

# PHD™

## Product Health Declaration

Dulux New Zealand

### Dulux Enviro2 Interior Acrylic Sealer Undercoat

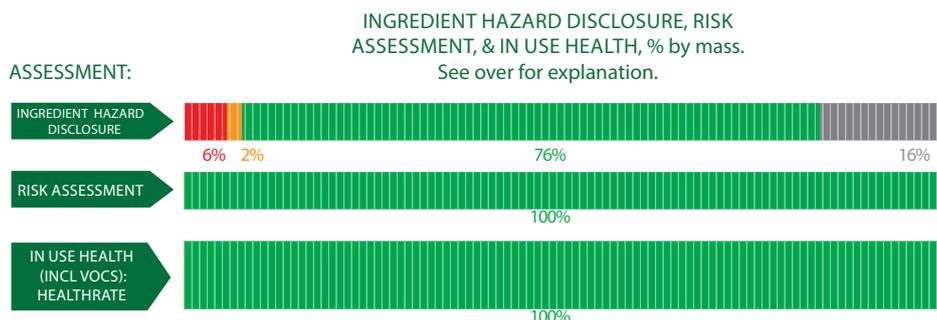
Dulux Enviro2 acrylic sealer undercoat has characteristics of low odour and low VOC emissions. This is a water-based prepcoat used mostly on interior surfaces. This acrylic paint can be used to undercoat plasterboards, masonry and interior timber in one coat.

Products/Ranges:	Dulux New Zealand Enviro2 Interior
Product Stages Assessed:	Material inputs, manufacturing, in-use
Product Type:	Paint & Applied Finishes
CSI Masterformat:	09 91 00 Painting
Licenced Site/s:	Lower Hutt, New Zealand
Licence Number:	DUN:EI01:2024:PH
Licence Date:	8th December 2020
Valid To:	8th December 2026
Standard:	GGT International v4.0
Screening Date:	2nd February 2024
PHD URL:	<a href="https://www.globalgreentag.com/certificate/1392/">https://www.globalgreentag.com/certificate/1392/</a>



<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 Recognized for Feature 26 (Part 1); Feature 97 (Part 1); as a Compliant Technical Document (Audited) for Feature 04 (Part 1) 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 3); X05 (Part 1, 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.



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	In Use 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>Aqueous dispersion of polymer</b>								
Proprietary	Polymer	10-20%	None	OK				No identifiable risk to end user. Recycled Content: None Nano Materials: No
2-methyl-2H-isothiazol-3-one	2682-20-4	<0.1%	H330, H311 H301, H314 H318, H317 H400, H410	OK				Once applied the aqueous dispersion of polymer together with its preservatives/biocides will be incorporated in a hard, durable, inert film and will not present a significant hazard. Any fragments, chips and flakes of the paint will be of little concern as they are expected to be inert.  No identifiable risk to end user. Recycled Content: Unknown Nanomaterials: unknown
1,2-Benzisothiazol-3(2H)-one	2634-33-5	<0.1%	H302, H315 H318, H317 H400	OK				Once applied the aqueous dispersion of polymer together with its preservatives/biocides will be incorporated in a hard, durable, inert film and will not present a significant hazard. Any fragments, chips and flakes of the paint will be of little concern as they are expected to be inert.  No identifiable risk to end user. Recycled Content: Unknown Nanomaterials: unknown
<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

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
Diethylenetriamine	111-40-0	<0.1%	H312, H302 H314, H317	OK				The ingredient may cause damage to skin & eyes. Duluz 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	0.1-1%	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.  No identifiable risk to end user. Recycled Content: Unknown Nanomaterials: unknown
<b>Modifier</b>								
Non-ionic 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.  No identifiable risk to end user. Recycled Content: Unknown Nanomaterials: unknown
<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.  No identifiable risk to end user. Recycled Content: Unknown Nanomaterials: unknown
<b>Plasticiser</b>								
Poly(oxy-1,2-ethanediyl), $\alpha$ -hydro- $\omega$ -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>Water</b>								

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
Dosed Water	Diluent	20-30%	None	OK				No identifiable risk to end user. Recycled Content: None Nano Materials: No
<b>Surfactant</b>								
Non ionic surfactant	Surfactant	0.1-1%	H400	OK				The ingredient may cause detrimental impact on aqueous environment. Dulux is 14001 certified, which ensure proper handling of the chemicals while manufacturing. 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
Alcohols, C11-15-secondary, ethoxylated	68131-40-8	0.01-1%	H412	OK				The ingredient may cause detrimental impact on aqueous environment. Dulux is 14001 certified, which ensure proper handling of the chemicals while manufacturing. 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
water	7732-18-5	0.01-1%	None	OK				No identifiable risk to end user. Recycled Content: None Nano Materials: No
Poly(oxy-1,2-ethanediyl), $\alpha$ -hydro- $\omega$ -hydroxy-Ethane-1,2-diol, ethoxylated	25322-68-3	0.01-1%	H335, H319, H336, H302 & H314	OK				The ingredient may cause detrimental impact on aqueous environment. Dulux is 14001 certified, which ensure proper handling of the chemicals while manufacturing. 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	15-30%	None	OK				No identifiable risk to end user. Recycled Content: None Nano Materials: No
<b>Pigment</b>								
Kaolin	Mineral pigment	1-5%	None	OK				No identifiable risk to end user. Recycled Content: None Nano Materials: No
<b>Talc</b>								

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
Quartz	14808-60-7	0.1-1%	H350, H373	OK				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. Once applied, this ingredient 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
Proprietary	Filler	5-10%	None	OK				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
Additive								
Industrial Micro-biocide	Biocide	0.1-1%	H332, H318 & H413	OK				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. Once applied, this biocide 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: no
Binder								
Proprietary	Binder	0.1-1%	None	OK				Once applied, this binder 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: no
Pigment								
Titanium dioxide	13463-67-7	10-20%	None	OK				No identifiable risk to end user. Recycled Content: None Nano Materials: No

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. Dulux New Zealand is an ISO9001:2015 accredited organisation.