Material Safety Data Sheet (MSDS) - Solid Strand Bamboo Flooring

I. PRODUCT IDENTIFICATION

PRODUCT NAME	Prefinished Solid Strand Woven Bamboo Flooring
MANUFACTURER/ DISTRIBUTOR	Green Building Supply Contact: 800-405-0222
APPLICATIONS	Residential and Commercial Flooring (Indoor Use Only)

II. INGREDIENTS

NAME	PERCENT	EXPOSURE LIMITS	COMMENTS	REGULATORY AGENCY
ВАМВОО	94-95%	PEL-TWA 15 mg/m3 PEL-TWA 5 mg/m3	Total dust Respirable dust fraction Respirable	OSHA OSHA ACGIH ACGIH

		TLV-TWA 3 mg/m3 TLV-STEL 10 mg/m3	Inhalable particles	
PHENOL FORMALDEHYDE RESIN SOLIDS	4-5%	PEL-TWA 0.75 ppm PEL-STEL 2 ppm TLV- Ceiling 0.3 ppm	Free gaseous formaldehyde	OSHA OSHA ACGIH
POLYMERIZED POLYURETHANE (UV FINISH)	0-1%	PEL-TWA None TLV-TWA None	None None	OSHA ACGIH

III. HAZARD IDENTIFICATION

Appearance and Odor: A natural or toasted honey (carbonized) bamboo with no, to a slight odor.

Primary Health Hazards: The extent to which health hazards are of primary concern for this product is the exposure to dust particles generated during machining, sanding, cutting, sawing, planning or routing.

Primary Route(s) of Exposure:

(X) Eyes: Dust, Ingestion:N/A (X) Inhalation:Dust, (X) Skin: Dust

Medical Conditions Generally Aggravated by Exposure: Dust particles can trigger respiratory conditions or pre-existing allergies.

Chronic Health Hazards: No tests have shown any correlating long term effects of bamboo / eucalyptus dust and respiratory conditions, or cancer.

Carcinogenicity:

NTP - Formaldehyde, Group: N/A

IARC Monographs - Formaldehyde, Group: N/A,

OSHA Regulated - Formaldehyde: N/A

IV. EMERGENCY AND FIRST-AID PROCEDURES

Ingestion: N/A

Eye Contact: Dust in eye may cause redness or watering, but should be treated as a foreign object. Flush with water several times. If irritation persists, you should seek medical attention.

Skin Absorption: Has not been known to occur under normal use Inhalation: Out-of-the-box, or in whole form, this is N/A. Bamboo / eucalyptus dust can cause sensitive individuals to experience respiratory difficulties, nasal irritation, cough or sneezing. Leave area and go to fresh air. Seek medical attention if respiratory difficulties or cough become severe, or nasal irritation persists.

V. FIRE AND EXPLOSION

Flash Point Method: N/A Flammable Limits: N/A

LEL: N/A UEL: N/A

Extinguishing Media: Carbon Dioxide, Dry Chemical or Sand. Water

Auto ignition Temperature: Variable (400-500 F)

Special Firefighting Procedures: None. Unusual Fire/Explosion Hazards: None.

VI. ACCIDENTAL RELEASE MEASURES

Out-of-the-box, this procedure is N/A. However, dust generated from cutting, drilling, planning, routing or sanding and related machining may be shoveled or

vacuumed and properly disposed of. A NOISH-approved dust respirator and goggles should be worn if dust exposure limits are exceeded.

VII. HANDLING AND STORAGE

Precautions to be Taken In Handling and Storage: Out-of-the-box there is no special handling required for this product. These products may release very small quantities of formaldehyde in gaseous form. Under foreseeable conditions of use, these products release less than 0.010 ppm in standard large chamber test conditions. This product should be kept in cool, dry environment and not exposed to high heat or flame. Store in well-ventilated area.

VIII. EXPOSURE CONTROL MEASURES

Personal Protective Equipment:

RESPIRATORY PROTECTION: Not required when taken out-of-the-box, however a NOISH-approved dust respirator is recommended for high dust producing activities such as cutting, drilling, planning or routing.

PROTECTIVE GLOVES: Not required when taken out-of-the-box, however some sort of work glove is recommended to avoid splinters or silvers after machining and handling the product.

EYE PROTECTION: Not required, but strongly recommended when machining or milling any material.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Are not required, but long sleeves and/or pants might be desirable.

WORK/HYGIENE PRACTICES: It is recommended to clean up dusty areas to avoid excess accumulation. Minimize practices that generate high air-borne dust particles.

Ventilation:

LOCAL EXHAUST: Provide local exhaust as needed so that exposure limits are met.

MECHANICAL: Good ventilation in processing and storage areas should be provided so that exposure limits are met.

IX. PHYSICAL/CHEMICAL PROPERTIES

Boiling Point: N/A Vapor Pressure: N/A Vapor Density: N/A

Specific Gravity: 1.03 g/ml

Melting Point: N/A

Evaporation Rate: N/A Solubility in Water: <0.1 % Volatile by Vol: 0

X. STABILITY AND REACTIVITY

Stat	oility:	
()	
Unst	table	(X)
Stab	le	

Conditions to Avoid: Excessive moisture, condensation or water vapor as this may cause warping or popping of the boards. Open flame or conditions above 400 F may cause the product to ignite.

Incompatibility (Materials to Avoid): Avoid contact with oxidizing agents.

Hazardous Decomposition or By-Products: Thermal decomposition by-products include carbon monoxide, carbon dioxide, aliphatic aldehydes, rosin acids, terpenes,

and polycyclic aromatic hydrocarbons.

Hazardous Polymerization: Will not occur.

Sensitivity to Mechanical Impact: N/A

Sensitivity to Static Discharge: N/A

XII. TOXICOLOGICAL INFORMATION

The product, in the finished form, has no reportable toxicological information. Formaldehyde OSHA Hazard rating = 3 for local and systemic acute and chronic exposures; highly toxic. Irritation studies: human skin, 150 ug/3 days, intermittent exposure produced mild results; human eye, 1 ppm/6 minutes, produced mild results. Toxicity studies: human inhalation TCLO of 8 ppm reported but response not specified; human inhalation TCLO of 17/mg/m3 for 30 minutes produced eye and pulmonary results; human inhalation TCLO of 300ug/m3 produced nose and CNS results; LC50 (rat, inhalation) = 1,000 mg/m3/30 minutes; LC50 (mice, inhalation) = 400mg/m3/2 hours.

Sources: Lewis, R.J., Sr. 1992 Sax's Dangerous Properties of Industrial Materials, Eighth

Edition, Van Nostrand Reinhold, NY.; **NIOSH Registry of Toxic Effects of Chemical Substances**

(RTECS), 1983-1984 Cumulative Supplement to 1981-1982 Edition and May 1995; OSHA

Regulated Hazardous Substances, Government Institutes, Inc., February 1990.

XII. ECOLOGICAL INFORMATION

Blue Forest™ Bamboo and Eucalyptus are rapidly renewable products, and can contribute up to two LEED credits. These products do not contribute to the diminishment of natural wood forests.

XIII. DISPOSAL CONSIDERATIONS

Waste Disposal Method: In out-of-the-box product form, incineration is the preferred disposal method. However, if you choose Land disposal, refer to the RCRA criteria and local requirements, and determine if the material is considered hazardous waste. Take the appropriate steps according the information acquired above.

XIV. TRANSPORT INFORMATION

Not regulated as a hazardous material by U.S. Department of Transportation. Not listed as hazardous material in Canadian Transportation of Hazardous Goods regulations.

XV. REGULATORY INFORMATION

TSCA: All ingredients are on the TSCA inventory or are not required to be listed on the TSCA inventory.

Chemicals listed: Formaldehyde CAS# 50-00-0

DSL: All ingredients are listed or are not required to be listed under the Canadian Domestic Substance List.

Chemicals listed: Formaldehyde CAS# 50-00-0

WHMIS Classification

Not a controlled product

State Right to Know:

California Prop 65 – This product contains formaldehyde which may be emitted from product. Formaldehyde is a compound that is known in the State of California to cause cancer. Green Building Supply has emission-tested its products for formaldehyde, and finds the emissions

rate to be well below a significant risk level that would require product warnings. Pennsylvania – This product contains formaldehyde which depending on humidity and temperature may be emitted from product.

SARA Section 313 Information:

This product contains formaldehyde at a concentration that lists it with the chemical to SARA Title III, Section 313 supplier notification requirements. This product falls considerably below the Threshold Planning Requirement for Formaldehyde of 500 lbs.

SARA Section 311/312 Hazard Category

Under the above referenced category, and reviewed against definitions, the product meets:

- · An immediate (acute) health hazard: Yes dust only
- · A delayed (chronic) health hazard: No
- · A fire hazard: No
- · A reactivity hazard: No
- · A sudden release hazard: No

XVI. ADDITIONAL INFORMATION

Prepared by: Green Building Supply Date Updated: 01/01/2021

USER RESPONSIBILITY: The information contained in this MSDS comes from sources believed to be accurate or otherwise technically correct, and information from occupational health and safety professionals, and regulatory agencies. It is the user's responsibility to determine if this information is suitable for their applications, and to follow safety precautions as necessary. The user has the responsibility to make sure that this sheet is the most up-to-date initial or revision issue.



ACGIH- American Conference of Government Industrial Hygienists Ceiling limit CAS# -

Chemical Abstracts Numbering System

DSL- Canadian Domestic Substance List EPA- U.S.

Environmental Protection Agency IARC- International

Agency for Research on Cancer LCLo-Lowest

concentration in air resulting in death

LC50- Administered dose resulting in death to 50% of experimental animals LDLo-

Lowest dose resulting in death

MSHA- Mining Safety and Health Administration

ND- Not determined

N/A- Not applicable

NAV- Not available

NIOSH- National Institute for Occupational Safety and Health

NTP- National Toxicology Program

OSHA- Occupational Safety and Health Administration PEL-

Permissible Exposure Level

PPM- Parts of gas or vapor per million parts of air RCRA-

Resource Conservation and Recovery Act SARA- Superfund

Amendments and Reauthorization Act STEL- Short-Term

Exposure Limit (15 minutes)

TDG- Canadian Transportation of Dangerous Goods TCLo- Lowest concentration in air resulting in a toxic effect TDLo- Lowest dose resulting in a toxic effect

TLV- Threshold Limit Value TSCA- Toxic

Substance Control Act TWA- Time-Weighted

Average (8 hours)

WHMIS- Workplace Hazardous Materials Information System