

HPD UNIQUE IDENTIFIER: 20823

CLASSIFICATION: 12 Furnishings

PRODUCT DESCRIPTION: The Contract Series Two Shading System sets the benchmark for performance, function, and aesthetics, with easy installation and a best in class operation system. Functions include the ability to link multiple shades to link up to 90-degree angles, withstanding widths up to 12' and pulling forces consistent across the range of sizes up to 120 square feet all 2-3 lbs of pull forces all of which compliments the premium S45 and S60 systems: Sleek, compact shading system with an extensive color pallet; Durable construction, modern design and Industrial aesthetic; Compact and easily hidden in internally and ; Dynamic light and heat control can aid in increasing energy efficiency.

Section 1: Summary

Nested Method / Product Threshold

CONTENT INVENTORY

Inventory Reporting Format

- Nested Materials Method
- Basic Method

Threshold level

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

Residuals/Impurities

Residuals/Impurities Considered in 7 of 7 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

All substances disclosed by Name (Specific or Generic) and Identifier.

Threshold Disclosed Per

- Material
- Product

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 ALLOY TUBE [MAGNESIUM LT-UNK | PHY SILICON LT-UNK
 MANGANESE LT-P1 | END | MUL | REP IRON LT-P1 | END CHROMIUM,
 METALLIC LT-P1 | RES | END | SKI COPPER LT-P1 | MUL TITANIUM LT-UNK
 ZINC LT-P1 | AQU | PHY | END | MUL] MILD STEEL (CARBON STEEL) [IRON
 LT-P1 | END SILICON LT-UNK GRAPHITE LT-UNK MANGANESE LT-P1 | END |
 MUL | REP SULFUR, ELEMENTAL LT-UNK | SKI PHOSPHORUS BM-2 | PHY |
 MAM NICKEL (METALLIC) LT-1 | RES | CAN | SKI | MAM | MUL 1,3-
 BENZENEDICARBOXYLIC ACID, POLYMER WITH 1,4-
 BENZENEDICARBOXYLIC ACID, 2,2-DIMETHYL-1,3-PROPANEDIOL, 1,2-
 ETHANEDIOL AND HEXANEDIOIC ACID NoGS BARIUM SULFATE BM-2 | CAN]
 POLYOXYMETHYLENE COPOLYMER [1,3,5-TRIOXANE, POLYMER WITH 1,3-
 DIOXOLANE LT-UNK] POLAMIDE 6 [POLY[IMINO(1,6-DIOXO-1,6-
 HEXANEDIYL)IMINO-1,6-HEXANEDIYL] LT-UNK] THERMOPLASTIC POLYMER
 COMPOSITE [NYLON 6 LT-UNK GLASS, OXIDE, CHEMICALS LT-UNK]
 POLYCARBONATE [1,3-DIOXOLAN-2-ONE LT-UNK BISPHENOL A BM-1 | END
 | REP | DEL | MUL | SKI | EYE] STEEL (CHROME) [IRON LT-P1 | 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:

The S45 inventory as listed in this HPD is grouped by piece composition and not individual material parts. The HPD was performed in this manner because S45 system are customizable from hundreds of oof pieces that could not be individually listed here. This inventory is conducted to the threshold of the possibilities of those systems with the example minimum and maximum system parts listed below. A minimum and maximum were chosen for practical and possible installations of the S45 system. Both the minimum and maximum systems include the following parts: chainwinder, bracket set, idler, tube, chain, easy link drive, bearing bracket. Each part listing can have multiple small pieces such as springs and hardware. All pieces were considered for the 100 ppm threshold.

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 V1.2 (Section 01350/CHPS) - Classroom & Office scenario

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: 2020-06-25

PUBLISHED DATE: 2020-06-25

EXPIRY DATE: 2023-06-25



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 ALLOY TUBE

#: 63.6200 - 93.7600

PRODUCT THRESHOLD: 100 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

MATERIAL TYPE: Metal

RESIDUALS AND IMPURITIES NOTES: Residuals and impurities screened using the toxnet database. No actual tests were performed on the physical materials used for these parts. All residuals and impurities are based on the toxnet database and are not a guarantee of presence in the actual material. They are listed for reference only. This is for Aluminum alloy 6063.

OTHER MATERIAL NOTES:

MAGNESIUM

ID: 7439-95-4

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2020-06-25

#: 45.0000 - 90.0000

GS: LT-UNK

RC: None

NANO: No

SUBSTANCE ROLE: Alloy element

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

SUBSTANCE NOTES: Per the PubChem database: COMMERCIAL MAGNESIUM IS ABOUT 99.9% PURE; CHIEF CONTAMINANTS ARE ALUMINUM, COPPER, IRON, MANGANESE, NICKEL & SILICON. MAGNESIUM OF HIGH PURITY IS OBTAINED BY DISTILLATION OF IMPURE METAL IN VACUO.

SILICON

ID: 7440-21-3

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2020-06-25

#: 20.0000 - 40.0000

GS: LT-UNK

RC: None

NANO: No

SUBSTANCE ROLE: Alloy element

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

SUBSTANCE NOTES: Per the PubChem database: Impurities: Boron, aluminum; garium; indium; germanium; tin; phosphorus; arsenic; antimony; copper; oxygen; sulfur; iron; tellurium. No actual quantities are listed so the threshold level is unknown. This is not listed in Quartz.

MANGANESE

ID: 7439-96-5

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2020-06-25

#: 0.9997 - 10.0000

GS: LT-P1

RC: None

NANO: No

SUBSTANCE ROLE: Alloy 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: In accordance with the HPD guide on special circumstances: The threshold applied to Residuals and Impurities (R/I) should be the same as the threshold applied to intentionally added substances, in terms of level (i.e., 100 ppm, 1000 ppm, per SDS, etc.) and whether applied to each homogenous Material or to the Product as a whole. No impurities are noted at the threshold of 100 ppm.

IRON

ID: 7439-89-6

| HAZARD SCREENING METHOD: Pharos Chemical and Materials Library | | HAZARD SCREENING DATE: 2020-06-25 | | |
|---|---------------------------------------|--|-----------------|--------------------------------------|
| %: 0.0000 - 35.0000 | GS: LT-P1 | RC: None | NANO: No | SUBSTANCE ROLE: Alloy element |
| HAZARD TYPE | AGENCY AND LIST TITLES | WARNINGS | | |
| ENDOCRINE | TEDX - Potential Endocrine Disruptors | Potential Endocrine Disruptor | | |

SUBSTANCE NOTES: Quartz database reports no known hazardous impurities. PubChem only lists impurities for pig iron and without concentrations: silicon, sulfur, phosphorus, manganese and carbon.

CHROMIUM, METALLIC

ID: 7440-47-3

| HAZARD SCREENING METHOD: Pharos Chemical and Materials Library | | HAZARD SCREENING DATE: 2020-06-25 | | |
|---|---------------------------------------|---|-----------------|--------------------------------------|
| %: 0.0000 - 10.0000 | GS: LT-P1 | RC: None | NANO: No | SUBSTANCE ROLE: Alloy 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: In accordance with the HPD guide on special circumstances: The threshold applied to Residuals and Impurities (R/I) should be the same as the threshold applied to intentionally added substances, in terms of level (i.e., 100 ppm, 1000 ppm, per SDS, etc.) and whether applied to each homogenous Material or to the Product as a whole. No impurities are noted at the threshold of 100 ppm.

COPPER

ID: 7440-50-8

| HAZARD SCREENING METHOD: Pharos Chemical and Materials Library | | HAZARD SCREENING DATE: 2020-06-25 | | |
|---|---|--|-----------------|--------------------------------------|
| %: 0.0000 - 10.0000 | GS: LT-P1 | RC: None | NANO: No | SUBSTANCE ROLE: Alloy element |
| HAZARD TYPE | AGENCY AND LIST TITLES | WARNINGS | | |
| MULTIPLE | German FEA - Substances Hazardous to Waters | Class 2 - Hazard to Waters | | |

SUBSTANCE NOTES: In accordance with the HPD guide on special circumstances: The threshold applied to Residuals and Impurities (R/I) should be the same as the threshold applied to intentionally added substances, in terms of level (i.e., 100 ppm, 1000 ppm, per SDS, etc.) and whether applied to each homogenous Material or to the Product as a whole. No impurities are noted at the threshold of 100 ppm.

TITANIUM

ID: 7440-32-6

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

HAZARD SCREENING DATE: **2020-06-25**

#: **0.0000 - 10.0000**

GS: **LT-UNK**

RC: **None**

NANO: **No**

SUBSTANCE ROLE: **Alloy element**

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

SUBSTANCE NOTES: In accordance with the HPD guide on special circumstances: The threshold applied to Residuals and Impurities (R/I) should be the same as the threshold applied to intentionally added substances, in terms of level (i.e., 100 ppm, 1000 ppm, per SDS, etc.) and whether applied to each homogenous Material or to the Product as a whole. No impurities are noted at the threshold of 100 ppm.

ZINC

ID: 7440-66-6

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

HAZARD SCREENING DATE: **2020-06-25**

#: **0.0000 - 10.0000**

GS: **LT-P1**

RC: **None**

NANO: **No**

SUBSTANCE ROLE: **Alloy element**

| 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: In accordance with the HPD guide on special circumstances: The threshold applied to Residuals and Impurities (R/I) should be the same as the threshold applied to intentionally added substances, in terms of level (i.e., 100 ppm, 1000 ppm, per SDS, etc.) and whether applied to each homogenous Material or to the Product as a whole. No impurities are noted at the threshold of 100 ppm.

MILD STEEL (CARBON STEEL)

#: **20.6800 - 24.0400**

PRODUCT THRESHOLD: **100 ppm**

RESIDUALS AND IMPURITIES CONSIDERED: **Yes**

MATERIAL TYPE: **Metal**

RESIDUALS AND IMPURITIES NOTES: Residuals and impurities screened using the toxnet database. The chemical composition of steel is from averaging several sources including the Quartz database. No actual tests were performed on the actual materials used for these parts. All residuals and impurities are based on the toxnet database and are not a guarantee of presence in the actual material. They are listed for reference only.

OTHER MATERIAL NOTES:

IRON

ID: 7439-89-6

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

HAZARD SCREENING DATE: **2020-06-25**

#: 97.9981 - 97.9992

GS: LT-P1

RC: None

NANO: No

SUBSTANCE ROLE: Alloy element

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

SUBSTANCE NOTES: Quartz database reports no known hazardous impurities. PubChem only lists impurities for pig iron and without concentrations: silicon, sulfur, phosphorus, manganese and carbon.

SILICON

ID: 7440-21-3

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2020-06-25

#: 0.2787 - 0.2805 GS: LT-UNK RC: None NANO: No SUBSTANCE ROLE: Alloy element

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

SUBSTANCE NOTES: In accordance with the HPD guide on special circumstances: The threshold applied to Residuals and Impurities (R/I) should be the same as the threshold applied to intentionally added substances, in terms of level (i.e., 100 ppm, 1000 ppm, per SDS, etc.) and whether applied to each homogenous Material or to the Product as a whole. No impurities are noted at the threshold of 100 ppm.

GRAPHITE

ID: 7440-44-0

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2020-06-25

#: 0.2515 - 0.2912 GS: LT-UNK RC: None NANO: No SUBSTANCE ROLE: Alloy element

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

SUBSTANCE NOTES: In accordance with the HPD guide on special circumstances: The threshold applied to Residuals and Impurities (R/I) should be the same as the threshold applied to intentionally added substances, in terms of level (i.e., 100 ppm, 1000 ppm, per SDS, etc.) and whether applied to each homogenous Material or to the Product as a whole. No impurities are noted at the threshold of 100 ppm.

MANGANESE

ID: 7439-96-5

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2020-06-25

#: 0.0998 - 0.1015 GS: LT-P1 RC: None NANO: No SUBSTANCE ROLE: Alloy 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: In accordance with the HPD guide on special circumstances: The threshold applied to Residuals and Impurities (R/I) should be the same as the threshold applied to intentionally added substances, in terms of level (i.e., 100 ppm, 1000 ppm, per SDS, etc.) and whether applied to each homogenous Material or to the Product as a whole. No impurities are noted at the threshold of 100 ppm.

SULFUR, ELEMENTAL

ID: 7704-34-9

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2020-06-25**%: **0.0484 - 0.0499**GS: **LT-UNK**RC: **None**NANO: **No**SUBSTANCE ROLE: **Alloy element**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

SKIN IRRITATION**EU - GHS (H-Statements)****H315 - Causes skin irritation**

SUBSTANCE NOTES: In accordance with the HPD guide on special circumstances: The threshold applied to Residuals and Impurities (R/I) should be the same as the threshold applied to intentionally added substances, in terms of level (i.e., 100 ppm, 1000 ppm, per SDS, etc.) and whether applied to each homogenous Material or to the Product as a whole. No impurities are noted at the threshold of 100 ppm.

PHOSPHORUS

ID: 7723-14-0

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2020-06-25**%: **0.0387 - 0.0624**GS: **BM-2**RC: **None**NANO: **No**SUBSTANCE ROLE: **Alloy element**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

PHYSICAL HAZARD (REACTIVE)**EU - GHS (H-Statements)****H228 - Flammable solid****MAMMALIAN****US EPA - EPCRA Extremely Hazardous Substances****Extremely Hazardous Substances**

SUBSTANCE NOTES: In accordance with the HPD guide on special circumstances: The threshold applied to Residuals and Impurities (R/I) should be the same as the threshold applied to intentionally added substances, in terms of level (i.e., 100 ppm, 1000 ppm, per SDS, etc.) and whether applied to each homogenous Material or to the Product as a whole. No impurities are noted at the threshold of 100 ppm.

NICKEL (METALLIC)

ID: 7440-02-0

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2020-06-25**%: **0.0097 - 0.6614**GS: **LT-1**RC: **None**NANO: **No**SUBSTANCE ROLE: **Plating agent**

| 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: Per the PubChem database: Commercial nickel metal is more than 99.5% pure and may be in the form of square plates, powder, briquets, pellets, ingots, disks, or shot.

1,3-BENZENEDICARBOXYLIC ACID, POLYMER WITH 1,4-BENZENEDICARBOXYLIC ACID, 2,2-DIMETHYL-1,3-PROPANEDIOL, 1,2-ETHANEDIOL AND HEXANEDIOIC ACID

ID: 40471-09-8

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

HAZARD SCREENING DATE: **2020-06-25**

%: **0.0000 - 0.2163**

GS: **NoGS**

RC: **UNK**

NANO: **No**

SUBSTANCE ROLE: **Binder**

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

SUBSTANCE NOTES: In accordance with the HPD guide on special circumstances: The threshold applied to Residuals and Impurities (R/I) should be the same as the threshold applied to intentionally added substances, in terms of level (i.e., 100 ppm, 1000 ppm, per SDS, etc.) and whether applied to each homogenous Material or to the Product as a whole. No impurities are noted at the threshold of 100 ppm.

BARIUM SULFATE

ID: 7727-43-7

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

HAZARD SCREENING DATE: **2020-06-25**

%: **0.0000 - 0.0832**

GS: **BM-2**

RC: **UNK**

NANO: **No**

SUBSTANCE ROLE: **Filler**

| HAZARD TYPE | AGENCY AND LIST TITLES | WARNINGS |
|-------------|------------------------|--|
| CANCER | MAK | Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels |

SUBSTANCE NOTES: In accordance with the HPD guide on special circumstances: The threshold applied to Residuals and Impurities (R/I) should be the same as the threshold applied to intentionally added substances, in terms of level (i.e., 100 ppm, 1000 ppm, per SDS, etc.) and whether applied to each homogenous Material or to the Product as a whole. No impurities are noted at the threshold of 100 ppm.

POLYOXYMETHYLENE COPOLYMER %: 6.8000 - 7.2700

PRODUCT THRESHOLD: 100 ppm RESIDUALS AND IMPURITIES CONSIDERED: Yes MATERIAL TYPE: Polymeric Material

RESIDUALS AND IMPURITIES NOTES: Residuals and impurities screened using the toxnet database. No actual tests were performed on the physical materials used for these parts. All residuals and impurities are based on the toxnet database and are not a guarantee of presence in the actual material. They are listed for reference only.

OTHER MATERIAL NOTES:

1,3,5-TRIOXANE, POLYMER WITH 1,3-DIOXOLANE

ID: 24969-26-4

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2020-06-25

%: 97.0000 - 99.9862

GS: LT-UNK

RC: None

NANO: No

SUBSTANCE ROLE: Monomer

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

SUBSTANCE NOTES: In accordance with the HPD guide on special circumstances: The threshold applied to Residuals and Impurities (R/I) should be the same as the threshold applied to intentionally added substances, in terms of level (i.e., 100 ppm, 1000 ppm, per SDS, etc.) and whether applied to each homogenous Material or to the Product as a whole. No impurities are noted at the threshold of 100 ppm.

POLAMIDE 6 %: 3.3400 - 4.8600

PRODUCT THRESHOLD: 100 ppm RESIDUALS AND IMPURITIES CONSIDERED: Yes MATERIAL TYPE: Polymeric Material

RESIDUALS AND IMPURITIES NOTES: Residuals and impurities screened using the toxnet database. In accordance with the HPD guide on special circumstances: The threshold applied to Residuals and Impurities (R/I) should be the same as the threshold applied to intentionally added substances, in terms of level (i.e., 100 ppm, 1000 ppm, per SDS, etc.) and whether applied to each homogenous Material or to the Product as a whole. No impurities are noted at the threshold of 100 ppm.

OTHER MATERIAL NOTES:

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2020-06-25**%: **100.0000 - 100.0000**GS: **LT-UNK**RC: **UNK**NANO: **No**SUBSTANCE ROLE: **Monomer**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

None found

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: In accordance with the HPD guide on special circumstances: The threshold applied to Residuals and Impurities (R/I) should be the same as the threshold applied to intentionally added substances, in terms of level (i.e., 100 ppm, 1000 ppm, per SDS, etc.) and whether applied to each homogenous Material or to the Product as a whole. No impurities are noted at the threshold of 100 ppm.

THERMOPLASTIC POLYMER COMPOSITE%: **1.2100 - 5.1900**PRODUCT THRESHOLD: **100 ppm**RESIDUALS AND IMPURITIES CONSIDERED: **Yes**MATERIAL TYPE: **Polymeric Material**

RESIDUALS AND IMPURITIES NOTES: Residuals and impurities screened using the toxnet database. No actual tests were performed on the physical materials used for these parts. All residuals and impurities are based on the toxnet database and are not a guarantee of presence in the actual material. They are listed for reference only. This inventory is based on a generic specification. The manufacturer would not release their actual inventory.

OTHER MATERIAL NOTES:

NYLON 6

ID: 25038-54-4

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2020-06-25**%: **30.0000 - 70.0000**GS: **LT-UNK**RC: **None**NANO: **No**SUBSTANCE ROLE: **Monomer**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

None found

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: In accordance with the HPD guide on special circumstances: The threshold applied to Residuals and Impurities (R/I) should be the same as the threshold applied to intentionally added substances, in terms of level (i.e., 100 ppm, 1000 ppm, per SDS, etc.) and whether applied to each homogenous Material or to the Product as a whole. No impurities are noted at the threshold of 100 ppm.

GLASS, OXIDE, CHEMICALS

ID: 65997-17-3

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2020-06-25**%: **0.0000 - 30.0000**GS: **LT-UNK**RC: **None**NANO: **No**SUBSTANCE ROLE: **Structure component**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

None found

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: In accordance with the HPD guide on special circumstances: The threshold applied to Residuals and Impurities (R/I) should be the same as the threshold applied to intentionally added substances, in terms of level (i.e., 100 ppm, 1000 ppm, per SDS, etc.) and whether applied to each homogenous Material or to the Product as a whole. No impurities are noted at the threshold of 100 ppm.

POLYCARBONATE%: **0.6600 - 0.7600**PRODUCT THRESHOLD: **100 ppm**RESIDUALS AND IMPURITIES CONSIDERED: **Yes**MATERIAL TYPE: **Polymeric Material**

RESIDUALS AND IMPURITIES NOTES: Residuals and impurities screened using the toxnet database. No actual tests were performed on the physical materials used for these parts. All residuals and impurities are based on the toxnet database and are not a guarantee of presence in the actual material. They are listed for reference only.

OTHER MATERIAL NOTES:

1,3-DIOXOLAN-2-ONE

ID: 96-49-1

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2020-06-25**%: **0.0000 - 75.0000**GS: **LT-UNK**RC: **None**NANO: **No**SUBSTANCE ROLE: **Binder**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

None found

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: In accordance with the HPD guide on special circumstances: The threshold applied to Residuals and Impurities (R/I) should be the same as the threshold applied to intentionally added substances, in terms of level (i.e., 100 ppm, 1000 ppm, per SDS, etc.) and whether applied to each homogenous Material or to the Product as a whole. No impurities are noted at the threshold of 100 ppm.

BISPHENOL A

ID: 80-05-7

%: **0.0000 - 75.0000**GS: **BM-1**RC: **None**NANO: **No**SUBSTANCE ROLE: **Monomer**

| HAZARD TYPE | AGENCY AND LIST TITLES | WARNINGS |
|-----------------|--|--|
| ENDOCRINE | EU - Priority Endocrine Disruptors | Category 1 - In vivo evidence of Endocrine Disruption Activity |
| REPRODUCTIVE | CA EPA - Prop 65 | Reproductive Toxicity - Female |
| REPRODUCTIVE | EU - SVHC Authorisation List | Toxic to reproduction - Candidate list |
| ENDOCRINE | OSPAR - Priority PBTs & EDs & equivalent concern | Endocrine Disruptor - Substance of Possible Concern |
| DEVELOPMENTAL | US NIH - Reproductive & Developmental Monographs | Clear Evidence of Adverse Effects - Developmental Toxicity |
| REPRODUCTIVE | US NIH - Reproductive & Developmental Monographs | Some Evidence of Adverse Effects - Reproductive Toxicity |
| RESTRICTED LIST | US EPA - PPT Chemical Action Plans | EPA Chemical of Concern - Action Plan published |
| RESTRICTED LIST | US EPA - PPT Chemical Action Plans | TSCA Work Plan chemical - Action Plan in development |
| SKIN SENSITIZE | EU - GHS (H-Statements) | H317 - May cause an allergic skin reaction |
| EYE IRRITATION | EU - GHS (H-Statements) | H318 - Causes serious eye damage |
| REPRODUCTIVE | EU - GHS (H-Statements) | H360F - May damage fertility |
| REPRODUCTIVE | EU - REACH Annex XVII CMRs | Toxic to Reproduction Category 2 - Substances which should be regarded as if they impair fertility or cause Developmental Toxicity in humans |
| MULTIPLE | ChemSec - SIN List | CMR - Carcinogen, Mutagen &/or Reproductive Toxicant |
| ENDOCRINE | ChemSec - SIN List | Endocrine Disruption |
| ENDOCRINE | TEDX - Potential Endocrine Disruptors | Potential Endocrine Disruptor |
| MULTIPLE | German FEA - Substances Hazardous to Waters | Class 2 - Hazard to Waters |
| MULTIPLE | German FEA - Substances Hazardous to Waters | Class 3 - Severe Hazard to Waters |
| SKIN SENSITIZE | MAK | Sensitizing Substance SP - Danger of photocontact sensitization |
| REPRODUCTIVE | GHS - Japan | Toxic to reproduction - Category 1B [H360] |
| REPRODUCTIVE | EU - Annex VI CMRs | Reproductive Toxicity - Category 1B |

SUBSTANCE NOTES: In accordance with the HPD guide on special circumstances: The threshold applied to Residuals and Impurities (R/I) should be the same as the threshold applied to intentionally added substances, in terms of level (i.e., 100 ppm, 1000 ppm, per SDS, etc.) and whether applied to each homogenous Material or to the Product as a whole. No impurities are noted at the threshold of 100 ppm.

STEEL (CHROME)%: **0.1000 - 0.1800**PRODUCT THRESHOLD: **100 ppm**RESIDUALS AND IMPURITIES CONSIDERED: **Yes**MATERIAL TYPE: **Metal**

RESIDUALS AND IMPURITIES NOTES: Residuals and impurities screened using the toxnet database. The chemical composition for chrome steel is from ANSI standard 14400. The actual parts were not tested. In addition, all residual and impurity data is from peer-reviewed journal articles and scientific data. Residuals and impurities are listed for reference only.

IRON

ID: **7439-89-6**

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

HAZARD SCREENING DATE: **2020-06-25**

#: **97.0000 - 97.7778**

GS: **LT-P1**

RC: **None**

NANO: **No**

SUBSTANCE ROLE: **Alloy element**

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

SUBSTANCE NOTES: **Quartz database reports no known hazardous impurities. PubChem only lists impurities for pig iron and without concentrations: silicon, sulfur, phosphorus, manganese and carbon.**

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 V1.2 (Section 01350/CHPS) - Classroom & Office scenario

CERTIFYING PARTY: **Self-declared**

ISSUE DATE: **2019-04-**

EXPIRY DATE:

CERTIFIER OR LAB: **Berkeley**

APPLICABLE FACILITIES: **This covers the S45, it is not a facility restrictive test.**

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Analyticaal

CERTIFICATE URL:

CERTIFICATION AND COMPLIANCE NOTES: **A copy of the report can be found here: <https://rolleaseacmedacontract.com/wp-content/uploads/2020/05/S45-Low-VOC-LEED.pdf>**

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.

AMBIENT

HPD URL: [https://hpdrepository.hpd-](https://hpdrepository.hpd-collaborative.org/repository/HPDs/publish_430_Ambient_Fabric_by_Texstyle_a_division_of_Rollease_Acmeda.pdf)

FABRIC [collaborative.org/repository/HPDs/publish_430_Ambient_Fabric_by_Texstyle_a_division_of_Rollease_Acmeda.pdf](https://hpdrepository.hpd-collaborative.org/repository/HPDs/publish_430_Ambient_Fabric_by_Texstyle_a_division_of_Rollease_Acmeda.pdf)

BY

TEXSTYLE

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:

This is a fabric for the window shade system.

ALKENZ 3000 NET

HPD URL: [https://hpdrepository.hpd-](https://hpdrepository.hpd-collaborative.org/repository/HPDs/publish_430_Rollease_Acmeda_Alkenz_3000_NET_Fabric.pdf)

[collaborative.org/repository/HPDs/publish_430_Rollease_Acmeda_Alkenz_3000_NET_Fabric.pdf](https://hpdrepository.hpd-collaborative.org/repository/HPDs/publish_430_Rollease_Acmeda_Alkenz_3000_NET_Fabric.pdf)

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:

This is a fabric for the window shading system.

ALKENZ 3000 HT

HPD URL: [https://hpdrepository.hpd-](https://hpdrepository.hpd-collaborative.org/repository/HPDs/publish_430_Rollease_Acmeda_Alkenz_3000_HT_Fabric.pdf)

[collaborative.org/repository/HPDs/publish_430_Rollease_Acmeda_Alkenz_3000_HT_Fabric.pdf](https://hpdrepository.hpd-collaborative.org/repository/HPDs/publish_430_Rollease_Acmeda_Alkenz_3000_HT_Fabric.pdf)

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:

This is a fabric for the window shading system.

MESA FABRIC

HPD URL: [https://hpdrepository.hpd-](https://hpdrepository.hpd-collaborative.org/repository/HPDs/publish_430_Rollease_Acmeda_Mesa_Fabric.pdf)

[collaborative.org/repository/HPDs/publish_430_Rollease_Acmeda_Mesa_Fabric.pdf](https://hpdrepository.hpd-collaborative.org/repository/HPDs/publish_430_Rollease_Acmeda_Mesa_Fabric.pdf)

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:

This is a fabric for the window shading system.

TEMPE FABRIC

HPD URL: [https://hpdrepository.hpd-](https://hpdrepository.hpd-collaborative.org/repository/HPDs/publish_430_Rollease_Acmeda_Tempe_Fabric.pdf)

[collaborative.org/repository/HPDs/publish_430_Rollease_Acmeda_Tempe_Fabric.pdf](https://hpdrepository.hpd-collaborative.org/repository/HPDs/publish_430_Rollease_Acmeda_Tempe_Fabric.pdf)

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:

This is a fabric for the window shading system.

ALKENZ 4000 NET

HPD URL: https://hpdrepository.hpd-collaborative.org/repository/HPDs/publish_430_Rollease_Acmeda_Alkenz_4000_NET_Fabric.pdf

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:

This is a fabric for the window shading system.

Section 5: General Notes

This HPD includes all the system parts for the S45 system. accessories for this system are the shade fabrics by Textstlye by Rollease Acmeda. Those textiles are listed in the accessory section of this HPD. Any electronic components in this system are below the 10% threshold and are completely encased. As per the special instructions per HPD they are not included in this inventory. Electronic components may or may not be present in the installed system. In addition, the range for substances in this HPD is greater than 10% because the system is completely customizable and comes in custom sizes. For this reason, a minimum and maximum length system were created as the upper and lower thresholds to create the percentages.

MANUFACTURER INFORMATION

MANUFACTURER: **Rollease Acmeda**
ADDRESS: **750 E. Main Street**
Stamford CT 06902, United States of America
WEBSITE: **<https://rolleseeacmedacontract.com>**

CONTACT NAME: **Geremie Giancola**
TITLE: **Commercial Group Manager - North America**
PHONE: **(800) 552-5100**
EMAIL: **geremie.giancola@rolleseeacmeda.com**

The listed contact is responsible for the validity of this HPD and attests that it is accurate and complete to the best of his or her knowledge.

KEY

Hazard Types

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

GreenScreen (GS)

| | |
|---|--|
| BM-4 Benchmark 4 (prefer-safer chemical) | LT-1 List Translator 1 (Likely Benchmark-1) |
| BM-3 Benchmark 3 (use but still opportunity for improvement) | LT-UNK List Translator Benchmark Unknown (the chemical is present on at least one GreenScreen Specified List, but the information contained within the list did not result in a clear mapping to a LT-1 or LTP1 score.) |
| BM-2 Benchmark 2 (use but search for safer substitutes) | NoGS No GreenScreen. |
| BM-1 Benchmark 1 (avoid - chemical of high concern) | |
| BM-U Benchmark Unspecified (due to insufficient data) | |
| LT-P1 List Translator Possible 1 (Possible Benchmark-1) | |

Recycled Types

PreC Pre-consumer recycled content
PostC Post-consumer recycled content
UNK Inclusion of recycled content is unknown
None Does not include recycled content

Other Terms:

GHS SDS Globally Harmonized System of Classification and Labeling of Chemicals Safety Data Sheet

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.