

HPD UNIQUE IDENTIFIER: 26931

CLASSIFICATION: 12 51 83 Custom Office Furniture

PRODUCT DESCRIPTION: This HPD includes wood and metal accessories for the Pair Product lines: Planter Hook, Olli Coat Rack, Olli Frame, Olli Meeting Table, Stackable Caddy, Stackable Planter, Stackable Storage, Olli Plug, Bag Hook, Tuck, Mix Infills and Swing End Panel. Traverse from focus work to a collaborative environment in minutes by enhancing your workspace with Sidekicks and Elements designed to fit the needs of any workplace.

Section 1: Summary

Nested Method / Product Threshold

CONTENT INVENTORY

<p>Inventory Reporting Format</p> <p><input checked="" type="radio"/> Nested Materials Method</p> <p><input type="radio"/> Basic Method</p> <p>Threshold Disclosed Per</p> <p><input type="radio"/> Material</p> <p><input checked="" type="radio"/> Product</p>	<p>Threshold Level</p> <p><input checked="" type="radio"/> 100 ppm</p> <p><input type="radio"/> 1,000 ppm</p> <p><input type="radio"/> Per GHS SDS</p> <p><input type="radio"/> Other</p>	<p>Residuals/Impurities</p> <p>Considered in 9 of 9 Materials</p> <p>Explanation(s) provided for Residuals/Impurities?</p> <p><input checked="" type="radio"/> Yes <input type="radio"/> No</p>	<p><i>All Substances Above the Threshold Indicated Are:</i></p> <p>Characterized <input checked="" type="radio"/> Yes Ex/SC <input type="radio"/> Yes <input type="radio"/> No</p> <p><i>% weight and role provided for all substances except SC substances characterized according to SC guidance.</i></p> <p>Screened <input checked="" type="radio"/> Yes Ex/SC <input type="radio"/> Yes <input type="radio"/> No</p> <p><i>All substances screened using Priority Hazard Lists with results disclosed except SC substances screened according to SC guidance.</i></p> <p>Identified <input checked="" type="radio"/> Yes Ex/SC <input type="radio"/> Yes <input type="radio"/> No</p> <p><i>All substances disclosed by Name (Specific or Generic) and Identifier except SC substances identified according to SC guidance.</i></p>
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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

PARTICLEBOARD FOR FURNITURE CONSTRUCTION [SC:WOOD DUST Not Screened METHYLENE DIISOCYANATE NoGS POLYVINYL ACETATE LT-UNK] METAL [IRON, ELEMENTAL LT-P1 | END MANGANESE LT-P1 | END | MUL | REP COPPER LT-UNK | AQU SILICON, ELEMENTAL LT-UNK SULFUR, PRECIPITATED LT-UNK | SKI PHOSPHORUS (PRIMARY CASRN IS 7723-14-0) BM-2 | MAM | PHY CARBON LT-UNK] SC:BIO:SOLIDWOOD [SC:SOLID WOOD Not Screened] SC:BIO:WOODVENEER [SC:DOMESTIC WOOD VENEER Not Screened] UV CURED WOOD FINISH [BISPHENOL A-EPICHLOROHYDRIN ACRYLATE BM-1 DIPROPYLENE GLYCOL DIACRYLATE LT-UNK TRIPROPYLENE GLYCOL DIACRYLATE LT-P1 | SKI | MUL | EYE | AQU DIPROPYLENE GLYCOL (PRIMARY CASRN IS 25265-71-8) LT-UNK BISPHENOL A BM-1 | END | MUL | REP | DEV | SKI | EYE EPICHLOROHYDRIN LT-1 | CAN | END | SKI | MUL | MAM | REP | GEN SILICON DIOXIDE BM-1 | CAN HYDROCHLORIC ACID BM-2 | RES | MAM | SKI BISPHENOL A BM-1 | END | MUL | REP | DEV | SKI | EYE] MISC. HARDWARE [IRON, ELEMENTAL LT-P1 | END] WOOD ADHESIVE 1 [POLYVINYL ACETATE LT-UNK WATER BM-4 TALC BM-1 | CAN 2,2,4-TRIMETHYL-1,3-PENTANEDIOL DIISOBUTYRATE LT-P1 | END DIPROPYLENE GLYCOL MONOMETHYL ETHER LT-UNK POLYVINYL ALCOHOL LT-UNK ALUMINUM CHLORIDE LT-P1 | RES | SKI] WOOD ADHESIVE 2 [WATER (PRIMARY CASRN IS 7732-18-5) BM-4 POLYCHLOROPRENE LT-UNK ZINC OXIDE BM-1 | END | RES | MUL | AQU RESIN ACIDS AND ROSIN ACIDS, FUMARATED, CALCIUM SALTS LT-P1 | MUL] LAMINATE [SC:KRAFT PAPER Not Screened PHENOL-FORMALDEHYDE RESIN LT-P1 | RES CELLULOSE,

Number of Greenscreen BM-4/BM3 contents ... 2

Contents highest concern GreenScreen Benchmark or List translator Score ... BM-1

Nanomaterial ... No

INVENTORY AND SCREENING NOTES:

Special conditions applied: BiologicalMaterial

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

Our wood and metal accessories come in a wide range of options. To cover that full range we have created a low and high option and all configurations are included in that range. The "low" option is a metal bag hook. This is an individual sellable accessory. For the "high" option we used a Swing end panel 72" W x 42" H, with varying inserts from wood and laminate.

All other configurations are within this range.

Residuals and impurities are considered in accordance with the HPD Best Practice Guidance, 10.02.17, version 1

"The threshold applied to Residuals and Impurities (R/I) is the same as the threshold applied to intentionally added substances, in terms of level, i.e., 100 ppm or 1000 ppm. Residuals and impurities present below the declared Inventory Threshold do not need to be reported on the HPD."

This includes average data as declared in the common product database or in peer-reviewed scientific articles. For this product, no actual material has been tested therefore residuals and impurities are for informational purposes only and are not a guarantee of presence in the actual building material.

The main databases used for researching potential residuals and

MICROCRYSTALLINE **LT-UNK** | RES MELAMINE/FORMALDEHYDE
RESIN **LT-UNK** TITANIUM DIOXIDE **LT-1** | CAN | END POLYNOXYLIN
LT-P1 | RES HEXANEDIOIC ACID, POLYMER WITH N-(2-
AMINOETHYL)-1,2-ETHANEDIAMINE, REACTION PRODUCTS WITH
DIMETHYLAMINE AND EPICHLOROHYDRIN **LT-UNK**]

impurities are Pharos and PubChem (formerly toxnet). Any R/I above the threshold shall be listed on the HPD, otherwise, if none are listed then no residuals or impurities are common in that substance above the threshold.

SPECIAL CONDITION: Minor Fasteners

Version: SCMinorFasteners/2020-07-16

All hardware for this system not reported is in alignment with HPDC Special Conditions- Minor Fasteners. The total weight of all metal fasteners is <1% of the total weight of the system. Any fasteners reported above that threshold are listed on the HPD. The total combined weight of the commodity fasteners is between .05% and 1%. All minor fasteners fit within the specific guidelines as outlined in the HPD Guide for Special Conditions They are purchased from a third party, made to a generic specification, e.g. ASTM, and not made to order for the specific manufacturer.

Disclaimer- Every effort has been made to report the substances in this product by the manufacturer to the listed threshold. This is a voluntary, self-reported effort. Any errors or omissions shall be considered human error and therefore reported to the manufacturer. The manufacturer shall not be liable for omissions.

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: SCS Indoor Advantage Gold - Classroom & Office scenario

CONSISTENCY WITH OTHER PROGRAMS

No pre-checks completed or disclosed.

Third Party Verified?

Yes

No

PREPARER: Self-Prepared

VERIFIER:

VERIFICATION #:

SCREENING DATE: 2021-12-17

PUBLISHED DATE: 2021-12-29

EXPIRY DATE: 2024-12-17

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 2.2, available on the HPDC website at: www.hpd-collaborative.org/hpd-2-2-standard

PARTICLEBOARD FOR FURNITURE CONSTRUCTION

#: 49.0000 - 90.0000

PRODUCT THRESHOLD: 100 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

MATERIAL TYPE: Wood Dust, Fiber or Chips

RESIDUALS AND IMPURITIES NOTES: Residuals and impurities are considered in accordance with the HPD Best Practice Guidance, 10.02.17, version 1 “The threshold applied to Residuals and Impurities (R/I) is the same as the threshold applied to intentionally added substances, in terms of level, i.e., 100 ppm or 1000 ppm. Residuals and impurities present below the declared Inventory Threshold do not need to be reported on the HPD.” This includes average data as declared in the common product database or in peer-reviewed scientific articles. For this product, no actual material has been tested therefore residuals and impurities are for informational purposes only and are not a guarantee of presence in the actual building material. The main databases used for researching potential residuals and impurities are Pharos and PubChem (formerly toxnet). Any R/I above the threshold shall be listed on the HPD, otherwise, if none are listed then no residuals or impurities are common in that substance above the threshold.

OTHER MATERIAL NOTES: This particleboard is not used for door construction but is the primary core board for the furniture composition. The company only disclosed that the wood dust was 50-100% of the core's chemical composition. The cut sheet for the product lists that it uses NAF adhesive. NAF-based resins are resins formulated with no added formaldehyde as part of the resin cross-linking structure and include resins made from soy, polyvinyl acetate, or methylene diisocyanate. Resins in particleboard can be 0-40% by composition so the substances will be screened and adjusted accordingly. In addition, this product is FSC certified and CARB certified.

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **Not Screened**

%: **50.0000 - 100.0000** GS: **Not Screened** RC: **Both** NANO: **No** SUBSTANCE ROLE: **Binder**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
Hazard Screening not performed		

SUBSTANCE NOTES:
 Version: SCBioMats/2018-02-23
 Category: Tree-based materials
 Identifier: Wood dust

This disclosure does not provide information on allergens, hyper-accumulation of metals, production of any toxic substances during normal metabolic activities, pesticides, and other potential hazards or sources of hazards which may be found in certain biological materials. The company only disclosed that the wood dust was 50-100% of the core's chemical composition. The cut sheet for the product lists that it uses NAF adhesive. NAF-based resins are resins formulated with no added formaldehyde as part of the resin cross-linking structure and include resins made from soy, polyvinyl acetate, or methylene diisocyanate. Resins in particleboard can be 0-40% by composition so the substances will be screened and adjusted accordingly. In addition, this product is FSC certified and CARB certified. It is 90% recycled content- 82% post-industrial and 8 % post-consumer.

METHYLENE DIISOCYANATE

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-12-17 21:39:07**

%: **0.0100 - 40.0000** 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: The company only disclosed that the wood dust was 50-100% of the core's chemical composition. The cut sheet for the product lists that it uses NAF adhesive. NAF-based resins are resins formulated with no added formaldehyde as part of the resin cross-linking structure and include resins made from soy, polyvinyl acetate, or methylene diisocyanate. Resins in particleboard can be 0-40% by composition so the substances will be screened and adjusted accordingly. In addition, this product is FSC certified and CARB certified.

POLYVINYL ACETATE

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-12-17 21:39:06**

%: **0.0100 - 40.0000** GS: **LT-UNK** 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: The company only disclosed that the wood dust was 50-100% of the core's chemical composition. The cut sheet for the product lists that it uses NAF adhesive. NAF-based resins are resins formulated with no added formaldehyde as part of the resin cross-linking structure and include resins made from soy, polyvinyl acetate, or methylene diisocyanate. Resins in particleboard can be 0-40% by composition so the substances will be screened and adjusted accordingly. In addition, this product is FSC certified and CARB certified.

METAL

%: **30.0000**

PRODUCT THRESHOLD: **100 ppm** RESIDUALS AND IMPURITIES CONSIDERED: **Yes** MATERIAL TYPE: **Metal**

RESIDUALS AND IMPURITIES NOTES: Residuals and impurities are considered in accordance with the HPD Best Practice Guidance, 10.02.17, version 1 "The threshold applied to Residuals and Impurities (R/I) is the same as the threshold applied to intentionally added substances, in terms of level, i.e., 100 ppm or 1000 ppm. Residuals and impurities present below the declared Inventory Threshold do not need to be reported on the HPD." This includes average data as declared in the common product database or in peer-reviewed scientific articles. For this product, no actual material has been tested therefore residuals and impurities are for informational purposes only and are not a guarantee of presence in the actual building material. The main databases used for researching potential residuals and impurities are Pharos and PubChem (formerly toxnet). Any R/I above the threshold shall be listed on the HPD, otherwise, if none are listed then no residuals or impurities are common in that substance above the threshold.

OTHER MATERIAL NOTES: This material is used for the metal surround. It includes the 16 gauge metal tubing and mounting plate. These come from two different manufacturers therefore there is a range of compositions. Both are essentially sheet metal (carbon steel). Includes all options for legs including the sled base.

IRON, ELEMENTAL

ID: 7439-89-6

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-12-17 21:38:55**

%: **97.0000** GS: **LT-P1** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Alloy element**

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

SUBSTANCE NOTES: Per the PubChem database: Blast furnace pig iron contains silicon, sulfur, phosphorus, manganese and carbon.No Threshold is listed. Residuals and impurities are considered in accordance with the HPD Best Practice Guidance, 10.02.17, version 1 "The threshold applied to Residuals and Impurities (R/I) is the same as the threshold applied to intentionally added substances, in terms of level, i.e., 100 ppm or 1000 ppm. Residuals and impurities present below the declared Inventory Threshold do not need to be reported on the HPD."

This includes average data as declared in the common product database or in peer-reviewed scientific articles. For this product, no actual material has been tested therefore residuals and impurities are for informational purposes only and are not a guarantee of presence in the actual building material.

The main databases used for researching potential residuals and impurities are Pharos and PubChem (formerly toxnet). Any R/I above the threshold shall be listed on the HPD, otherwise, if none are listed then no residuals or impurities are common in that substance above the threshold.

MANGANESE

ID: 7439-96-5

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-12-17 21:39:02**

%: **1.1000** GS: **LT-P1** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Alloy element**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
REP	GHS - Japan	H360 - May damage fertility or the unborn child [Toxic to reproduction - Category 1B]

SUBSTANCE NOTES: Aluminum is a common residual but is below the threshold."Production of manganese metal is achieved by aluminum reduction of low iron-content manganese ore, and electrolytically from sulfate or chloride solution (Lewis 2001)." (ATSDR) Manganese with <0.1% metallic impurities can be produced electrolytically from a manganese sulfate solution (EPA 1984; Lewis 2001)." (ATSDR)

Residuals and impurities are considered in accordance with the HPD Best Practice Guidance, 10.02.17, version 1

"The threshold applied to Residuals and Impurities (R/I) is the same as the threshold applied to intentionally added substances, in terms of level, i.e., 100 ppm or 1000 ppm. Residuals and impurities present below the declared Inventory Threshold do not need to be reported on the HPD."

This includes average data as declared in the common product database or in peer-reviewed scientific articles. For this product, no actual material has been tested therefore residuals and impurities are for informational purposes only and are not a guarantee of presence in the actual building material.

The main databases used for researching potential residuals and impurities are Pharos and PubChem (formerly toxnet). Any R/I above the threshold shall be listed on the HPD, otherwise, if none are listed then no residuals or impurities are common in that substance above the threshold.

COPPER

ID: 7440-50-8

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-12-17 21:39:03**

#: **0.3500** GS: **LT-UNK** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Alloy element**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
AQU	EU - GHS (H-Statements)	H411 - Toxic to aquatic life with long lasting effects

SUBSTANCE NOTES: About 80% of the primary copper in the world comes from low-grade or poor sulfide ores, which are usually treated by pyrometallurgical methods, generally in the following sequence: (1) Beneficiation by froth flotation of ore to copper concentrate; (2) Optional partial roasting to obtain oxidized material or calcines; (3) two-stage pyrometallurgical extraction, (a) smelting concentrates to matte, (b) converting matte by oxidation to crude (converter or blister) copper; (4) Refining the crude copper, usually in two steps, (a) pyrometallurgically to fire-refined copper, (b) electrolytically to high-purity electrolytic copper.

[Gerhartz, W. (exec ed.). Ullmann's Encyclopedia of Industrial Chemistry. 5th ed.Vol A1: Deerfield Beach, FL: VCH Publishers, 1985 to Present., p. VA7 (86) 479]

Residuals and impurities are considered in accordance with the HPD Best Practice Guidance, 10.02.17, version 1

"The threshold applied to Residuals and Impurities (R/I) is the same as the threshold applied to intentionally added substances, in terms of level, i.e., 100 ppm or 1000 ppm. Residuals and impurities present below the declared Inventory Threshold do not need to be reported on the HPD."

This includes average data as declared in the common product database or in peer-reviewed scientific articles. For this product, no actual material has been tested therefore residuals and impurities are for informational purposes only and are not a guarantee of presence in the actual building material.

The main databases used for researching potential residuals and impurities are Pharos and PubChem (formerly toxnet). Any R/I above the threshold shall be listed on the HPD, otherwise, if none are listed then no residuals or impurities are common in that substance above the threshold.

SILICON, ELEMENTAL

ID: 7440-21-3

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-12-17 21:39:04**

#: **Impurity/Residual** GS: **LT-UNK** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Impurity/Residual**

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

SUBSTANCE NOTES: Residuals and impurities are considered in accordance with the HPD Best Practice Guidance, 10.02.17, version 1 “The threshold applied to Residuals and Impurities (R/I) is the same as the threshold applied to intentionally added substances, in terms of level, i.e., 100 ppm or 1000 ppm. Residuals and impurities present below the declared Inventory Threshold do not need to be reported on the HPD.”

This includes average data as declared in the common product database or in peer-reviewed scientific articles. For this product, no actual material has been tested therefore residuals and impurities are for informational purposes only and are not a guarantee of presence in the actual building material.

The main databases used for researching potential residuals and impurities are Pharos and PubChem (formerly toxnet). Any R/I above the threshold shall be listed on the HPD, otherwise, if none are listed then no residuals or impurities are common in that substance above the threshold.

SULFUR, PRECIPITATED

ID: 7704-34-9

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-12-17 21:39:06**

%: **Impurity/Residual** GS: **LT-UNK** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Impurity/Residual**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
SKI	EU - GHS (H-Statements) Annex 6 Table 3-1	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]

SUBSTANCE NOTES: Residuals and impurities are considered in accordance with the HPD Best Practice Guidance, 10.02.17, version 1 “The threshold applied to Residuals and Impurities (R/I) is the same as the threshold applied to intentionally added substances, in terms of level, i.e., 100 ppm or 1000 ppm. Residuals and impurities present below the declared Inventory Threshold do not need to be reported on the HPD.”

This includes average data as declared in the common product database or in peer-reviewed scientific articles. For this product, no actual material has been tested therefore residuals and impurities are for informational purposes only and are not a guarantee of presence in the actual building material.

The main databases used for researching potential residuals and impurities are Pharos and PubChem (formerly toxnet). Any R/I above the threshold shall be listed on the HPD, otherwise, if none are listed then no residuals or impurities are common in that substance above the threshold.

PHOSPHORUS (PRIMARY CASRN IS 7723-14-0)

ID: 29879-37-6

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-12-17 21:39:07**

%: **Impurity/Residual** GS: **BM-2** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Impurity/Residual**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
MAM	US EPA - EPCRA Extremely Hazardous Substances	Extremely Hazardous Substances
PHY	EU - GHS (H-Statements) Annex 6 Table 3-1	H228 - Flammable solid [Flammable solids - Category 1 or 2]

SUBSTANCE NOTES: Residuals and impurities are considered in accordance with the HPD Best Practice Guidance, 10.02.17, version 1 “The threshold applied to Residuals and Impurities (R/I) is the same as the threshold applied to intentionally added substances, in terms of level, i.e., 100 ppm or 1000 ppm. Residuals and impurities present below the declared Inventory Threshold do not need to be reported on the HPD.”

This includes average data as declared in the common product database or in peer-reviewed scientific articles. For this product, no actual material has been tested therefore residuals and impurities are for informational purposes only and are not a guarantee of presence in the actual building material.

The main databases used for researching potential residuals and impurities are Pharos and PubChem (formerly toxnet). Any R/I above the threshold shall be listed on the HPD, otherwise, if none are listed then no residuals or impurities are common in that substance above the threshold.

CARBON

ID: 7440-44-0

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-12-17 21:39:05**

SC: BIO: SOLID WOOD

%: 5.0000

PRODUCT THRESHOLD: 100 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

MATERIAL TYPE: Wood or Lumber

RESIDUALS AND IMPURITIES NOTES: Residuals and impurities are considered in accordance with the HPD Best Practice Guidance, 10.02.17, version 1 "The threshold applied to Residuals and Impurities (R/I) is the same as the threshold applied to intentionally added substances, in terms of level, i.e., 100 ppm or 1000 ppm. Residuals and impurities present below the declared Inventory Threshold do not need to be reported on the HPD." This includes average data as declared in the common product database or in peer-reviewed scientific articles. For this product, no actual material has been tested therefore residuals and impurities are for informational purposes only and are not a guarantee of presence in the actual building material. The main databases used for researching potential residuals and impurities are Pharos and PubChem (formerly toxnet). Any R/I above the threshold shall be listed on the HPD, otherwise, if none are listed then no residuals or impurities are common in that substance above the threshold.

OTHER MATERIAL NOTES: SpecialConditionApplied:BiologicalMaterial

SC: SOLID WOOD

ID: SC:Bio

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: Not Screened

%: 100.0000

GS: Not Screened

RC: UNK

NANO: No

SUBSTANCE ROLE: Biological material

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

Hazard Screening not performed

SUBSTANCE NOTES:

Version: SCBioMats/2018-02-23

Category: Tree-based materials

Identifier: hardwood

This disclosure does not provide information on allergens, hyper-accumulation of metals, production of any toxic substances during normal metabolic activities, pesticides, and other potential hazards or sources of hazards which may be found in certain biological materials. No additional notes needed.

SC: BIO: WOOD VENEER

%: 0.0100

PRODUCT THRESHOLD: 100 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

MATERIAL TYPE: Wood or Lumber

RESIDUALS AND IMPURITIES NOTES: Residuals and impurities are considered in accordance with the HPD Best Practice Guidance, 10.02.17, version 1 "The threshold applied to Residuals and Impurities (R/I) is the same as the threshold applied to intentionally added substances, in terms of level, i.e., 100 ppm or 1000 ppm. Residuals and impurities present below the declared Inventory Threshold do not need to be reported on the HPD." This includes average data as declared in the common product database or in peer-reviewed scientific articles. For this product, no actual material has been tested therefore residuals and impurities are for informational purposes only and are not a guarantee of presence in the actual building material. The main databases used for researching potential residuals and impurities are Pharos and PubChem (formerly toxnet). Any R/I above the threshold shall be listed on the HPD, otherwise, if none are listed then no residuals or impurities are common in that substance above the threshold.

OTHER MATERIAL NOTES: SpecialConditionApplied:BiologicalMaterial --- Pair uses a variety of domestic veneers for this collection. They also use laminate therefore this is an alternate material.

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **Not Screened**%: **100.0000** GS: **Not Screened** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Structure component**

HAZARD TYPE AGENCY AND LIST TITLES WARNINGS

Hazard Screening not performed

SUBSTANCE NOTES:

Version: SCBioMats/2018-02-23

Category: Tree-based materials

Identifier: Domestic Veneer, various choices

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

UV CURED WOOD FINISH

%: **0.0100**PRODUCT THRESHOLD: **100 ppm** RESIDUALS AND IMPURITIES CONSIDERED: **Yes** MATERIAL TYPE: **Polymeric Material**

RESIDUALS AND IMPURITIES NOTES: Residuals and impurities are considered in accordance with the HPD Best Practice Guidance, 10.02.17, version 1 "The threshold applied to Residuals and Impurities (R/I) is the same as the threshold applied to intentionally added substances, in terms of level, i.e., 100 ppm or 1000 ppm. Residuals and impurities present below the declared Inventory Threshold do not need to be reported on the HPD." This includes average data as declared in the common product database or in peer-reviewed scientific articles. For this product, no actual material has been tested therefore residuals and impurities are for informational purposes only and are not a guarantee of presence in the actual building material. The main databases used for researching potential residuals and impurities are Pharos and PubChem (formerly toxnet). Any R/I above the threshold shall be listed on the HPD, otherwise, if none are listed then no residuals or impurities are common in that substance above the threshold.

OTHER MATERIAL NOTES: The acrylate polymer is proprietary company information and can not be disclosed outside the manufacturer. It is not a hazardous substance as it is not reported on the SDS. The threshold level is 0.01. No substitute or clarification of information could be found in the database of common building materials.

This finish is above the reportable threshold but it difficult to obtain exact weights for the entire product. It is listed and screened above the threshold but a maximum number is not listed. As the manufacturer, we have used considerable resources to comply with the intent of the HPD by supplying this level of information.

BISPHENOL A-EPICHLOROHYDRIN ACRYLATE

ID: **55818-57-0**HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-12-17 21:38:57**%: **25.0000 - 50.0000** GS: **BM-1** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Film former**

HAZARD TYPE AGENCY AND LIST TITLES WARNINGS

None found No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: The residual monomer content of bisphenol-A in the epoxy resin as produced is a maximum of 1,000 ppm. The residual bisphenol-A will be further reacted when the product is used (i.e. when the epoxy resin is cured)." (EU Risk Assessment, 2003)

Epichlorohydrin (ECH), 1-chloro-2,3-epoxypropane, is a raw material used in the production of epoxy resins, synthetic glycerol, elastomers, paper, and pharmaceuticals [1-2]. ECH can enter drinking water supplies by leaching from epoxy resin coatings on pipes or through flocculating agents in water treatment. (Agilent Technologies)

DIPROPYLENE GLYCOL DIACRYLATE

ID: **57472-68-1**HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-12-17 21:38:59**%: **10.0000 - 25.0000** GS: **LT-UNK** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Antioxidant**

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

SUBSTANCE NOTES:

TRIPROPYLENE GLYCOL DIACRYLATE

ID: 42978-66-5

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-12-17 21:38:59**

#: **10.0000 - 25.0000** GS: **LT-P1** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Plasticizer**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
SKI	MAK	Sensitizing Substance Sh - Danger of skin sensitization
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
SKI	EU - GHS (H-Statements) Annex 6 Table 3-1	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
SKI	EU - GHS (H-Statements) Annex 6 Table 3-1	H317 - May cause an allergic skin reaction [Skin sensitization - Category 1]
EYE	EU - GHS (H-Statements) Annex 6 Table 3-1	H319 - Causes serious eye irritation [Serious eye damage/eye irritation - Category 2A]
AQU	EU - GHS (H-Statements) Annex 6 Table 3-1	H411 - Toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 2]

SUBSTANCE NOTES: No known impurities.

DIPROPYLENE GLYCOL (PRIMARY CASRN IS 25265-71-8)

ID: 78644-49-2

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-12-17 21:39:12**

#: **Impurity/Residual** GS: **LT-UNK** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Impurity/Residual**

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

SUBSTANCE NOTES: Listed as <1.0% content in BASF MSDS for commercial DGMA (Laromer DPGDA).

BISPHENOL A

ID: 80-05-7

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-12-17 21:39:13**

#: **Impurity/Residual** GS: **BM-1** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Impurity/Residual**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
END	OSPAR - Priority PBTs & EDs & equivalent concern	Endocrine Disruptor - Substance of Possible Concern
MUL	US EPA - PPT Chemical Action Plans	EPA Chemical of Concern - Action Plan published
MUL	US EPA - PPT Chemical Action Plans	TSCA Work Plan chemical - Action Plan in development
END	ChemSec - SIN List	Endocrine Disruption
REP	EU - SVHC Authorisation List	Toxic to reproduction - Candidate list
REP	EU - Annex VI CMRs	Reproductive Toxicity - Category 1B
MUL	ChemSec - SIN List	CMR - Carcinogen, Mutagen &/or Reproductive Toxicant
MUL	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters
DEV	CA EPA - Prop 65	Developmental toxicity
DEV	US NIH - Reproductive & Developmental Monographs	Clear Evidence of Adverse Effects - Developmental Toxicity
REP	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
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
REP	US NIH - Reproductive & Developmental Monographs	Some Evidence of Adverse Effects - Reproductive Toxicity
SKI	MAK	Sensitizing Substance SP - Danger of photocontact sensitization
REP	CA EPA - Prop 65	Reproductive Toxicity - Female
END	EU - Priority Endocrine Disruptors	Category 1 - In vivo evidence of Endocrine Disruption Activity
REP	GHS - Japan	H360 - May damage fertility or the unborn child [Toxic to reproduction - Category 1B]
SKI	EU - GHS (H-Statements) Annex 6 Table 3-1	H317 - May cause an allergic skin reaction [Skin sensitization - Category 1]
EYE	EU - GHS (H-Statements) Annex 6 Table 3-1	H318 - Causes serious eye damage [Serious eye damage/eye irritation - Category 1]
REP	EU - GHS (H-Statements) Annex 6 Table 3-1	H360F - May damage fertility [Reproductive toxicity - Category 1A or 1B]

SUBSTANCE NOTES: The residual monomer content of bisphenol-A in the epoxy resin as produced is a maximum of 1,000 ppm. The residual bisphenol-A will be further reacted when the product is used (i.e. when the epoxy resin is cured)." (EU Risk Assessment, 2003)

EPICHLOROHYDRIN

ID: 106-89-8

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-12-17 21:39:12**

#: **Impurity/Residual** GS: **LT-1** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Impurity/Residual**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
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CAN	US CDC - Occupational Carcinogens	Occupational Carcinogen
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
CAN	EU - REACH Annex XVII CMRs	Carcinogen Category 2 - Substances which should be regarded as if they are Carcinogenic to man
CAN	EU - Annex VI CMRs	Carcinogen Category 1B - Presumed Carcinogen based on animal evidence
SKI	MAK	Sensitizing Substance Sh - Danger of skin sensitization
MUL	ChemSec - SIN List	CMR - Carcinogen, Mutagen &/or Reproductive Toxicant
MUL	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters
CAN	CA EPA - Prop 65	Carcinogen
CAN	MAK	Carcinogen Group 2 - Considered to be carcinogenic for man
CAN	US NIH - Report on Carcinogens	Reasonably Anticipated to be Human Carcinogen
CAN	US EPA - IRIS Carcinogens	(1986) Group B2 - Probable human Carcinogen
CAN	IARC	Group 2a - Agent is probably Carcinogenic to humans
MAM	US EPA - EPCRA Extremely Hazardous Substances	Extremely Hazardous Substances
REP	CA EPA - Prop 65	Reproductive Toxicity - Male
END	EU - Priority Endocrine Disruptors	Category 1 - In vivo evidence of Endocrine Disruption Activity
GEN	GHS - New Zealand	6.6A - Known or presumed human mutagens
CAN	GHS - New Zealand	6.7A - Known or presumed human carcinogens
CAN	GHS - Australia	H350 - May cause cancer [Carcinogenicity - Category 1A or 1B]
GEN	GHS - Australia	H340 - May cause genetic defects [Germ cell mutagenicity - Category 1A or 1B]
CAN	GHS - Korea	H350 - May cause cancer [Carcinogenicity - Category 1]
CAN	GHS - Japan	H350 - May cause cancer [Carcinogenicity - Category 1B]
CAN	GHS - Malaysia	H350 - May cause cancer [Carcinogenicity - Category 1A or 1B]
SKI	EU - GHS (H-Statements) Annex 6 Table 3-1	H317 - May cause an allergic skin reaction [Skin sensitization - Category 1]
CAN	EU - GHS (H-Statements) Annex 6 Table 3-1	H350 - May cause cancer [Carcinogenicity - Category 1A or 1B]
SKI	EU - GHS (H-Statements) Annex 6 Table 3-1	H314 - Causes severe skin burns and eye damage [Skin corrosion/irritation - Category 1A or 1B or 1C]
MAM	EU - GHS (H-Statements) Annex 6 Table 3-1	H331 - Toxic if inhaled [Acute toxicity (inhalation) - Category 3]
MAM	EU - GHS (H-Statements) Annex 6 Table 3-1	H301 - Toxic if swallowed [Acute toxicity (oral) - Category 3]

MAM EU - GHS (H-Statements) Annex 6 Table 3-1 H311 - Toxic in contact with skin [Acute toxicity (dermal) Category 2]
 SUBSTANCE NOTES: Epichlorohydrin (ECH), 1-chloro-2,3-epoxypropane, is a raw material in the production of epoxy resins, synthetic glycerol, elastomers, paper, and pharmaceuticals [1-2]. ECH can enter drinking water supplies by leaching from epoxy resin coatings on pipes or through flocculating agents in water treatment. (Agilent Technologies)

SILICON DIOXIDE

ID: 7631-86-9

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-12-17 21:39:11**

#: **0.0000 - 10.0000** GS: **BM-1** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Abrasion resistance**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CAN	GHS - Japan	H350 - May cause cancer [Carcinogenicity - Category 1A]
CAN	GHS - Australia	H350i - May cause cancer by inhalation [Carcinogenicity - Category 1A or 1B]

SUBSTANCE NOTES: "The manufacturing process for pyrogenic silicas is based mainly on the combustion of volatile silanes, especially silicon tetrachloride, in an oxygen-hydrogen burner. Primary particles (7-50 nm particle size) of amorphous silica fuse together in the high-temperature flame to yield stable aggregates of between 100 and 500 nm in diameter. These aggregates form micron-sized agglomerates. The finely divided silica is separated from the hydrochloric acid-containing off-gas stream in filter stations. The hydrochloric acid content of the product is commonly reduced to less than 100 ppm by desorbing the hydrochloric acid with air in a fluid-bed reactor. Pyrogenic silica appears as a fluffy white powder. [IARC. Monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Man. Geneva: World Health Organization, International Agency for Research on Cancer, 1972-PRESENT. (Multivolume work). Available at:<http://monographs.iarc.fr/index.php> p. V68 56 (1997)]" (HSDB)

HYDROCHLORIC ACID

ID: 7647-01-0

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-12-17 21:39:10**

#: **Impurity/Residual** GS: **BM-2** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Impurity/Residual**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
RES	AOEC - Asthmagens	Asthmagen (Rr) - irritant-induced
MAM	US EPA - EPCRA Extremely Hazardous Substances	Extremely Hazardous Substances
SKI	EU - GHS (H-Statements) Annex 6 Table 3-1	H314 - Causes severe skin burns and eye damage [Skin corrosion/irritation - Category 1A or 1B or 1C]
MAM	EU - GHS (H-Statements) Annex 6 Table 3-1	H331 - Toxic if inhaled [Acute toxicity (inhalation) - Category 3]

SUBSTANCE NOTES: "The manufacturing process for pyrogenic silicas is based mainly on the combustion of volatile silanes, especially silicon tetrachloride, in an oxygen-hydrogen burner. Primary particles (7-50 nm particle size) of amorphous silica fuse together in the high-temperature flame to yield stable aggregates of between 100 and 500 nm in diameter. These aggregates form micron-sized agglomerates. The finely divided silica is separated from the hydrochloric acid-containing off-gas stream in filter stations. The hydrochloric acid content of the product is commonly reduced to less than 100 ppm by desorbing the hydrochloric acid with air in a fluid-bed reactor. Pyrogenic silica appears as a fluffy white powder. [IARC. Monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Man. Geneva: World Health Organization, International Agency for Research on Cancer, 1972-PRESENT. (Multivolume work). Available at:<http://monographs.iarc.fr/index.php> p. V68 56 (1997)]" (HSDB)

BISPHENOL A

ID: 80-05-7

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-12-17 21:39:09**

#: **Impurity/Residual** GS: **BM-1** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Impurity/Residual**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
END	OSPAR - Priority PBTs & EDs & equivalent concern	Endocrine Disruptor - Substance of Possible Concern
MUL	US EPA - PPT Chemical Action Plans	EPA Chemical of Concern - Action Plan published
MUL	US EPA - PPT Chemical Action Plans	TSCA Work Plan chemical - Action Plan in development
END	ChemSec - SIN List	Endocrine Disruption
REP	EU - SVHC Authorisation List	Toxic to reproduction - Candidate list
REP	EU - Annex VI CMRs	Reproductive Toxicity - Category 1B
MUL	ChemSec - SIN List	CMR - Carcinogen, Mutagen &/or Reproductive Toxicant
MUL	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters
DEV	CA EPA - Prop 65	Developmental toxicity
DEV	US NIH - Reproductive & Developmental Monographs	Clear Evidence of Adverse Effects - Developmental Toxicity
REP	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
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
REP	US NIH - Reproductive & Developmental Monographs	Some Evidence of Adverse Effects - Reproductive Toxicity
SKI	MAK	Sensitizing Substance SP - Danger of photocontact sensitization
REP	CA EPA - Prop 65	Reproductive Toxicity - Female
END	EU - Priority Endocrine Disruptors	Category 1 - In vivo evidence of Endocrine Disruption Activity
REP	GHS - Japan	H360 - May damage fertility or the unborn child [Toxic to reproduction - Category 1B]
SKI	EU - GHS (H-Statements) Annex 6 Table 3-1	H317 - May cause an allergic skin reaction [Skin sensitization - Category 1]
EYE	EU - GHS (H-Statements) Annex 6 Table 3-1	H318 - Causes serious eye damage [Serious eye damage/eye irritation - Category 1]
REP	EU - GHS (H-Statements) Annex 6 Table 3-1	H360F - May damage fertility [Reproductive toxicity - Category 1A or 1B]

MISC. HARDWARE

RESIDUALS AND IMPURITIES CONSIDERED: Yes
 %: 0.0100

PRODUCT NOTES: The residual monomer content of bisphenol-A in the epoxy resin as produced is a maximum of 1,000 ppm. Residual bisphenol-A will be further reacted when the product is used (i.e. when the epoxy resin is cured)." (EU Risk Assessment, 2003)

RESIDUALS AND IMPURITIES NOTES: Residuals and impurities are considered in accordance with the HPD Best Practice Guidance, 10.02.17, version 1 "The threshold applied to Residuals and Impurities (R/I) is the same as the threshold applied to intentionally added substances, in terms of level, i.e., 100 ppm or 1000 ppm. Residuals and impurities present below the declared Inventory Threshold do not need to be reported on the HPD." This includes average data as declared in the common product database or in peer-reviewed scientific articles. For this product, no actual material has been tested therefore residuals and impurities are for informational purposes only and are not a guarantee of presence in the actual building material. The main databases used for researching potential residuals and impurities are Pharos and PubChem (formerly toxnet). Any R/I above the threshold shall be listed on the HPD, otherwise, if none are listed then no residuals or impurities are common in that substance above the threshold.

OTHER MATERIAL NOTES: This material follows the SPecial Condition for minor fasteners. See the section "General Notes" for more information on that condition. All hardware is <5% of the weight of the products.

IRON, ELEMENTAL

ID: 7439-89-6

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-12-17 21:38:55**

#: **90.0000 - 97.0000** GS: **LT-P1** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Alloy element**

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

SUBSTANCE NOTES: Residuals and impurities were screened using the Pharos database. None listed. Per the PubChem database: Blast furnace pig iron contains silicon, sulfur, phosphorus, manganese and carbon. All impurities are below the threshold.

WOOD ADHESIVE 1

#: **0.0100**

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

RESIDUALS AND IMPURITIES NOTES: Residuals and impurities are considered in accordance with the HPD Best Practice Guidance, 10.02.17, version 1 "The threshold applied to Residuals and Impurities (R/I) is the same as the threshold applied to intentionally added substances, in terms of level, i.e., 100 ppm or 1000 ppm. Residuals and impurities present below the declared Inventory Threshold do not need to be reported on the HPD." This includes average data as declared in the common product database or in peer-reviewed scientific articles. For this product, no actual material has been tested therefore residuals and impurities are for informational purposes only and are not a guarantee of presence in the actual building material. The main databases used for researching potential residuals and impurities are Pharos and PubChem (formerly toxnet). Any R/I above the threshold shall be listed on the HPD, otherwise, if none are listed then no residuals or impurities are common in that substance above the threshold.

OTHER MATERIAL NOTES: This furniture collection can contain one of two wood adhesives or both. The low option they have the maximum percentage of composition by weight of 1.5% for low option and 5% for the high option. In the HPD they are listed as adhesive 1 and adhesive 2. This is a PVA interior wood glue. The database of common building materials was used to supplement the information given by the manufacturer. Citing proprietary information the manufacturer would not disclose the chemical inventory to 100 ppm. The information in the database was used as a supplement and should not be accepted as absolute. Every effort was made to make a complete inventory and screening of all materials.

This finish is above the reportable threshold but it difficult to obtain exact weights for the entire product. It is listed and screened above the threshold but a maximum number is not listed. As the manufacturer, we have used considerable resources to comply with the intent of the HPD by supplying this level of information.

POLYVINYL ACETATE

ID: 9003-20-7

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-12-17 21:38:56**

#: **30.0000 - 39.2300** GS: **LT-UNK** 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: This is a PVA interior wood glue. The database of common building materials was used to supplement the information given by the manufacturer. Citing proprietary information the manufacturer would not disclose the chemical inventory to 100 ppm. The information in the database was used as a supplement and should not be accepted as absolute. Every effort was made to make a complete inventory and screening of all materials.

WATER

ID: 7732-18-5

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-12-17 21:38:57**

#: **25.0000 - 40.1000** GS: **BM-4** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Solvent**

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

SUBSTANCE NOTES: This is a PVA interior wood glue. The database of common building materials was used to supplement the information given by the manufacturer. Citing proprietary information the manufacturer would not disclose the chemical inventory to 100 ppm. The information in the database was used as a supplement and should not be accepted as absolute. Every effort was made to make a complete inventory and screening of all materials.

TALC ID: 14807-96-6

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-12-17 21:39:00**

#: **6.0000 - 8.7200** GS: **BM-1** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Filler**

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

SUBSTANCE NOTES: This is a PVA interior wood glue. The database of common building materials was used to supplement the information given by the manufacturer. Citing proprietary information the manufacturer would not disclose the chemical inventory to 100 ppm. The information in the database was used as a supplement and should not be accepted as absolute. Every effort was made to make a complete inventory and screening of all materials.

Actinolite, anthophyllite and tremolite may occur in some talc deposits; when asbestiform, they constitute asbestos and, when not asbestiform, they are referred to as mineral fragments or cleavage fragments.” and “Minerals commonly found in talc products include chlorite and carbonate. Less commonly, talc products contain tremolite, anthophyllite and serpentine.”

IARC Working Group on the Evaluation of Carcinogenic Risk to Humans. Carbon Black, Titanium Dioxide, and Talc. Lyon (FR): International Agency for Research on Cancer; 2010. (IARC Monographs on the Evaluation of Carcinogenic Risks to Humans, No. 93.) Available from: <https://www.ncbi.nlm.nih.gov/books/NBK326521/>.

2,2,4-TRIMETHYL-1,3-PENTANEDIOL DIISOBUTYRATE ID: 6846-50-0

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-12-17 21:39:01**

#: **5.0000 - 8.7200** GS: **LT-P1** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Plasticizer**

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

SUBSTANCE NOTES: This is a PVA interior wood glue. The database of common building materials was used to supplement the information given by the manufacturer. Citing proprietary information the manufacturer would not disclose the chemical inventory to 100 ppm. The information in the database was used as a supplement and should not be accepted as absolute. Every effort was made to make a complete inventory and screening of all materials.

DIPROPYLENE GLYCOL MONOMETHYL ETHER ID: 34590-94-8

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-12-17 21:39:04**

#: **0.1000 - 0.7000** GS: **LT-UNK** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Defoamer**

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

SUBSTANCE NOTES: This is a PVA interior wood glue. The database of common building materials was used to supplement the information given by the manufacturer. Citing proprietary information the manufacturer would not disclose the chemical inventory to 100 ppm. The information in the database was used as a supplement and should not be accepted as absolute. Every effort was made to make a complete inventory and screening of all materials.

POLYVINYL ALCOHOL

ID: 9002-89-5

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-12-17 21:39:10**

#: **0.0000 - 1.2200** GS: **LT-UNK** 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: This is a PVA interior wood glue. The database of common building materials was used to supplement the information given by the manufacturer. Citing proprietary information the manufacturer would not disclose the chemical inventory to 100 ppm. The information in the database was used as a supplement and should not be accepted as absolute. Every effort was made to make a complete inventory and screening of all materials.

ALUMINUM CHLORIDE

ID: 7446-70-0

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-12-17 21:39:11**

#: **0.0000 - 1.2200** GS: **LT-P1** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Curing agent**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
RES	AOEC - Asthmagens	Asthmagen (Rs) - sensitizer-induced
SKI	EU - GHS (H-Statements) Annex 6 Table 3-1	H314 - Causes severe skin burns and eye damage [Skin corrosion/irritation - Category 1A or 1B or 1C]

SUBSTANCE NOTES: This is a PVA interior wood glue. The database of common building materials was used to supplement the information given by the manufacturer. Citing proprietary information the manufacturer would not disclose the chemical inventory to 100 ppm. The information in the database was used as a supplement and should not be accepted as absolute. Every effort was made to make a complete inventory and screening of all materials.

WOOD ADHESIVE 2

#: **0.0100**

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

RESIDUALS AND IMPURITIES NOTES: Residuals and impurities are considered in accordance with the HPD Best Practice Guidance, 10.02.17, version 1 "The threshold applied to Residuals and Impurities (R/I) is the same as the threshold applied to intentionally added substances, in terms of level, i.e., 100 ppm or 1000 ppm. Residuals and impurities present below the declared Inventory Threshold do not need to be reported on the HPD." This includes average data as declared in the common product database or in peer-reviewed scientific articles. For this product, no actual material has been tested therefore residuals and impurities are for informational purposes only and are not a guarantee of presence in the actual building material. The main databases used for researching potential residuals and impurities are Pharos and PubChem (formerly toxnet). Any R/I above the threshold shall be listed on the HPD, otherwise, if none are listed then no residuals or impurities are common in that substance above the threshold.

OTHER MATERIAL NOTES: This furniture collection can contain one of two wood adhesives or both. The low option they have the maximum percentage of composition by weight of 1.5% for low option and 5% for the high option. In the HPD they are listed as adhesive 1 and adhesive 2. This has one missing ingredient that is at the threshold of 0.01. It is highly proprietary and the company will not disclose. All other ingredients are disclosed. The ingredient is listed as a resin dispersion.

This finish is above the reportable threshold but it difficult to obtain exact weights for the entire product. It is listed and screened above the threshold but a maximum number is not listed. As the manufacturer, we have used considerable resources to comply with the intent of the HPD by supplying this level of information.

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-12-17 21:38:56**%: **40.0000 - 50.0000** GS: **BM-4** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Solvent**

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

SUBSTANCE NOTES:

POLYCHLOROPRENE

ID: 9010-98-4

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-12-17 21:38:56**%: **30.0000 - 40.0000** GS: **LT-UNK** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Adhesive**

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

SUBSTANCE NOTES:

ZINC OXIDE

ID: 1314-13-2

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-12-17 21:39:03**%: **1.0000 - 3.0000** GS: **BM-1** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Accelerator**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
RES	AOEC - Asthmagens	Asthmagen (Rs) - sensitizer-induced
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
AQU	EU - GHS (H-Statements) Annex 6 Table 3-1	H400 - Very toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 1]
AQU	EU - GHS (H-Statements) Annex 6 Table 3-1	H410 - Very toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 1]

SUBSTANCE NOTES:

RESIN ACIDS AND ROSIN ACIDS, FUMARATED, CALCIUM SALTS

ID: 94387-04-9

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-12-17 21:39:05**%: **0.1000 - 5.0000** GS: **LT-P1** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Filler**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters

SUBSTANCE NOTES:

LAMINATE

%: 0.0000 - 4.0000

PRODUCT THRESHOLD: 100 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

MATERIAL TYPE: Paper or Cardboard

RESIDUALS AND IMPURITIES NOTES: Residuals and impurities are considered in accordance with the HPD Best Practice Guidance, 10.02.17, version 1 "The threshold applied to Residuals and Impurities (R/I) is the same as the threshold applied to intentionally added substances, in terms of level, i.e., 100 ppm or 1000 ppm. Residuals and impurities present below the declared Inventory Threshold do not need to be reported on the HPD." This includes average data as declared in the common product database or in peer-reviewed scientific articles. For this product, no actual material has been tested therefore residuals and impurities are for informational purposes only and are not a guarantee of presence in the actual building material. The main databases used for researching potential residuals and impurities are Pharos and PubChem (formerly toxnet). Any R/I above the threshold shall be listed on the HPD, otherwise, if none are listed then no residuals or impurities are common in that substance above the threshold.

OTHER MATERIAL NOTES: Laminate is an alternate option to wood veneer in this collection. To fill in the gaps of the manufacturer data the Pharos common building material database was used.

SC:KRAFT PAPER

ID: SC:Bio

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library HAZARD SCREENING DATE: Not Screened

%: 50.0000 - 50.9700 GS: Not Screened RC: UNK NANO: No SUBSTANCE ROLE: Filler

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
Hazard Screening not performed		

SUBSTANCE NOTES:
Version: SCBioMats/2018-02-23
Category: Tree-based materials
Identifier: Generic wood pulp

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

PHENOL-FORMALDEHYDE RESIN

ID: 9003-35-4

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2021-12-17 21:38:58

%: 20.0000 - 23.9800 GS: LT-P1 RC: UNK NANO: No SUBSTANCE ROLE: Binder

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

SUBSTANCE NOTES: Information is based on the database of common building materials.

CELLULOSE, MICROCRYSTALLINE

ID: 9004-34-6

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2021-12-17 21:39:01

%: 3.6100 - 10.0500 GS: LT-UNK RC: UNK NANO: No SUBSTANCE ROLE: Filler

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

SUBSTANCE NOTES: This information is based on the database of common building materials.

MELAMINE/FORMALDEHYDE RESIN

ID: 9003-08-1

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2021-12-17 21:39:07		
%: 0.0100 - 0.3400	GS: LT-UNK	RC: UNK	NANO: No	SUBSTANCE ROLE: Polymer species
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS		
None found		No warnings found on HPD Priority Hazard Lists		

SUBSTANCE NOTES: The material laminate was supplemented with information from the database of common building materials.

TITANIUM DIOXIDE

ID: **13463-67-7**

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2021-12-17 21:39:09		
%: 0.0000 - 9.4400	GS: LT-1	RC: UNK	NANO: No	SUBSTANCE ROLE: Pigment
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS		
CAN	US CDC - Occupational Carcinogens	Occupational Carcinogen		
CAN	CA EPA - Prop 65	Carcinogen - specific to chemical form or exposure route		
CAN	IARC	Group 2B - Possibly carcinogenic to humans - inhaled from occupational sources		
CAN	MAK	Carcinogen Group 3A - Evidence of carcinogenic effects but not sufficient to establish MAK/BAT value		
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor		
CAN	MAK	Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels		
CAN	EU - GHS (H-Statements) Annex 6 Table 3-1	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]		

SUBSTANCE NOTES: Laminate is an alternate option to wood veneer in this collection. To fill in the gaps of the manufacturer data the Pharos common building material database was used.

POLYNOXYLIN

ID: **9011-05-6**

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2021-12-17 21:39:08		
%: 0.0000 - 4.8900	GS: LT-P1	RC: UNK	NANO: No	SUBSTANCE ROLE: Monomer
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS		
RES	AOEC - Asthmagens	Asthmagen (Rs) - sensitizer-induced		

SUBSTANCE NOTES: Information for laminate was supplemented with information from the database of common building materials.

HEXANEDIOIC ACID, POLYMER WITH N-(2-AMINOETHYL)-1,2-ETHANEDIAMINE, REACTION PRODUCTS WITH DIMETHYLAMINE AND EPICHLOROHYDRIN

ID: **68583-79-9**

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2021-12-17 21:39:08		
%: 0.0000 - 0.3300	GS: LT-UNK	RC: UNK	NANO: No	SUBSTANCE ROLE: Polymer species

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

None found

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: The material laminate was supplemented with information from the database of common building materials.

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	SCS Indoor Advantage Gold - Classroom & Office scenario		
CERTIFYING PARTY: Third Party	ISSUE DATE: 2021-12-18	EXPIRY DATE: 2022-12-17	CERTIFIER OR LAB: SCS Global
APPLICABLE FACILITIES: Systems and tables: Systems: Belay, Fade, Gradient, Mix, Olli, Simple Beam, Swing, Swing Bar, Swing High, Swing Jr, Swing Low; Conferencing: Baby Beluga, Beluga, BYOT, Cape, Gradient Conference Tables, Serif, Sevens; Systems Accessories: 101, Bag Hook, Crostini, Crouton, End of Run Panels and Shelving, Felt Cable Manager, Gradient Storage, Hanging Whiteboard, Hanging Woodboard, Olli Coat Rack, Mix Divider Screen, Nest, Nest Screen, Olli Butterfly Screen, Olli Cushion, Olli Plug, Olli Frame, Olli Meeting Table, Oscar, Planter Hook, Saltine, Stackable Caddy, Stackable Planter, Stackable Storage, Stash, Swing Beam Mounted Screen, Swing Modesty, Swing/Olli/ BYOT Power Sleeve, Toast, Tuck, Wally			
CERTIFICATE URL:			
CERTIFICATION AND COMPLIANCE NOTES: #SCS-IAQ-05854			

Section 4: Accessories

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

No accessories are required for this product.

Section 5: General Notes

Residuals and impurities are considered in accordance with the HPD Best Practice Guidance, 10.02.17, version 1

“The threshold applied to Residuals and Impurities (R/I) is the same as the threshold applied to intentionally added substances, in terms of level, i.e., 100 ppm or 1000 ppm. Residuals and impurities present below the declared Inventory Threshold do not need to be reported on the HPD.”

This includes average data as declared in the common product database or in peer-reviewed scientific articles. For this product, no actual material has been tested therefore residuals and impurities are for informational purposes only and are not a guarantee of presence in the actual building material.

The main databases used for researching potential residuals and impurities are Pharos and PubChem (formerly toxnet). Any R/I above the threshold shall be listed on the HPD, otherwise, if none are listed then no residuals or impurities are common in that substance above the threshold.

SPECIAL CONDITION: Minor Fasteners

Version: SCMinorFasteners/2020-07-16

All hardware for this system not reported is in alignment with HPDC Special Conditions- Minor Fasteners. The total weight of all metal fasteners is <1% of the total weight of the system. Any fasteners reported above that threshold are listed on the HPD. The total combined weight of the commodity fasteners is between 0.5% and 1%. All minor fasteners fit within the specific guidelines as outlined in the HPD Guide for Special Conditions They are purchased from a third party, made to a generic specification, e.g. ASTM, and not made to order for the specific manufacturer.

Disclaimer- Every effort has been made to report the substances in this product by the manufacturer to the listed threshold. This is a voluntary, self-reported effort. Any errors or omissions shall be considered human error and therefore reported to the manufacturer. The manufacturer shall not be liable for omissions.

MANUFACTURER INFORMATION

MANUFACTURER: Pair
ADDRESS: 500 Davis Street
 San Francisco CA 94111, United States
WEBSITE: <http://madebypair.com>

CONTACT NAME: Astor Ng
TITLE: Project Manager
PHONE: 415.747.7300
EMAIL: astor@madebypair.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.