

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	Threshold Level	Residuals/Impurities	
<input checked="" type="radio"/> Nested Materials Method <input type="radio"/> Basic Method	<input checked="" type="radio"/> 100 ppm <input type="radio"/> 1,000 ppm <input type="radio"/> Per GHS SDS <input type="radio"/> Other	Considered in 12 of 12 Materials  Explanation(s) provided for Residuals/Impurities? <input checked="" type="radio"/> Yes <input type="radio"/> No	<i>All Substances Above the Threshold Indicated Are:</i> <b>Characterized</b> <input checked="" type="radio"/> Yes Ex/SC <input type="radio"/> Yes <input type="radio"/> No <i>% weight and role provided for all substances except SC substances characterized according to SC guidance.</i> <b>Screened</b> <input checked="" type="radio"/> Yes Ex/SC <input type="radio"/> Yes <input type="radio"/> No <i>All substances screened using Priority Hazard Lists with results disclosed except SC substances screened according to SC guidance.</i> <b>Identified</b> <input type="radio"/> Yes Ex/SC <input type="radio"/> Yes <input checked="" type="radio"/> No <i>One or more substances not disclosed by Name (Specific or Generic) and Identifier and/ or one or more Special Condition did not follow guidance.</i>
Threshold Disclosed Per <input type="radio"/> Material <input checked="" type="radio"/> Product			

CONTENT IN DESCENDING ORDER OF QUANTITY

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

**MATERIAL** | **SUBSTANCE** | *RESIDUAL OR IMPURITY*

**GREENSCREEN SCORE** | **HAZARD TYPE**

**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: ELECTRICAL COMPONENTS** [ **SC: POWER CABLES** Not 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)**

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 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, 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?

Yes

No

PREPARER: Self-Prepared

VERIFIER:

VERIFICATION #:

SCREENING DATE: 2021-07-08

PUBLISHED DATE: 2021-12-29

EXPIRY DATE: 2024-07-08

## Section 2: Content in Descending Order of Quantity

This section lists contents in a product based on specific threshold(s) and reports detailed health information including hazards. This HPD uses the inventory method indicated above, which is one of three possible methods:

- Basic Inventory method with Product-level threshold.
- Nested Material Inventory method with Product-level threshold
- Nested Material Inventory method with individual Material-level thresholds

Definitions and requirements for the three inventory methods and requirements for each data field can be found in the HPD Open Standard version 2.2, available on the HPDC website at: [www.hpd-collaborative.org/hpd-2-2-standard](http://www.hpd-collaborative.org/hpd-2-2-standard)

<b>BEAM</b>	<b>%: 30.0000 - 40.9000</b>	
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: 7439-89-6

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library	HAZARD SCREENING DATE: 2021-07-08 11:36:08			
%: 97.0000 - 100.0000	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.

### CALCIUM ID: 7440-70-2

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library	HAZARD SCREENING DATE: 2021-07-08 11:36:26			
%: 0.0000 - 0.1000	GS: LT-P1	RC: UNK	NANO: No	SUBSTANCE ROLE: Alloy element

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
PHY	EU - GHS (H-Statements)	H261 - In contact with 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 11:36:26			
%: 0.0000 - 0.6000	GS: LT-UNK	RC: UNK	NANO: No	SUBSTANCE ROLE: Alloy element

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

SUBSTANCE NOTES: 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: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-07-08 11:36:26**

#: **0.0000 - 0.5000** GS: **LT-P1** 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]

## MANGANESE

ID: 7439-96-5

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-07-08 11:36:27**

#: **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 reproduction - 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 11:36:28**

#: **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: 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 SCREENING DATE: **2021-07-08 11:36:28**

#: **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

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

**ALUMINUM FLUORIDE**

ID: 7784-18-1

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-07-08 11:36:28**

#: **0.0000 - 40.0000** GS: **BM-1** RC: **UNK** NANO: **Unknown** SUBSTANCE ROLE: **Binder**

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

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.

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)**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-07-08 11:36:29**

%: **0.0000 - 40.0000** 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:** 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

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 TYPE	AGENCY AND LIST TITLES	WARNINGS
Hazard Screening not performed		
<p><b>SUBSTANCE NOTES:</b>  Version: SCGeoMats/2019-06-20  Origin: Unknown  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.</p>		

**POLYVINYL ACETATE**

ID: 9003-20-7

HAZARD SCREENING METHOD: <b>Pharos Chemical and Materials Library</b>		HAZARD SCREENING DATE: <b>2021-07-08 11:36:25</b>		
%: <b>0.0000 - 40.0000</b>	GS: <b>LT-UNK</b>	RC: <b>UNK</b>	NANO: <b>Unknown</b>	SUBSTANCE ROLE: <b>Binder</b>
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.

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

ID: 97568-33-7

HAZARD SCREENING METHOD: <b>Pharos Chemical and Materials Library</b>		HAZARD SCREENING DATE: <b>2021-07-08 11:36:30</b>		
%: <b>0.0000 - 40.0000</b>	GS: <b>LT-UNK</b>	RC: <b>UNK</b>	NANO: <b>No</b>	SUBSTANCE ROLE: <b>Binder</b>
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS		
CAN	EU - GHS (H-Statements)	H351 - Suspected of causing cancer		
MUL	US EPA - PPT Chemical Action Plans	EPA Chemical of Concern - Action Plan published		
RES	AOEC - Asthmagens	Asthmagens (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	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.

**METAL LEGS**

%: 2.0000

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 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 SCREENING DATE: 2021-07-08 11:36:08

%: 97.0000 - 100.0000 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.

**MANGANESE**

ID: 7439-96-5

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2021-07-08 11:36:18

%: 1.1000 - 1.6500 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	Toxic to reproduction - 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

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2021-07-08 11:36:19

%: 0.3500 GS: LT-P1 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]



**SULFUR, PRECIPITATED**

ID: 7704-34-9

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-07-08 11:36:23**%: **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

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 11:36:22**%: **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 reproduction - 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 11:36:22**%: **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: 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 SCREENING DATE: **2021-07-08 11:36:23**%: **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:

**PHOSPHORUS**

ID: 7723-14-0

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-07-08 11:36:21**%: **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)	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      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: 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.

**SC:WOOD DUST**

ID: SC:Bio

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		

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. Generic CAS RN 9004-34-6

**CELLULOSE, MICROCRYSTALLINE**

ID: 9004-34-6

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library      HAZARD SCREENING DATE: 2021-07-08 11:36:13

#: 10.0000 - 20.0000      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:

**UNDISCLOSED**

ID: Undisclosed

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library      HAZARD SCREENING DATE: 2021-07-08 11:36:15

#: 10.0000 - 30.0000      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: 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: <b>Pharos Chemical and Materials Library</b>	HAZARD SCREENING DATE: <b>2021-07-08 11:36:14</b>			
%: <b>10.0000 - 30.0000</b>	GS: <b>NoGS</b>	RC: <b>UNK</b>	NANO: <b>No</b>	SUBSTANCE ROLE: <b>Binder</b>

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
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: <b>Pharos Chemical and Materials Library</b>	HAZARD SCREENING DATE: <b>2021-07-08 11:36:14</b>			
%: <b>10.0000 - 30.0000</b>	GS: <b>LT-P1</b>	RC: <b>UNK</b>	NANO: <b>No</b>	SUBSTANCE ROLE: <b>Binder</b>

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**

PRODUCT THRESHOLD: 100 ppm	RESIDUALS AND IMPURITIES CONSIDERED: Yes	MATERIAL TYPE: Polymeric Material
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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: <b>Pharos Chemical and Materials Library</b>	HAZARD SCREENING DATE: <b>2021-07-08 11:36:11</b>			
%: <b>25.0000 - 50.0000</b>	GS: <b>BM-1</b>	RC: <b>UNK</b>	NANO: <b>No</b>	SUBSTANCE ROLE: <b>Film former</b>

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: **2021-07-08 11:35:18**

#: **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: **2021-07-08 11:35:24**

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

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
SKI	MAK	Sensitizing Substance Sh - Danger of skin sensitization
SKI	EU - GHS (H-Statements)	H315 - Causes skin irritation
EYE	EU - GHS (H-Statements)	H319 - Causes serious eye irritation
AQU	EU - GHS (H-Statements)	H411 - Toxic to aquatic life with long lasting effects
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to 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: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-07-08 11:36:31**

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

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CAN	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

%: <b>Impurity/Residual</b>	GS: <b>BM-1</b>	RC: <b>UNK</b>	NANO: <b>No</b>	SUBSTANCE ROLE: <b>Impurity/Residual</b>
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		
SKI	EU - GHS (H-Statements)	H317 - May cause an allergic skin reaction		
EYE	EU - GHS (H-Statements)	H318 - Causes serious eye damage		
REP	US NIH - Reproductive & Developmental Monographs	Some Evidence of Adverse Effects - Reproductive Toxicity		
SKI	MAK	Sensitizing Substance SP - Danger of photocontact sensitization		
REP	EU - GHS (H-Statements)	H360F - May damage fertility		
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	Toxic to reproduction - 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**

%: <b>Impurity/Residual</b>	GS: <b>BM-2</b>	RC: <b>UNK</b>	NANO: <b>No</b>	SUBSTANCE ROLE: <b>Impurity/Residual</b>
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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
MAM	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: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-07-08 11:36:31**

%: **Impurity/Residual** GS: **LT-1** 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 11:36:33**

#: 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
SKI	EU - GHS (H-Statements)	H317 - May cause an allergic skin reaction
EYE	EU - GHS (H-Statements)	H318 - Causes serious eye damage
REP	US NIH - Reproductive & Developmental Monographs	Some Evidence of Adverse Effects - Reproductive Toxicity
SKI	MAK	Sensitizing Substance SP - Danger of photocontact sensitization
REP	EU - GHS (H-Statements)	H360F - May damage fertility
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	Toxic to reproduction - 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 Library** HAZARD SCREENING DATE: **2021-07-08 11:36:33**

#: 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

SC: **ELECTRONICS:ELECTRICALCOMPONENTS**

#: 0.1000 - 5.0000

SUBSTANCE NOTES: Listed as <1.0% content in BASF MSDS for commercial DGMA (Laremer DPGDA). MATERIAL TYPE: Electronic Component

PRODUCT THRESHOLD: 100 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

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.

**SC:POWER CABLES**

ID: **SC:Electronics**

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-ETHANEDIOL AND HEXANEDIOIC ACID**

ID: **40471-09-8**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-07-08 11:36:09**

%: **50.0000 - 60.0000** GS: **NoGS** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Monomer**

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

**SUBSTANCE NOTES:**

**TITANIUM DIOXIDE**

ID: **13463-67-7**

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-07-08 11:36:12**

%: **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 SCREENING DATE: **2021-07-08 11:36:17**

%: **2.5000 - 10.0000** GS: **LT-P1** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Coating**

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

SUBSTANCE NOTES:

### TRIGLYCIDYL ISOCYANURATE

ID: 2451-62-9

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-07-08 11:36:18**

%: **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: 7727-43-7

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-07-08 11:36:17**

%: **2.5000 - 10.0000** GS: **BM-2** 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 11:36:20**

%: **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.

### ALUMINUM OXIDE

ID: 1344-28-1

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-07-08 11:36:21**

%: **0.1000 - 2.5000** GS: **BM-2** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Abrasive**

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

SUBSTANCE NOTES:

### KAOLIN

ID: 1332-58-7

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-07-08 11:36:29**

%: **0.0000 - 2.5000** GS: **LT-UNK** 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

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

### ALUMINUM HYDROXIDE, DRIED

ID: 21645-51-2

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-07-08 11:36:34**

%: **0.0000 - 2.5000** GS: **BM-2** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Filler**

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

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

### SC: BIO: WOODVENEER

%: 0.0000 - 1.0000

**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.

**SC:DOMESTIC WOOD VENEER**

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: **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 SCREENING DATE: **2021-07-08 11:36:10**

%: **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: **2021-07-08 11:36:11**

#: **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: **2021-07-08 11:36:15**

#: **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: **2021-07-08 11:36:16**

#: **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 TYPE	AGENCY AND LIST TITLES	WARNINGS
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%: **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.

**ALUMINUM CHLORIDE**ID: **7446-70-0**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
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%: **0.0000 - 1.2200**GS: **LT-P1**RC: **UNK**NANO: **No**SUBSTANCE ROLE: **Curing agent**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

SKI

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 TYPE	AGENCY AND LIST TITLES	WARNINGS
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%: **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.

**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.

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 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: **2021-07-08 11:36:09**%: **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: Per manufacturer's SDS.

**POLYCHLOROPRENE**

ID: 9010-98-4

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-07-08 11:36:10**%: **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 11:36:18**%: **1.0000 - 3.0000** GS: **BM-1** RC: **UNK** NANO: **No** 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 Disruptors	Potential Endocrine Disruptor
RES	AOEC - Asthmagens	Asthmagen (Rs) - sensitizer-induced
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters

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

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

ID: 94387-04-9

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-07-08 11:36:20**%: **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: 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: <b>Pharos Chemical and Materials Library</b>		HAZARD SCREENING DATE: <b>Not Screened</b>		
%: <b>50.0000 - 50.9700</b>	GS: <b>Not Screened</b>	RC: <b>UNK</b>	NANO: <b>No</b>	SUBSTANCE ROLE: <b>Filler</b>
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. CAS RN 9004-34-6

**PHENOL-FORMALDEHYDE RESIN**

ID: **9003-35-4**

HAZARD SCREENING METHOD: <b>Pharos Chemical and Materials Library</b>		HAZARD SCREENING DATE: <b>2021-07-08 11:36:12</b>		
%: <b>20.0000 - 23.9800</b>	GS: <b>LT-P1</b>	RC: <b>UNK</b>	NANO: <b>No</b>	SUBSTANCE ROLE: <b>Binder</b>
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: <b>Pharos Chemical and Materials Library</b>		HAZARD SCREENING DATE: <b>2021-07-08 11:36:16</b>		
%: <b>3.6100 - 10.0500</b>	GS: <b>LT-UNK</b>	RC: <b>UNK</b>	NANO: <b>No</b>	SUBSTANCE ROLE: <b>Filler</b>
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: <b>Pharos Chemical and Materials Library</b>		HAZARD SCREENING DATE: <b>2021-07-08 11:36:02</b>		
%: <b>0.0100 - 0.3400</b>	GS: <b>LT-UNK</b>	RC: <b>UNK</b>	NANO: <b>No</b>	SUBSTANCE ROLE: <b>Polymer species</b>
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.

**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 11:36:24**

#: **0.0000 - 0.3300** GS: **LT-UNK** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Polymer species**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
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None found		No warnings found on HPD Priority Hazard Lists
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SUBSTANCE NOTES: The material laminate was supplemented with information from the database of common building materials.

**POLYNOXYLIN**

ID: 9011-05-6

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-07-08 11:34:47**

#: **0.0000 - 4.8900** GS: **LT-P1** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Polymer species**

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

### 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, self-reported 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**  
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 WEBSITE: <http://madebypair.com>

CONTACT NAME: **Astor Ng**  
 TITLE: **Project Manager**  
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*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**

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

**GreenScreen (GS)**

<b>BM-4</b> Benchmark 4 (prefer-safer chemical)	<b>LT-1</b> List Translator 1 (Likely Benchmark-1)
<b>BM-3</b> Benchmark 3 (use but still opportunity for improvement)	<b>LT-UNK</b> 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.)
<b>BM-2</b> Benchmark 2 (use but search for safer substitutes)	<b>NoGS</b> No GreenScreen.
<b>BM-1</b> Benchmark 1 (avoid - chemical of high concern)	
<b>BM-U</b> Benchmark Unspecified (due to insufficient data)	
<b>LT-P1</b> 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.*