created via: HPDC Online Builder

**HPD UNIQUE IDENTIFIER: 26968** 

CLASSIFICATION: 12 51 83 Custom Office Furniture

PRODUCT DESCRIPTION: Swing is not your average workstation. More than a power source, Swing is a platform for creativity. Designed with accessories and customization in mind, Swing makes work feel a lot like a home with a workspace you control This HPD includes the Pair product lines for power beams: Swing, Swing Jr., Simple Beam, and Olli. These systems are comparable in product attributes because they include a freestanding beam for power and data distribution. The power system can be used to delineate space and support various modes of individual and collaborative work.



#### **Section 1: Summary**

#### **Nested Method / Product Threshold**

#### **CONTENT INVENTORY**

Inventory Reporting Format

Nested Materials Method

C Basic Method

**Threshold Disclosed Per** 

Material

Product

Threshold Level

⊙ 100 ppm

C 1,000 ppm

C Per GHS SDS

Othe

Residuals/Impurities

Considered in 12 of 12 Materials

Explanation(s) provided for Residuals/Impurities?

Yes ○ No

All Substances Above the Threshold Indicated Are:

Characterized

© Yes Ex/SC C Yes C No.

% weight and role provided for all substances except SC

substances characterized according to SC guidance.

Screened • Yes Ex/SC • Yes • No

All substances screened using Priority Hazard Lists with results disclosed except SC substances screened according to SC guidance.

Identified

○ Yes Ex/SC ○ Yes ⊙ No

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

#### **CONTENT IN DESCENDING ORDER OF QUANTITY**

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

MATERIAL | SUBSTANCE | RESIDUAL OR IMPURITY

**GREENSCREEN SCORE | HAZARD TYPE** 

BEAM [ IRON, ELEMENTAL LT-P1 | END CALCIUM LT-P1 | PHY CARBON LT-UNK COPPER LT-P1 | AQU MANGANESE LT-P1 | END | MUL | REP SILICON, ELEMENTAL LT-UNK SULFUR, PRECIPITATED LT-UNK | SKI ALUMINUM FLUORIDE BM-1 ] SC:BIO:PARTICLEBOARD [ SC:WOOD **DUST Not Screened PHENOL-FORMALDEHYDE RESIN (PRIMARY CASRN** IS 9003-35-4) LT-P1 | RES ] SC:BIO:PARTICLEBOARD2 [ SC:WOOD DUST Not Screened POLYVINYL ACETATE LT-UNK METHYLENE BISPHENYL DIISOCYANATE (PURE MDI) (PRIMARY CASRN IS 101-68-8) LT-UNK | CAN | MUL | RES | SKI | EYE | METAL LEGS [ IRON, ELEMENTAL (PRIMARY CASRN IS 7439-89-6) LT-P1 | END MANGANESE LT-P1 | END | MUL | REP COPPER LT-P1 | AQU SULFUR, PRECIPITATED LT-UNK | SKI MANGANESE LT-P1 | END | MUL | REP SILICON, ELEMENTAL LT-UNK CARBON LT-UNK PHOSPHORUS BM-2 | MAM | PHY ] UNDISCLOSED [ SC:WOOD DUST Not Screened CELLULOSE, MICROCRYSTALLINE LT-UNK | RES UNDISCLOSED LT-UNK UNDISCLOSED NoGS UNDISCLOSED LT-P1 | RES ] UV CURED WOOD FINISH [ BISPHENOL A-EPICHLOROHYDRIN ACRYLATE BM-1 DIPROPYLENE GLYCOL DIACRYLATE LT-UNK TRIPROPYLENE GLYCOL DIACRYLATE LT-P1 | SKI | EYE | AQU | MUL SILICON DIOXIDE BM-1 | CAN BISPHENOL A BM-1 | END | MUL | REP | DEV | SKI | EYE HYDROCHLORIC ACID BM-2 | SKI | MAM | RES EPICHLOROHYDRIN LT-1 | CAN | END | SKI | MUL | MAM | REP | GEN BISPHENOL A BM-1 | END | MUL | REP | DEV | SKI | EYE DIPROPYLENE GLYCOL (PRIMARY CASRN IS 25265-71-8) LT-UNK ] SC:ELECTRONICS:ELECTRICALCOMPONENTS [ SC:POWER CABLES Not

SC:ELECTRONICS:ELECTRICALCOMPONENTS [ SC:POWER CABLES No Screened ] POWDER COAT FINISH FOR METAL LEGS [ 1,3-BENZENEDICARBOXYLIC ACID, POLYMER WITH 1,4-

BENZENEDICARBOXYLIC ACID, 2,2-DIMETHYL-1,3-PROPANEDIOL, 1,2-ETHANEDIOL AND HEXANEDIOIC ACID NOGS TITANIUM DIOXIDE LT-1 |
CAN | END PYROMELLITIC ACID 2-PHENYL-2-IMIDAZOLINE SALT (1:1)

Work Untethered Power System: Swing hpdrepository.hpd-collaborative.org

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, GeologicalMaterial, Electronics

[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.

With 2500 possible combinations to this product line, we conducted this HPD with a "low" and "high" option to configure the percentage of material composition for all materials and substances. The product category is defined as Workstations including Swing, Swing Jr, Simple Beam, and Olli. This HPD covers all products in those lines. The "low" option is Swing with a TOP 48" - NO HOLE RADIUS, NO HOLE RADIUS, SWING BEAM, 48", SWING COVER, SWING LEGS, and HARDWARE

For the "high" option we used Swing with SWING TOP 72", SWING BEAM, 72", SWING COVER, SWING LEG, SWING TUBE 72", SWING LEG, BAR END CAP, SWING LEG, BAR MIDCAP, SWING TUBE BAR BRACKET.

Notes 1). All other configurations are within this range. 2). All hardware for this system not reported is in alignment with HPDC Special Conditions-Minor Fasteners. The total weight of all metal fasteners is <5% 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 1.17% and 1.23%. 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. 3). Electronics are also covered by a special condition and reported as such. All electrical components are EU RoHS compliant without exemptions. 4). All impurities

LT-P1 | MUL TRIGLYCIDYL ISOCYANURATE LT-1 | MUL | MAM | RES | SKI | GEN | EYE BARIUM SULFATE BM-2 | CAN QUARTZ LT-1 | CAN ALUMINUM OXIDE BM-2 | RES KAOLIN LT-UNK | CAN ALUMINUM HYDROXIDE, DRIED BM-2 ] SC:BIO:WOODVENEER [ SC:DOMESTIC WOOD VENEER Not Screened ] 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 ALUMINUM CHLORIDE LT-P1 | SKI | RES POLYVINYL ALCOHOL LT-UNK ] WOOD ADHESIVE 2 [ WATER (PRIMARY CASRN IS 7732-18-5) BM-4 POLYCHLOROPRENE LT-UNK ZINC OXIDE BM-1 | AQU | END | RES | MUL RESIN ACIDS AND ROSIN ACIDS, FUMARATED, CALCIUM SALTS LT-P1 | MUL ] LAMINATE [ SC:KRAFT PAPER Not Screened PHENOL-FORMALDEHYDE RESIN LT-P1 | RES **CELLULOSE, MICROCRYSTALLINE LT-UNK | RES** MELAMINE/FORMALDEHYDE RESIN LT-UNK HEXANEDIOIC ACID, POLYMER WITH N-(2-AMINOETHYL)-1,2-ETHANEDIAMINE, REACTION PRODUCTS WITH DIMETHYLAMINE AND EPICHLOROHYDRIN LT-UNK POLYNOXYLIN LT-P1 | RES ]

and residuals reported as part of the screening process are based on peerreviewed scientific data about that substance and are not a guarantee of presence in the actual material. No actual materials were tested for impurities and residuals therefore the information provided is for reference only. The Pharos database was used.

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**

Pre-checked for LEED v4 Material Ingredients Option 1

Third Party Verified?

YesNo

PREPARER: Self-Prepared

VERIFIER: VERIFICATION #: SCREENING DATE: 2021-07-08 PUBLISHED DATE: 2021-12-29 EXPIRY DATE: 2024-07-08



**END** 

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

**BEAM** %: 30.0000 - 40.9000

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 is standard sheet metal.

IRON, ELEMENTAL				ID: <b>7439-89-6</b>
HAZARD SCREENING METHOD:	Pharos Chemical and Materials Library	HAZARD SC	REENING DATE:	2021-07-08 18:36:08
%: 97.0000 - 100.0000	GS: <b>LT-P1</b>	RC: UNK	NANO: No	SUBSTANCE ROLE: Alloy element
HAZARD TYPE	AGENCY AND LIST TITLES	V	WARNINGS	

Potential Endocrine Disruptor

SUBSTANCE NOTES: Per the PubChem database: Blast furnace pig iron contains silicon, sulfur, phosphorus, manganese and carbon.

**TEDX - Potential Endocrine Disruptors** 

CALCIUM ID: 7440-70-2

HAZARD SCREENING METHOD:	Pharos Chemical and Materials Library	HAZARD S	CREENING DATE:	2021-07-08 18:36:26
%: 0.0000 - 0.1000	GS: <b>LT-P1</b>	RC: UNK	NANO: No	SUBSTANCE ROLE: Alloy element
HAZARD TYPE	AGENCY AND LIST TITLES		WARNINGS	
PHY	EU - GHS (H-Statements)		H261 - In contact v	vith water releases flammable gases

SUBSTANCE NOTES: Residuals and impurities screened using the PubChem database. Available as commercial-grade with 99.9% purity. No impurities listed above the threshold. Possible impurities include Mg, N, Al, Fe, Mn, Co, Li, Be, Cr, and B. This is for informational purposes only. No actual material was tested.

**CARBON** ID: 7440-44-0

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2021-07-08 18:36:26 %: 0.0000 - 0.6000 GS: LT-UNK RC: UNK SUBSTANCE ROLE: Alloy element NANO: No **HAZARD TYPE** AGENCY AND LIST TITLES WARNINGS None found No warnings found on HPD Priority Hazard Lists SUBSTANCE NOTES: Elemental carbon is found in nature in two crystalline allotropic forms: graphite and diamond. Various impurities, none reported above the threshold for elemental carbon.

Natural graphite is mined in open-pit and underground mines. The crude ore contains several impurities in various quantities. Only some of the Sri Lanka deposits contain types with carbon contents up to 100%. The crude ore is separated in some places by hand. Crude ores with a carbon content sufficiently high for industrial use are only crushed, dried, graded, and if necessary, milled. Flake graphites must be enriched, preferably by using flotation processes. Since graphite flakes float easily, this process is successfully used even for low-grade ores

COPPER ID: 7440-50-8

HAZARD SCREENING METHOD: P	haros Chemical and Materials Library	HAZARD S	SCREENING DATE:	2021-07-08 18:36:26
%: 0.0000 - 0.5000	GS: LT-P1	RC: UNK	NANO: <b>No</b>	SUBSTANCE ROLE: Alloy element
HAZARD TYPE	AGENCY AND LIST TITLES		WARNINGS	
AQU	EU - GHS (H-Statements)		H411 - Toxic to aqu	uatic 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]

MANGANESE ID: 7439-96-5

HAZARD SCREENING METHOD:	Pharos Chemical and Materials Library	HAZARD	SCREENING DATE:	2021-07-08 18:36:27	
%: Impurity/Residual	GS: LT-P1	RC: UNK	NANO: No	SUBSTANCE ROLE: Impurity/Residual	
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		Toxic to reproduc	tion - Category 1B [H360]	

SUBSTANCE NOTES: Per the PubChem database: Blast furnace pig iron contains silicon, sulfur, phosphorus, manganese and carbon.

SILICON, ELEMENTAL ID: 7440-21-3

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2021-07-08 18:36:28

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

HAZARD TYPE AGENCY AND LIST TITLES WARNINGS

None found None found Natural Lists

SUBSTANCE NOTES: Per the PubChem database: Blast furnace pig iron contains silicon, sulfur, phosphorus, manganese and carbon.

SULFUR, PRECIPITATED ID: 7704-34-9

HAZARD SCREENING METHOD:	Pharos Chemical and Materials Library	HAZARD S	SCREENING DATE:	2021-07-08 18:36:28
%: 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)		H315 - Causes skin irritation	

ALUMINUM FLUORIDE ID: 7784-18-1

SUBSTANCE NOTES: This product's manufacturer listed the binder as 0-40% containing alkali and phenol-formaldehyde resin. This percentage range is larger than the required 10% difference but due to proprietary reasons, this is what the manufacturer would disclose.

SC:BIO:PARTICLEBOARD %: 13.0000 - 28.0000

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: SpecialConditionApplied:BiologicalMaterial --- This is an alternate material. This product's manufacturer listed the binder as 0-40% containing alkali and phenol-formaldehyde resin. This percentage range is larger than the required 10% difference but due to proprietary reasons, this is what the manufacturer would disclose.

SC:WOOD DUST ID: SC:Bio

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

%: **60.0000 - 100.0000** 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 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. This product's manufacturer listed the binder as 0-40% containing alkali and phenol-formaldehyde resin. This percentage range is larger than the required 10% difference but due to proprietary reasons, this is what the manufacturer would disclose.

#### PHENOL-FORMALDEHYDE RESIN (PRIMARY CASRN IS 9003-35-4)

ID: 2180992-35-0

SUBSTANCE NOTES: This product's manufacturer listed the binder as 0-40% containing alkali and phenol-formaldehyde resin. This percentage range is larger than the required 10% difference but due to proprietary reasons, this is what the manufacturer would disclose.

SC:BIO:PARTICLEBOARD2

%: 11.9000 - 13.7000

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: SpecialConditionApplied:BiologicalMaterial --- these workstations can use two different particleboards based on different options. 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.

SC:WOOD DUST ID: SC:GeoMat

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

%: 50.0000 - 100.0000 GS: Not Screened RC: UNK NANO: No SUBSTANCE ROLE: Filler

#### Hazard Screening not performed

SUBSTANCE NOTES:

Version: SCGeoMats/2019-06-20

Origin: Unknown

None found

Typical Composition: Various types of wood dust Potential presence of toxic metals: None reported

Presence of Radioactive Elements: none 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.

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.

# METHYLENE BISPHENYL DIISOCYANATE (PURE MDI) (PRIMARY CASRN IS 101-68-8)

ID: 97568-33-7

No warnings found on HPD Priority Hazard Lists

HAZARD SCREENING METHOD:	Pharos Chemical and Materials Library	HAZARD	SCREENING DATE: 2021-07-08 18:36:30
%: 0.0000 - 40.0000	GS: LT-UNK	RC: UNK	NANO: No SUBSTANCE ROLE: Binder
HAZARD TYPE	AGENCY AND LIST TITLES		WARNINGS
CAN	EU - GHS (H-Statements)		H351 - Suspected of causing cancer
MUL	US EPA - PPT Chemical Action Plans	<b>S</b>	EPA Chemical of Concern - Action Plan published
RES	AOEC - Asthmagens		Asthmagen (G) - generally accepted
CAN	MAK		Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels
SKI	EU - GHS (H-Statements)		H315 - Causes skin irritation
EYE	EU - GHS (H-Statements)		H319 - Causes serious eye irritation
RES	MAK		Sensitizing Substance Sah - Danger of airway & skin sensitization
RES	EU - GHS (H-Statements)		H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled
SKI	EU - GHS (H-Statements)		H317 - May cause an allergic skin reaction
RES	US EPA - PPT Chemical Action Plans	3	Inhalation sensitizer causing asthma and lung damage

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.

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 includes the 16 gauge metal tubing and mounting plate for options with tube legs. These come from two different manufacturers therefore there is a range of composition. Both are essentially sheet metal (carbon steel). Includes all options for legs including the sled base.

#### **IRON, ELEMENTAL (PRIMARY CASRN IS 7439-89-6)**

ID: 443783-52-6

HAZARD SCREENING METHOD:	Pharos Chemical and Materials Library	HAZARD S	SCREENING DATE:	2021-07-08 18:36:08
%: 97.0000 - 100.0000	GS: <b>LT-P1</b>	RC: UNK	NANO: No	SUBSTANCE ROLE: Alloy element
HAZARD TYPE	AGENCY AND LIST TITLES		WARNINGS	
END	TEDX - Potential Endocrine Disruptor	S	Potential Endocrine	Disruptor

SUBSTANCE NOTES: Per the PubChem database: Blast furnace pig iron contains silicon, sulfur, phosphorus, manganese and carbon.

MANGANESE ID: 7439-96-5

HAZARD SCREENING METHOD:	Pharos Chemical and Materials Library	HAZARD	SCREENING DATE:	2021-07-08 18:36:18	
%: 1.1000 - 1.6500	GS: <b>LT-P1</b>	RC: UNK	NANO: <b>No</b>	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		Toxic to reproduct	ion - Category 1B [H360]	

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)

COPPER ID: 7440-50-8

AQU	EU - GHS (H-Statements)		H411 - Toxic to aquatic life with long lasting effects	
HAZARD TYPE	AGENCY AND LIST TITLES		WARNINGS	
%: <b>0.3500</b>	GS: LT-P1	RC: UNK	NANO: <b>No</b>	SUBSTANCE ROLE: Alloy element
HAZARD SCREENING METHOD: P	Pharos Chemical and Materials Library	HAZARD S	SCREENING DATE:	2021-07-08 18:36:19

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]

SULFUR, PRECIPITATED ID: 7704-34-9

HAZARD SCREENING METHOD:	Pharos Chemical and Materials Library	HAZARD S	CREENING DATE:	2021-07-08 18:36:23	
%: Impurity/Residual	GS: LT-UNK	RC: UNK	NANO: <b>No</b>	SUBSTANCE ROLE: Impurity/Residual	
HAZARD TYPE	AGENCY AND LIST TITLES		WARNINGS		
SKI	EU - GHS (H-Statements)		H315 - Causes ski	n irritation	
SUBSTANCE NOTES: Per the PubChem database: Blast furnace pig iron contains silicon, sulfur, phosphorus, manganese and carbon.					

MANGANESE ID: 7439-96-5

HAZARD SCREENING METHOD:	Pharos Chemical and Materials Library	HAZARD	SCREENING DATE:	2021-07-08 18:36:22	
%: Impurity/Residual	GS: <b>LT-P1</b>	RC: UNK	NANO: No	SUBSTANCE ROLE: Impurity/Residual	
HAZARD TYPE	AGENCY AND LIST TITLES		WARNINGS		
END	TEDX - Potential Endocrine Disrupto	rs	Potential Endocrin	ne Disruptor	
MUL	German FEA - Substances Hazardou Waters	s to	Class 2 - Hazard t	ro Waters	
REP	GHS - Japan		Toxic to reproduc	tion - Category 1B [H360]	
SUBSTANCE NOTES: Par the PubChem detabase: Blact furnace pig iron contains silicon, sulfur, phosphorus, manganese and carbon					

SUBSTANCE NOTES: Per the PubChem database: Blast furnace pig iron contains silicon, sulfur, phosphorus, manganese and carbon.

SILICON, ELEMENTAL ID: 7440-21-3

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2021-07-08 18:36:22

%: Impurity/Residual

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

None found

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: Per the PubChem database: Blast furnace pig iron contains silicon, sulfur, phosphorus, manganese and carbon.

CARBON ID: 7440-44-0

HAZARD SCREENING METHOD:	Pharos Chemical and Materials Library	HAZARD SC	REENING DATE:	2021-07-08 18:36:23
%: Impurity/Residual	GS: LT-UNK	RC: UNK	NANO: No	SUBSTANCE ROLE: Impurity/Residual
HAZARD TYPE	AGENCY AND LIST TITLES	٧	WARNINGS	
None found			No wa	rnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES:

PHOSPHORUS ID: 7723-14-0

HAZARD SCREENING METHOD: Pharos Chem	ical and Materials Library	HAZARD SCF	REENING DATE:	2021-07-08 18:36:21
%: Impurity/Residual	GS: <b>BM-2</b>	RC: UNK	NANO: No	SUBSTANCE ROLE: Impurity/Residual

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
МАМ	US EPA - EPCRA Extremely Hazardous Substances	Extremely Hazardous Substances
PHY	EU - GHS (H-Statements)	H228 - Flammable solid

SUBSTANCE NOTES: Per the PubChem database: Blast furnace pig iron contains silicon, sulfur, phosphorus, manganese and carbon.

UNDISCLOSED %: 0.2000 - 0.3400

PRODUCT THRESHOLD: 100 ppm RESIDUALS AND IMPURITIES CONSIDERED: Yes

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

OTHER MATERIAL NOTES: Formaldehyde resins are listed on the SDS by the manufacturer at 10-30%. Inquiry to the manufacturer did not list additional information as it is proprietary to the company. The product sheet states that there is no added urea-formaldehyde so additional options for formaldehyde resins will be listed as possible substances since the exact information is unknown. Types of formaldehyde resins include: melamine resin, phenol-formaldehyde resin, polyoxymethylene plastics, 1,4-butanediol, and methylene diphenyl diisocyanate.

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library HAZARD SCREENING DATE: Not Screened
%: 25.0000 - 75.0000 GS: Not Screened RC: UNK NANO: No SUBSTANCE ROLE: Filler
HAZARD TYPE AGENCY AND LIST TITLES WARNINGS

Hazard Screening not performed

on the HPD, otherwise, if none are listed then no residuals or impurities are common in that substance above the threshold.

SUBSTANCE NOTES:

**SC:WOOD DUST** 

Version: SCBioMats/2018-02-23 Category: Tree-based materials Identifier: Generic 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. Generic CAS RN 9004-34-6

#### **CELLULOSE, MICROCRYSTALLINE**

ID: 9004-34-6

ID: SC:Bio

MATERIAL TYPE: Polymeric Material

HAZARD SCREENING METHOD:	Pharos Chemical and Materials Library	HAZARD SC	CREENING DATE: 202	21-07-08 18:36:13
%: 10.0000 - 20.0000	GS: LT-UNK	RC: UNK	NANO: <b>No</b>	SUBSTANCE ROLE: Filler
HAZARD TYPE	AGENCY AND LIST TITLES	V	WARNINGS	
RES AOEC - Asthmagens		A	Asthmagen (Rs) - sens	itizer-induced

SUBSTANCE NOTES:

UNDISCLOSED ID: Undisclosed

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2021-07-08 18:36:15

%: 10.0000 - 30.0000 GS: LT-UNK RC: UNK NANO: No SUBSTANCE ROLE: Binder

HAZARD TYPE WARNINGS AGENCY AND LIST TITLES

simply states the family that it belongs to. All resins in the family are screened and listed as possible ingredients.

None found No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: This substance is listed as a possible in the chemical composition. The manufacturer will not disclose the exact resin but simply states the family that it belongs to. All resins in the family are screened and listed as possible ingredients.

UNDISCLOSED **ID: Undisclosed** 

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2021-07-08 18:36:14 %: 10.0000 - 30.0000 GS: NoGS RC: UNK NANO: No SUBSTANCE ROLE: Binder HAZARD TYPE AGENCY AND LIST TITLES WARNINGS

SUBSTANCE NOTES: This substance is listed as a possible in the chemical composition. The manufacturer will not disclose the exact resin but

UNDISCLOSED

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2021-07-08 18:36:14 SUBSTANCE ROLE: Binder %: 10.0000 - 30.0000 GS: LT-P1 RC: UNK NANO: No HAZARD TYPE AGENCY AND LIST TITLES WARNINGS RES AOEC - Asthmagens Asthmagen (Rs) - sensitizer-induced

SUBSTANCE NOTES: This is a possible substance. Due to manufacturer proprietary information the exact composition is unknown. This is listed on the SDS as a possible resin.

**UV CURED WOOD FINISH** %: 0.1000 - 0.6000

None found

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

No warnings found on HPD Priority Hazard Lists

ID: Undisclosed

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 SC	REENING DATE:	2021-07-08 18:36:11
%: 25.0000 - 50.0000	GS: <b>BM-1</b>	RC: UNK	NANO: <b>No</b>	SUBSTANCE ROLE: Film former
HAZARD TYPE	AGENCY AND LIST TITLES	V	VARNINGS	
None found			No wan	nings 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 SC	REENING DATE:	2021-07-08 18:35:18
%: 10.0000 - 25.0000	GS: LT-UNK	RC: UNK	NANO: No	SUBSTANCE ROLE: Antioxidant
HAZARD TYPE	AGENCY AND LIST TITLES	W	/ARNINGS	
None found			No war	nings found on HPD Priority Hazard Lists

SUBSTANCE NOTES:

#### TRIPROPYLENE GLYCOL DIACRYLATE

ID: 42978-66-5

HAZARD SCREENING METHOD:	Pharos Chemical and Materials Library	HAZARD S	SCREENING DATE:	2021-07-08 18:35:24
%: 10.0000 - 25.0000	GS: LT-P1	RC: UNK	NANO: No	SUBSTANCE ROLE: Plasticizer
HAZARD TYPE	AGENCY AND LIST TITLES		WARNINGS	
SKI	MAK		Sensitizing Substa	nce Sh - Danger of skin sensitization
SKI	EU - GHS (H-Statements)		H315 - Causes skir	n irritation
EYE	EU - GHS (H-Statements)		H319 - Causes seri	ious eye irritation
AQU	EU - GHS (H-Statements)		H411 - Toxic to aq	uatic life with long lasting effects
MUL	German FEA - Substances Hazardou Waters	s to	Class 2 - Hazard to	o Waters
SKI	EU - GHS (H-Statements)		H317 - May cause	an allergic skin reaction

SUBSTANCE NOTES: No known impurities.

SILICON DIOXIDE ID: 7631-86-9

HAZARD SCREENING METHOD: F	Pharos Chemical and Materials Library	HAZARD S	SCREENING DATE	2021-07-08 18:36:31	
%: 0.0000 - 10.0000	GS: <b>BM-1</b>	RC: UNK	NANO: <b>No</b>	SUBSTANCE ROLE: Abrasion resistance	
HAZARD TYPE	AGENCY AND LIST TITLES		WARNINGS		
CAN	GHS - Australia	GHS - Australia		H350i - May cause cancer by inhalation	
CAN	GHS - Japan		Carcinogenicity -	Category 1A [H350]	

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: I	Pharos Chemical and Materials Library	HAZARD	SCREENING DATE:	2021-07-08 18:36:30
%: Impurity/Residual	GS: <b>BM-1</b>	RC: UNK	NANO: No	SUBSTANCE ROLE: Impurity/Residual
HAZARD TYPE	AGENCY AND LIST TITLES		WARNINGS	
END	TEDX - Potential Endocrine Disruptor	rs	Potential Endocrin	ne Disruptor
END	OSPAR - Priority PBTs & EDs & equivoconcern	/alent	Endocrine Disrupt	tor - Substance of Possible Concern
MUL	US EPA - PPT Chemical Action Plans	3	EPA Chemical of 0	Concern - Action Plan published
MUL	US EPA - PPT Chemical Action Plans	3	TSCA Work Plan o	chemical - Action Plan in development
END	ChemSec - SIN List		Endocrine Disrupt	iion
REP	EU - SVHC Authorisation List		Toxic to reproduc	tion - Candidate list
REP	EU - Annex VI CMRs		Reproductive Tox	icity - Category 1B
MUL	ChemSec - SIN List		CMR - Carcinoger	n, Mutagen &/or Reproductive Toxicant
MUL	German FEA - Substances Hazardou Waters	s to	Class 3 - Severe F	Hazard to Waters
DEV	CA EPA - Prop 65		Developmental to	xicity
DEV	US NIH - Reproductive & Developme Monographs	ntal	Clear Evidence of	Adverse Effects - Developmental Toxicity
REP	EU - REACH Annex XVII CMRs			ection Category 2 - Substances which ed as if they impair fertility or cause exicity in humans
MUL	German FEA - Substances Hazardou Waters	s to	Class 2 - Hazard t	o Waters
SKI	EU - GHS (H-Statements)		H317 - May cause	an allergic skin reaction
EYE	EU - GHS (H-Statements)		H318 - Causes se	rious eye damage
REP	US NIH - Reproductive & Developme Monographs	ntal	Some Evidence of	f Adverse Effects - Reproductive Toxicity
SKI	MAK		Sensitizing Substa	ance SP - Danger of photocontact
REP	EU - GHS (H-Statements)		H360F - May dam	age fertility
REP	CA EPA - Prop 65		Reproductive Tox	icity - Female
END	EU - Priority Endocrine Disruptors		Category 1 - In viv	vo evidence of Endocrine Disruption
REP	GHS - Japan		Toxic to reproduc	tion - Category 1B [H360]

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)

HYDROCHLORIC ACID					ID: 7647-01-0
HAZARD SCREENING METHOD:	Pharos Chemical and Materials Library	HAZARD SC	REENING DATE:	2021-07-08 18:36:25	
%: Impurity/Residual	GS: <b>BM-2</b>	RC: UNK	NANO: No	SUBSTANCE ROLE: Impur	ity/Residual

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
SKI	EU - GHS (H-Statements)	H314 - Causes severe skin burns and eye damage
MAM	EU - GHS (H-Statements)	H331 - Toxic if inhaled
RES	AOEC - Asthmagens	Asthmagen (Rr) - irritant-induced
МАМ	US EPA - EPCRA Extremely Hazardous Substances	Extremely Hazardous Substances

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)

EPICHLOROHYDRIN ID: 106-89-8

HAZARD SCREENING METHOD: Phare	s Chemical and Materials Library	HAZARD SCI	REENING DATE:	2021-07-08 18:36:31
%: Impurity/Residual	GS: <b>LT-1</b>	RC: UNK	NANO: No	SUBSTANCE ROLE: Impurity/Residual

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CAN	US CDC - Occupational Carcinogens	Occupational Carcinogen
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
CAN	EU - GHS (H-Statements)	H350 - May cause cancer
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
MAM	EU - GHS (H-Statements)	H301 - Toxic if swallowed
MAM	EU - GHS (H-Statements)	H311 - Toxic in contact with skin
SKI	EU - GHS (H-Statements)	H314 - Causes severe skin burns and eye damage
MAM	EU - GHS (H-Statements)	H331 - Toxic if inhaled
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
SKI	EU - GHS (H-Statements)	H317 - May cause an allergic skin reaction
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
CAN	GHS - Australia	H350 - May cause cancer
GEN	GHS - New Zealand	6.6A - Known or presumed human mutagens
CAN	GHS - New Zealand	6.7A - Known or presumed human carcinogens
GEN	GHS - Australia	H340 - May cause genetic defects
CAN	GHS - Korea	Carcinogenicity - Category 1 [H350 - May cause cancer]
CAN	GHS - Malaysia	H350 - May cause cancer
CAN	GHS - Japan	Carcinogenicity - Category 1B [H350]

SUBSTANCE NOTES: 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)

BISPHENOL A ID: 80-05-7

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2021-07-08 18:36:33

%: Impurity/Residual	GS: <b>BM-1</b>	RC: UNK	NANO: No	SUBSTANCE ROLE: Impurity/Residual
HAZARD TYPE	AGENCY AND LIST TITLES		WARNINGS	
END	TEDX - Potential Endocrine Disru	ptors	Potential Endocr	rine Disruptor
END	OSPAR - Priority PBTs & EDs & e concern	quivalent	Endocrine Disru	otor - Substance of Possible Concern
MUL	US EPA - PPT Chemical Action P	lans	EPA Chemical of	f Concern - Action Plan published
MUL	US EPA - PPT Chemical Action P	lans	TSCA Work Plan	chemical - Action Plan in development
END	ChemSec - SIN List		Endocrine Disrup	otion
REP	EU - SVHC Authorisation List		Toxic to reprodu	ction - Candidate list
REP	EU - Annex VI CMRs		Reproductive To	xicity - Category 1B
MUL	ChemSec - SIN List		CMR - Carcinoge	en, Mutagen &/or Reproductive Toxicant
MUL	German FEA - Substances Hazar Waters	dous to	Class 3 - Severe	Hazard to Waters
DEV	CA EPA - Prop 65		Developmental t	oxicity
DEV	US NIH - Reproductive & Develop Monographs	omental	Clear Evidence o	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 Hazar Waters	dous to	Class 2 - Hazard	to Waters
SKI	EU - GHS (H-Statements)		H317 - May caus	se an allergic skin reaction
EYE	EU - GHS (H-Statements)		H318 - Causes s	erious eye damage
REP	US NIH - Reproductive & Develop Monographs	omental	Some Evidence	of Adverse Effects - Reproductive Toxicity
SKI	MAK		Sensitizing Substance SP - Danger of photocontact sensitization	
REP	EU - GHS (H-Statements)		H360F - May dar	mage fertility
REP	CA EPA - Prop 65		Reproductive To	xicity - Female
END	EU - Priority Endocrine Disruptor	S	Category 1 - In vivo evidence of Endocrine Disruption Activity	
REP	GHS - Japan		Toxic to reprodu	ction - Category 1B [H360]

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)

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

ID: 78644-49-2

HAZARD SCREENING METHOD	Pharos Chemical and Materials Librar	y HAZARD SO	CREENING DATE:	2021-07-08 18:36:33
%: Impurity/Residual	GS: LT-UNK	RC: UNK	NANO: No	SUBSTANCE ROLE: Impurity/Residual
HAZARD TYPE	AGENCY AND LIST TITLES	1	WARNINGS	
None found SC:ELECTRONICS:ELECTRICALCOMPONENTS %: 0.1000 - 5.0000			No wa	arnings found on HPD Priority Hazard Lists

PROBESTANGE SATES: Lister as <1.0% content in BASESMSDS to ROMMPROMESTANDED PRESPONDAL MATERIAL

MATERIAL TYPE: Electronic Component

RESIDUALS AND IMPURITIES NOTES: RoHS Compliant without exemptions 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:Electronics --- This includes power cords and electrical receptacles.

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

%: 100.0000 GS: Not Screened RC: UNK NANO: Unknown SUBSTANCE ROLE: Electronic component

HAZARD TYPE AGENCY AND LIST TITLES WARNINGS

Hazard Screening not performed

SUBSTANCE NOTES: Version: SCElec/2018-02-23 Brief Description: Power Cables

Compliance: RoHS Compliant without exceptions

Takeback Program: none Per: SPECIAL CONDITION: Electronics

Version: SCElec/2018-02-23

#### POWDER COAT FINISH FOR METAL LEGS

%: 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 option covers all colors and contains alternate materials based on different pigments. 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.

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

ID: 40471-09-8

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

HAZARD SCREENING METHOD:	D SCREENING METHOD: Pharos Chemical and Materials Library		REENING DATE:	2021-07-08 18:36:09
%: 50.0000 - 60.0000	GS: NoGS	RC: UNK	NANO: No	SUBSTANCE ROLE: Monomer
HAZARD TYPE	AGENCY AND LIST TITLES	W	/ARNINGS	
None found			No wai	mings found on HPD Priority Hazard Lists

SUBSTANCE NOTES:

TITANIUM DIOXIDE ID: 13463-67-7

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2021-07-08 18:36:12

%: 25.0000 - 50.0000 GS: LT-1 RC: UNK NANO: No SUBSTANCE ROLE: Pigment

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CAN	EU - GHS (H-Statements)	H351 - Suspected of causing cancer
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

SUBSTANCE NOTES: This is not in all color options and therefore the depending on the color choice this substance is a "may contain".

#### PYROMELLITIC ACID 2-PHENYL-2-IMIDAZOLINE SALT (1:1)

ID: 54553-90-1

HAZARD SCREENING METHOD:	Pharos Chemical and Materials Library	HAZARD S	SCREENING DATE:	2021-07-08 18:36:17
%: 2.5000 - 10.0000	GS: LT-P1	RC: UNK	NANO: <b>No</b>	SUBSTANCE ROLE: Coating
HAZARD TYPE	AGENCY AND LIST TITLES		WARNINGS	
MUL	German FEA - Substances Hazardous Waters	s to	Class 2 - Hazard to	o Waters

SUBSTANCE NOTES:

TRIGLYCIDYL ISOCYANURATE	ID: 2451-62-9

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2021-07-08 18:36:18

%: 2.5000 - 10.0000 GS: LT-1 RC: UNK NANO: No SUBSTANCE ROLE: Curing agent

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

SUBSTANCE NOTES:

BARIUM SULFATE				ID: 7727-43	-/
HAZARD SCREENING METHOD:	Pharos Chemical and Materials Library	HAZARD SC	REENING DATE: 2	2021-07-08 18:36:17	
%: 2.5000 - 10.0000	GS: <b>BM-2</b>	RC: UNK	NANO: No	SUBSTANCE ROLE: Pigment	

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

CAN

MAK

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

SUBSTANCE NOTES: This substance is not in all color options and should be considered a "may contain".

QUARTZ ID: 14808-60-7

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2021-07-08 18:36:20

%: 0.1000 - 1.0000 GS: LT-1 RC: UNK NANO: No SUBSTANCE ROLE: Abrasion resistance

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	US NIH - Report on Carcinogens	Known to be Human Carcinogen (respirable size - occupational setting)
CAN	MAK	Carcinogen Group 1 - Substances that cause cancer in man
CAN	IARC	Group 1 - Agent is carcinogenic to humans - inhaled from occupational sources
CAN	IARC	Group 1 - Agent is Carcinogenic to humans
CAN	GHS - Australia	H350i - May cause cancer by inhalation
CAN	GHS - New Zealand	6.7A - Known or presumed human carcinogens
CAN	GHS - Japan	Carcinogenicity - Category 1A [H350]

SUBSTANCE NOTES: This is not in all color options therefore it is a "may contain" depending on the color choice.

SUBSTANCE NOTES: Based in SDS this substance is a "may contain" and may not appear in all color choices.

ALUMINUM OXIDE				ID: 1344-28-1
HAZARD SCREENING METHOD:	Pharos Chemical and Materials Library	HAZARD :	SCREENING DATE:	2021-07-08 18:36:21
%: 0.1000 - 2.5000	GS: <b>BM-2</b>	RC: UNK	NANO: <b>No</b>	SUBSTANCE ROLE: Abrasive
HAZARD TYPE	AGENCY AND LIST TITLES		WARNINGS	
RES	AOEC - Asthmagens		Asthmagen (Rs) -	sensitizer-induced

SUBSTANCE NOTES:

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

%: 0.0000 - 2.5000

GS: LT-UNK

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

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

ALUMINUM HYDROXIDE, DRIE					ID: 21645-51-2
HAZARD SCREENING METHOD:	Pharos Chemical and Materials Library	HAZARD SC	REENING DATE:	2021-07-08 18:36:34	
%: 0.0000 - 2.5000	GS: <b>BM-2</b>	RC: UNK	NANO: <b>No</b>	SUBSTANCE ROLE: F	iller
HAZARD TYPE	AGENCY AND LIST TITLES	V	VARNINGS		
None found			No wa	rnings found on HPD Priority	Hazard Lists
SUBSTANCE NOTES: This is no	ot in all color options therefore it is a "may o	contain" deper	nding on the color	choice.	

SC:BIO:WOODVENEER %: 0.0000 - 1.0000

SC-DOMESTIC WOOD VENEER

ID: SC:Bio

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.

3C.DOMESTIC WOOD V	ENEER			Ю. ЭС.ЫО	
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.

#### WOOD ADHESIVE 1 %: 0.0000 - 1.5000

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%. 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 SO	CREENING DATE:	2021-07-08 18:36:10
%: 30.0000 - 39.2300	GS: LT-UNK	RC: UNK	NANO: <b>No</b>	SUBSTANCE ROLE: Binder
HAZARD TYPE	AGENCY AND LIST TITLES	1	WARNINGS	
None found			No wa	rnings 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
%: 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: P	haros Chemical and Materials Library	HAZARD S	SCREENING DATE:	2021-07-08 18:36:15
%: 6.0000 - 8.7200	GS: <b>BM-1</b>	RC: UNK	NANO: No	SUBSTANCE ROLE: Filler
HAZARD TYPE	AGENCY AND LIST TITLES		WARNINGS	
CAN	MAK		Carcinogen Group but not sufficient fo	3B - Evidence of carcinogenic effects or classification
CAN	IARC		Group 2b - Possibly	y 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: 2021-07-08 18:36:16			
%: 5.0000 - 8.7200	GS: LT-P1	RC: UNK	NANO: <b>No</b>	SUBSTANCE ROLE: Plasticizer	
HAZARD TYPE	AGENCY AND LIST TITLES		WARNINGS		
END	TEDX - Potential Endocrine Disruptor	s Potential Endocrine Disruptor		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 SC	REENING DATE:	2021-07-08 18:36:19
%: 0.1000 - 0.7000	GS: LT-UNK	RC: UNK	NANO: <b>No</b>	SUBSTANCE ROLE: Defoamer
HAZARD TYPE	AGENCY AND LIST TITLES	W	/ARNINGS	
None found			No warr	nings 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:		2021-07-08 18:36:24		
%: 0.0000 - 1.2200	GS: <b>LT-P1</b>	RC: UNK	NANO: <b>No</b>	SUBSTANCE ROLE: Curing agent		
HAZARD TYPE	AGENCY AND LIST TITLES		WARNINGS			
SKI	EU - GHS (H-Statements)	EU - GHS (H-Statements)		H314 - Causes severe skin burns and eye damage		
RES	AOEC - Asthmagens		Asthmagen (Rs) -	sensitizer-induced		

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 SCF	REENING DATE: 2	021-07-08 18:34:57
%: <b>0.0000 - 1.2200</b>	GS: LT-UNK	RC: UNK	NANO: No	SUBSTANCE ROLE: Binder
HAZARD TYPE	AGENCY AND LIST TITLES	W	ARNINGS	
None found			No warn	ings 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.

WOOD ADHESIVE 2 %: 0.0000 - 1.5000

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.

of composition by weight of 1.5%. 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.
ork Untethered Power System: Swing

SUBSTANCE NOTES: Per manufacturer's SDS.

ID: 558440-22-5

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library RC: UNK NANO: No SUBSTANCE ROLE: Solvent
HAZARD TYPE AGENCY AND LIST TITLES WARNINGS

None found No warnings found on HPD Priority Hazard Lists

POLYCHLOROPRENE ID: 9010-98-4

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2021-07-08 18:36:10
%: 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: anufacturer's SDS.

ZINC OXIDE ID: 1314-13-2

HAZARD SCREENING METHOD:	Pharos Chemical and Materials Library	HAZARD SCREENING DATE		2021-07-08 18:36:18		
%: 1.0000 - 3.0000	GS: <b>BM-1</b>	RC: UNK	NANO: <b>No</b>	SUBSTANCE ROLE: Accelerator		
HAZARD TYPE	AGENCY AND LIST TITLES		WARNINGS			
AQU	EU - GHS (H-Statements)		H400 - Very toxic to aquatic life			
AQU	EU - GHS (H-Statements)		H410 - Very toxic to aquatic life with long lasting effects			
END	TEDX - Potential Endocrine Disruptor	rs	Potential Endocrin	ne Disruptor		
RES	AOEC - Asthmagens	Asthmagen (Rs) - sensitizer-induced		sensitizer-induced		
MUL	German FEA - Substances Hazardou Waters	s to	Class 2 - Hazard to	o Waters		

SUBSTANCE NOTES: anufacturer's SDS. anufacturer's SDS.

#### RESIN ACIDS AND ROSIN ACIDS, FUMARATED, CALCIUM SALTS

ID: 94387-04-9

MUL	German FEA - Substances Hazardous Waters	s to	Class 2 - Hazard to	o Waters	
HAZARD TYPE	AGENCY AND LIST TITLES		WARNINGS		
%: 0.1000 - 5.0000	GS: LT-P1	RC: UNK	NANO: <b>No</b>	SUBSTANCE ROLE: Filler	
HAZARD SCREENING METHOD:	Pharos Chemical and Materials Library	HAZARD S	SCREENING DATE:	2021-07-08 18:36:20	

SUBSTANCE NOTES: anufacturer's SDS.

**LAMINATE** %: 0.0000 - 1.3000

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: 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 SCR	EENING DATE: N	ot Screened
%: 50.0000 - 50.9700	GS: Not Screened	RC: UNK	NANO: <b>No</b>	SUBSTANCE ROLE: Filler
HAZARD TYPE	AGENCY AND LIST TITLES	WA	ARNINGS	
	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. CAS RN 9004-

PHENOL-FORMALDEHYDE RESIN ID: 9003-35-4

HAZARD SCREENING METHOD: P	Pharos Chemical and Materials Library	HAZARD S	CREENING DATE: 20	021-07-08 18:36:12	
%: 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

RES	AOEC - Asthmagens		Asthmagen (Rs) - sensitizer-induced		
HAZARD TYPE	AGENCY AND LIST TITLES	W	/ARNINGS		
%: 3.6100 - 10.0500	GS: LT-UNK	RC: UNK	NANO: No	SUBSTANCE ROLE: Filler	
HAZARD SCREENING METHOD:	Pharos Chemical and Materials Library	HAZARD SC	REENING DATE:	2021-07-08 18:36:16	

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

## MELAMINE/FORMALDEHYDE RESIN

None found No warnings found on HPD Priority Hazard Lists

ID: 9003-08-1

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:		2021-07-08 18:36:24	
%: 0.0000 - 0.3300	GS: LT-UNK	RC: UNK	NANO: No	SUBSTANCE ROLE: Polymer species	
HAZARD TYPE	AGENCY AND LIST TITLES	V	WARNINGS		
None found			No w	arnings found on HPD Priority Hazard Lists	
SUBSTANCE NOTES: The m	naterial laminate was supplemented with inforn	nation from th	e database of co	mmon building materials.	

POLYNOXYLIN ID: 9011-0							
HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE:		2021-07-08 18:34:47			
%: 0.0000 - 4.8900	GS: LT-P1	RC: UNK	NANO: No	SUBSTANCE ROLE: Polymer species			
HAZARD TYPE	AGENCY AND LIST TITLES		WARNINGS				
RES	AOEC - Asthmagens		Asthmagen (Rs) - sensitizer-induced				

SUBSTANCE NOTES: This is urea formaldehyde



#### **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

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:** 

ISSUE DATE: 2021-12-

EXPIRY DATE: 2022-12- CERTIFIER OR LAB: SCS Global

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.

#### **ACCESSORIES: FABRIC**

HPD URL: https://builder.hpd-

collaborative.org/actions/builder/record/7048/download

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:

Pair Product lines are completely customizable. Accessories shall be chosen by the designer to obtain the look or function desired by the client.

ACCESSORIES: METAL AND WOOD

HPD URL: https://builder.hpd-

collaborative.org/actions/builder/record/7014/download

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:

Pair Product lines are completely customizable. Accessories shall be chosen by the designer to obtain the look or function desired by the client.



#### Section 5: General Notes

Pair provided all the information for this HPD in good faith with the intention of understanding and screening their products' material ingredients at .01% or 100 ppm. Any errors made should be simply considered human errors and Pair shall not be held liable for any errors made. With 2500 possible combinations to this product line, we conducted this HPD with a "low" and "high" option to configure the percentage of material composition for all materials and substances. The "low" option is Swing with a TOP 48" - NO HOLE RADIUS, NO HOLE RADIUS, SWING BEAM, 48", SWING COVER, SWING LEGS, and HARDWARE. For the "high" option we used Swing with SWING TOP 72", SWING BEAM, 72", SWING COVER, SWING LEG, SWING TUBE 72", SWING LEG, BAR END CAP, SWING LEG, BAR MIDCAP, SWING TUBE BAR BRACKET.

Notes 1). All other configurations are within this range. 2). All hardware for this system not reported is in alignment with HPDC Special Conditions-Minor Fasteners. The total weight of all metal fasteners is <5% 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 1.17% and 1.23%. 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. 3). Electronics are also covered by a special condition and reported as such. All electrical components are EU RoHS compliant without exemptions. 4). All impurities and residuals reported as part of the screening process are based on peer-reviewed scientific data about that substance and are not a guarantee of presence in the actual material. No actual materials were tested for impurities and residuals therefore the information provided is for reference only. The Pharos database was used.

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



#### 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** 

**CAN** Cancer

**AQU** Aquatic toxicity

**DEV** Developmental toxicity **END** Endocrine activity

**EYE** Eye irritation/corrosivity

**GEN** Gene mutation

**GLO** Global warming

LAN Land toxicity

MAM Mammalian/systemic/organ toxicity

**MUL** Multiple **NEU** Neurotoxicity

NF Not found on Priority Hazard Lists

**OZO** Ozone depletion

PBT Persistent, bioaccumulative, and toxic

PHY Physical hazard (flammable or reactive)

**REP** Reproductive

**RES** Respiratory sensitization

SKI Skin sensitization/irritation/corrosivity

**UNK** Unknown

#### GreenScreen (GS)

BM-4 Benchmark 4 (prefer-safer chemical)

BM-3 Benchmark 3 (use but still opportunity for improvement)

BM-2 Benchmark 2 (use but search for safer substitutes)

BM-1 Benchmark 1 (avoid - chemical of high concern)

BM-U Benchmark Unspecified (due to insufficient data)

LT-P1 List Translator Possible 1 (Possible Benchmark-1)

LT-1 List Translator 1 (Likely Benchmark-1)

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.)

NoGS No GreenScreen.

#### **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.