GLOBAL GREEN TAG INTERNATIONAL



Green Resources Material (GRM) Australia Pty Ltd. **Biowood**

The GRM Biowood architectural reconstituted wood composite product can be used for decking, cladding, ceiling and flooring construction applications.

Products/Ranges: Product Stages Assessed: Product Type: CSI Masterformat: Licenced Site/s: Licence Number: Licence Date: Valid To: Standard: Screening Date: PHD URL:

Decking, Cladding, Ceiling and Flooring Material Inputs, Manufacturing, In-use Wood Composite 06 00 00 Indonesia BWA:BW01:2023:PH 12 January 2023 12 January 2024 GGT International v4.0 20 August 2021 https://www.globalgreentag.com/getfile/12160/phd.





PHD Summary Percentage Assessed: 100%

Inventory Threshold: 100ppm Product Level Inventory Method: Nested Materials

GreenTag Banned List Compliant.

GreenTag PHD recognized by WELL[™] & LEED[®] Material Transparency & Optimization credits included below:

S Meets Green Star [®] 'Buildings v1.0' as Recognized for~ Credit 9: Responsible Finishes; as a Compliant Technical Document (Audited) for ~ Credit 13: Exposure to Toxins, and 'Design & As Built v1.3' and 'Interiors v1.3' ~ Indoor Pollutants.

Meets IWBI[®] WELL[™] v1.0 as Recognized for ~ Feature 26 (Part 1); Feature 97 (Part 1); as a Compliant Technical Document (Audited) for ~ Feature 11 (Part 1); Feature 25 (Part 2, 4), and, meets IWBI[®] WELL[™] v2.0 as Recognized for ~ X07 (Parts 1, 3); X08 (Part 2); as a Compliant Technical Document (Audited) for ~ X01 (Part 1); X07 (Part 2); X08 (Part 1).

Meets USGBC LEED[®] v4.0 and v4.1 Rating Tool Credit as Recognized for MR Credit: Building Product Disclosure and Optimisation - Material Ingredients - Option 1: Material Ingredient Reporting, Option 2: International ACP - REACH Optimisation.

Highly unlikely user exposure to any Carcinogens, Mutagens, Reproductive Toxicant or Endocrine Disruptors during installed use of the product.



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:

- i. substances used or created during the manufacturing process unless they remain in the final product; or
- ii. 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 Personal Products Standard v1.0/1.1, and Cleaning Products Standard v1.1/1.2 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: Wood Powder										
Wood Powder	Cellulose	50-80%	H350 (Carc. 1A)	ОК				Wood dust may cause nasal cavities and surrounding area of the noseby inhalation. Between Manufacturing and End-of- Life, the Manufacturing stage was deter- mined to be the stage with the greatest environmental and health risks of the material. Risk was determined to be low in the Manufacturing stage when OHS policies and procedures are complied with which minimise inhalation of dust. The risk assessment for the Use phase determined that the wood powder being bound in the product was not-expected expose users to the hazard. Recycled Content: Unknown Nanomaterials: No		
Material: Polyvinyl Chloride										
Polyvinyl Chloride	9002-86-2	15-30%	H315 (Skin Irrit. 2) H319 (Eye Irrit. 2) H335 (STOT SE 3) H362 (Lact.) H400 (Aquatic Acute 1) H410 (Aquatic Chronic 1) H412 (Aquatic Chronic 3)	ОК			_	Polyvinyl chloride can irritate when inhaled as a powder. Between Manufacturing and End-of- Life, the Manufacturing stage was determined to be the stage with the greatest environmental and health risks of the material. Risk was determined to be low in the Manufacturing stage when OHS policies and procedures are complied with for inhalation, dermal and eye exposure. The risk assessment for the Use phase determined that because the polyvinyl chloride was embedded in the product the risk of exposure during use of the installed product was highly unlikely. Recycled Content: None Nanomaterials: Unknown		
Material: Calcium Carbona	ite									
Calcium Carbonate	471-34-1	3-10%	H315 (Skin Irrit. 2) H319 (Eye Irrit. 2) H318 (Eye Dam. 1) H335 (STOT SE 3) H336 (STOT SE 3) H372 (STOT RE 1)	ОК				Calcium carbonate can be harmful when contact with skin or eye or when it is inhaled. Between Manufacturing and End-of- Life, the Manufacturing stage was determined to be the stage with the greatest environmental and health risks of the material. Risk was determined to be low in the Manufacturing stage when OHS policies and procedures are complied with for inhalation, dermal and eye exposure. The risk assessment for the Use phase determined that because the susb- stance is bound and embeded in the product, users are not expected to be exposed to the hazards. Recycled Content: None Nanomaterials: Unknown		
Material: Additives										
Additives	Propriety	1-5%	No hazards declared in substance decla- ration.	ОК	_			The substances have been declared as not associated with any risk phases and all substances have been declared to comply with REACH standards. Not able to be categorised due to lack of toxicity impact information. In-Use phase risk assessment determines that because there is no hazard declared associated with these substances, these additives are not expected to cause any harm to users as they are embedded in the product and they are have been declared not associated with any risk phases. Recycled Content: Unknown Nanomaterials: Unknown		
* No GHS H-Statement classification										

Comments:



PHD

TVOC emissions: TVOC emissions rate is 0.14mg/m2/hr After 168 hours (within the GBCA benchmark limit less than 0.5mg/m2/hr) using test method ASTM D5116-10 "Standard Guide for Small-Scale" Environmental Chamber Determinations of Organic Emissions from Indoor Material/Products". Tested by TÜV SÜD PSB in April 2017.

4-Phenylcyclohexane emissions: 4-Phenylcyclohexane emissions rate is <0.002mg/m2/hr After 168 hours (within the GBCA benchmark limit less than 0.05mg/m2/hr) using test method ASTM D5116-10 "Standard Guide for Small-Scale" Environmental Chamber Determinations of Organic Emissions from Indoor Material/Products". Tested by TÜV SÜD PSB in April 2017.

Formaldehyde emissions: Formaldehyde emission rate is less than 0.002mg/m2/hr After 168 hours (within the benchmark limit less than 0.1mg/m2/hr) using test method ASTM D5116-10 "Standard Guide for Small-Scale" Environmental Chamber Determinations of Organic Emissions from Indoor Material/Products". Tested by TÜV SÜD PSB in April 2017.

