

HPD UNIQUE IDENTIFIER: 208902218752

CLASSIFICATION: 06 11 13 Engineered Wood Products

PRODUCT DESCRIPTION: Laminated Engineered Bamboo Beams, Posts, and Glu-lam products. These products are used in load and non-load bearing applications. These products can be used in interior and exterior applications.

Section 1: Summary

Basic Method / Product Threshold

CONTENT INVENTORY

| | | | |
|--|--|--|---|
| <p>Inventory Reporting Format</p> <p><input type="radio"/> Nested Materials Method</p> <p><input checked="" type="radio"/> Basic Method</p> <p>Threshold Disclosed Per</p> <p><input type="radio"/> Material</p> <p><input checked="" type="radio"/> Product</p> | <p>Threshold Level</p> <p><input type="radio"/> 100 ppm</p> <p><input type="radio"/> 1,000 ppm</p> <p><input type="radio"/> Per GHS SDS</p> <p><input checked="" type="radio"/> Other</p> | <p>Residuals/Impurities Evaluation</p> <p><input type="radio"/> Completed</p> <p><input type="radio"/> Partially Completed</p> <p><input checked="" type="radio"/> Not Completed</p> <p>Explanation(s) provided :</p> <p><input checked="" type="radio"/> Yes <input type="radio"/> No</p> | <p><i>For all contents above the threshold, the manufacturer has:</i></p> <p>Characterized <input checked="" type="radio"/> Yes <input type="radio"/> No</p> <p><i>Provided weight and role.</i></p> <p>Screened <input checked="" type="radio"/> Yes <input type="radio"/> No</p> <p><i>Provided screening results using HPDC-approved methods.</i></p> <p>Identified <input type="radio"/> Yes <input checked="" type="radio"/> No</p> <p><i>Provided name and CAS RN or other identifier.</i></p> |
|--|--|--|---|

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

LAMBOO® STRUCTURE™ PRODUCTS [UNDISCLOSED LT-P1 BAMBOO]

Number of Greenscreen BM-4/BM3 contents ... 0

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

Nanomaterial ... No

INVENTORY AND SCREENING NOTES:

Special Conditions applied: [BiologicalMaterial]

Residuals/Impurities in select raw materials are quantitatively measured, and displayed in the HPD when greater than 100 ppm.

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: Environmental Product Declaration (EPD) by ASTM : Environmental Product Declaration (EPD) by ASTM

CONSISTENCY WITH OTHER PROGRAMS

No pre-checks completed or disclosed.

Third Party Verified?

- Yes
- No

PREPARER: Self-Prepared
VERIFIER:
VERIFICATION #:

SCREENING DATE: 2024-02-28
PUBLISHED DATE: 2024-02-28
EXPIRY DATE: 2027-02-28

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

LAMBOO® STRUCTURE™ PRODUCTS

PRODUCT THRESHOLD: Other

RESIDUALS AND IMPURITIES EVALUATION COMPLETED: No

RESIDUALS AND IMPURITIES NOTES: Residuals and Impurities were considered based on supplier SDS. SDS may not identify all Residuals or Impurities present in this Product that would require reporting on the HPD. No Residuals or Impurities are expected to be present at or above Content Inventory Threshold that return a GreenScreen score of BM-1, LT-1, LT-P1 or NoGS.

OTHER PRODUCT NOTES: For more information about the Lamboo® Structure™ Series products, please visit www.lamboo.us.

HAZARD DATA SOURCE: **HPDC Special Conditions Policy**%: **98.0000 - 99.0000** GreenScreen: **Not Required** RC: **PostC** NANO: **No** MATERIAL ROLE: **Biological material**

HAZARD TYPE AGENCY AND LIST TITLES WARNINGS

Hazard Screening is not applicable to this Special Condition

BIOLOGICAL MATERIALS CATEGORY: Plant-based materials

INGREDIENT DESCRIPTION: *Phyllostachys edulis*

MATERIAL CONTENT NOTES: Moso (*Phyllostachys edulis*) Bamboo is a rapidly growing plant-based material that has been used in building applications for hundreds of years. This material is the primary material used in Lamboo engineered products.

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.

UNDISCLOSEDID: **Undisclosed**HAZARD DATA SOURCE: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2024-02-28 13:45:33**%: **0.5000 - 1.0000** GreenScreen: **LT-P1** 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

RESTRICTED LIST International Living Future Institute (ILFI) Living Building Challenge 4.0 - Red List of Materials & Chemicals - Effective April 1, 2023

Red List substances to avoid in Living Building Challenge V4.0 projects

SUBSTANCE NOTES: Adhesive used to glue together bamboo slats and layers of bamboo lumber when creating structural members.

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

Environmental Product Declaration (EPD) by ASTM

CERTIFYING PARTY: Third Party
APPLICABLE FACILITIES: ALL
CERTIFICATE URL:

ISSUE DATE: 2023-01-16 00:00:00
EXPIRY DATE: 2028-01-16 00:00:00

CERTIFIER OR LAB: The
International EPD® System

CERTIFICATION AND COMPLIANCE NOTES: EPD has been verified and certified by The International EPD System.

BIOBASED CONTENT

Environmental Product Declaration (EPD) by ASTM

CERTIFYING PARTY: Third Party
APPLICABLE FACILITIES: ALL
CERTIFICATE URL:

ISSUE DATE: 2023-01-16 00:00:00
EXPIRY DATE: 2028-01-16 00:00:00

CERTIFIER OR LAB: The
International EPD® System

CERTIFICATION AND COMPLIANCE NOTES: EPD has been verified and certified by The International EPD System.

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

This HPD is provided solely for the intended recipient in connection with its assessment of products and for no other purpose. In providing information, Lamboo 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 Lamboo's website for more information on this product - <https://www.lamboo.us/resourcelibrary>

MANUFACTURER INFORMATION

MANUFACTURER: **Lamboo Technologies, LLC**
 ADDRESS: **301 West Edwards Street**
Litchfield, Illinois 62056
 COUNTRY: **United States**

WEBSITE: **www.lamboo.us**
 CONTACT NAME: **Jeran Hammann**
 TITLE: **Executive Vice President**
 PHONE: **866-966-2999**
 EMAIL: **jeran@lamboo.us**

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

