

HPD UNIQUE IDENTIFIER: 31341

CLASSIFICATION: 09 64 00 Wood Flooring

PRODUCT DESCRIPTION: The product "FREB-7-AVE" has a thickness of 14mm and a width of 189mm. This engineered flooring product constitutes a base ply and a European Oak hardwood top layer laminated using resin. The product is fumed/smoked with ammonia to get the desired shade and then stained and coated with a clear coat. This product can be installed in various ways depending on the site conditions and can be used in residential and commercial spaces. For more information on the product, please visit - www.allwoodgrp.com

Section 1: Summary

Nested Method / Product Threshold

CONTENT INVENTORY

Inventory Reporting Format	Threshold Level	Residuals/Impurities Evaluation	For all contents above the threshold, the manufacturer has:
<input type="radio"/> Nested Materials Method <input type="radio"/> Basic Method	<input type="radio"/> 100 ppm <input checked="" type="radio"/> 1,000 ppm <input type="radio"/> Per GHS SDS <input type="radio"/> Other	Completed in 5 of 5 Materials Explanation(s) provided for Residuals/Impurities? <input checked="" type="radio"/> Yes <input type="radio"/> No	Characterized <input checked="" type="radio"/> Yes <input type="radio"/> No Provided weight and role. Screened <input checked="" type="radio"/> Yes <input type="radio"/> No Provided screening results using HPDC-approved methods. Identified <input checked="" type="radio"/> Yes <input type="radio"/> No Provided name and CAS RN or other identifier.
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.

NESTED MATERIAL | MATERIAL OR SUBSTANCE | RESIDUAL OR IMPURITY

GREENSCREEN SCORE | HAZARD TYPE

PLYWOOD [WOOD] VENEER [VENEER] RESIN [LIMESTONE BM-3dg GLYCERIDES, C16-18 MONO-, DI- AND TRI-, HYDROGENATED, CITRATES, ESTERS WITH POLYGLYCEROL PALMITATE STEARATE, SODIUM SALTS (AVERAGE MW 937 G/MOL) LT-P1 | MUL WATER BM-4 ACETIC ACID ETHENYL ESTER, POLYMER WITH ETHENOL LT-UNK DOCUSATE SODIUM LT-P1 | MUL | SKI | EYE | REP QUARTZ BM-1 | CAN | MAM | GEN] UV PRIMER [ETHANOL BM-2 | CAN | END | DEV | REP | PHY | EYE | MAM ETHYLENE GLYCOL MONO-N-BUTYL ETHER BM-2 | END | SKI | EYE | MAM | REP] UV SEALER [ALUMINUM OXIDE BM-2 | MAM BISPHENOL A-EPICHLOROHYDRIN ACRYLATE BM-1 | MUL TRIPROPYLENE GLYCOL DIACRYLATE LT-P1 | SKI | MUL | EYE | AQU TRIMETHYLOLPROPANE TRIACRYLATE LT-P1 | SKI | CAN | MUL | EYE | AQU DIPROPYLENE GLYCOL DIACRYLATE LT-UNK | SKI | EYE POLY(OXY-1,2-ETHANEDIYL), .ALPHA.,.ALPHA.'-1,6-HEXANEDIYLBIS[.OMEGA.-[(1-OXO-2-PROPEN-1-YL)OXY]- NoGS 1,6-HEXANEDIOL DIACRYLATE LT-P1 | SKI | MUL | EYE | AQU 2,4,6-TRIMETHYLBENZOYL DIPHENYLPHOSPHINE OXIDE LT-P1 | MUL | REP]

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

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

Nanomaterial ... No

INVENTORY AND SCREENING NOTES:

Special Conditions applied: [BiologicalMaterial]

Impurities listed above the threshold by Quartz or Pharos databases are noted in this HPD. Residuals and impurities are considered following the HPD Best Practice Guidance, 10.02.17, version 1 "The threshold applied to Residuals and Impurities (R/I) is the same as that applied to intentionally added substances, i.e., 100 ppm or 1000 ppm. Residuals and impurities below the declared Inventory Threshold do not need to be reported on the HPD." This includes average data declared in the common product database or 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. Pharos and PubChem (formerly TOXNET) are the main databases for researching potential residuals and impurities. 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. This HPD was produced using primary information from the manufacturer, including CAS numbers and SDS when needed. 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 a 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: CDPH Standard Method - Not tested

CONSISTENCY WITH OTHER PROGRAMS

Pre-checked for LEED v4 Option 1.

Pre-checked for LEED v4.1 Option 1.

Third Party Verified?

Yes

No

PREPARER: Self-Prepared

VERIFIER:

VERIFICATION #:

SCREENING DATE: 2023-02-13

PUBLISHED DATE: 2023-02-13

EXPIRY DATE: 2026-02-13

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

PLYWOOD

%: 71.0000

PRODUCT THRESHOLD: 1000 ppm RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes MATERIAL TYPE: Wood or Lumber

RESIDUALS AND IMPURITIES NOTES: Impurities listed above the threshold by Quartz or Pharos databases are noted in this HPD. Residuals and impurities are considered following the HPD Best Practice Guidance, 10.02.17, version 1 “The threshold applied to Residuals and Impurities (R/I) is the same as that applied to intentionally added substances, i.e., 100 ppm or 1000 ppm. Residuals and impurities below the declared Inventory Threshold do not need to be reported on the HPD.” This includes average data declared in the common product database or 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. Pharos and PubChem (formerly TOXNET) are the main databases for researching potential residuals and impurities. 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. No residuals or impurities are listed above the threshold for this product per the Pharos database.

OTHER MATERIAL NOTES: The eucalyptus wood is procured from the source and the plywood is made at the same facility.

WOOD

ID: Biological Material

HAZARD DATA SOURCE: [HPDC Special Conditions Policy](#)

%: 100.0000 GreenScreen: Not Required RC: None NANO: No MATERIAL ROLE: Filler

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
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Hazard Screening is not applicable to this Special Condition

BIOLOGICAL MATERIALS CATEGORY: Tree-based materials

INGREDIENT DESCRIPTION: Eucalyptus

MATERIAL CONTENT NOTES: 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.

VENEER

%: 21.0000

PRODUCT THRESHOLD: 1000 ppm RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes MATERIAL TYPE: Wood or Lumber

RESIDUALS AND IMPURITIES NOTES: Impurities listed above the threshold by Quartz or Pharos databases are noted in this HPD. Residuals and impurities are considered following the HPD Best Practice Guidance, 10.02.17, version 1 “The threshold applied to Residuals and Impurities (R/I) is the same as that applied to intentionally added substances, i.e., 100 ppm or 1000 ppm. Residuals and impurities below the declared Inventory Threshold do not need to be reported on the HPD.” This includes average data declared in the common product database or 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. Pharos and PubChem (formerly TOXNET) are the main databases for researching potential residuals and impurities. 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. No residuals or impurities are listed above the threshold for this product per the Pharos database.

OTHER MATERIAL NOTES: The veneers are sawn from logs at the facility.

VENEERID: **Biological Material**HAZARD DATA SOURCE: **HPDC Special Conditions Policy**%: **100.0000** GreenScreen: **Not Required** RC: **None** NANO: **No** MATERIAL ROLE: **Filler**

HAZARD TYPE AGENCY AND LIST TITLES WARNINGS

Hazard Screening is not applicable to this Special Condition

BIOLOGICAL MATERIALS CATEGORY: **Tree-based materials**INGREDIENT DESCRIPTION: **European Oak**

MATERIAL CONTENT NOTES: 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.

RESIN%: **5.0000**PRODUCT THRESHOLD: **1000 ppm** RESIDUALS AND IMPURITIES EVALUATION COMPLETED: **Yes** MATERIAL TYPE: **Polymeric Material**

RESIDUALS AND IMPURITIES NOTES: Impurities listed above the threshold by Quartz or Pharos databases are noted in this HPD. Residuals and impurities are considered following the HPD Best Practice Guidance, 10.02.17, version 1 “The threshold applied to Residuals and Impurities (R/I) is the same as that applied to intentionally added substances, i.e., 100 ppm or 1000 ppm. Residuals and impurities below the declared Inventory Threshold do not need to be reported on the HPD.” This includes average data declared in the common product database or 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. Pharos and PubChem (formerly TOXNET) are the main databases for researching potential residuals and impurities. 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. No residuals or impurities are listed above the threshold for this product per the Pharos database.

OTHER MATERIAL NOTES: This material consists of two proprietary ingredients, which do not currently have a CAS number. Efforts were made to understand these ingredients better, but retrieving this information was not possible. Since, no hazards were mentioned for these ingredients in the product SDS, it is assumed to be a safe product.

LIMESTONEID: **1317-65-3**HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2023-02-13 0:38:45**%: **20.0000 - 40.0000** GreenScreen: **BM-3dg** RC: **None** NANO: **No** SUBSTANCE ROLE: **Filler**

HAZARD TYPE LIST NAME AND SOURCE WARNINGS

None found No warnings found on HPD Priority Hazard Lists

ADDITIONAL LISTINGS LIST NAME AND SOURCE NOTIFICATION

None found No listings found on Additional Hazard Lists

SUBSTANCE NOTES:

GLYCERIDES, C16-18 MONO-, DI- AND TRI-, HYDROGENATED, CITRATES, ESTERS WITH POLYGLYCEROL PALMITATE STEARATE, SODIUM SALTS (AVERAGE MW 937 G/MOL)ID: **1208985-39-0**HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2023-02-13 0:38:46**%: **20.0000 - 40.0000** GreenScreen: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Emulsifier**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
None found		No listings found on Additional Hazard Lists

SUBSTANCE NOTES: This product is mentioned in the product SDS as "Synthetic co-polymer emulsifier" and more information is not available since it is a proprietary ingredient for the manufacturer of this product. Hence, a suitable proxy substance - Glycerides has been selected as an ingredient for this product.

WATER ID: 7732-18-5

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2023-02-13 0:38:46		
%: 10.0000 - 30.0000	GreenScreen: BM-4	RC: None	NANO: No	SUBSTANCE ROLE: Solvent
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
None found		No warnings 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:				

ACETIC ACID ETHENYL ESTER, POLYMER WITH ETHENOL ID: 25213-24-5

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2023-02-13 0:38:47		
%: 1.0000 - 10.0000	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Adhesive
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
None found		No warnings found on HPD Priority Hazard Lists		
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION		
None found		No listings found on Additional Hazard Lists		
SUBSTANCE NOTES:				

DOCUSATE SODIUM ID: 577-11-7

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2023-02-13 0:38:48		
%: 0.0000 - 1.0000	GreenScreen: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Surfactant

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
SKI	GHS - New Zealand	Skin irritation category 2
SKI	GHS - Australia	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
EYE	GHS - New Zealand	Serious eye damage category 1
SKI	GHS - Japan	H315 - Causes skin irritation [Skin corrosion / irritation - Category 2]
REP	GHS - Japan	H361 - Suspected of damaging fertility or the unborn child [Toxic to reproduction - Category 2]
EYE	GHS - Australia	H318 - Causes serious eye damage [Serious eye damage/eye irritation - Category 1]

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
None found		No listings found on Additional Hazard Lists

SUBSTANCE NOTES: This product is mentioned in the product SDS as "Surfactant" and more information is not available since it is a proprietary ingredient for the manufacturer of this product. Hence, a suitable proxy substance - Docusate Sodium has been selected as an ingredient for this product.

QUARTZ

ID: 14808-60-7

HAZARD DATA SOURCE: Pharos Chemical and Materials Library	HAZARD SCREENING DATE: 2023-02-13 0:38:46			
%: Impurity/Residual	GreenScreen: BM-1	RC: None	NANO: No	SUBSTANCE ROLE: Impurity/Residual

HAZARD TYPE	LIST NAME AND SOURCE	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 - Japan	H350 - May cause cancer [Carcinogenicity - Category 1A]
CAN	GHS - Australia	H350i - May cause cancer by inhalation [Carcinogenicity - Category 1A or 1B]
CAN	GHS - New Zealand	Carcinogenicity category 1
MAM	GHS - Japan	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1]
GEN	GHS - Japan	H341 - Suspected of causing genetic defects [Germ cell mutagenicity - 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
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
None found		No listings found on Additional Hazard Lists

SUBSTANCE NOTES: This impurity was found in the Pharos database and hence noted here.

UV PRIMER

#: 1.5000

PRODUCT THRESHOLD: 1000 ppm RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes MATERIAL TYPE: Polymeric Material

RESIDUALS AND IMPURITIES NOTES: Impurities listed above the threshold by Quartz or Pharos databases are noted in this HPD. Residuals and impurities are considered following the HPD Best Practice Guidance, 10.02.17, version 1 "The threshold applied to Residuals and Impurities (R/I) is the same as that applied to intentionally added substances, i.e., 100 ppm or 1000 ppm. Residuals and impurities below the declared Inventory Threshold do not need to be reported on the HPD." This includes average data declared in the common product database or 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. Pharos and PubChem (formerly TOXNET) are the main databases for researching potential residuals and impurities. 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. No residuals or impurities are listed above the threshold for this product per the Pharos database.

OTHER MATERIAL NOTES: This material consists of one proprietary ingredient, which does not currently have a CAS number. Efforts were made to understand this ingredient better, but retrieving this information was not possible. Since, no hazards were mentioned for this ingredient in the product SDS, it is assumed to be a safe product.

ETHANOL

ID: 64-17-5

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2023-02-13 0:38:47**

%: **1.0000 - 3.0000** GreenScreen: **BM-2** RC: **None** NANO: **No** SUBSTANCE ROLE: **Solvent**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
CAN	CA EPA - Prop 65	Carcinogen - specific to chemical form or exposure route
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
CAN	IARC	Group 1 - Agent is Carcinogenic to humans
CAN	MAK	Carcinogen Group 5 - Genotoxic carcinogen with very slight risk under MAK/BAT levels
DEV	CA EPA - Prop 65	Developmental - specific to chemical form or exposure route
CAN	GHS - Japan	H350 - May cause cancer [Carcinogenicity - Category 1A]
REP	GHS - Japan	H360 - May damage fertility or the unborn child [Toxic to reproduction - Category 1A]
PHY	EU - GHS (H-Statements) Annex 6 Table 3-1	H225 - Highly flammable liquid and vapour [Flammable liquids - Category 2]
EYE	GHS - New Zealand	Eye irritation category 2
EYE	GHS - Australia	H319 - Causes serious eye irritation [Serious eye damage/eye irritation - Category 2A]
MAM	GHS - Japan	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1]
PHY	GHS - New Zealand	Flammable liquids category 2
PHY	GHS - Japan	H225 - Highly flammable liquid and vapour [Flammable liquids - Category 2]
PHY	GHS - Malaysia	H225 - Highly flammable liquid and vapour [Flammable liquids - Category 2]
PHY	GHS - Australia	H225 - Highly flammable liquid and vapour [Flammable liquids - Category 2]

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
None found		No listings found on Additional Hazard Lists

SUBSTANCE NOTES:

ETHYLENE GLYCOL MONO-N-BUTYL ETHER

ID: 111-76-2

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2023-02-13 0:38:48**

%: **0.3000 - 2.6000** GreenScreen: **BM-2** RC: **None** NANO: **No** SUBSTANCE ROLE: **Solvent**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
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]
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]
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 - 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]
REP	GHS - Japan	H361 - Suspected of damaging fertility or the unborn child [Toxic to reproduction - Category 2]
MAM	Québec CSST - WHMIS 1988	Class D1A - Very toxic material causing immediate and serious toxic effects
MAM	GHS - Japan	H311 - Toxic in contact with skin [Acute Toxicity (dermal) - Category 3]
EYE	GHS - Japan	H319 - Causes serious eye irritation [Serious eye damage / eye irritation - Category 2A]
MAM	GHS - Japan	H330 - Fatal if inhaled [Acute toxicity (inhalation: vapor) - Category 2]
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes of Problematic Chemicals Some Solvents
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Cosmetics & Personal Care Products

SUBSTANCE NOTES:

UV SEALER

%: 1.5000

PRODUCT THRESHOLD: 1000 ppm RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes MATERIAL TYPE: Polymeric Material

RESIDUALS AND IMPURITIES NOTES: Impurities listed above the threshold by Quartz or Pharos databases are noted in this HPD. Residuals and impurities are considered following the HPD Best Practice Guidance, 10.02.17, version 1 “The threshold applied to Residuals and Impurities (R/I) is the same as that applied to intentionally added substances, i.e., 100 ppm or 1000 ppm. Residuals and impurities below the declared Inventory Threshold do not need to be reported on the HPD.” This includes average data declared in the common product database or 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. Pharos and PubChem (formerly TOXNET) are the main databases for researching potential residuals and impurities. 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. No residuals or impurities are listed above the threshold for this product per the Pharos database.

OTHER MATERIAL NOTES: This material consists of one proprietary ingredient, which does not currently have a CAS number. Efforts were made to understand this ingredient better, but retrieving this information was not possible. Since, no hazards were mentioned for this ingredient in the product SDS, it is assumed to be a safe product.

ALUMINUM OXIDE

ID: 1344-28-1

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2023-02-13 0:38:49**

%: **20.0000 - 50.0000** GreenScreen: **BM-2** RC: **None** NANO: **No** SUBSTANCE ROLE: **Heat or UV stabilizer**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
MAM	GHS - Japan	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1]
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Biological and Environmentally Released Materials
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Children's Products

SUBSTANCE NOTES: Percentages greater than 20% are used to hide the proprietary formulas.

As per the pharos database any impurities in this product are at an unknown quantity.

BISPHENOL A-EPICHLOROHYDRIN ACRYLATE

ID: 55818-57-0

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2023-02-13 0:38:49**

%: **10.0000 - 20.0000** GreenScreen: **BM-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Water resistance**

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

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Core Restrictions
RESTRICTED LIST	International Living Future Institute (ILFI)	Living Building Challenge 4.0 - Red List of Materials & Chemicals - Effective April 1, 2022 Red List substances to avoid in Living Building Challenge V4.0 projects

SUBSTANCE NOTES:

TRIPROPYLENE GLYCOL DIACRYLATE

ID: 42978-66-5

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2023-02-13 0:38:49**

%: **10.0000 - 20.0000** GreenScreen: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Plasticizer**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
SKI	MAK	Sensitizing Substance Sh - Danger of skin sensitization
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
SKI	EU - GHS (H-Statements) Annex 6 Table 3-1	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
EYE	EU - GHS (H-Statements) Annex 6 Table 3-1	H319 - Causes serious eye irritation [Serious eye damage/eye irritation - Category 2A]
AQU	EU - GHS (H-Statements) Annex 6 Table 3-1	H411 - Toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 2]
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]
SKI	GHS - New Zealand	Skin sensitisation category 1
AQU	GHS - New Zealand	Hazardous to the aquatic environment - chronic category 2
AQU	GHS - Australia	H411 - Toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 2]
AQU	GHS - Japan	H401 - Toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 2]
AQU	GHS - Japan	H411 - Toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 2]
EYE	GHS - Japan	H319 - Causes serious eye irritation [Serious eye damage / eye irritation - Category 2A]

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
None found		No listings found on Additional Hazard Lists

SUBSTANCE NOTES:

TRIMETHYLOLPROPANE TRIACRYLATE

ID: 15625-89-5

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2023-02-13 0:38:50**

%: **5.0000 - 10.0000** GreenScreen: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Curing agent**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
SKI	MAK	Sensitizing Substance Sh - Danger of skin sensitization
CAN	IARC	Group 2b - Possibly carcinogenic to humans
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
SKI	EU - GHS (H-Statements) Annex 6 Table 3-1	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
EYE	EU - GHS (H-Statements) Annex 6 Table 3-1	H319 - Causes serious eye irritation [Serious eye damage/eye irritation - Category 2A]
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]
SKI	GHS - New Zealand	Skin sensitisation category 1
AQU	GHS - New Zealand	Hazardous to the aquatic environment - chronic category 2
EYE	GHS - Japan	H319 - Causes serious eye irritation [Serious eye damage / eye irritation - Category 2A]
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
None found		No listings found on Additional Hazard Lists

SUBSTANCE NOTES:

DIPROPYLENE GLYCOL DIACRYLATE

ID: 57472-68-1

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2023-02-13 0:38:50		
%: 1.0000 - 5.0000	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Plasticizer
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
SKI	GHS - New Zealand	Skin irritation category 2		
EYE	GHS - New Zealand	Eye irritation category 2		
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION		
None found		No listings found on Additional Hazard Lists		

SUBSTANCE NOTES:

POLY(OXY-1,2-ETHANEDIYL), .ALPHA.,.ALPHA.'-1,6-HEXANEDIYLBIS[.OMEGA.-[(1-OXO-2-PROPEN-1-YL)OXY]-

ID: 84170-27-4

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2023-02-13 0:38:51		
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%: 1.0000 - 5.0000

GreenScreen: NoGS

RC: None

NANO: No

SUBSTANCE ROLE: Surfactant

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
None found		No listings found on Additional Hazard Lists
SUBSTANCE NOTES:		

1,6-HEXANEDIOL DIACRYLATE

ID: 13048-33-4

HAZARD DATA SOURCE: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2023-02-13 0:38:51

%: 0.1000 - 2.6000

GreenScreen: LT-P1

RC: None

NANO: No

SUBSTANCE ROLE: Binder

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
SKI	MAK	Sensitizing Substance Sh - Danger of skin sensitization
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
SKI	EU - GHS (H-Statements) Annex 6 Table 3-1	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
EYE	EU - GHS (H-Statements) Annex 6 Table 3-1	H319 - Causes serious eye irritation [Serious eye damage/eye irritation - Category 2A]
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]
SKI	GHS - New Zealand	Skin sensitisation category 1
AQU	GHS - Japan	H400 - Very toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 1]
AQU	GHS - Japan	H410 - Very toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 1]
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
None found		No listings found on Additional Hazard Lists
SUBSTANCE NOTES:		

2,4,6-TRIMETHYLBENZOYL DIPHENYLPHOSPHINE OXIDE

ID: 75980-60-8

HAZARD DATA SOURCE: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2023-02-13 0:38:49

%: 0.0000 - 1.0000

GreenScreen: LT-P1

RC: None

NANO: No

SUBSTANCE ROLE: Curing agent

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
None found		No listings found on Additional Hazard Lists
SUBSTANCE NOTES:		

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
REP	EU - GHS (H-Statements) Annex 6 Table 3-1	H361f - Suspected of damaging fertility [Reproductive toxicity - Category 2]
REP	EU - Annex VI CMRs	Reproductive Toxicity - Category 2
REP	GHS - Australia	H361f - Suspected of damaging fertility [Reproductive toxicity - Category 2]
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
None found		No listings found on Additional Hazard Lists

SUBSTANCE NOTES:

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 - Not tested	
CERTIFYING PARTY: Self-declared	ISSUE DATE: 2023-01-31	CERTIFIER OR LAB: None
APPLICABLE FACILITIES: The facility in Jiaxing city has been certified for VOC emissions	EXPIRY DATE:	
CERTIFICATE URL:		
CERTIFICATION AND COMPLIANCE NOTES:		

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

No accessories were added because this must be installed by professional installers who will use their tools and methods. Site-specific conditions determine exact methods. Therefore, additional tools and products are unknown. For manufacturer-specific installation instructions, please visit the website: <https://allwoodgrp.com/>

MANUFACTURER INFORMATION

MANUFACTURER: Allwood Group
ADDRESS: PO Box 1788
 Tualatin Oregon 97062, USA
WEBSITE: <https://allwoodgrp.com/>

CONTACT NAME: Scott Petersen
TITLE: Managing Partner
PHONE: 503-255-7976
EMAIL: scott@allwoodgrp.com

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

KEY

Hazard Types

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

GreenScreen (GS)

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

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.