

PHD™

Product Health Declaration

Dulux New Zealand

Dulux Enviro2 Interior Semi Gloss White

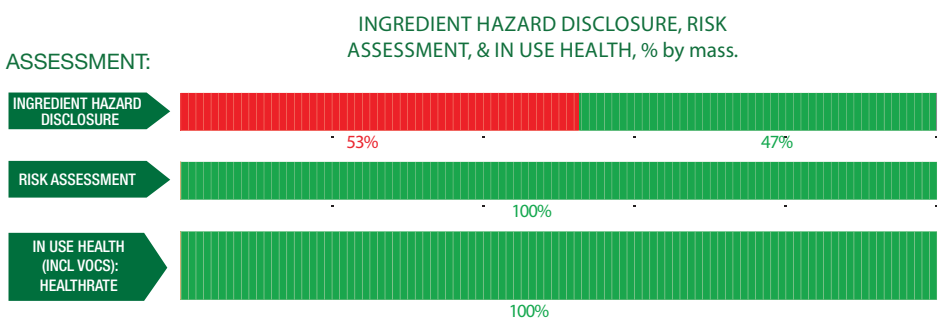
Dulux Enviro2 Interior Semi Gloss is a washable, hardwearing acrylic product that provides a semi gloss finish for interior walls in general living and wet areas. This product has characteristics of low odour and low VOC emissions. The product also has antimould properties which will help prevent the growth of mould and mildew.

Products/Ranges: Enviro2 Interior Semi Gloss White
Product Stages Assessed: Material inputs, manufacturing, in-use
CSI Masterformat: 09 91 00 Painting
Licensed Site/s: Lower Hutt, New Zealand
Licence Number: DUN:EI04:2020:PH
Licence Date: 8th December 2020
Valid To: 8th December 2022
Standard: GGT International v4.0
Screening Date: 24th November 2020
PHD URL: https://www.globalgreentag.com/wp-content/uploads/2022/01/Semi-Gloss-White-PHD_Certificate_v6.pdf



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

- 📍 GreenTag Banned List Compliant
- 📍 Meets Indoor Air Quality VOC emission requirements, for Green Star, LEED & BREEAM
- 📍 Product Meets Optimisation requirements - No Grey or Red Light category ingredient
- 📍 Meets USGBC LEED® v4.0 and v4.1 Rating System MR Credit: Building Product Disclosure and Optimisation - Material Ingredients - Option 2 - International ACP - REACH Optimization
- 📍 Meets WELL™ v1.0 Features - 11: Fundamental Material - Part 1c, 26: Enhanced Material Safety, 04: VOC Reduction Part 1, 26: Enhanced Material Safety Part 1, 97: Material Transparency and WELL™ v2.0 Features - X07: Material Transparency (Part 1 & 3) and X08: Material Optimisation (Part 1 & 2).
- 📍 No worker exposure to Carcinogens, Mutagens, Reproductive Toxicant or Endocrine Disruptors
- 📍 No user exposure to Carcinogens, Mutagens, Reproductive Toxicant or Endocrine Disruptors
- 📍 No environmental exposure to Carcinogens, Mutagens, Reproductive Toxicants or Endocrine Disruptors



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:

- 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) 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 a 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. |
| Red | Problematic (Red): Target for Phase 'Issue of Concern' or 'Red Light' Comment depending on % of ingredient. |
| 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 |

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 | Ingredient Assessment | Whole Of Life Assessment | In Use Health Assessment | Comment |
|-------------------------------|------------------------|--------------------------------|--------------------------------|-----------------------|--------------------------|--------------------------|---|
| Additive | | | | | | | |
| Neutralizing Amine | Additive | 0.1-1% | None | | | | None Recycled Content: Unknown Nanomaterials: unknown |
| Foam Control | | | | | | | |
| White mineral oil (petroleum) | 8042-47-5 | 0.1-1% | None | | | | None Recycled Content: Unknown Nanomaterials: unknown |

| Ingredient Name | CAS Number OR Function | Proportion in finished product | GHS, IARC & Endocrine Category | Ingredient Assessment | Whole Of Life Assessment | In Use Health Assessment | Comment |
|---|------------------------|--------------------------------|---|-----------------------|--------------------------|--------------------------|--|
| Precipitated synthetic amorphous silica | 112926-00-8 | <0.1% | STOT 3. Eye Irrit 2A | | | | Once applied, this ingredient in the foam control will be incorporated in a hard, durable, inert film and will not present a significant hazard Recycled Content: Unknown Nanomaterials: unknown |
| Diethylenetriamine | 111-40-0 | <0.1% | Acute Aq Tox 3. Acute Tox 4 Acute Tox 2 Skin Corr 1B Skin Sens 1 | | | | Once applied, this ingredient in the foam control will be incorporated in a hard, durable, inert film and will not present a significant hazard Recycled Content: Unknown Nanomaterials: unknown |
| Proprietary | Additive | 0.1-1% | None | | | | None Recycled Content: Unknown Nanomaterials: unknown |
| Thinner | | | | | | | |
| Isobutyric acid, monoester with 2,2,4-trimethylpentane-1,3-diol | 25265-77-4 | 1-5% | Eye Irrit. 2 Aq Chron 3 Skin Irrit. 2 STOT SE 3 | | | | 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. Recycled Content: Unknown Nanomaterials: unknown |
| Proprietary | Additive | <0.1% | None | | | | 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 |
| Polyethylene Glycol | | | | | | | |
| Polyethylene glycol | 25322-68-3 | 0.1-1% | STOT SE 3 Eye Irrit 2 | | | | None Recycled Content: Unknown Nanomaterials: unknown |
| Modifier | | | | | | | |
| Hydrophobically modified ethylene oxide urethane | Rheology modifier | 0.1-1% | None | | | | 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 |
| Surfactant | | | | | | | |
| Alcohols, C11-15-secondary, ethoxylated | 68131-40-8 | 0.1-1% | Aq Chron 3 Eye Dam. 1 Skin Irrit. 2 Eye Dam. 1 Skin Sens. 1 Aq Chron 2 Eye Irrit. 2 Acute Tox. 4 | | | | Once applied, this surfactant will be incorporated in a hard, durable, inert film and will not present a significant hazard. Recycled Content: Unknown Nanomaterials: unknown |
| Water | 7732-18-5 | <0.1% | None | | | | None Recycled Content: Unknown Nanomaterials: unknown |
| Poly(ethylene oxide) | 25322-68-3 | <0.1% | STOT SE 3 Eye Irrit. 2 Acute Tox. 4 Skin Corr. 1B | | | | Once applied, this surfactant ingredient will be incorporated in hard, durable, inert film and will not present a significant hazard. Recycled Content: Unknown Nanomaterials: unknown |
| Modifier | | | | | | | |

| Ingredient Name | CAS Number OR Function | Proportion in finished product | GHS, IARC & Endocrine Category | Ingredient Assessment | Whole Of Life Assessment | In Use Health Assessment | Comment |
|--|-------------------------------|--------------------------------|--|-----------------------|--------------------------|--------------------------|--|
| Hydrophobically modified ethylene oxide urethane | Rheology modifier | 1-5% | None | | | | 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 |
| Modifier | | | | | | | |
| Non-ionic urethane | Rheology modifier | 0.1-1% | None | | | | 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 |
| Dispersant | | | | | | | |
| Hydrophobic Copolymer | Waterborne pigment dispersant | 0.1-1% | None | | | | 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 |
| Emulsion | | | | | | | |
| Acrylic polymer | Emulsion | 40-50% | None | | | | Once applied, this acrylic polymer will be incorporated in a hard, durable, inert film and will not present a significant hazard. Recycled Content: Unknown Nanomaterials: unknown |
| Water | | | | | | | |
| Dosed Water | Diluent | 10-20% | None | | | | None Recycled Content: Unknown Nanomaterials: no |
| Surfactant | | | | | | | |
| Non ionic surfactant | Surfactant | 0.1-1% | Acute Aq Tox 1 | | | | Once applied, this surfactant will be incorporated in a hard, durable, inert film and will not present a significant hazard. Recycled Content: Unknown Nanomaterials: unknown |
| Calcium Carbonate | | | | | | | |
| Limestone | Extender | 1-5% | None | | | | None Recycled Content: Unknown Nanomaterials: Yes |
| Additive | | | | | | | |
| Industrial Microbiocide | Biocide | 0.1-1% | Eye Dam 1 Skin Sens 1 Aq Chron 3 | | | | Once applied, this biocide will be incorporated in hard, durable, inert film and will not present a significant hazard. Recycled Content: Unknown Nanomaterials: no |
| Pigment | | | | | | | |
| Titanium dioxide | Pigment | 15-25% | None | | | | None Recycled Content: Unknown Nanomaterials: Yes |

* No GHS H-Statement classification

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 10/11/2020 by Dulux New Zealand. The VOC content also complies with limits set in the CDPH-IAQ V1.1 2010: Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources using Environmental Chambers.