop 65 | Carcinogen |
| CANCER | US CDC - Occupational Carcinogens | Occupational Carcinogen |
| CANCER | US NIH - Report on Carcinogens | Known to be a human Carcinogen |
| CANCER | US NIH - Report on Carcinogens | Reasonably Anticipated to be Human Carcinogen |
| SKIN SENSITIZE | EU - GHS (H-Statements) | H317 - May cause an allergic skin reaction |
| CANCER | EU - GHS (H-Statements) | H351 - Suspected of causing cancer |
| ORGAN TOXICANT | EU - GHS (H-Statements) | H372 - Causes damage to organs through prolonged or repeated exposure |
| MULTIPLE | German FEA - Substances Hazardous to Waters | Class 2 - Hazard to Waters |
| CANCER | MAK | Carcinogen Group 1 - Substances that cause cancer in man |
| RESPIRATORY | MAK | Sensitizing Substance Sah - Danger of airway & skin sensitization |

SUBSTANCE NOTES: Ingredient in galvaneal steel.

CARBON

ID: 7440-44-0

%: **0.10 - 5.50**GS: **LT-UNK**RC: **UNK**NANO: **No**ROLE: **Alloying element**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

None found

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: **Ingredient in galvanized steel.****MOLYBDENUM**ID: **7439-98-7**%: **0.10 - 5.00**GS: **LT-UNK**RC: **UNK**NANO: **No**ROLE: **Alloying element**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

None found

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: **Ingredient in galvanized steel.****MANGANESE**ID: **7439-96-5**%: **0.10 - 4.50**GS: **LT-P1**RC: **UNK**NANO: **No**ROLE: **Alloying element**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

ENDOCRINE

TEDX - Potential Endocrine Disruptors

Potential Endocrine Disruptor

MULTIPLE

German FEA - Substances Hazardous to Waters

Class 2 - Hazard to Waters

REPRODUCTIVE

GHS - Japan

Toxic to reproduction - Category 1B [H360]

SUBSTANCE NOTES: **Ingredient used in manufacture of galvanized steel.****TIN**ID: **7440-31-5**%: **0.10 - 3.50**GS: **LT-UNK**RC: **UNK**NANO: **No**ROLE: **Alloying element**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

None found

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: **Ingredient used in manufacture of galvanized steel.**

CHROMIUM

ID: 7440-47-3

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2019-12-20**%: **0.10 - 3.00**GS: **LT-P1**RC: **UNK**NANO: **No**ROLE: **Alloying element**

| HAZARD TYPE | AGENCY AND LIST TITLES | WARNINGS |
|----------------|---------------------------------------|---|
| RESPIRATORY | AOEC - Asthmagens | Asthmagen (Rs) - sensitizer-induced |
| ENDOCRINE | TEDX - Potential Endocrine Disruptors | Potential Endocrine Disruptor |
| SKIN SENSITIZE | MAK | Sensitizing Substance Sh - Danger of skin sensitization |

SUBSTANCE NOTES: **Ingredient used in manufacture of galvanneal steel.****COPPER**

ID: 7440-50-8

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2019-12-20**%: **0.10 - 3.00**GS: **LT-UNK**RC: **UNK**NANO: **No**ROLE: **Alloying element**

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

SUBSTANCE NOTES: **Ingredient used in manufacture of galvanneal steel.****SILICON**

ID: 7440-21-3

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2019-12-20**%: **0.10 - 2.00**GS: **LT-UNK**RC: **UNK**NANO: **No**ROLE: **Alloying element**

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

SUBSTANCE NOTES: **Ingredient used in manufacture of galvanneal steel.****STAINLESS STEEL ALLOY MESH (SCREEN)**%: **1.00 - 2.00**PRODUCT THRESHOLD: **1000 ppm**RESIDUALS AND IMPURITIES CONSIDERED: **Yes**RESIDUALS AND IMPURITIES NOTES: **Information not provided by supplier.**OTHER MATERIAL NOTES: **Stainless steel alloy woven mesh used for insect or bird screen.****CHROMIUM**

ID: 7440-47-3

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2019-12-20**

%: 17.00 - 19.00

GS: LT-P1

RC: UNK

NANO: No

ROLE: Ingredient

| HAZARD TYPE | AGENCY AND LIST TITLES | WARNINGS |
|----------------|---------------------------------------|---|
| RESPIRATORY | AOEC - Asthmagens | Asthmagen (Rs) - sensitizer-induced |
| ENDOCRINE | TEDX - Potential Endocrine Disruptors | Potential Endocrine Disruptor |
| SKIN SENSITIZE | MAK | Sensitizing Substance Sh - Danger of skin sensitization |

SUBSTANCE NOTES: Ingredient used in the manufacturer of stainless steel mesh screen.

NICKEL

ID: 7440-02-0

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2019-12-20

%: 8.00 - 10.00

GS: LT-1

RC: UNK

NANO: No

ROLE: Ingredient

| HAZARD TYPE | AGENCY AND LIST TITLES | WARNINGS |
|----------------|---|---|
| RESPIRATORY | AOEC - Asthmagens | Asthmagen (Rs) - sensitizer-induced |
| CANCER | IARC | Group 1 - Agent is Carcinogenic to humans |
| CANCER | IARC | Group 2b - Possibly carcinogenic to humans |
| CANCER | CA EPA - Prop 65 | Carcinogen |
| CANCER | US CDC - Occupational Carcinogens | Occupational Carcinogen |
| CANCER | US NIH - Report on Carcinogens | Known to be a human Carcinogen |
| CANCER | US NIH - Report on Carcinogens | Reasonably Anticipated to be Human Carcinogen |
| SKIN SENSITIZE | EU - GHS (H-Statements) | H317 - May cause an allergic skin reaction |
| CANCER | EU - GHS (H-Statements) | H351 - Suspected of causing cancer |
| ORGAN TOXICANT | EU - GHS (H-Statements) | H372 - Causes damage to organs through prolonged or repeated exposure |
| MULTIPLE | German FEA - Substances Hazardous to Waters | Class 2 - Hazard to Waters |
| CANCER | MAK | Carcinogen Group 1 - Substances that cause cancer in man |
| RESPIRATORY | MAK | Sensitizing Substance Sah - Danger of airway & skin sensitization |

SUBSTANCE NOTES: Ingredient used in the manufacturer of stainless steel mesh screen.

MANGANESE

ID: 7439-96-5

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2019-12-20

%: 1.00 - 2.00

GS: LT-P1

RC: UNK

NANO: No

ROLE: Ingredient

| HAZARD TYPE | AGENCY AND LIST TITLES | WARNINGS |
|--------------|---|--|
| ENDOCRINE | TEDX - Potential Endocrine Disruptors | Potential Endocrine Disruptor |
| MULTIPLE | German FEA - Substances Hazardous to Waters | Class 2 - Hazard to Waters |
| REPRODUCTIVE | GHS - Japan | Toxic to reproduction - Category 1B [H360] |

SUBSTANCE NOTES: Ingredient used in the manufacturer of stainless steel mesh screen.

CARBON

ID: 7440-44-0

| HAZARD SCREENING METHOD: Pharos Chemical and Materials Library | | HAZARD SCREENING DATE: 2019-12-20 | | |
|--|------------------------|--|----------|------------------|
| #: 0.00 - 0.15 | GS: LT-UNK | RC: UNK | NANO: No | ROLE: Ingredient |
| HAZARD TYPE | AGENCY AND LIST TITLES | WARNINGS | | |
| None found | | No warnings found on HPD Priority Hazard Lists | | |

SUBSTANCE NOTES: Ingredient used in the manufacturer of stainless steel mesh screen.

SILICON

ID: 7440-21-3

| HAZARD SCREENING METHOD: Pharos Chemical and Materials Library | | HAZARD SCREENING DATE: 2019-12-20 | | |
|--|------------------------|--|----------|------------------|
| #: 0.00 - 0.75 | GS: LT-UNK | RC: UNK | NANO: No | ROLE: Ingredient |
| HAZARD TYPE | AGENCY AND LIST TITLES | WARNINGS | | |
| None found | | No warnings found on HPD Priority Hazard Lists | | |

SUBSTANCE NOTES: Ingredient used in the manufacturer of stainless steel mesh screen.

ALUMINUM ALLOY MESH (SCREEN)

#: 1.00 - 2.00

| | |
|--|--|
| PRODUCT THRESHOLD: 1000 ppm | RESIDUALS AND IMPURITIES CONSIDERED: Yes |
| RESIDUALS AND IMPURITIES NOTES: Information not provided by the supplier. | |
| OTHER MATERIAL NOTES: One of the choices for screen material is an aluminum mesh screen. | |

3003-H14 ALUMINUM

ID: 7429-90-5

| HAZARD SCREENING METHOD: Pharos Chemical and Materials Library | | HAZARD SCREENING DATE: 2019-12-20 | | |
|--|-----------|-----------------------------------|----------|-----------------------|
| #: 98.00 - 99.00 | GS: LT-P1 | RC: UNK | NANO: No | ROLE: Main Ingredient |

| 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: Ingredient used in the manufacturer of aluminum mesh screen.

NICKEL

ID: 7440-02-0

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

HAZARD SCREENING DATE: **2019-12-20**

#: **0.00 - 0.06**

GS: **LT-1**

RC: **UNK**

NANO: **No**

ROLE: **Ingredient**

| HAZARD TYPE | AGENCY AND LIST TITLES | WARNINGS |
|----------------|---|---|
| RESPIRATORY | AOEC - Asthmagens | Asthmagen (Rs) - sensitizer-induced |
| CANCER | IARC | Group 1 - Agent is Carcinogenic to humans |
| CANCER | IARC | Group 2b - Possibly carcinogenic to humans |
| CANCER | CA EPA - Prop 65 | Carcinogen |
| CANCER | US CDC - Occupational Carcinogens | Occupational Carcinogen |
| CANCER | US NIH - Report on Carcinogens | Known to be a human Carcinogen |
| CANCER | US NIH - Report on Carcinogens | Reasonably Anticipated to be Human Carcinogen |
| SKIN SENSITIZE | EU - GHS (H-Statements) | H317 - May cause an allergic skin reaction |
| CANCER | EU - GHS (H-Statements) | H351 - Suspected of causing cancer |
| ORGAN TOXICANT | EU - GHS (H-Statements) | H372 - Causes damage to organs through prolonged or repeated exposure |
| MULTIPLE | German FEA - Substances Hazardous to Waters | Class 2 - Hazard to Waters |
| CANCER | MAK | Carcinogen Group 1 - Substances that cause cancer in man |
| RESPIRATORY | MAK | Sensitizing Substance Sah - Danger of airway & skin sensitization |

SUBSTANCE NOTES: Ingredient used in the manufacturer of aluminum mesh screen.

COPPER

ID: 7440-50-8

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

HAZARD SCREENING DATE: **2019-12-20**

#: **0.00 - 0.05** GS: **LT-UNK** RC: **UNK** NANO: **No** ROLE: **Ingredient**

HAZARD TYPE AGENCY AND LIST TITLES WARNINGS

None found No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: **Ingredient used in the manufacturer of aluminum mesh screen.**

MANGANESE

ID: **7439-96-5**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2019-12-20**

#: **0.00 - 0.05** GS: **LT-P1** RC: **UNK** NANO: **No** ROLE: **Ingredient**

HAZARD TYPE AGENCY AND LIST TITLES WARNINGS

ENDOCRINE TEDX - Potential Endocrine Disruptors Potential Endocrine Disruptor

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

REPRODUCTIVE GHS - Japan Toxic to reproduction - Category 1B [H360]

SUBSTANCE NOTES: **Ingredient used in the manufacturer of aluminum mesh screen.**

FUSIBLE LINK AND SPRING

#: **0.50 - 1.00**

PRODUCT THRESHOLD: **1000 ppm**

RESIDUALS AND IMPURITIES CONSIDERED: **Yes**

RESIDUALS AND IMPURITIES NOTES: **Information is not provided by the supplier.**

OTHER MATERIAL NOTES: **The fusible link is part of the 1900 A fire rated louver and allows the operable blades to close one the link has melted (165F). 1900 A is the only louver that has this feature.**

COPPER

ID: **7440-50-8**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2019-12-20**

#: **1.00 - 2.00** GS: **LT-UNK** RC: **UNK** NANO: **No** ROLE: **Ingredient**

HAZARD TYPE AGENCY AND LIST TITLES WARNINGS

None found No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: **Used in creating Bismuth Alloy to soften the steel and allow the fusible link to melt at 165 degrees F.**

STEEL MANUFACTURE, CHEMICALS

ID: **65997-19-5**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2019-12-20**

#: **0.50 - 1.00** GS: **LT-UNK** RC: **UNK** NANO: **No** ROLE: **Ingredient**

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

SUBSTANCE NOTES: One of the ingredients in the fusible link for the 1900 A louver.

TIN

ID: 7440-31-5

| HAZARD SCREENING METHOD: Pharos Chemical and Materials Library | | HAZARD SCREENING DATE: 2019-12-20 | | |
|--|------------|-----------------------------------|----------|------------------|
| #: 0.00 - 0.50 | GS: LT-UNK | RC: UNK | NANO: No | ROLE: Ingredient |

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

SUBSTANCE NOTES: Used in making Bismuth Alloy which softens the steel allowing it to melt at 165 degrees F.

BISMUTH

ID: 7440-69-9

| HAZARD SCREENING METHOD: Pharos Chemical and Materials Library | | HAZARD SCREENING DATE: 2019-12-20 | | |
|--|------------|-----------------------------------|----------|------------------|
| #: 0.00 - 0.50 | GS: LT-UNK | RC: UNK | NANO: No | ROLE: Ingredient |

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

SUBSTANCE NOTES: Used in softening steel so it will melt at 165 degrees.

SELENIUM

ID: 7782-49-2

| HAZARD SCREENING METHOD: Pharos Chemical and Materials Library | | HAZARD SCREENING DATE: 2019-12-20 | | |
|--|-----------|-----------------------------------|----------|------------------|
| #: 0.00 - 1.00 | GS: LT-P1 | RC: UNK | NANO: No | ROLE: Ingredient |

| HAZARD TYPE | AGENCY AND LIST TITLES | WARNINGS |
|-------------|---|--|
| PBT | OR DEQ - Priority Persistent Pollutants | Priority Persistent Pollutant - Tier 1 |
| MAMMALIAN | EU - GHS (H-Statements) | H301 - Toxic if swallowed |
| MAMMALIAN | EU - GHS (H-Statements) | H331 - Toxic if inhaled |
| MULTIPLE | German FEA - Substances Hazardous to Waters | Class 2 - Hazard to Waters |
| CANCER | MAK | Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification |

SUBSTANCE NOTES: Used in bismuth alloy.

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

HAZARD SCREENING DATE: **2019-12-20**

#: **0.00 - 1.00** GS: **LT-1** RC: **UNK** NANO: **No** ROLE: **Ingredient**

| HAZARD TYPE | AGENCY AND LIST TITLES | WARNINGS |
|----------------|---|---|
| RESPIRATORY | AOEC - Asthmagens | Asthmagen (Rs) - sensitizer-induced |
| CANCER | IARC | Group 1 - Agent is Carcinogenic to humans |
| CANCER | IARC | Group 2b - Possibly carcinogenic to humans |
| CANCER | CA EPA - Prop 65 | Carcinogen |
| CANCER | US CDC - Occupational Carcinogens | Occupational Carcinogen |
| CANCER | US NIH - Report on Carcinogens | Known to be a human Carcinogen |
| CANCER | US NIH - Report on Carcinogens | Reasonably Anticipated to be Human Carcinogen |
| SKIN SENSITIZE | EU - GHS (H-Statements) | H317 - May cause an allergic skin reaction |
| CANCER | EU - GHS (H-Statements) | H351 - Suspected of causing cancer |
| ORGAN TOXICANT | EU - GHS (H-Statements) | H372 - Causes damage to organs through prolonged or repeated exposure |
| MULTIPLE | German FEA - Substances Hazardous to Waters | Class 2 - Hazard to Waters |
| CANCER | MAK | Carcinogen Group 1 - Substances that cause cancer in man |
| RESPIRATORY | MAK | Sensitizing Substance Sah - Danger of airway & skin sensitization |

SUBSTANCE NOTES: **Used in bismuth alloy.**

POWDER COAT

#: **0.00 - 1.40**

PRODUCT THRESHOLD: **1000 ppm**

RESIDUALS AND IMPURITIES CONSIDERED: **Yes**

RESIDUALS AND IMPURITIES NOTES: **Information not provided by the supplier.**

OTHER MATERIAL NOTES: **Mixture of polyester resins and pigments for coating vision lites. This is a dry powder electrostatically applied and then cured in the oven.**

UNDISCLOSED

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

HAZARD SCREENING DATE: **2019-12-20**

#: **50.00 - 59.00** GS: **NoGS** RC: **UNK** NANO: **No** ROLE: **Main element**

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

SUBSTANCE NOTES: The manufacturer does not provide specifics on these resins because its proprietary.

UNDISCLOSED

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

HAZARD SCREENING DATE: **2019-12-20**

#: **0.00 - 21.00** GS: **LT-UNK** RC: **UNK** NANO: **No** ROLE: **Ingredient**

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

SUBSTANCE NOTES: The manufacturer does not allow disclosure of the ingredients because the combination of ingredients is proprietary.

UNDISCLOSED

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

HAZARD SCREENING DATE: **2019-12-20**

#: **0.00 - 5.50** GS: **LT-1** RC: **UNK** NANO: **No** ROLE: **Ingredient**

| 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: The manufacturer does not allow disclosure of the ingredients because the combination of ingredients is proprietary.

UNDISCLOSED

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

HAZARD SCREENING DATE: **2019-12-20**

?: **0.00 - 2.60**

GS: **LT-1**

RC: **UNK**

NANO: **No**

ROLE: **Ingredient**

| 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: The manufacturer does not allow disclosure of the ingredients because the combination of ingredients is proprietary.

UNDISCLOSED

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

HAZARD SCREENING DATE: **2019-12-20**

?: **0.00 - 2.30**

GS: **LT-UNK**

RC: **UNK**

NANO: **No**

ROLE: **Ingredient**

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

SUBSTANCE NOTES: The manufacturer does not allow disclosure of the ingredients because the combination of ingredients is proprietary.

UNDISCLOSED

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

HAZARD SCREENING DATE: **2019-12-20**

?: **0.00 - 1.30**

GS: **BM-2**

RC: **UNK**

NANO: **No**

ROLE: **Ingredient**

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

SUBSTANCE NOTES: The manufacturer does not allow disclosure of the ingredients because the combination of ingredients is proprietary.

UNDISCLOSED

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

HAZARD SCREENING DATE: **2019-12-20**

#: **0.00 - 0.72**

GS: **LT-1**

RC: **UNK**

NANO: **No**

ROLE: **Ingredient**

| 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: **The manufacturer does not allow disclosure of the ingredients because the combination of ingredients is proprietary.**

UNDISCLOSED

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

HAZARD SCREENING DATE: **2019-12-20**

#: **0.00 - 0.64**

GS: **LT-UNK**

RC: **UNK**

NANO: **No**

ROLE: **Ingredient**

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

SUBSTANCE NOTES: **The manufacturer does not allow disclosure of the ingredients because the combination of ingredients is proprietary.**

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: **2022-**

CERTIFIER OR LAB: **None**

APPLICABLE FACILITIES: **All**

11-08

11-08

CERTIFICATE URL:

CERTIFICATION AND COMPLIANCE NOTES: **No liquid paint product is used in the manufacture of louvers. Finish is powder coat electrostatically applied and baked on for a durable long lasting finish.**

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.

SCREWS

HPD URL: **No HPD available**

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:

Depending on the louver model the appropriate screws will be included. For steel louvers, steel screws with powder coat paint are sent. For stainless steel louvers, stainless steel screws are included. Steel screws are powder coat painted to match the product..

Section 5: General Notes

This HPD covers all steel, galvanized, aluminum and stainless steel door louvers manufactured by Activar Construction Products Group - Air Louvers. Final assembly locations include: Minneapolis, MN and Commerce, CA. This product can be used to meet LEED v4 points for MR Credit: Building Product Disclosure and Optimization - Material Ingredients - Option 1. All ingredients have been screened against the Living Building Challenge Red List and is found to be Red List Free. Note: The undisclosed ingredients of the powder coat paint have also been screened and are confirmed Red List Free. Please contact us for more information if you are looking to meet LEED or LBC.

MANUFACTURER INFORMATION

MANUFACTURER: Activar Construction Products Group
ADDRESS: 4450 West 78th Street Circle
Minneapolis Minnesota 55435, United States
WEBSITE: www.activexcp.com/

CONTACT NAME: Kathrine Barrett
TITLE: Market Analyst/Specifications Engineer
PHONE: 9528381912
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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)
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.