

# PHD™

## Product Health Declaration



Dulux New Zealand

## Dulux Enviro2 Interior Ceiling Flat

Dulux Enviro2 Interior Ceiling Flat has characteristics of low odour and low VOC emissions. This is specifically designed for use on ceilings. This acrylic paint has high opacity and a flat finish to help hide minor surface imperfections and produce an even finish.

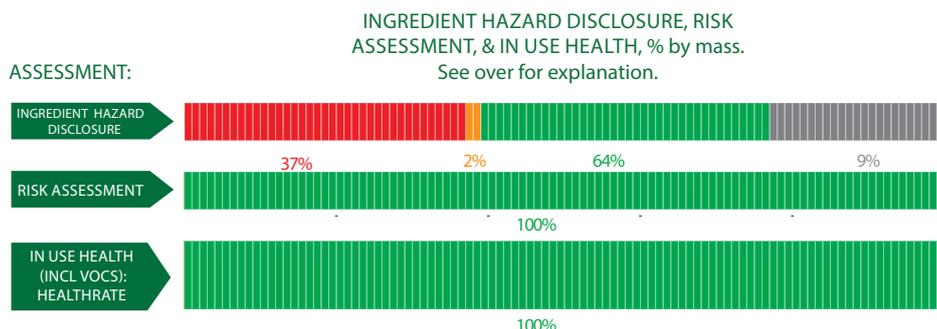
Products/Ranges:  
Product Stages Assessed:  
Product Type:  
CSI Masterformat:  
Licenced Site/s:  
Licence Number:  
Licence Date:  
Valid To:  
Standard:  
Screening Date:  
PHD URL:

Dulux New Zealand Enviro2 Interior  
Material inputs, manufacturing, in-use  
Paint & Applied Finishes  
09 91 00 Painting  
Lower Hutt, New Zealand  
DUN:EI02:2024:PH  
8th December 2020  
8th December 2026  
GGT International v4.0  
2nd February 2024  
<https://www.globalgreentag.com/certificate/1180/>



<b>PHD Summary</b>	<b>Inventory Threshold:</b>	<b>Inventory Method:</b>
Percentage Assessed: <b>100%</b>	100ppm Product Level	Nested Materials

- GreenTag Banned List Compliant.
- GreenTag PHD recognized by WELL® & LEED® Material Transparency & Optimization credits included below:
- Meets IWBI® WELL® v1.0 as a Compliant Technical Document (Audited) for ~ Feature 04 (Part 1); and, meets IWBI® WELL® v2.0 as Recognized for X06 (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.



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:

- 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) 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<sup>®</sup> v4.0 & v4.1, WELL<sup>®</sup> v1.0 & v2.0, Green Star<sup>®</sup>, 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

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	InUse Health Assessment	Comment
<b>Binder</b>								
Tylose	Binder	0.1-1%	None	OK				No identifiable risk to end user. Recycled Content: None Nano Materials: No
<b>Additive</b>								
Neutralizing Amine	Additive	0.1-1%	None	OK				No identifiable risk to end user. Recycled Content: None Nano Materials: No
<b>Foam Control</b>								
White mineral oil (petroleum)	8042-47-5	0.1-1%	None	OK				No identifiable risk to end user. Recycled Content: None Nano Materials: No
Precipitated synthetic amorphous silica	112926-00-8	<0.1%	H330, H372, H332, H318, H335	OK				The ingredient may cause eye and respiratory irritation if exposed for longer period. Dulux NZ ensures proper PPE usage for the workers. Once applied, this ingredient in the foam control will be incorporated in a hard, durable, inert film and will not present a significant hazard.  No identifiable risk to end user. Recycled Content: Unknown Nanomaterials: unknown
Diethylenetriamine	111-40-0	<0.1%	H312, H302 H314, H317	OK				The ingredient may cause damage to skin & eyes. Dulux NZ is 14001 certified which ensure proper PPE usage. Once applied, this ingredient in the foam control will be incorporated in a hard, durable, inert film and will not present a significant hazard.  No identifiable risk to end user. Recycled Content: Unknown Nanomaterials: unknown
Proprietary	Additive	0.1-1%	None	OK				No identifiable risk to end user. Recycled Content: None Nano Materials: No
<b>Thinner</b>								
Isobutyric acid, monoester with 2,2,4-trimethylpentane-1,3-diol	25265-77-4	1-5%	H319, H315, H335, H412	OK				Thinner solvents present risk such as VOC to indoor air quality however, as noted from the total voc of the final product, this is lower than the limits set by the GBCA and LEED. In terms of chronic exposure risks, this is minimised because when the paint is applied and dried, the inert nature of thinner does not present any health risk.  No identifiable risk to end user. Recycled Content: Unknown Nanomaterials: unknown
Proprietary	Additive	<0.1%	None	OK				Thinner additives - In terms of chronic exposure risks, this is minimised because when the paint is applied and dried, the inert nature of thinner does not present any health risk. Recycled Content: Unknown Nanomaterials: unknown
<b>Additive</b>								
Polyethylene glycol	25322-68-3	1-5%	None	OK				No identifiable risk to end user. Recycled Content: None Nano Materials: No
<b>Modifier</b>								
Non-ironic urethane	Rheology modifier	0.1-1%	None	OK				Once applied, this rheology modifier will be incorporated in a hard, durable, inert film and will not present a significant hazard. Recycled Content: Unknown Nanomaterials: unknown

Ingredient Name	CAS Number OR Function	Proportion in finished product	GHS, IARC & Endocrine Category	REACH Compliance	Ingredient Assessment	Whole Of Life Assessment	InUse Health Assessment	Comment
<b>Dispersant</b>								
Polycarboxylic acid	Waterborne pigment dispersant	0.1-1%	None	OK				Once applied, this dispersant will be incorporated in a hard, durable, inert film and will not present a significant hazard. Recycled Content: Unknown Nanomaterials: unknown
<b>Plasticiser</b>								
Poly(oxy-1,2-ethanediy), $\alpha$ -hydro-w-hydroxy-Ethane-1,2-diol, ethoxylated	Plasticiser	0.1-1%	None	OK				No identifiable risk to end user. Recycled Content: None Nano Materials: No
<b>Binder</b>								
reaction mass of 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazol-3-one	55965-84-9	<0.1%	None	OK				No identifiable risk to end user. Recycled Content: None Nano Materials: No
Optima T	Binder	10-20%	H315, H314, H332, H330, H319, H373, H400, H304	OK				The ingredient may cause Skin, eye and respiratory irritation if exposed for longer period. It can also have detrimental impacts on the aqueous environment. Dulux NZ is ISO 14001 certified which ensures proper handling of chemical for hazard mitigation. Exposure to this component in the binder may occur during paint stripping from wood and metal surfaces. However, once applied, the binder is bound in the hard durable inert film and will not pose significant hazards.  No identifiable risk to end user. Recycled Content: Unknown Nanomaterials: unknown
<b>Water</b>								
Dosed Water	Diluent	30-40%	None	OK				No identifiable risk to end user. Recycled Content: None Nano Materials: No
<b>Surfactant</b>								
Non ionic surfactant	Surfactant	0.5-1%	H400	OK				The ingredient can have detrimental impacts on the aqueous environment. Once applied, this surfactant will be incorporated in a hard, durable, inert film and will not present a significant hazard.  No identifiable risk to end user. Recycled Content: Unknown Nanomaterials: unknown
<b>Calcium Carbonate</b>								
Limestone	Extender	1-5%	None	OK				No identifiable risk to end user. Recycled Content: None Nano Materials: No
<b>Perlite</b>								
Perlite	Filler	5-10%	H334, H317	OK				The ingredient can have skin reaction and respiratory irritation when exposed for longer period. Dulux NZ ensure proper PPE usage by workers during manufacturing stage. Once applied, this filler will be incorporated in hard, durable, inert film and will not present a significant hazard.  No identifiable risk to end user. Recycled Content: Unknown Nanomaterials: Yes

Ingredient Name	CAS Number OR Function	Proportion in finished product	GHS, IARC & Endocrine Category	REACH Compliance	Ingredient Assessment	Whole Of Life Assessment	InUse Health Assessment	Comment
Talc								
Quartz	14808-60-7	0.1-1%	H350, H373	OK				<p>The ingredient may cause carcinogenic properties in its raw form via inhalation. Dulux NZ is ISO 14001 certified, which ensures that proper PPE usage by the factory workers.</p> <p>Once applied, this ingredient will be incorporated in hard, durable, inert film and will not present a significant hazard.</p> <p>No identifiable risk to end user. Recycled Content: Unknown Nanomaterials: Yes</p>
Proprietary	Filler	1-5%	None	OK				<p>Once applied, this filler will be incorporated in hard, durable, inert film and will not present a significant hazard.</p> <p>No identifiable risk to end user. Recycled Content: Unknown Nanomaterials: Yes</p>
Additive								
Industrial Microbiocide	Biocide	0.1-1%	H319, H315, H400	OK				<p>The ingredient may cause skin, eye irritation. Also it can have detrimental impact to aqueous solution. Once applied, this biocide will be incorporated in hard, durable, inert film and will not present a significant hazard.</p> <p>No identifiable risk to end user. Recycled Content: Unknown Nanomaterials: no</p>
Binder								
Proprietary	Binder	2-5%	None	OK				<p>Once applied, this binder will be incorporated in hard, durable, inert film and will not present a significant hazard.</p> <p>No identifiable risk to end user. Recycled Content: Unknown Nanomaterials: no</p>
Modifier								
Hydrophobically modified ethylene oxide urethane	Rheology modifier	0.1-1%	None	OK				<p>Once applied, this rheology modifier will be incorporated in a hard, durable, inert film and will not present a significant hazard.</p> <p>No identifiable risk to end user. Recycled Content: Unknown Nanomaterials: unknown</p>
Pigment								
Titanium dioxide	13463-67-7	10-20%	None	OK				<p>No identifiable risk to end user. Recycled Content: None Nano Materials: No</p>
Biocide								
Antimicrobial micro-biocide	Biocide	0.1-1%	H319, H315, H400	OK				<p>The ingredient may cause skin, eye irritation. Also it can have detrimental impact to aqueous solution. Dulux NZ is ISO 14001 certified, which ensures that proper PPE usage by the factory workers and chemical handling to reduce environmental hazards. Once applied, this biocide will be incorporated in hard, durable, inert film and will not present a significant hazard.</p> <p>No identifiable risk to end user. Recycled Content: Unknown Nanomaterials: no</p>

GHS H-Statement classification:  
H302/H304 (Fatal if swallowed)  
H311 (Toxic skin contact)  
H314( skin/eye damage)  
H315 (Skin irritation)  
H317 (Allergic skin reaction)  
H318(Eye damage)  
H317(Allergic skin reaction)  
H330 (Fatal if inhaled)  
H332 (Harmful if inhaled)  
H350 ( May cause cancer)  
H373 (May cause organ damage)  
H400/H413 (Very toxic to aquatic life)

Comments:

**VOC emissions:** Global GreenTag International Program Standard v4.0 Formaldehyde Content Supplementary Standard in accordance with requirements of the New Zealand Green Building Council and LEEDv4, as updated from time to time.

**VOC content:** VOC g/L for Dulux Enviro2 Interior ASU applied on site is < 1g/L ready to use product calculated in accordance with the stated methodology within Green Star NZ technical manual. The TVOC content of the 'ready-to-use' paint shall be theoretically calculated as the sum total of VOCs of each of the raw material components comprising the paint. Calculations submitted on 25/10/2023 by Dulux New Zealand.