created via: HPDC Online Builder

**HPD UNIQUE IDENTIFIER: 31116** 

CLASSIFICATION: 06 42 00 Wood Paneling

PRODUCT DESCRIPTION: This HPD covers all available dimensions, thicknesses and laminate options for NU Green® FR MDF by Uniboard®. NU Green® FR MDF is a Fire-Resistant Medium Density Fiberboard. NU Green® FR MDF is primarily composed of cellulosic materials (usually wood), generally in the form of discrete pieces of particles, as distinguished from fibers, bonded together with a bonding system cured under heat and pressure, and contains additives. No-Added Formaldehyde (NAF) panels.

# 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** 

C 1,000 ppm

O Per GHS SDS

Other

**Residuals/Impurities Evaluation** 

Completed in 6 of 6 Materials

Explanation(s) provided for Residuals/Impurities?

Yes ○ No

For all contents above the threshold, the manufacturer has: Characterized Yes ○ No

Provided weight and role.

Screened ⊙ Yes ○ No

Provided screening results using HPDC-approved

methods.

 Yes No Identified

Provided name and CAS RN or other identifier.

#### 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.

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

**GREENSCREEN SCORE | HAZARD TYPE** 

WOOD [ WOOD FIBER ] FLAME RETARDANT [ WATER NoGS UNDISCLOSED LT-UNK | EYE UNDISCLOSED LT-UNK UNDISCLOSED LT-UNK UNDISCLOSED LT-UNK | WATER [ WATER BM-4] DIISOCYANATE RESIN [ POLYMERIC MDI (PMDI) LT-UNK | CAN | RES | EYE | SKI | MAM METHYLENE BISPHENYL DIISOCYANATE (PURE MDI) LT-UNK | CAN | RES | SKI | EYE | MAM DIPHENYLMETHANE DIISOCYANATE (MDI) - NON ISOMER SPECIFIC LT-UNK | SKI | EYE | CAN | MAM 4,4'-MDI DIMER LT-UNK | SKI | EYE | MAM | CAN ISOCYANIC ACID, POLYMETHYLENEPOLYPHENYLENE ESTER, POLYMER WITH \_-HYDRO-\_-HYDROXYPOLY( OXY-1,2-ETHANEDIYL) LT-P1 | SKI | MAM ] MELAMINE CELLULOSE [ UNDISCLOSED NoGS UNDISCLOSED LT-UNK | UNDISCLOSED NoGS UNDISCLOSED LT-P1 | SKI UNDISCLOSED LT-UNK UNDISCLOSED LT-1 | CAN | END | MAM UNDISCLOSED BM-4 UNDISCLOSED LT-P1 | END | EYE | MAM UNDISCLOSED LT-1 | END | DEV | EYE | MAM | SKI UNDISCLOSED LT-UNK UNDISCLOSED BM-4 WAX [ SLACK WAX (PETROLEUM) LT-1 CAN | MUL | DEV ]

Number of Greenscreen BM-4/BM3 contents ... 3

Contents highest-concern GreenScreen score(s) (BM-1, LT-1, LT-P1) ... LT-1, LT-P1

Nanomaterial ... No

# **INVENTORY AND SCREENING NOTES:**

Special Conditions applied: [BiologicalMaterial]

HPD prepared using a Nested Materials Inventory with a product threshold at 100 ppm. The content inventory includes ranges to encompass both NU Green® FR MDF with and without melamine lamiates. Nu Green® FR MDF contain materials with Special Conditions (biological material and polymers) as per the HPDC. Reporting of Biological materials was done according to HPDC Guidelines. Guidelines for reporting polymers are still under development by HPDC and the manufacturers will update the HPD accordingly once these guidelines get published. Substances present in NU Green® FR MDF panels, as well as known residuals and impurities, have been disclosed at 100 ppm. More details about how residuals and impurities were considered available in the appropriate sections.

# **VOLATILE ORGANIC COMPOUND (VOC) CONTENT**

VOC Content data is not applicable for this product category.

# **CERTIFICATIONS AND COMPLIANCE** See Section 3 for additional listinas.

VOC emissions: CDPH Standard Method V1.2 (Section 01350/CHPS) -Not applicable

Sustainable forestry: FSC Certification - Chain of Custody (COC) Formaldehyde emissions: EPA TSCA Title VI (40 CRF 770), CAN/CSA-0160-16, ANSI A208.1 and CARB Composite Wood ATCM CA 93120 No-Added Formaldehyde (NAF)

Multi-attribute: CPA 4-19 Eco-Certified Composite (ECC) - Value Added Certification

# **CONSISTENCY WITH OTHER PROGRAMS**

Pre-checked for LEED v4 Option 1. Pre-checked for LEED v4.1 Option 1.

Third Party Verified?

PREPARER: Vertima

SCREENING DATE: 2023-01-24

C Yes

VERIFIER:

PUBLISHED DATE: 2023-01-24

⊙ No VERIFICATION #:

EXPIRY DATE: 2026-01-24

# 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 2.3, available on the HPDC website at: www.hpd-collaborative.org/hpd-2-3-standard

WOOD %: 74.7000 - 76.8000

PRODUCT THRESHOLD: 100 RESIDUALS AND IMPURITIES EVALUATION COMPLETED: MATERIAL TYPE: Wood Dust, Fiber or

ppm Yes Chips

RESIDUALS AND IMPURITIES NOTES: No residuals or impurities suspected to be present in wood fiber.

OTHER MATERIAL NOTES: Weight percentage may vary as this HPD covers multiple products, i.e. with or without laminate.

WOOD FIBER ID: Biological Material

HAZARD DATA SOURCE: HPDC Special Conditions Policy

%: 100.0000 GreenScreen: Not Required RC: PreC NANO: No MATERIAL ROLE: Structure component

HAZARD TYPE AGENCY AND LIST TITLES WARNINGS

Hazard Screening is not applicable to this Special Condition

BIOLOGICAL MATERIALS CATEGORY: Tree-based materials

INGREDIENT DESCRIPTION: 9004-34-6

MATERIAL CONTENT NOTES: Pre-Consumer Recycled includes fiber, such as scrap, trimmings and cuttings, generated as a by-product from manufacturing and converting processes of primary wood products. Examples of this category include planer shavings, plytrim, sawdust, fines, chips and bagasse.

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.

FLAME RETARDANT %: 14.1000 - 14.5000

PRODUCT THRESHOLD: 100 ppm RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes MATERIAL TYPE: Other: Inorganic

RESIDUALS AND IMPURITIES NOTES: The supplier declared that no residuals or impurities are known or expected to be present at or above the Inventory Threshold

OTHER MATERIAL NOTES: Weight percentage may vary as this HPD covers multiple products, i.e. with or without laminate.

WATER ID: 7782-18-5

HAZARD DATA SOURCE: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2023-01-24 9:17:15

%: 45.0000 - 55.0000 GreenScreen: NoGS RC: PreC NANO: No SUBSTANCE ROLE: Solvent

HAZARD TYPE LIST NAME AND SOURCE WARNINGS

None found No warnings found on HPD Priority Hazard Lists

None found No listings found on Additional Hazard Lists

SUBSTANCE NOTES: The water comes from re-used rainwater.

UNDISCLOSED	ID: Undisclosed

HAZARD DATA SOURCE:	Pharos Chemical and Materials Library	HAZARD SO	CREENING DATE:	2023-01-24 9:17:16
%: 30.0000 - 30.0000	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Flame retardant
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
EYE	GHS - New Zealand		Eye irritation cat	regory 2
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION	
RESTRICTED LIST	Cradle to Cradle Products Innov Institute (C2CPII)	ation	0_0 000	Product Standard Restricted (RSL) - Effective July 1, 2022
			Biological and E	invironmentally Released Materials

SUBSTANCE NOTES: This substance is undisclosed as it is confidential.

UNDISCLOSED	ID: Undisclosed
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HAZARD DATA SOURCE:	Pharos Chemical and Materials Library	HAZARD SO	CREENING DATE:	2023-01-24 9:17:17
%: 10.0000 - 15.0000	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Flame retardant
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
None found			No warı	nings found on HPD Priority Hazard Lists
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION	
None found			No	listings found on Additional Hazard Lists

SUBSTANCE NOTES: This substance is undisclosed as it is confidential.

LINDISCLOSED	ID: Undisclosed

HAZARD DATA SOURCE:	Pharos Chemical and Materials Library	HAZARD SO	CREENING DATE:	2023-01-24 9:17:17
%: 10.0000 - 15.0000	GreenScreen: LT-UNK	RC: None	NANO: <b>No</b>	SUBSTANCE ROLE: Flame retardant
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
None found			No warı	nings found on HPD Priority Hazard Lists
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION	
None found			No	listings found on Additional Hazard Lists

SUBSTANCE NOTES: This substance is undisclosed as it is confidential.

UNDISCLOSED				ID: Undisclose
HAZARD DATA SOURCE:	Pharos Chemical and Materials Library	HAZARD SO	REENING DATE:	2023-01-24 9:17:18
%: 5.0000 - 10.0000	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Flame retardant
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
None found			No wari	nings found on HPD Priority Hazard List
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION	
None found			No	listings found on Additional Hazard Lists

WATER %: 4.0000 - 4.1000

PRODUCT THRESHOLD: 100 ppm RESIDUALS AND IMPURITIES EVALUATION COMPLETED: No MATERIAL TYPE: Other: Natural resource

RESIDUALS AND IMPURITIES NOTES: No data collected regarding this material.

OTHER MATERIAL NOTES: Weight percentage may vary as this HPD covers multiple products. Standard water is used (municipal)

Pharos Chemical and Materials Library	HAZARD SO	CREENING DATE:	2023-01-24 9:17:16	
GreenScreen: BM-4	RC: None	NANO: <b>No</b>	SUBSTANCE ROLE: Hun	nectant
LIST NAME AND SOURCE		WARNINGS		
		No warr	nings found on HPD Priority F	lazard Lists
LIST NAME AND SOURCE		NOTIFICATION		
	nmission	EU - REACH Exe	emptions	
( /		Exempted from I safety	REACH Annex IV listing due t	o intrinsic
	GreenScreen: <b>BM-4</b> LIST NAME AND SOURCE  LIST NAME AND SOURCE	GreenScreen: BM-4 RC: None  LIST NAME AND SOURCE  LIST NAME AND SOURCE  European Union / European Commission	GreenScreen: BM-4 RC: None NANO: No  LIST NAME AND SOURCE WARNINGS  No warr  LIST NAME AND SOURCE NOTIFICATION  European Union / European Commission (EU EC)  Exempted from I	GreenScreen: BM-4 RC: None NANO: No SUBSTANCE ROLE: Hum  LIST NAME AND SOURCE WARNINGS  No warnings found on HPD Priority H  LIST NAME AND SOURCE NOTIFICATION  European Union / European Commission (EU EC)  Exempted from REACH Annex IV listing due to

**DIISOCYANATE RESIN** %: 3.7000 - 3.8000

SUBSTANCE NOTES: See materials notes for details.

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

RESIDUALS AND IMPURITIES NOTES: Supplier A has reported impurities and they are listed in the material composition. Supplier B declared, backed by technical/scientific knowledge, that no residuals or impurities were present in their product.

OTHER MATERIAL NOTES: Weight percentage may vary as this HPD covers multiple products and this material has multiple suppliers.

POLYMERIC MDI (PMDI) ID: 9016-87-9

HAZARD DATA SOURCE:	Pharos Chemical and Materials Library	HAZARD SC	REENING DATE:	2023-01-24 9:17:16
%: <b>30.0000 - 70.0000</b>	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Binder
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
CAN	MAK		Carcinogen Grou low risk under Ma	p 4 - Non-genotoxic carcinogen with AK/BAT levels
RES	MAK		Sensitizing Substantial	tance Sah - Danger of airway & skin
EYE	GHS - New Zealand		Eye irritation cate	egory 2
SKI	GHS - Australia		H315 - Causes sl Category 2]	kin irritation [Skin corrosion/irritation -
EYE	GHS - Australia			erious eye irritation [Serious eye ation - Category 2A]
MAM	GHS - Australia			amage to organs through prolonged or re [Specific target organ toxicity - rre - Category 1]
MAM	GHS - New Zealand		Specific target or category 1	rgan toxicity - repeated exposure
MAM	GHS - New Zealand		Acute inhalation	toxicity category 2
MAM	Québec CSST - WHMIS 1988		Class D1A - Very serious toxic effe	toxic material causing immediate and ects
MAM	GHS - Australia		H330 - Fatal if inl Category 1 or 2]	naled [Acute toxicity (inhalation) -
CAN	GHS - Australia		H351 - Suspecte Category 2]	d of causing cancer [Carcinogenicity -
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION	
RESTRICTED LIST	Perkins+Will (P+W)		P&W - Precaution	nary List
			Precautionary lis	t of substances recommended for

SUBSTANCE NOTES: Weight interval is used to cover recipe from multiple suppliers and keep exact recipe confidential.

# METHYLENE BISPHENYL DIISOCYANATE (PURE MDI)

ID: 101-68-8

HAZARD DATA SOURCE	: Pharos Chemical and Materials Library	HAZARD S	CREENING DATE:	2023-01-24 9:17:17
%: 30.0000 - 45.0000	GreenScreen: LT-UNK	RC: None	NANO: <b>No</b>	SUBSTANCE ROLE: Monomer
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
CAN	MAK		Carcinogen Grou low risk under M	up 4 - Non-genotoxic carcinogen with IAK/BAT levels
RES	MAK		Sensitizing Subs	stance Sah - Danger of airway & skin
SKI	EU - GHS (H-Statements) Annex	6 Table 3-1	H315 - Causes s Category 2]	kin irritation [Skin corrosion/irritation -

EYE	EU - GHS (H-Statements) Annex 6 Table 3-1	H319 - Causes serious eye irritation [Serious eye damage/eye irritation - Category 2A]
CAN	EU - GHS (H-Statements) Annex 6 Table 3-1	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]
SKI	GHS - New Zealand	Skin irritation category 2
EYE	GHS - New Zealand	Eye irritation category 2
SKI	GHS - Australia	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
EYE	GHS - Australia	H319 - Causes serious eye irritation [Serious eye damage/eye irritation - Category 2A]
CAN	GHS - New Zealand	Carcinogenicity category 2
MAM	GHS - Japan	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1]
MAM	GHS - Australia	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organ toxicity - repeated exposure - Category 1]
MAM	GHS - New Zealand	Specific target organ toxicity - repeated exposure category 1
MAM	GHS - Japan	H370 - Causes damage to organs [Specific target organs/systemic toxicity following single exposure - Category 1]
CAN	EU - Annex VI CMRs	Carcinogen Category 2 - Suspected human Carcinogen
SKI	GHS - Japan	H315 - Causes skin irritation [Skin corrosion / irritation - Category 2]
SKI	GHS - New Zealand	Skin sensitisation category 1
MAM	GHS - New Zealand	Acute inhalation toxicity category 2
EYE	GHS - Korea	H319 - Causes serious eye irritation [Serious eye damage/irritation - Category 2]
SKI	GHS - Korea	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
MAM	Québec CSST - WHMIS 1988	Class D1A - Very toxic material causing immediate and serious toxic effects
MAM	GHS - Japan	H330 - Fatal if inhaled [Acute toxicity (inhalation: gas) - Category 2]
MAM	GHS - Australia	H330 - Fatal if inhaled [Acute toxicity (inhalation) - Category 1 or 2]
MAM	GHS - Japan	H330 - Fatal if inhaled [Acute toxicity (inhalation: dust, mist) - Category 2]
CAN	GHS - Australia	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]
МАМ	GHS - Korea	H335 - May cause respiratory irritation [Specific target organ toxicity - Single exposure - Category 3]

LIST NAME AND SOURCE	NOTIFICATION
Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022
	Formulated Consumer Products
Perkins+Will (P+W)	P&W - Precautionary List
	Precautionary list of substances recommended for avoidance
	Institute (C2CPII)

SUBSTANCE NOTES: Weight interval is used to cover recipe from multiple suppliers and keep exact recipe confidential.

# DIPHENYLMETHANE DIISOCYANATE (MDI) - NON ISOMER SPECIFIC

ID: 26447-40-5

HAZARD DATA SOURCE: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2023-01-24 9:17:18

%: 0.0000 - 7.0000 GreenScreen: LT-UNK RC: None NANO: No SUBSTANCE ROLE: Monomer

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
SKI	EU - GHS (H-Statements) Annex 6 Table 3-1	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
EYE	EU - GHS (H-Statements) Annex 6 Table 3-1	H319 - Causes serious eye irritation [Serious eye damage/eye irritation - Category 2A]
CAN	EU - GHS (H-Statements) Annex 6 Table 3-1	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]
SKI	GHS - New Zealand	Skin irritation category 2
EYE	GHS - New Zealand	Eye irritation category 2
SKI	GHS - Australia	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
EYE	GHS - Australia	H319 - Causes serious eye irritation [Serious eye damage/eye irritation - Category 2A]
CAN	GHS - New Zealand	Carcinogenicity category 2
MAM	GHS - Australia	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organ toxicity - repeated exposure - Category 1]
MAM	GHS - New Zealand	Specific target organ toxicity - repeated exposure category 1
CAN	EU - Annex VI CMRs	Carcinogen Category 2 - Suspected human Carcinogen
SKI	GHS - Japan	H315 - Causes skin irritation [Skin corrosion / irritation - Category 2]
SKI	GHS - New Zealand	Skin sensitisation category 1
MAM	GHS - New Zealand	Acute inhalation toxicity category 2
MAM	GHS - Australia	H330 - Fatal if inhaled [Acute toxicity (inhalation) - Category 1 or 2]
MAM	GHS - Japan	H330 - Fatal if inhaled [Acute toxicity (inhalation: dust, mist) - Category 2]
CAN	GHS - Australia	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Perkins+Will (P+W)	P&W - Precautionary List
		Precautionary list of substances recommended for avoidance

SUBSTANCE NOTES: Weight interval is used to cover recipe from multiple suppliers and keep exact recipe confidential.

4,4'-MDI DIMER ID: 17589-24-1

HAZARD DATA SOURCE: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2023-01-24 9:17:18

%: Impurity/Residual GreenScreen: LT-UNK RC: None NANO: No SUBSTANCE ROLE: Impurity/Residual

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
SKI	GHS - Australia	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
EYE	GHS - Australia	H319 - Causes serious eye irritation [Serious eye damage/eye irritation - Category 2A]
MAM	GHS - Australia	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organ toxicity - repeated exposure - Category 1]
MAM	GHS - Australia	H330 - Fatal if inhaled [Acute toxicity (inhalation) - Category 1 or 2]
CAN	GHS - Australia	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Perkins+Will (P+W)	P&W - Precautionary List
		Precautionary list of substances recommended for avoidance

SUBSTANCE NOTES: See materials notes for details.

# ISOCYANIC ACID, POLYMETHYLENEPOLYPHENYLENE ESTER, POLYMER WITH \_-HYDRO-\_-HYDROXYPOLY( OXY-1,2-ETHANEDIYL)

ID: 57636-09-6

HAZARD DATA SOURCE:	Pharos Chemical and Materials Library	HAZARD SC	REENING DATE:	2023-01-24 9:17:18
%: Impurity/Residual	GreenScreen: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Impurity/Residual
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
SKI	GHS - Australia		H315 - Causes s Category 2]	skin irritation [Skin corrosion/irritation -
МАМ	GHS - Australia		H330 - Fatal if ir Category 1 or 2	nhaled [Acute toxicity (inhalation) -
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION	
None found			No	listings found on Additional Hazard Lists

SUBSTANCE NOTES: See materials notes for details.

**MELAMINE CELLULOSE** %: 0.0000 - 2.8000

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

RESIDUALS AND IMPURITIES NOTES: Residuals and impurities are below the reporting threshold.

OTHER MATERIAL NOTES: Weight percentage may vary as this HPD covers multiple products, i.e. with or without laminate, and this material comes from multiple suppliers. The composition of this material is confidential.

NU Green FR MDF

HAZARD DATA SOURCE:	Pharos Chemical and Materials Library	HAZARD SO	CREENING DATE:	2023-01-24 9:17:20
%: 0.0000 - 65.0000	GreenScreen: NoGS	RC: None	NANO: No	SUBSTANCE ROLE: Polymer species
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
None found			No warr	nings found on HPD Priority Hazard Lists
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION	
RESTRICTED LIST	International Living Future Institu	ute (ILFI)	0 0	Challenge 4.0 - Red List of Materials & ective April 1, 2022
			Red List substar	nces to avoid in Living Building projects

UNDISCLOSED				ID: Undisclosed
HAZARD DATA SOURCE:	Pharos Chemical and Materials Library	HAZARD SO	CREENING DATE:	2023-01-24 9:17:19
%: 0.0000 - 65.0000	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Polymer species
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
	EC - CEPA DSL		Persistent	

**NOTIFICATION** 

Challenge V4.0 projects

SUBSTANCE NOTES: This substance is undisclosed as it is proprietary. Weight interval is used to account for the use of melamine

UNDISCLOSED

HAZARD DATA SOURCE: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2023-01-24 9:17:20

%: 21.0000 - 55.0000 GreenScreen: NoGS RC: None NANO: No SUBSTANCE ROLE: Carrier

HAZARD TYPE LIST NAME AND SOURCE WARNINGS

None found No warnings found on HPD Priority Hazard Lists

ADDITIONAL LISTINGS LIST NAME AND SOURCE NOTIFICATION

LIST NAME AND SOURCE

cellulose from multiple suppliers and to keep exact product recipes confidential.

International Living Future Institute (ILFI)

EXEMPT European Union / European Commission EU - REACH Exemptions (EU EC)

Exempted from REACH Annex IV listing due to intrinsic safety

Living Building Challenge 4.0 - Red List of Materials &

Red List substances to avoid in Living Building

Chemicals - Effective April 1, 2022

ADDITIONAL LISTINGS

RESTRICTED LIST

HAZARD DATA SOURCE:	Pharos Chemical and Materials Library	HAZARD SO	CREENING DATE:	2023-01-24 9:17:21
%: 0.0000 - 35.0000	GreenScreen: LT-P1	RC: None	NANO: <b>No</b>	SUBSTANCE ROLE: Polymer specie
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
SKI	GHS - New Zealand		Skin sensitisation category 1	
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION	
RESTRICTED LIST	RESTRICTED LIST Perkins+Will (P+W)		P&W - Precautionary List	
			Precautionary lis	st of substances recommended for
RESTRICTED LIST	International Living Future Institu	ute (ILFI)		Challenge 4.0 - Red List of Materials & ective April 1, 2022
			Red List substar	nces to avoid in Living Building

SUBSTANCE NOTES: This substance is undisclosed as it is proprietary. Weight interval is used to account for the use of melamine

cellulose from multiple suppliers and to keep exact product recipes confidential.

UNDISCLOSED				ID: Undisclose
HAZARD DATA SOURCE:	Pharos Chemical and Materials Library	HAZARD SO	CREENING DATE:	2023-01-24 9:17:19
%: 0.0000 - 35.0000	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Polymer species
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
None found			No warr	nings found on HPD Priority Hazard List
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION	
RESTRICTED LIST	Perkins+Will (P+W)		P&W - Precautio	onary List
			Precautionary lis	st of substances recommended for
RESTRICTED LIST	International Living Future Institu	ute (ILFI)	0	Challenge 4.0 - Red List of Materials & ective April 1, 2022
			Red List substar	nces to avoid in Living Building

SUBSTANCE NOTES: This substance is undisclosed as it is proprietary. Weight interval is used to account for the use of melamine cellulose from multiple suppliers and to keep exact product recipes confidential.

UNDISCLOSED ID: Undisclosed

HAZARD DATA SOURCE:	Pharos Chemical and Materials Library	HAZARD SO	CREENING DATE:	2023-01-24 9:17:20
%: 0.0000 - 25.0000	GreenScreen: LT-1	RC: None	NANO: <b>No</b>	SUBSTANCE ROLE: Opacifier
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
CAN	US CDC - Occupational Carcino	gens	Occupational Ca	rcinogen
CAN	CA EPA - Prop 65		Carcinogen - spe	ecific to chemical form or exposure
CAN	IARC		Group 2B - Poss from occupation	ibly carcinogenic to humans - inhaled al sources
CAN	MAK		_	up 3A - Evidence of carcinogenic effects to establish MAK/BAT value
END	TEDX - Potential Endocrine Disr	uptors	Potential Endocr	rine Disruptor
CAN	MAK		Carcinogen Grou low risk under M	up 4 - Non-genotoxic carcinogen with AK/BAT levels
CAN	EU - GHS (H-Statements) Annex	6 Table 3-1	H351 - Suspecte Category 2]	d of causing cancer [Carcinogenicity -
CAN	GHS - Japan		H351 - Suspecte Category 2]	d of causing cancer [Carcinogenicity -
MAM	GHS - Japan		repeated exposu	amage to organs through prolonged or ire [Specific target organs/systemic grepeated exposure - Category 1]
CAN	EU - Annex VI CMRs		Carcinogen Cate	egory 2 - Suspected human Carcinogen
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION	
RESTRICTED LIST	Cradle to Cradle Products Innov Institute (C2CPII)	ation	0_0 000	Product Standard Restricted (RSL) - Effective July 1, 2022
			Cosmetics & Per	rsonal Care Products
POSITIVE LIST	US Environmental Protection Ag	jency (US	US EPA - DfE Sa	fer Chemicals Ingredients list (SCIL)
	<b></b> ,		Colorants - Gree	n Circle (Verified Low Concern)

UNDISCLOSED				ID: Undisclose
HAZARD DATA SOURCE:	Pharos Chemical and Materials Library	HAZARD SC	REENING DATE:	2023-01-24 9:17:20
%: 0.0000 - 15.0000	GreenScreen: BM-4	RC: None	NANO: <b>No</b>	SUBSTANCE ROLE: Solvent
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
None found			No warr	nings found on HPD Priority Hazard Lists

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
EXEMPT	European Union / European Commission (EU EC)	EU - REACH Exemptions
		Exempted from REACH Annex IV listing due to intrinsic safety

UNDISCLOSED ID: Undisclosed

HAZARD DATA SOURCE:	Pharos Chemical and Materials Library	HAZARD SCREENING DATE:		2023-01-24 9:17:21
%: 0.0000 - 3.0000	GreenScreen: LT-P1	RC: None	NANO: <b>No</b>	SUBSTANCE ROLE: Plasticizer
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
END	TEDX - Potential Endocrine Disr	uptors	Potential Endocr	ine Disruptor
EYE	GHS - New Zealand		Eye irritation cate	egory 2
MAM	GHS - New Zealand		Acute inhalation	toxicity category 3
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION	
RESTRICTED LIST	Perkins+Will (P+W)		P&W - Precautio	nary List
			Precautionary lis avoidance	t of substances recommended for
RESTRICTED LIST	Green Science Policy Institute (	SSPI)	GSPI - Six Class	es of Problematic Chemicals
			Bisphenols and I	Phthalates
RESTRICTED LIST	Green Science Policy Institute (0	SSPI)	GSPI - Six Class	es of Problematic Chemicals
			Some Solvents	
RESTRICTED LIST	International Living Future Instit			challenge 4.0 - Red List of Materials & ctive April 1, 2022
			Red List substan Challenge V4.0 p	ices to avoid in Living Building projects

SUBSTANCE NOTES: This substance is undisclosed as it is proprietary. Weight interval is used to account for the use of melamine cellulose from multiple suppliers and to keep exact product recipes confidential.

UNDISCLOSED ID: Undisclosed

HAZARD DATA SOURCE: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2023-01-24 9:17:21

%: 0.0000 - 2.5000 GreenScreen: LT-1 RC: None NANO: No SUBSTANCE ROLE: Plasticizer

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
DEV	CA EPA - Prop 65	Developmental toxicity
DEV	US NIH - Reproductive & Developmental Monographs	Clear Evidence of Adverse Effects - Developmental Toxicity
EYE	GHS - New Zealand	Eye irritation category 2
MAM	GHS - New Zealand	Specific target organ toxicity - repeated exposure category 1
MAM	GHS - Japan	H370 - Causes damage to organs [Specific target organs/systemic toxicity following single exposure - Category 1]
SKI	GHS - Japan	H315 - Causes skin irritation [Skin corrosion / irritation - Category 2]
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes of Problematic Chemicals
		Some Solvents

UNDISCLOSED				ID: Undisclosed
HAZARD DATA SOURCE:	Pharos Chemical and Materials Library	HAZARD SO	REENING DATE:	2023-01-24 9:17:19
%: 0.0000 - 2.0000	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Polymer species
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
None found			No warr	nings found on HPD Priority Hazard Lists
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION	
None found			No	listings found on Additional Hazard Lists

UNDISCLOSED				ID: Undisclosed	
HAZARD DATA SOURCE:	Pharos Chemical and Materials Library	HAZARD SO	REENING DATE:	2023-01-24 9:17:20	
%: 0.0000 - 2.0000	GreenScreen: BM-4	RC: None	NANO: No	SUBSTANCE ROLE: Polymer species	
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS		
None found			No warr	nings found on HPD Priority Hazard Lists	

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
EXEMPT	European Union / European Commission (EU EC)	EU - REACH Exemptions
		Exempted from REACH Annex IV listing due to intrinsic safety

SUBSTANCE NOTES: this material is part of the polymer and is proprietary.

# WAX %: 0.7000 - 0.8000

**SLACK WAX (PETROLEUM)** 

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

RESIDUALS AND IMPURITIES NOTES: Suppliers declared, backed by technical/scientific knowledge, that no residuals or impurities were present in their product; however, no such tests are performed on their product. According to Pharos, known or potential residuals for slack wax (64742-61-6) is paraffin (8002-74-2) and paraffin oil (8012-95-1).

OTHER MATERIAL NOTES: Slack wax is used as water repellant. Data Source for TSCA Definition 2018: A complex combination of hydrocarbons obtained from a petroleum fraction by solvent crystallization (solvent dewaxing) or as a distillation fraction from a very waxy crude. It consists predominantly of saturated straight and branched chain hydrocarbons having carbon numbers predominantly greater than C20.

•	,				
HAZARD DATA SOURCE:	Pharos Chemical and Materials Library	HAZARD S	CREENING DATE:	2023-01-24 9:17:21	
%: 100.0000	GreenScreen: LT-1	RC: None	NANO: No	SUBSTANCE ROLE: Water resistance	
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS		
CAN	EU - REACH Annex XVII CMRs			egory 2 - Substances which should be ley are Carcinogenic to man	
CAN	EU - Annex VI CMRs	Carcinogen Category 1B - Presur on animal evidence		egory 1B - Presumed Carcinogen based	
MUL	ChemSec - SIN List			CMR - Carcinogen, Mutagen &/or Reproductive Toxicant	
MUL	German FEA - Substances Haza Waters	German FEA - Substances Hazardous to Waters		Class 3 - Severe Hazard to Waters	
CAN	GHS - Australia		H350 - May caus 1A or 1B]	se cancer [Carcinogenicity - Category	
CAN	EU - GHS (H-Statements) Annex	6 Table 3-1	H350 - May caus 1A or 1B]	se cancer [Carcinogenicity - Category	
DEV	GHS - Australia		•	ted of damaging the unborn child oxicity - Category 2]	
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION		
None found			No	listings found on Additional Hazard List	

SUBSTANCE NOTES: See material notes for details.

ID: 64742-61-6

# Section 3: Certifications and Compliance

This section lists applicable certification and standards compliance information for VOC emissions and VOC content. Other types of health or environmental performance testing or certifications completed for the product may be provided.

#### **VOC EMISSIONS**

# CDPH Standard Method V1.2 (Section 01350/CHPS) - Not applicable

CERTIFYING PARTY: Self-declared

ISSUE DATE: 2022-09-27

**EXPIRY DATE:** 

CERTIFIER OR LAB: n/a

APPLICABLE FACILITIES: All facilities

**CERTIFICATE URL:** 

CERTIFICATION AND COMPLIANCE NOTES: According to LEED v4, emissions and content requirements for Composite Wood are to follow the Composite Wood Evaluation which states: "Composite wood, as defined by the California Air Resources Board, Airborne Toxic Measure to Reduce Formaldehyde Emissions from Composite Wood Products Regulation, must be documented to have low formaldehyde emissions that meet the California Air Resources Board ATCM for formaldehyde requirements for ultra-low-emitting formaldehyde (ULEF) resins or no added formaldehyde resins. "

#### SUSTAINABLE FORESTRY

### FSC Certification - Chain of Custody (COC)

**CERTIFYING PARTY: Third Party** 

ISSUE DATE: 2007-11-06

CERTIFIER OR LAB: Preferred by

APPLICABLE FACILITIES: Uiboard Canada INc. - Multi-

EXPIRY DATE: 2027-12-01

Nature

Site

CERTIFICATE URL: https://info.fsc.org

CERTIFICATION AND COMPLIANCE NOTES: Certificate registration code NC-COC-002726, NC-CW-002726

#### FORMALDEHYDE EMISSIONS

EPA TSCA Title VI (40 CRF 770), CAN/CSA-0160-16, ANSI A208.1 and CARB Composite Wood ATCM CA 93120 No-Added Formaldehyde (NAF)

**CERTIFYING PARTY: Third Party** 

ISSUE DATE: 2019-03-25

CERTIFIER OR LAB: Composite

APPLICABLE FACILITIES: Mont-Laurier, Quebec, Canada EXPIRY DATE:

Panel Association

**CERTIFICATE URL:** 

J9L 2W3

https://www.compositepanel.org/testing-

certification/certification-programs/

CERTIFICATION AND COMPLIANCE NOTES: Fulfills The Requirements Of: EPA TSCA Title VI (40 CFR 770), CAN/CSA-0160- 16, ANSI A208.2 and California Air Resources Board (CARB) Airborne Toxic Control Measures (ATCM) 93120. State of California Air Resources Board Executive Order N-18-118 (https://www.arb.ca.gov/toxics/compwood/naf\_ulef/listofnaf\_ulef.htm).

# **MULTI-ATTRIBUTE**

# CPA 4-19 Eco-Certified Composite (ECC) - Value Added Certification

CERTIFYING PARTY: Second Party

ISSUE DATE: 2019-05-30

CERTIFIER OR LAB: Composite

APPLICABLE FACILITIES: Mont-Laurier, Quebec,

**EXPIRY DATE:** 

**Panel Association** 

Canada, J9L 3W3 **CERTIFICATE URL:** 

https://www.compositepanel.org/testing-

certification/certification-programs/

CERTIFICATION AND COMPLIANCE NOTES: Carbon Footprint; Locally Sourced Fiber; Recycled, Recovered or Post-Consumer Fiber Content; Sustainable Use of Wood Fiber; Responsible Wood Sourcing.



# Section 4: Accessories

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

No accessories are required for this product.



# Section 5: General Notes



#### MANUFACTURER INFORMATION

MANUFACTURER: Uniboard Canada Inc. ADDRESS: 5555, Ernest Cormier Street

Laval Quebec H7C 2S9, Canada

WEBSITE: www.uniboard.com

CONTACT NAME: Pierre Martin

TITLE: Technology and Innovation Director

PHONE: **450.664.6000** 

EMAIL: pierre.martin@uniboard.com

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

#### **KEY**

**Hazard Types** 

**AQU** Aquatic toxicity

**CAN** Cancer

**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

NoGS No GreenScreen.

GreenScreen Benchmark scores sometimes also carry subscripts, which provide more context for how the score was determined. These are DG (data gap), TP (transformation product), and CoHC (chemical of high concern). For more information, see 2.2.2.4 GreenScreen® for Safer Chemicals, www.greenscreenchemicals.org, and Best Practices for Hazard Screening on the HPDC website (hpd-collaborative.org).

#### **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.