

HI GLO WINTERGRADE WHITE

RESENE PAINTS LTD

Chemwatch Hazard Alert Code: 0

Chemwatch: 9-72708

Version No: 1.3

Safety Data Sheet according to HSNO Regulations

Issue Date: 07/08/2014

Print Date: 07/08/2014

Initial Date: 07/08/2014

S.GHS.NZL.EN

SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

Product Identifier

| | |
|-------------------------------|--------------------------|
| Product name | HI GLO WINTERGRADE WHITE |
| Chemical Name | Not Applicable |
| Synonyms | 8932 |
| Proper shipping name | Not Applicable |
| Chemical formula | Not Applicable |
| Other means of identification | Not Available |
| CAS number | Not Applicable |

Relevant identified uses of the substance or mixture and uses advised against

| | |
|--------------------------|---|
| Relevant identified uses | Use according to manufacturer's directions. |
|--------------------------|---|

Details of the manufacturer/importer

| | |
|-------------------------|--|
| Registered company name | RESENE PAINTS LTD |
| Address | 32-50 Vogel Street, Lower Hutt, Wellington New Zealand |
| Telephone | +64 4 5770500 |
| Fax | +64 4 5773327 |
| Website | www.resene.co.nz |
| Email | advice@resene.co.nz |

Emergency telephone number

| | |
|-----------------------------------|---------------|
| Association / Organisation | Not Available |
| Emergency telephone numbers | 0800 737363 |
| Other emergency telephone numbers | 0800 737363 |

CHEMWATCH EMERGENCY RESPONSE

| Primary Number | Alternative Number 1 | Alternative Number 2 |
|----------------|----------------------|----------------------|
| +800 2436 2255 | +612 9186 1132 | Not Available |

Once connected and if the message is not in your preferred language then please dial 01

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

Not considered a Hazardous Substance according to the criteria of the New Zealand Hazardous Substances New Organisms legislation. Not regulated for transport of Dangerous Goods.

| | |
|---|----------------|
| GHS Classification | Not Applicable |
| Determined by Chemwatch using GHS/HSNO criteria | Not Available |

Label elements

| | |
|--------------------|----------------|
| GHS label elements | Not Applicable |
|--------------------|----------------|

| | |
|-------------|-----------------------|
| SIGNAL WORD | NOT APPLICABLE |
|-------------|-----------------------|

Hazard statement(s)

Not Applicable

Continued...

Precautionary statement(s): Prevention

Not Applicable

Precautionary statement(s): Response

Not Applicable

Precautionary statement(s): Storage

Not Applicable

Precautionary statement(s): Disposal

Not Applicable

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS**Substances**

See section below for composition of Mixtures

Mixtures

| CAS No | %[weight] | Name |
|-----------|-----------|---|
| 1317-80-2 | 15-25 | titanium dioxide (rutile) |

SECTION 4 FIRST AID MEASURES

NZ Poisons Centre 0800 POISON (0800 764 766) | NZ Emergency Services: 111

Description of first aid measures

| | |
|---------------------|--|
| Eye Contact | <p>If this product comes in contact with eyes:</p> <ul style="list-style-type: none"> ▶ Wash out immediately with water. ▶ If irritation continues, seek medical attention. ▶ Removal of contact lenses after an eye injury should only be undertaken by skilled personnel. |
| Skin Contact | <p>If skin or hair contact occurs:</p> <ul style="list-style-type: none"> ▶ Flush skin and hair with running water (and soap if available). ▶ Seek medical attention in event of irritation. |
| Inhalation | <ul style="list-style-type: none"> ▶ If fumes, aerosols or combustion products are inhaled remove from contaminated area. ▶ Other measures are usually unnecessary. |
| Ingestion | <ul style="list-style-type: none"> ▶ Immediately give a glass of water. ▶ First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor. |

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5 FIREFIGHTING MEASURES**Extinguishing media**

| | |
|--|--|
| | ▶ There is no restriction on the type of extinguisher which may be used. |
|--|--|

Special hazards arising from the substrate or mixture

| | |
|-----------------------------|-------------|
| Fire Incompatibility | None known. |
|-----------------------------|-------------|

Advice for firefighters

| | |
|------------------------------|---|
| Fire Fighting | ▶ Alert Fire Brigade and tell them location and nature of hazard. |
| Fire/Explosion Hazard | ▶ Non combustible. |

SECTION 6 ACCIDENTAL RELEASE MEASURES**Personal precautions, protective equipment and emergency procedures**

| | |
|---------------------|------------------------------------|
| Minor Spills | ▶ Clean up all spills immediately. |
| Major Spills | Moderate hazard. |

| | |
|--|---|
| | Personal Protective Equipment advice is contained in Section 8 of the MSDS. |
|--|---|

SECTION 7 HANDLING AND STORAGE**Precautions for safe handling**

| | |
|--------------------------|---|
| Safe handling | ▶ Avoid all personal contact, including inhalation. |
| Other information | |

Conditions for safe storage, including any incompatibilities

| | |
|--------------------------------|--|
| Suitable container | ▶ Polyethylene or polypropylene container. |
| Storage incompatibility | Titanium dioxide ▶ reacts with strong acids, strong oxidisers ▶ reacts violently with aluminium, calcium, hydrazine, lithium (at around 200 deg C.), magnesium, potassium, sodium, zinc, especially at elevated temperatures - these reactions involves reduction of the oxide and are accompanied by incandescence ▶ dust or powders can ignite and then explode in a carbon dioxide atmosphere None known |

PACKAGE MATERIAL INCOMPATIBILITIES

Not Available

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION**Control parameters****OCCUPATIONAL EXPOSURE LIMITS (OEL)****INGREDIENT DATA**


| Source | Ingredient | Material name | TWA | STEL | Peak | Notes |
|--|---------------------------|------------------|----------|---------------|---------------|---|
| New Zealand Workplace Exposure Standards (WES) | titanium dioxide (rutile) | Titanium dioxide | 10 mg/m3 | Not Available | Not Available | The value for inhalable dust containing no asbestos and less than 1% free silica. |

EMERGENCY LIMITS

| Ingredient | TEEL-0 | TEEL-1 | TEEL-2 | TEEL-3 |
|---------------------------|--------|--------|--------|---------|
| titanium dioxide (rutile) | 15 ppm | 15 ppm | 15 ppm | 500 ppm |

| Ingredient | Original IDLH | Revised IDLH |
|---------------------------|---------------|--------------|
| titanium dioxide (rutile) | N.E. / N.E. | 5,000 mg/m3 |

Exposure controls

| | |
|---|---|
| Appropriate engineering controls | Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. |
| Personal protection |  |
| Eye and face protection | ▶ Safety glasses with side shields ▶ Chemical goggles. |
| Skin protection | See Hand protection below |
| Hands/feet protection | The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. |
| Body protection | See Other protection below |
| Other protection | ▶ Overalls. |
| Thermal hazards | Not Available |

Recommended material(s)**GLOVE SELECTION INDEX**

Glove selection is based on a modified presentation of the:

"Forsberg Clothing Performance Index".The effect(s) of the following substance(s) are taken into account in the **computer-generated** selection:

HI GLO WINTERGRADE WHITE Not Available

| Material | CPI |
|----------|-----|
| | |

* CPI - Chemwatch Performance Index

A: Best Selection

B: Satisfactory; may degrade after 4 hours continuous immersion

C: Poor to Dangerous Choice for other than short term immersion

NOTE: As a series of factors will influence the actual performance of the glove, a final selection must be based on detailed observation. -

* Where the glove is to be used on a short term, casual or infrequent basis, factors such as "feel" or convenience (e.g. disposability), may dictate a choice of gloves which might otherwise be unsuitable following long-term or frequent use. A qualified practitioner should be consulted.

Respiratory protection

Type A-P Filter of sufficient capacity.

Where the concentration of gas/particulates in the breathing zone, approaches or exceeds the "Exposure Standard" (or ES), respiratory protection is required.

Degree of protection varies with both face-piece and Class of filter; the nature of protection varies with Type of filter.

| Required Minimum Protection Factor | Half-Face Respirator | Full-Face Respirator | Powered Air Respirator |
|------------------------------------|----------------------|----------------------|-------------------------|
| up to 5 x ES | A-AUS / Class 1 P2 | - | A-PAPR-AUS / Class 1 P2 |
| up to 25 x ES | Air-line* | A-2 P2 | A-PAPR-2 P2 |
| up to 50 x ES | - | A-3 P2 | - |
| 50+ x ES | - | Air-line** | - |

* - Continuous-flow; ** - Continuous-flow or positive pressure demand

^ - Full-face

A(All classes) = Organic vapours, B AUS or B1 = Acid gasses, B2 = Acid gas or hydrogen cyanide(HCN), B3 = Acid gas or hydrogen cyanide(HCN), E = Sulfur dioxide(SO2), G = Agricultural chemicals, K = Ammonia(NH3), Hg = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 degC)

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

| | | | |
|---|---------------|--|---------------|
| Appearance | White liquid | | |
| Physical state | Liquid | Relative density (Water = 1) | 1.26 |
| Odour | Not Available | Partition coefficient n-octanol / water | Not Available |
| Odour threshold | Not Available | Auto-ignition temperature (°C) | Not Available |
| pH (as supplied) | 8.7 | Decomposition temperature | Not Available |
| Melting point / freezing point (°C) | Not Available | Viscosity (cSt) | 1100 |
| Initial boiling point and boiling range (°C) | 100 | Molecular weight (g/mol) | Not Available |
| Flash point (°C) | Not Available | Taste | Not Available |
| Evaporation rate | Not Available | Explosive properties | Not Available |
| Flammability | Not Available | Oxidising properties | Not Available |
| Upper Explosive Limit (%) | Not Available | Surface Tension (dyn/cm or mN/m) | Not Available |
| Lower Explosive Limit (%) | Not Available | Volatile Component (%vol) | Not Available |
| Vapour pressure (kPa) | Not Available | Gas group | Not Available |
| Solubility in water (g/L) | Miscible | pH as a solution(1%) | Not Available |
| Vapour density (Air = 1) | Not Available | VOC g/L | 9 |

SECTION 10 STABILITY AND REACTIVITY

| | |
|---|---|
| Reactivity | See section 7 |
| Chemical stability | ► Unstable in the presence of incompatible materials. |
| Possibility of hazardous reactions | See section 7 |
| Conditions to avoid | See section 7 |
| Incompatible materials | See section 7 |
| Hazardous decomposition products | See section 5 |

SECTION 11 TOXICOLOGICAL INFORMATION

Information on toxicological effects

| | |
|---------------------|--|
| Inhaled | The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified by EC Directives using animal models). |
| Ingestion | The material has NOT been classified by EC Directives or other classification systems as "harmful by ingestion". |
| Skin Contact | The material is not thought to produce adverse health effects or skin irritation following contact (as classified by EC Directives using animal models). |
| Eye | Although the liquid is not thought to be an irritant (as classified by EC Directives), direct contact with the eye may produce transient discomfort characterised by tearing or conjunctival redness (as with windburn). |
| Chronic | Limited evidence suggests that repeated or long-term occupational exposure may produce cumulative health effects involving organs or biochemical systems. |

| | | |
|----------------------------------|-----------------|-------------------|
| HI GLO WINTERGRADE WHITE | TOXICITY | IRRITATION |
| | Not Available | Not Available |
| titanium dioxide (rutile) | TOXICITY | IRRITATION |
| | Not Available | Not Available |

| | |
|--|--|
| TITANIUM DIOXIDE (RUTILE) | Skin (human) 0.3: mg/3d-I mild |
| HI GLO WINTERGRADE WHITE, TITANIUM DIOXIDE (RUTILE) | No significant acute toxicological data identified in literature search. |

| | | | |
|----------------------------------|---|------------------------|---|
| Acute Toxicity | ⊖ | Carcinogenicity | ⊖ |
| Skin Irritation/Corrosion | ⊖ | Reproductivity | ⊖ |

| | | | |
|-----------------------------------|---|--------------------------|---|
| Serious Eye Damage/Irritation | ☹ | STOT - Single Exposure | ☹ |
| Respiratory or Skin sensitisation | ☹ | STOT - Repeated Exposure | ☹ |
| Mutagenicity | ☹ | Aspiration Hazard | ☹ |

Legend:
 ✓ – Data required to make classification available
 ✗ – Data available but does not fill the criteria for classification
 ☹ – Data Not Available to make classification

CMR STATUS

Not Applicable

SECTION 12 ECOLOGICAL INFORMATION**Toxicity****DO NOT** discharge into sewer or waterways.**Persistence and degradability**

| Ingredient | Persistence: Water/Soil | Persistence: Air |
|---------------|-------------------------|------------------|
| Not Available | Not Available | Not Available |

Bioaccumulative potential

| Ingredient | Bioaccumulation |
|---------------|-----------------|
| Not Available | Not Available |

Mobility in soil

| Ingredient | Mobility |
|---------------|---------------|
| Not Available | Not Available |

SECTION 13 DISPOSAL CONSIDERATIONS**Waste treatment methods**

| | |
|------------------------------|--|
| Product / Packaging disposal | Legislation addressing waste disposal requirements may differ by country, state and/ or territory. |
| | Insure that the disposal of material is carried out in accordance with Hazardous Substances (Disposal) Regulations 2001. |

SECTION 14 TRANSPORT INFORMATION**Labels Required**

| | |
|------------------|----------------|
| Marine Pollutant | NO |
| HAZCHEM | Not Applicable |

Land transport (UN): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS**Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS****Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS****Transport in bulk according to Annex II of MARPOL 73 / 78 and the IBC code**

| Source | Ingredient | Pollution Category |
|---|---------------------------|--------------------|
| IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk | titanium dioxide (rutile) | Z |

SECTION 15 REGULATORY INFORMATION**Safety, health and environmental regulations / legislation specific for the substance or mixture**

This substance is to be managed using the conditions specified in an applicable Group Standard
 Not Available

| HSR Number | Group Standard |
|--|--|
| titanium dioxide (rutile) (1317-80-2) is found on the following regulatory lists | "IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk", "New Zealand Inventory of Chemicals (NZIoC)", "FisherTransport Information", "OECD List of High Production Volume (HPV) Chemicals", "International Numbering System for Food Additives", "New Zealand Workplace Exposure Standards (WES)", "Sigma-Aldrich Transport Information", "OECD Existing Chemicals Database", "CODEX General Standard for Food Additives (GSFA) - Additives Permitted for Use in Food in General, Unless Otherwise Specified, in Accordance with GMP", "GESAMP/EHS Composite List - GESAMP Hazard Profiles", "New Zealand Cosmetic Products Group Standard - Schedule 6 Colouring Agents Cosmetic Products May Contain With Restrictions- Table 1: List of Colouring Agents Allowed for use in Cosmetic Products", "IMO IBC Code Chapter 17: Summary of minimum requirements", "International Fragrance Association (IFRA) Survey: Transparency List", "New Zealand Cosmetic Products Group Standard - Schedule 8: UV Filters Cosmetic Products May Contain |

Continued...

With Restrictions - Table 1: List of Permitted UV Filters which Cosmetic Products may contain"

Location Test Certificate

Subject to Regulation 55 of the Hazardous Substances (Classes 1 to 5 Controls) Regulations a location test certificate is required when quantity greater than or equal to those indicated below are present.

| Hazard Class | Quantity beyond which controls apply for closed containers | Quantity beyond which controls apply when use occurring in open containers |
|----------------|--|--|
| Not Applicable | Not Applicable | Not Applicable |

Approved Handler

Subject to Regulation 56 of the Hazardous Substances (Classes 1 to 5 Controls) Regulations, the substance must be under the personal control of an Approved Handler when present in a quantity greater than or equal to those indicated below.

| Class of substance | Quantities |
|--------------------|----------------|
| Not Applicable | Not Applicable |

SECTION 16 OTHER INFORMATION

Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

A list of reference resources used to assist the committee may be found at:

www.chemwatch.net/references

The (M)SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

This document is copyright. Apart from any fair dealing for the purposes of private study, research, review or criticism, as permitted under the Copyright Act, no part may be reproduced by any process without written permission from CHEMWATCH. TEL (+61 3) 9572 4700.

HI GLO WINTERGRADE WHITE