GLOBAL GREEN TAG INTERNATIONAL PTY LTD

PHD™
Product Health Declaration

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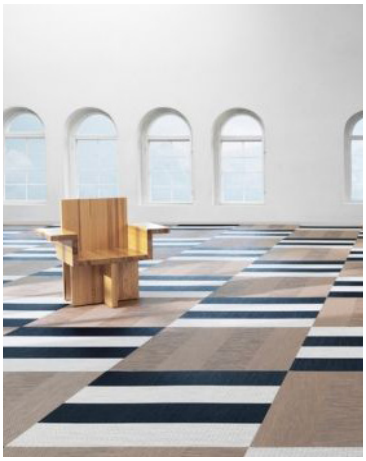
Bolon AB / The Andrews Group

Bolon Woven Flooring With Acoustic Backing

Bolon Woven Flooring with Acoustic Backing are resilient, durable synthetic woven flooring suitable for interior and some exterior commercial and residential floor finishes.



Products/Ranges:	Bolon Woven Flooring with Acoustic Backing
Product Stages Assessed:	Manufacturing + In-Use
Product Type:	Woven Vinyl Flooring
CSI Masterformat:	09 65 00
Licenced Site/s:	Ulricehamn, Sweden
Licence Number:	TAG:BO02:2023:PH
Licence Date:	23rd January 2018
Valid To:	10th September 2024
Standard:	GGT International v4.0
Screening Date:	17th October 2023
PHD URL:	https://www.globalgreentag.com/getfile/12699/phd.pdf

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

- GreenTag Banned List Compliant.
- GreenTag PHD recognized by WELL ® & LEED ® Material Transparency & Optimization credits included below:
- 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 04 (Part 3); Feature 11 (Part 1); Feature 25 (Part 2, 3, 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); X05 (Part 2); X06 (Part 2); 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.
- Independent third party assessment for worker, user, and environmental exposure to any 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

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 risks 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) of a PHD rating relates ONLY to a Human Health Toxicity Assessment and is declared separately and not equivalent to the overall Bronze, Silver Gold or Platinum Green Tag Certification Mark Tier Levels of LCARate.

1.2 Preparing a PHD

GGT PHDs are prepared in the format of a transparency document which utilizes Hazard Classifications from the UN Globally Harmonised System of Classification and Labelling of Chemicals (GHS). Hazard Classifications are then risk assessed with a focus on the In Use stage for an outcome of 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 International Standard v4.0/4.1, Personal Products Standard v1.0/1.1, or 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 Australasian 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 ® v1.0 & v2.0, Green Star ®, the following information is declared from the audit:

Colour	Ingredient Hazard Disclosure
Green	**Level 4** The hazard level of this ingredient indicates that the ingredient has no toxic hazard statements with no identified health effects.
Yellow	**Level 3** The hazard level of this ingredient indicates that the ingredient is mildly toxic and/or has short/medium term reversible health effects.
Orange	**Level 2** The hazard level of this ingredient indicates that the ingredient is moderately toxic and/or with a moderate health effects.
Red	**Level 1** The hazard level of this ingredient indicates that the ingredient is highly toxic with a potential for severe health effects.
Black	**Level 0** The hazard level of this ingredient indicates that the ingredient is highly toxic with a potential for severe health effects and is banned from being detectable above trace amounts in the final product.
Grey	**Grey Chemical** Not able to be categorised due to lack of toxicity impact information.

Colour	Risk Assessment & In Use Health Assessment Outcome
Green	**No Concerns** The risk assessment outcomes for the hazard level and percentage of ingredient used in the product after risk assessment is considered highly unlikely and therefore without concerns.
Yellow	**Human Health Comment** The risk assessment outcome for the hazard level and percentage of ingredient used in the product is after risk assessment considered low with an unlikely potential risk.
Orange	**Issue of Concern or Issue of Concern Minimised** The risk assessment outcome for the hazard level and percentage of ingredient used in the product is after risk assessment considered low to high with a higher than unlikely potential for risk.
Red	**Red Light Comment or Red Light Comment Minimised** The risk assessment outcome for the hazard level and percentage of ingredient used in the product is after risk assessment considered low to extremely high with a moderate potential for risk.
Dark Red	**Red Light Exclusion** The risk assessment outcome for the hazard level and percentage of ingredient used in the product is after risk assessment considered medium to extremely high with a likely potential for risk.
Grey	**Grey Chemical** Not able to be categorised due to lack of toxicity impact information.
Black	**Banned Ingredients** Level 0 Hazard Level categorised chemicals such as Substances of Very High Concern in the International Standard v4.0/v4.1 and/or Petroleum, Parabens plus a wide range of additional compounds stipulated by the Personal Products Standard v1.0/1.1 and Cleaning Products Standard v1.1/1.2

Ingredient Name	CAS Number OR Function	Proportion in finished product	GHS, IARC & Endocrine Category	REACH Compliance	Ingredient Hazard Disclosure	Risk Assessment	In Use Health Assessment	Comment
Material: Fillers								
Dolomite	16389-88-1	5-15%	H319 (Eye Dam. 2A)	OK				Review of published hazards for Dolomite indicate mild toxicity as a powder. However, since the substance is bound in the product and not present as a free powder the hazards are reduced. The abrasion of the finished product could release Dolomite into the environment. Users could then be exposed through inhalation or eye contact. However the frequency of hazardous amounts being release through abrasion during the In Use stage is unlikely becuse the powder is bound in the PVC polymer. Because there is unlikely within the In Use stage for exposure to Dolomite powder there are no assessed concerns for any In Use stage human health toxicity. Recycled Content: 3.7% Post-I (Finished Product) Nanomaterials: Unknown
Calcium Carbonate	471-34-1	15-30%	H318 (Eye Dam. 1), H335 (STOT SE 3 (Resp.)), H315 (Skin Irrit. 2)	OK				Review of published hazards for Calcium Carbonate indicate moderate toxicity as a powder with no Carcinogens, Mutagens or Reproductive toxicants. However, since the substance is bound in the product and not present as a free powder the hazards are reduced. The abrasion of the finished product could release Calcium Carbonate as a powder into the environment and expose people through inhalation, eye exposure or dermal contact could occur. However the frequency of hazardous amounts being release through abrasion during the In Use stage is unlikely because the powder is bound in the PVC polymer. Therefore once the powder is present bounded in the final product there are no assessed concerns for human health toxicity in the In Use stage. Recycled Content: None Both or Unknown / None Nanomaterials: Unknown
Material: Polymers								
Ethene, chloro-, homopolymer (Polyvinyl-chloride)	9002-86-2	30-50%	IARC 3, H319 (Eye Dam. 2A), H335 (STOT SE 3 (Resp.)), H315 (Skin Irrit. 2)	OK				Review of published hazards for polyvinyl chloride (PVC) indicate moderate toxicity, most likely as a fine powder. The International Agency for Research on Cancer (IARC) statement IARC 3 means there is no evidence at present that PVC causes cancer in humans. The abrasion of the finished product could release PVC as a powder into the environment and exposure people through inhalation, eye exposure or dermal contact. The release of Vinyl Chloride Monomer (VCM) as a Volatile Organic Compound (VOC) into the air could cause exposure through inhalation. VCM is a known carcinogen. However the frequency of hazardous amounts of PVC powder being release through abrasion during the In Use stage is unlikely because PVC is a strong polymer. Certificates for VCM testing show that the amount in the resin is within Australian Standards, less than 1 part per million. Therefore when the the PVC is a polymer in the final product there are no assessed concerns for human health toxicity in the In Use stage. Recycled Content: 4.7% Post-I (Finished Product) Nanomaterials:Unknown
Material: Ethylene-Vinyl Acetate (EVA) Resin								

Acetic acid ethenyl ester, polymer with ethene	24937-78-8	0.01 - 1%	H351 (Carc. 2), H317 (Skin Sens. 1), H319 (Eye Dam. 2A), H315 (Skin Irrit. 2)	OK				The overwhelming majority of published hazards reviewed report this chemical as unclassified. The reported hazards have been included based on the precautionary principle to assess all potentially reported hazards. The chemical is expected to be chemically transformed from it's liquid state during manufacture. There is not expected to be any amounts remaining in the final product that would exposed humans through skin or inhalation to any classified hazards within the In Use stage. Any potential off gassing of this chemical through Volatile Organic Compound (VOC) emissions is minimal because the client has provided a compliant VOC certificate. There are no expected concerns for human health toxicity in the In Use stage. Recycled Content: None Nanomaterials: Unknown
Material: Plasticiser								
Alkyl Sulfonate	91082-17-6	5-15%	None	OK				Review of published hazards identified none with all being unclassified. The chemical is used as a plasticizer for the PVC to provide flexibility. There is potential for humans to be exposed to this chemical through skin contact. Having no identified hazards there are no assessed concerns for human health toxicity identified withi the In Use stage. Recycled Content: 1.6% Post-I (Finished Product) Nanomaterials: Unknown
Bis(2-ethylhexyl) tere-phthalate	6422-86-2	5-15%	None	OK				Review of published hazards identified none with all being unclassified. The chemical is used as a plasticizer for the PVC to provide flexibility. There is potential for humans to be exposed to this chemical through skin contact. Having no identified hazards there are no assessed concerns for human health toxicity identified withi the In Use stage. Recycled Content: None Nanomaterials: Unknown
Material: Stabiliser								
Soybean oil, epoxidized	8013-07-8	0.01-1%	None	OK				Review of published hazards identified none with all being unclassified. There is potential for humans to be exposed to this chemical through skin contact. Having no identified hazards there are no assessed concerns for human health toxicity identified withi the In Use stage. Recycled Content: 0.2% Post-I (Finished Product) Nanomaterials: Unknown
Calcium / Zinc	Stabiliser	0-1%	(IARC 3)	OK				Review of published hazards identified one IARC 3 hazard statement. The International Agency for Research on Cancer (IARC) statement IARC 3 means there is no evidence at present that PVC causes cancer in humans. The chemical is used as a stabilizer for the PVC to provide heat and light stability. Further review did not identify any hazards for common zinc and calcium salt PVC stabilizers. There are no assessed concerns for human health toxicity within the In Use stage. Recycled Content: 0.15% Post-I (Finished Product) Both or Unknown / None Nanomaterials: Unknown
Materials: Pigments								

Titanium Dioxide	13463-67-7	0.01-1%	IARC 2B, H351 (Inhalation - Carc. 2)	OK				Review of published hazards for Titanium Dioxide indicate high toxicity. This is limited to potential inhalation and consumption. The International Agency for Research on Cancer (IARC) statement IARC 2B is that this chemical is possibly carcinogenic to humans however evidence is far from conclusive. The higher risk exposure scenarios of inhalation as a powder are unlikely and there is negligible risk for its use in the product being bound in the PVC polymer. There are no assessed concerns for human health toxicity identified for this chemical within the In Use stage. Recycled Content: None Nano Materials: Unknown
Various Pigments	Pigments	0.01-1%	None	OK				Pigments were reviewed through a manufacturer declaration for hazards above a 0.01% threshold. No hazards were identified within pigments above the 0.01% threshold of the declarations received from the manufacturer. There are no assessed concerns for human health toxicity for this chemical within the In Use stage. Recycled Content: 0.024% Post-I (Finished Product) Nanomaterials: Unknown
Carbon Black	1333-86-4	0.01-1%	IARC 2B	OK				Review of published hazards for Carbon Black indicate moderate toxicity. This is limited to potential inhalation and consumption. The International Agency for Research on Cancer (IARC) statement IARC 2B is that this chemical is possibly carcinogenic to humans however evidence is far from conclusive. The abrasion of the finished product could release Carbon Black as a powder into the environment and expose people to inhalation risk. However the frequency that hazardous amounts of Carbon Black powder would be release through abrasion during the In Use stage is unlikely because it is encapsulated in the PVC polymer. There are no assessed concerns for human health toxicity identified for this chemical within the In Use stage. Recycled Content: None Nanomaterials: Unknown
Material: Fibres								
Polyester: Poly(oxy-1,2-ethanediyloxycarbonyl-1,4-phenylenecarbonyl)	25038-59-9	5-15%	H319 (Eye Dam. 2A)	OK				The overwhelming majority of published hazards reviewed report this chemical as unclassified. The reported hazards have been included based on the precautionary principle to assess all potentially reported hazards. The abrasion of the finished product could release fine fibre particles into the air. However the frequency that hazardous amounts would be released is unlikely at the product is used as a backing and tightly bound. There are no assessed concerns for human health toxicity for this chemical within the In Use stage. Recycled Content: 12% Post-C (Finished Product) Both or Unknown / None Nanomaterials: Unknown

Fibre Glass	65997-17-3	1-5%	H350 (Carc. 1B)	OK				Review of published hazards for Fibre Glass indicate high toxicity. This high toxicity is limited to potential inhalation especially in the installation of glass fibre insulation. The product is not a glass fibre insulation, the amounts of fibre glass in the product are much lower than those of glass fibre insulation. Since the fibre glass is bound in the polymer there is an unlikely release into the environment. There are no assessed human health toxicity concerns for these chemicals within the In Use stage. Recycled Content: None Both or Unknown / None Nanomaterials: Unknown
Additives	Lubricants, Coatings and Antistatic Agents	1-5%	None	OK				Additives were reviewed through a manufacturer declaration for hazards above a 0.01% threshold. No hazards were identified within pigments above the 0.01% threshold of the declarations received from the manufacturer. There are no assessed concerns for human health toxicity for this chemical within the In Use stage. Recycled Content: None Nanomaterials: Unknown
Phosphoric acid, mono-C10-14-alkyl esters, dipotassium salts	68649-41-2	1-5%	H315 (Skin Irrit. 2), H319 (Eye Dam. 2A)	OK				Review of published hazards for this chemical indicate mild toxicity. This chemical's highest risk is as a powder or when dissolved in a liquid with potential eye and skin exposure. Since the chemical is present at low amounts and bound within the flooring product the potential for hazardous amounts being release during the In Use stage is unlikely. There are no assessed concerns for human health toxicity for this chemical within the In Use stage. Recycled Content: None Nanomaterials: Unknown

* No GHS H-Statement classification

Comments:
Bolon Woven Vinyl, Acoustic Felt has been tested and confirms to CDPH/EHLB Standard Method v1.2-2017. The certificate presented reports the result is below 0.5 mg/m3 (in compliance with CDPH/EHLB Standard Method v1.2-2017) which is compiant with the Global GreenTag International v4.0 standard. The test report covers a maximum thickness to 5.2 mm.