

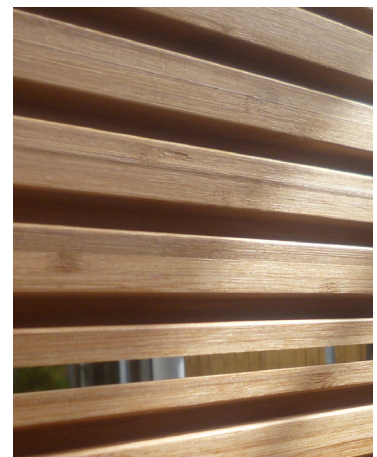


House of Bamboo

Engineered Laminated Bamboo with Wugu Bio-Glue

House of Bamboo's Engineered Laminated bamboo with Wugu Bio-Glue products are made with rapidly renewable materials. The products are tested against AS/NZ 3837 and assessed Fire Rating Class 3 under National Construction Code. Engineered Laminated bamboo with Wugu Bio-Glue Products are resistant to termites and require low maintenance.

Products/Ranges:	Engineered Laminated Bamboo with Wugu Bio-Glue
Product Stages Assessed:	Whole of life +re-use potential
Product Type:	Wall, Ceilings & Partitions
CSI Masterformat:	TBC
Licenced Site/s:	Vietnam & China
Licence Number:	HOB:EB02:2022:PH
Licence Date:	16th June 2022
Valid To:	16th June 2023
Standard:	GGT International v4.0
Screening Date:	29nd March 2022
PHD URL:	https://www.globalgreentag.com/getfile/13037/phd.pdf



PHD Summary	Inventory Threshold:	Inventory Method:
Percentage Assessed: 100%	100ppm Product Level	Nested Materials

- GreenTag Banned List Compliant.
- Product Meets Optimisation requirements - No Grey or Red Light category ingredient.
- Meets Green Star Buildings v1.0 Credit 7: Responsible Envelope - Good Practice products, Credit 9: Responsible Finish - Good Practice products, Green Star Design & As Built v1.3 Credit 21: Sustainable Products, Green Star Interiors v1.3 Credit 21: Sustainable Products.
- Meets WELL™ v1.0 Features 97: Material Transparency, Feature 4: VOC Reduction and, WELL™ v2.0 Features – X07: Material Transparency (Part 1&3), X08: Material Optimisation (Part 1&2), X06: VOC Restrictions (Part 2).
- Meets USGBC LEED® v4.0 and v4.1 Rating System MR Credit: “Building Product Disclosure and Optimisation - Material Ingredients” - Option 1: Material Ingredient Reporting and Option 2 - International ACP - REACH Optimisation.
- No worker, user, and environmental exposure to Carcinogens, Mutagens, Reproductive Toxicant or Endocrine Disruptors.

INGREDIENT HAZARD DISCLOSURE, RISK ASSESSMENT, & IN USE HEALTH, % by mass. See over for explanation.

ASSESSMENT:



Declared by:
Global GreenTag
International Pty Ltd

David Baggs
CEO & Program Director
Verified compliant with:
ISO 14024 & ISO 17065

1.0 Scope

The Global GreenTag International (GGT) Product Health Declaration (PHD) has been designed to provide an additional level of service to the green product sector in facilitating an easier understanding of both the hazard and risk associated with any certified products and is intended to indicate:

- Chemical hazards of both finished product and unique ingredients to a minimum level of 100ppm for final product throughout the product life cycle, (including any VOC or other gaseous emissions);
- An assessment of exposure or risk associated with ingredient handling, product use, and disposal in relation to established mitigation and management processes;

It is not intended to assess:

- substances used or created during the manufacturing process unless they remain in the final product; or
- substances created after the product is delivered for end use (e.g., if the product unusually degrades, combusts or otherwise changes chemical composition).

GGT PHDs are only issued to products that have passed GGT Standards' certification requirements. The Level of Assessment (BronzeHEALTH, SilverHEALTH GoldHEALTH or PlatinumHEALTH) rating relates ONLY to GGT Standard Sustainability Assessment Criteria 3, and is declared separately to the overall Bronze, Silver Gold or Platinum Green Tag Certification Mark Tier Levels.

1.2 Preparing an PHD

GGT PhDs are prepared using Hazard Classifications from the UN Globally Harmonised System of Classification and Labelling of Chemicals (GHS) and as an outcome of a successful Application for Certification. Assessments are undertaken by GGT Qualified Exemplar Global Lead Auditors and subsequently accepted for Certification by the GGT Program Director (also a Qualified Exemplar Global Lead Auditor) under the GGT International Standard v4.0, Personal Products Standard v1.0, and Cleaning Products Standard v1.1 and above Program Rules.

1.3 External Peer Review

Every GGT PHD is independently peer reviewed by an external Consultant Toxicologist and Member of the Australian College of Toxicology & Risk Assessment.

2.0 Declaration of Ingredients

Where a manufacturer wishes recognition under a rating program that requires transparency of ingredients such as LEED v4.0 & v4.1, WELL v1 & v2, Living Building Challenge, Estidama etc., the following information is declared from audit:

Colour	Ingredient Name
Green	Ideal- Low No concerns- ingredient safe at any level based on current known science, % of the ingredient, and relevance to use context'
Yellow	Medium to Low Hazardous Ingredient with minor level of "Issue of Concern" depending on % of the ingredient, hazard level, and relevance to use context'
Orange	Moderate Hazardous ingredient with "Issue of Concern" or "Issue of Concern Minimised" depending on % of the ingredient, hazard level, and relevance to use context'
Red	Problematic (Red): Target for Phase Hazardous ingredient with 'Red Light" or "Red Light Minimised" concern depending on % of the ingredient, hazard level, and relevance to use context'
Dark Red	Very Problematic (Dark Red): Target for Phase Very Hazardous ingredient with 'Red Light Exclusion" concern depending on % of the ingredient, hazard level, and relevance to use context'
Grey	Uncategorised Not able to be categorised due to lack of toxicity impact information.
Black	Banned Ingredients Petroleum, Parabens plus a wide range of compounds stipulated by cleaning/personal products standards.

Global GreenTag International Pty Ltd (Global GreenTag) is not a medical professional organisation. Global GreenTag does not purport to provide medical advice, and makes no warranty, representation, or guarantee regarding the declaration that it provides in relation to any allergies, chemical sensitivities or any other medical condition, nor does Global GreenTag assume any liability whatsoever arising out of the application or use of any product or piece of equipment that has been chemically assessed by Global GreenTag.

The chemical assessments carried out provide transparent information peer reviewed by a consultant toxicologist regarding the chemical make-up and ingredients of certain materials and products, but such assessments are not to be taken as any form of medical assessment or health advice and are not targeted towards providing specific solutions to allergenic conditions or any other type of medical concerns.

Users must carry out their own investigations if they are concerned about specific medical conditions and the impact of certain products or ingredients in relation to specific medical concerns.

Global GreenTag takes no responsibility and is not liable in any way with respect to any medical or health issues arising from a person's use of materials or products that have been chemically assessed by Global GreenTag. Global GreenTag shall not be liable for any direct, indirect, punitive, incidental, special or consequential damages to property or life whatsoever, arising out of or connected with the use or misuse of any materials or products that have been assessed by Global GreenTag.

Ingredient Name	CAS Number OR Function	Proportion in finished product	GHS, IARC & Endocrine Category	REACH Compliance	Ingredient Assessment	Whole Of Life Assessment	In Use Health Assessment	Comment
Material: Bamboo								
Bamboo	Bamboo fibre	80-100%	None	OK				Recycled Content: None Nanomaterials: Unknown
Material: Ammoniated compound								
Ammoniated compound	Hardner	0.056-0.07%	None	OK				Unknown substance is used. However, as there is no hazard declared, it is not expected to cause any harm to the end-user. Recycled Content: None Nanomaterials: Unknown
Material: Collagen								
Collagen	146317-23-9	0.14-0.18%	None	OK				Recycled Content: None Nanomaterials: Unknown
Material: Cellulose								
Cellulose	9004-34-6	0.3-0.4%	None	OK				Recycled Content: None Nanomaterials: Unknown
Material: Water								
Water	7732-18-5	0.5-0.7%	None	OK				Recycled Content: None Nanomaterials: No

* No GHS H-Statement classification

Comments:

VOC emissions: TVOC mg/m³ for final product is <0.5 mg/m³. Total formaldehyde ppm is not detected and the product can be defined as E0. Individual VOCs is no greater than 0.1 Threshold Limit Value (TLV) measured using Test Method ISO 16000-9:2006/COR1-2007 & ISO 16000-6:2011 & ISO 16000-3:2011. Sample tested in June 2020 at SGS-CSTC Standards Technical Service Co., Ltd. Guangzhou Branch. Test approved by SGS-CSTC Co., Ltd. Shunde Branch. Global GreenTag International Program Standard v4.0 Walls, Partitions and Ceilings Supplementary Standard is in accordance with requirements of the Green Building Council of Australia, New Zealand Green Building Council and LEED v4, as updated from time to time.