GLOBAL GREEN TAG INTERNATIONAL PTY LTD

PhD™ Product Health Declaration

GLOBAL GREENTAG HEALTH RATE
CERT TM
Gold HEALTH
trust brands™

Koppers Performance Chemicals

MicroPro® Wood Treatment Technology

Scope of Range:	MicroPro® Wood Treatment Technology
Life Cycle Assessed:	Raw materials, manufacturing, in use
Licenced Site/s:	Millington USA
Licence Number:	KOP- 001-V1-2018
Licence Date:	11th September 2018
Valid To:	11th September 2021
Standard:	GGT International v4.0
Assessment Year:	September 2018

This PhD ceases currency when original GreenTag GreenRate/LCARate certification expires or is revoked. Please check www.globalgreentag.com for currency.

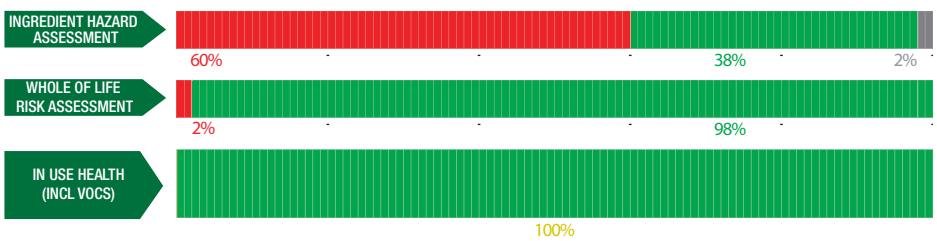
The Global GreenTag Product Health Declaration has been designed to provide an additional level of service to the green product sector in facilitating an easier industry understanding of both the health hazard and risk (if any) associated with any certified product/s.

PhD Summary
Percentage Assessed: 100%

Declaration Limit: 100ppm

- GreenTag Banned List Compliant - Annex XVII of REACH, SVHC Candidate/Authorisation list in REACH
- Contributes towards satisfying Feature 26 Enhanced Material Safety Part 1 Precautionary Material Selection, and Feature 97: Material Transparency Part 1 Material Information, under the WELL Building Standard™
- Low worker exposure to Carcinogens, Mutagens, Reproductive Toxicant or Endocrine Disruptors
- Low user exposure to Carcinogens, Mutagens, Reproductive Toxicant or Endocrine Disruptors
- Low environmental exposure to Carcinogens, Mutagens, Reproductive Toxicant or Endocrine Disruptors

MANUFACTURING, IN USE, & END OF LIFE STAGES
% by mass. See over for explanation.



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 each homogeneous ingredient 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 GGT International Standard v4.0, Personal Products Standard v1.0, and Cleaning Products Standard v1.0 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, Living Building Challenge, Estidama etc., the following information is declared from audit:

Colour	Ingredient Name
Green	**Ideal- Low** No Comment required
Yellow	**Medium to Low** No Comment, or 'Issue of Concern' required depending on % of ingredient.
Orange	**Moderate** 'Issue of Concern' or 'Red Light' Comment depending on % of ingredient. Limit 10%
Red	**Problematic (Red): Target for Phase** 'Issue of Concern' or 'Red Light' Comment depending on % of ingredient. Strict Upper Limit of 1%
Grey	**Uncategorised** Not able to be categorised due to lack of toxicity impact information.
Black	**Banned Ingredients** POPs, SVHCs plus a wide range of compounds depending on specific Standard requirements

Ingredient Name	Function	GHS, IARC and Endocrine Category	Hazard Assessment (Raw)	After Detailed Risk Assessment	Comment
Tebuconazole	Biocide Concentrate	Acute Tox. 4, Aquatic Acute 1, Aquatic Chronic 1, Repr. 2, Endocrine Disruptor Category 3			**The manufacturing of wood treatment concentration operates under an Occupational Health and Safety System and therefore risks are considered low at the manufacturing stage.** The concentration is transferred via a pipe into tanks through a computer con-trolled flow meter measuring system, eliminating any human exposure. The highly diluted solution is used to treat the wood in an enclosed pressure rated vessel. Dusk mask and goggles are required when cutting or sanding timber.
	Biocide Dillution				Tebuconazole is diluted at 0.04% concentration in final use, virtually eliminating toxicity risk and is considered safe in use.

Copper Carbonate	Biocide Concentrate	Acute Tox. 4, Aquatic Acute 1, Aquatic Chronic 2, Eye Irrit. 2, Skin Irrit. 2, STOT SE 3			The concentration is transferred via a pipe into tanks through a computer con-trolled flow meter measuring system, eliminating any human exposure. The highly diluted solution is used to treat the wood in an enclosed pressure rated vessel. Dusk mask and goggles are required when cutting or sanding timber. Copper Carbonate is diluted as low as 1.72% in final use. According to US EPA's leaching test and wipe test, the leaching rate is as low as 5% of total Copper Carbonate in the dilution. The risk is significantly reduced, and the product is considered safe in use. Preserved timber may be disposed of in landfills or burned in commercial or industrial incinerators or boilers.
	Biocide Dillution				
Dispersant	Additive	None			Substance Declaration "Considered safe in use"
Dispersant	Additive	None			Substance Declaration "Considered safe in use"
Calcium Nitrite Water Solution	Corrision In-hibitor	Acute Tox.3, Eye Irrt.2			The extremely low concentration of corrision inhibitor has negligible risk.
Water	Solvent	None			None

Comments: The product receives UL GreenGuard certification for low VOC emission.