HempWoodÈ Organic Flooring

HPD UNIQUE IDENTIFIER: TBD
CLASSIFICATION: Plant-Based Flooring
PRODUCT TYPE: 09 64 00
PRODUCT DESCRIPTION: HempWood® Organic Flooring is engineered flooring product constituting a base ply and compressed industrial hemp stalks in a top layer laminated using resin. It's a healthier flooring choice for our consumers with no VOCs due to our no-added formaldehyde soy-based adhesive. The engineered format offers multiple subfloor applications for commercial or residential projects.

THIRD-PARTY VERIFIED

Health Product Declaration® v2.3
created via:

Section 1: Summary

Basic Method/Product Threshold

CONTENT INVENTORY

Inventory Reporting Format
- ○ Nested Materials Method
- ◉ Basic Method

Threshold Disclosed Per
- ○ Material
- ◉ Product

Threshold Level
- ◉ 100 ppm
- ○ 1,000 ppm
- ○ Per GHS SDS
- ○ Other

Residuals/Impurities
- ◉ Completed
- ○ Partially Completed
- ○ Not Completed

Explanation(s) provided:
◉ 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.

Identified ◉ Yes ○ No
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.

PRODUCT | **MATERIAL OR SUBSTANCE** | *RESIDUAL OR IMPURITY*
GREENSCREEN SCORE | HAZARD TYPE

PUREBOND® FORMALDEHYDE FREE PLYWOOD [SC: Poplar Not Screened **Flour, Soy** NoGS **SC: Organic Compound** Not Screened **]**
SC: HempWood [Industrial Hemp Stalks Not Screened **Soy-Based Adhesive Resin** Undisclosed**] H.B. Fuller Hot Melt PUR [Undisclosed]** NoGS **Bona Traffic HD®** [**Water** BM-4 **Polymeric Resins** NoGS **Amorphous Silica** BM-1]

Number of Greenscreen BM-4/BM-3 contents: 1

Contents highest concern GreenScreen Benchmark or List translator Score: BM-1
Nanomaterial: N/A

INVENTORY AND SCREENING NOTES: This Health Product Declaration Form (HPD) was completed in accordance with HPD Standard Version 2.3, and discloses hazards associated with all substances present at or above 100 parts per million (ppm) in the finished product, along with the role and percent weight for each substance. Substances not "identified" are those considered proprietary to suppliers, and thus are "Undisclosed" on this HPD.

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

Material (g/l): N/A Regulatory (g/l): N/A

Does the product contain exempt VOCs? No

Are colorants available that do not increase the VOC content of the base paint when tinted? Yes

CERTIFICATIONS AND COMPLIANCE

See Section 3 for additional listings.
ASTM D6007-14 VOC Emissions: <0/008 ppm

CONSISTENCY WITH OTHER PROGRAMS

Third Party Verified?
- ○ Yes
- ◉ No

PREPARER: Fibonacci LLC
VERIFIER:
VERIFICATION #:

SCREENING DATE: 11/1/2024
PUBLISHED DATE: 11/1/2024
EXPIRY DATE: 11/1/2027

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.

PUREBOND® FORMALDEHYDE-FREE PLYWOOD %: 50.0000-55.0000

PRODUCT THRESHOLD:100 PPM

RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes

RESIDUALS/IMPURITIES NOTES: PureBond® plywood is comprised of no added formaldehyde components and assembled with no added formaldehyde adhesives. No known residuals or impurities were found in this material.

OTHER PRODUCT NOTES: This is the flooring platform.

SC: Poplar

ID: SC:Bio

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: 2021-02-24

%: **95.0000 - 96.0000** GS: **NoGS** RC: **None** NANO: **No** SUBSTANCE ROLE: **Structure Component**

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

SUBSTANCE NOTES:
Version: SCBioMats/2018-02-23
Category: Tree-based materials
Identifier: Populus
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. FSC-Certified wood is used for each layer of this plywood.

Flour, Soy

ID: 68513-95-1

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: 2021-02-24

%: **1.0000 - 4.0000** GS: **NoGS** RC: **None** NANO: **Unknown** SUBSTANCE ROLE: **Adhesive**

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

SUBSTANCE NOTES: **Soyad adhesives are water-based systems formulated with natural soy flour and a proprietary cross-linking resin. When blended together the resin reacts with the protein in the soy flour to form a durable and water-resistant thermoset adhesive.**

SC:ORGANIC COMPOUND

ID: SC:Bio

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: 2021-02-24

%: **0.5000 - 0.1000** GS: **NoGS** RC: **None** NANO: **Unknown** SUBSTANCE ROLE: **Binder**

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

SUBSTANCE NOTES:
Version: SCBioMats/2018-02-23
Category: Plant-based materials
Identifier: Bio-based proprietary resin
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. Soyad adhesives are water-based systems formulated with natural soy flour and a proprietary cross-linking resin. When blended together the resin reacts with the protein in the soy flour to form a durable and water-resistant thermoset adhesive.

HempWood® %: 40.0000-45.0000

PRODUCT THRESHOLD:100 PPM

RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes

RESIDUALS/IMPURITIES NOTES: HempWood® is comprised of industrial hemp stalks, soy-based bonding agents, and assembled with no added formaldehyde adhesives. No known residuals or impurities were found in this material.

OTHER PRODUCT NOTES: This is the wear layer.

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:

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

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Industrial Hemp Stalks

ID:SC:Bio

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: 2018-02-24

%: **80.0000 - 85.0000** GS: **NoGS** RC: **None** NANO: **Unknown** SUBSTANCE ROLE: **Structure Component**

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

SUBSTANCE NOTES:
Version: SCBioMats/2018-02-24
Category:Hemp-based materials
Identifier: 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. Various hemp species

Soy-Based Adhesive Resin

ID: Undisclosed

HAZARD SCREENING METHOD: **Undisclosed**

HAZARD SCREENING DATE: None

%: **11.0000 - 16.0000** GS: **NoGS** RC: **None** NANO: **Unknown** SUBSTANCE ROLE: **Bonding**

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

SUBSTANCE NOTES: **Undisclosed**

SC:ORGANIC COMPOUND

ID: SC:Bio

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: 2021-02-24

%: **0.5000 - 0.1000** GS: **NoGS** RC: **None** NANO: **Unknown** SUBSTANCE ROLE: **Binder**

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

SUBSTANCE NOTES:
Version: SCBioMats/2018-02-23
Category: Plant-based materials
Identifier: Bio-based proprietary resin
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. Soyad adhesives are water-based systems formulated with natural soy flour and a proprietary cross-linking resin. When blended together the resin reacts with the protein in the soy flour to form a durable and water-resistant thermoset adhesive.

H.B. Fuller Hot Melt PUR

%: 1.0000-1.2000

PRODUCT THRESHOLD:**100 PPM**

RESIDUALS AND IMPURITIES EVALUATION COMPLETED: **Yes**

RESIDUALS/IMPURITIES NOTE: **HempWood has taken steps to understand what residuals and impurities may be present in this material and disclose that information on the HPD. This product is not classified as hazardous under GHS criteria.**

OTHER PRODUCT NOTES: **This is the adhesive layer binding HempWood to the plywood platform.**

Undisclosed

ID: Undisclosed

HAZARD SCREENING METHOD: **N/A**

HAZARD SCREENING DATE: N/A

%: **0.0000 - 5.0000** GS: **NoGS** RC: **None** NANO: **Unknown** SUBSTANCE ROLE: **Adhesive**

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

SUBSTANCE NOTES: **Undisclosed**

Section 2: Content in Descending Order of Quantity

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Bona Traffic HD®

%: 1.0000-1.2000

PRODUCT THRESHOLD:**100 PPM**

RESIDUALS/IMPURITIES NOTE: **HempWood has taken steps to understand what residuals and impurities may be present in this material and disclose that information on the HPD. This product is not classified as hazardous under GHS criteria.**

OTHER PRODUCT NOTES: **This is the sealant finish layer.**

RESIDUALS AND IMPURITIES EVALUATION COMPLETED: **Yes**

Water

ID: 7732-18-5

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: 2022-01-06 7:34:45

%: 0.0000 - 5.0000 | **GS: BM-4** | **RC: None** | **NANO: Unknown** | **SUBSTANCE ROLE: Filler**

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

SUBSTANCE NOTES: None

Polymeric Resin

ID: 937182-60-0

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: 2022-01-06 7:34:45

%: 0.0000 - 5.0000 | **GS: NoGS** | **RC: UnNK** | **NANO: Unknown** | **SUBSTANCE ROLE: Plasticizer**

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

SUBSTANCE NOTES: None

AMORPHOUS SILICA

ID: 7631-86-9

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: 2022-01-06 7:34:45

%: 0.0000 - 5.0000 | **GS: BM-1** | **RC: None** | **NANO: Unknown** | **SUBSTANCE ROLE: Filler**

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

SUBSTANCE NOTES: Silica is bound within the coating and not inhalable. Accordingly, it is excluded from regulatory hazard lists. It is not in a respirable form in the final product.

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.

Lumber VOC Emissions

Capital Testing Certified

CERTIFYING PARTY: Josh Hosen, Dir. of Certification Programs
CERTIFIER OR LAB: Capital Testing and Certification Services
APPLICABLE FACILITIES: All
CERTIFICATE URL: https://5po4a0.p3cdn1.secureserver.net/wp-content/uploads/2023/02/HempWood%C2%AE-Lumber-VOC-Test-Results.pdf
CERTIFICATION AND COMPLIANCE NOTES: Test Method Used: ASTM D6007-14

ISSUE DATE: 12/9/2021
EXPIRY DATE: 12/9/2026

Biobased Content

C.A.I.S. Certified

CERTIFYING PARTY: Michael C Marshall, PhD Assistant Research Scientist & Quality Manager
CERTIFIER OR LAB: Center for Applied Isotope Studies
APPLICABLE FACILITIES: All
CERTIFICATE URL: https://5po4a0.p3cdn1.secureserver.net/wp-content/uploads/2022/11/BioBased-Certification.pdf
CERTIFICATION AND COMPLIANCE NOTES: Test conducted using ASTM method D6866-20 Radiocarbon (14C) determination with the stable carbon isotope ratio (δ13C) analyses.

ISSUE DATE: 8/5/2022.

EXPIRY DATE: N/A

Section 4: Accessories

Required listings here include products or accessories that are required or recommended for installation, cleaning, or operations and maintenance. Manufacturers may list any combination of products made by them or list any combination of their products and/or generics.

No additional accessories required

Section 5: General Notes

This HPD is provided solely for the intended recipient in connection with its assessment of products and for no other purpose. In providing information, HempWood expresses no opinion and makes no representations as to the applicability, suitability, accuracy, or completeness of the declaration form, or the standards, rules, classifications, warnings, or criteria utilized or referenced therein. Please refer to HempWood's website for more information on this product at https://www.hempwood.com

Section 6: References

MANUFACTURER INFORMATION

MANUFACTURER: HempWood LLC
ADDRESS:301 Rockwood Rd, Murray, KY, 42071

CONTACT NAME: Greg Wilson
TITLE: CEO, President
PHONE: (888) 338-1235

EMAIL: office@hempwood.com
WEBSITE: www.hempwood.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 hazards
NEU Neurotoxicity
OZO Ozone depletion
PBT Persistence, bioaccumulation, and toxicity
PHY Physical hazard (reactive)
REP Reproductive toxicity
RES Respiratory sensitization
SKI Skin sensitization/irritation/corrosivity
UNK Unknown

GreenScreen

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 Benchmark-1 (possible Benchmark-1)
LT-1 List Translator Likely Benchmark-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 Content Types

PreC Preconsumer (Post-Industrial)
PostC Postconsumer
Both Both Preconsumer and Postconsumer
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 is:
• A specification for reporting product content and associated health information.

The HPD Open Standard is not:
• A method for the assessment of exposure or risk associated with product handling or use, or
• A method for assessing potential health impacts of:
o substances used or created during the manufacturing process or
o 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. Manufacturer's Safety Data Sheet (SDS), if applicable, may offer occupational health and safety information.

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 Open Standard.

The HPD Open Standard is created, maintained, and evolved by the Health Product Declaration Collaborative (HPDC), a not-for-profit, member organization composed of, and led by, stakeholders throughout the building industry. HPDC is committed to the continuous improvement of building products through transparency, openness, and innovation throughout the product supply chain.