#### Wattyl

Chemwatch: 4875-72 Version No: 4.1.1.1 Safety Data Sheet according to HSNO Regulations Chemwatch Hazard Alert Code: 2

Issue Date: 30/07/2015 Print Date: 31/07/2015 Initial Date: Not Available S.GHS.NZL.EN

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

#### **Product Identifier**

| Product name                     | Valspar Interior - Kitchen & Bathroom Low Sheen White |
|----------------------------------|---|
| Synonyms                         | Product Code: 512521                                  |
| Other means of<br>identification | Not Available   |

#### 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 | Wattyl  | Valspar Australia  |
|-------------------------|---|--|
| Address                 | 2 Patiki Road Avondale 7 Auckland New Zealand | Level 4, 2 Burbank Place Baulkham Hills 2153 NSW Australia |
| Telephone               | +64 9 820 6700                                | +61 2 8867 3333  |
| Fax                     | +64 9 820 6752                                | +61 2 8867 3344  |
| Website                 | Not Available                                 | Not Available  |
| Email                   | Not Available                                 | Not Available  |

#### Emergency telephone number

| Association / Organisation        | Not Available | Not Available    |
|-----------------------------------|---------------|------------------|
| Emergency telephone<br>numbers    | Not Available | +61 1800 039 008 |
| Other emergency telephone numbers | Not Available | Not Available    |

## **SECTION 2 HAZARDS IDENTIFICATION**

Classification of the substance or mixture

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

#### CHEMWATCH HAZARD RATINGS

|              | Min | Max |             |
|--------------|-----|-----|-------------|
| Flammability | 0   | 1   |             |
| Toxicity     | 1   |     | 0 = Minimum |
| Body Contact | 2   |     | 1 = Low     |
| Reactivity   | 1   |     | 3 = High    |
| Chronic      | 0   | 1   | 4 = Extreme |

#### GHS Classification [1] Eye Irritation Category 2A Legend: 1. Classified by Chemwatch; 2. Classification drawn from CCID EPA NZ; 3. Classification drawn from EC Directive 1272/2008 - Annex VI Determined by Chemwatch 6.4A using GHS/HSNO criteria

| Label elements      |                               |
|---------------------|-------------------------------|
| GHS label elements  |                               |
|                     |                               |
| SIGNAL WORD         | WARNING                       |
|                     |                               |
| Hazard statement(s) |                               |
| H319                | Causes serious eye irritation |

Supplementary statement(s)

Not Applicable

## CLP classification (additional)

Not Applicable

## Precautionary statement(s) Prevention

| P280                                | Wear protective gloves/protective clothing/eye protection/face protection. |  |
|-------------------------------------|--|--|
|                                     |  |  |
| Precautionary statement(s) Response |  |  |

| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
|----------------|--|
| P337+P313      | If eye irritation persists: Get medical advice/attention.  |

## Precautionary statement(s) Storage

## Precautionary statement(s) Disposal

## SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

#### Substances

See section below for composition of Mixtures

#### Mixtures

| CAS No        | %[weight] | Name                                       |
|---------------|-----------|--|
| Not Available | 30-60     | acrylic copolymer                          |
| 13463-67-7    | 10-30     | titanium dioxide                           |
| 471-34-1      | 10-30     | calcium carbonate                          |
| Not Available | 1-9       | filler, unregulated                        |
| Not Available | 1-9       | ingredients determined not to be hazardous |
| 7732-18-5     | 10-30     | water                                      |

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

## **SECTION 4 FIRST AID MEASURES**

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

#### Description of first aid measures

| Eye Contact  | <ul> <li>If this product comes in contact with the eyes:</li> <li>Wash out immediately with fresh running water.</li> <li>Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.</li> <li>Seek medical attention without delay; if pain persists or recurs seek medical attention.</li> <li>Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.</li> </ul> |
|--------------|---|
| Skin Contact | <ul> <li>If skin contact occurs:</li> <li>Immediately remove all contaminated clothing, including footwear.</li> <li>Flush skin and hair with running water (and soap if available).</li> <li>Seek medical attention in event of irritation.</li> </ul>   |
| Inhalation   | <ul> <li>If fumes, aerosols or combustion products are inhaled remove from contaminated area.</li> <li>Other measures are usually unnecessary.</li> </ul>   |
| Ingestion    | <ul> <li>Immediately give a glass of water.</li> <li>First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.</li> </ul>   |

Indication of any immediate medical attention and special treatment needed Treat symptomatically.

## SECTION 5 FIREFIGHTING MEASURES

| Extinguishing media        |   |  |
|----------------------------|---|--|
|                            | <ul> <li>There is no restriction on the type of extinguisher which may be used.</li> <li>Use extinguishing media suitable for surrounding area.</li> </ul>  |  |
| Special hazards arising fr | om the substrate or mixture   |  |
| Fire Incompatibility       | Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result  |  |
| Advice for firefighters    |   |  |
| Fire Fighting              | <ul> <li>Alert Fire Brigade and tell them location and nature of hazard.</li> <li>Wear breathing apparatus plus protective gloves in the event of a fire.</li> <li>Prevent, by any means available, spillage from entering drains or water courses.</li> <li>Use fire fighting procedures suitable for surrounding area.</li> <li>DO NOT approach containers supported to be bot</li> </ul> |  |

Cool fire exposed containers with water spray from a protected location.

|                       | <ul> <li>If safe to do so, remove containers from path of fire.</li> <li>Equipment should be thoroughly decontaminated after use.</li> </ul> |
|-----------------------|--|
| Fire/Explosion Hazard | <ul> <li>Non combustible.</li> <li>Not considered a significant fire risk, however containers may burn.</li> </ul>                           |
|                       | Decomposes on heating and produces toxic fumes of:carbon monoxide (CO) carbon dioxide (CO2) nitrogen oxides (NOx)                            |

## SECTION 6 ACCIDENTAL RELEASE MEASURES

#### Personal precautions, protective equipment and emergency procedures

| Minor Spills | <ul> <li>Clean up all spills immediately.</li> <li>Avoid breathing vapours and contact with skin and eyes.</li> <li>Control personal contact with the substance, by using protective equipment.</li> <li>Contain and absorb spill with sand, earth, inert material or vermiculite.</li> <li>Wipe up.</li> <li>Place in a suitable, labelled container for waste disposal.</li> </ul>   |
|--------------|--|
| Major Spills | <ul> <li>Minor hazard.</li> <li>Clear area of personnel.</li> <li>Alert Fire Brigade and tell them location and nature of hazard.</li> <li>Control personal contact with the substance, by using protective equipment as required.</li> <li>Prevent spillage from entering drains or water ways.</li> <li>Contain spill with sand, earth or vermiculite.</li> <li>Collect recoverable product into labelled containers for recycling.</li> <li>Absorb remaining product with sand, earth or vermiculite and place in appropriate containers for disposal.</li> <li>Wash area and prevent runoff into drains or waterways.</li> <li>If contamination of drains or waterways occurs, advise emergency services.</li> </ul> |
|              | Personal Protective Equipment advice is contained in Section 8 of the MSDS.  |

## SECTION 7 HANDLING AND STORAGE

#### Precautions for safe handling

| Safe handling     | <ul> <li>DO NOT allow clothing wet with material to stay in contact with skin</li> <li>Limit all unnecessary personal contact.</li> <li>Wear protective clothing when risk of exposure occurs.</li> <li>Use in a well-ventilated area.</li> <li>Avoid contact with incompatible materials.</li> <li>When handling, DO NOT eat, drink or smoke.</li> <li>Keep containers securely sealed when not in use.</li> <li>Avoid physical damage to containers.</li> <li>Always wash hands with soap and water after handling.</li> <li>Work clothes should be laundered separately.</li> <li>Use good occupational work practice.</li> <li>Observe menuterature of entrance and handling recommendations contained within this MSDS.</li> </ul> |
|-------------------|---|
|                   | Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions are maintained.   |
| Other information | <ul> <li>Store in original containers.</li> <li>Keep containers securely sealed.</li> <li>Store in a cool, dry, well-ventilated area.</li> <li>Store away from incompatible materials and foodstuff containers.</li> <li>Protect containers against physical damage and check regularly for leaks.</li> <li>Observe manufacturer's storage and handling recommendations contained within this MSDS.</li> </ul>  |

## Conditions for safe storage, including any incompatibilities

| Suitable container      | <ul> <li>Polyethylene or polypropylene container.</li> <li>Packing as recommended by manufacturer.</li> <li>Check all containers are clearly labelled and free from leaks.</li> </ul> |
|-------------------------|---|
| Storage incompatibility | Avoid reaction with oxidising agents  |

## 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<br>Exposure Standards (WES) | titanium dioxide     | Titanium<br>dioxide  | 10<br>mg/m3 | Not<br>Available | Not<br>Available | The value for inhalable dust containing no asbestos and less than 1% free silica.                    |
| New Zealand Workplace<br>Exposure Standards (WES) | calcium<br>carbonate | Calcium<br>carbonate | 10<br>mg/m3 | Not<br>Available | Not<br>Available | 2011 correction;The value for inhalable dust containing no asbestos<br>and less than 1% free silica. |

## EMERGENCY LIMITS

| Ingredient        | Material name                            | TEEL-1   | TEEL-2    | TEEL-3     |
|-------------------|--|----------|-----------|------------|
| titanium dioxide  | Titanium oxide; (Titanium dioxide)       | 10 mg/m3 | 10 mg/m3  | 10 mg/m3   |
| calcium carbonate | Limestone; (Calcium carbonate; Dolomite) | 27 mg/m3 | 27 mg/m3  | 1300 mg/m3 |
| calcium carbonate | Carbonic acid, calcium salt              | 45 mg/m3 | 210 mg/m3 | 1300 mg/m3 |

| Ingredient                                 | Original IDLH         | Revised IDLH  |
|--|-----------------------|---------------|
| acrylic copolymer                          | Not Available         | Not Available |
| titanium dioxide                           | N.E. mg/m3 / N.E. ppm | 5,000 mg/m3   |
| calcium carbonate                          | Not Available         | Not Available |
| filler, unregulated                        | Not Available         | Not Available |
| ingredients determined not to be hazardous | Not Available         | Not Available |
| water                                      | Not Available         | Not Available |

## Exposure controls

|                         | Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection. The basic types of engineering controls are:<br>Process controls which involve changing the way a job activity or process is done to reduce the risk.<br>Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment. Ventilation can remove or dilute an air contaminant if designed property. The design of a ventilation system must match the particular process and chemical or contaminant in use.<br>Employers may need to use multiple types of controls to prevent employee overexposure.<br>General exhaust is adequate under normal operating conditions. Local exhaust ventilation may be required in specific circumstances. If risk of overexposure exists, wear approved respirator. Correct fit is essential to obtain adequate protection. Provide adequate ventilation in warehouse or closed storage areas. Air contaminants generated in the workplace possess varying "escape" velocities which, in turn, determine the "capture velocities" of fresh circulating air required to effectively remove the contaminant. |  |   |  |  |
|-------------------------|---|--|---|--|--|
|                         | Type of Contaminant:  |  | Air Speed:  |  |  |
|                         | solvent, vapours, degreasing etc., evaporating from tank (in still air).  |  | 0.25-0.5 m/s (50-100<br>f/min)  |  |  |
| Appropriate engineering | aerosols, fumes from pouring operations, intermittent container filling, low speed conveyer transfers<br>acid fumes, pickling (released at low velocity into zone of active generation)   | s, welding, spray drift, plating   | 0.5-1 m/s (100-200<br>f/min.)   |  |  |
| controls                | direct spray, spray painting in shallow booths, drum filling, conveyer loading, crusher dusts, gas dis<br>zone of rapid air motion)   | charge (active generation into   | 1-2.5 m/s (200-500<br>f/min.)   |  |  |
|                         | grinding, abrasive blasting, tumbling, high speed wheel generated dusts (released at high initial vel<br>air motion).   | ocity into zone of very high rapid   | 2.5-10 m/s (500-2000<br>f/min.)   |  |  |
|                         | Within each range the appropriate value depends on:   |  |   |  |  |
|                         | Lower end of the range  | Upper end of the range   |   |  |  |
|                         | 1: Room air currents minimal or favourable to capture   | 1: Disturbing room air currents  |   |  |  |
|                         | 2: Contaminants of low toxicity or of nuisance value only.  | 2: Contaminants of high toxicity   |   |  |  |
|                         | 3: Intermittent, low production.  | 3: High production, heavy use  |   |  |  |
|                         | 4: Large hood or large air mass in motion   | 4: Small hood-local control only   |   |  |  |
|                         | Simple theory shows that air velocity falls rapidly with distance away from the opening of a simple extra<br>of distance from the extraction point (in simple cases). Therefore the air speed at the extraction point i<br>distance from the contaminating source. The air velocity at the extraction fan, for example, should be a<br>solvents generated in a tank 2 meters distant from the extraction point. Other mechanical consideration<br>apparatus, make it essential that theoretical air velocities are multiplied by factors of 10 or more when   | action pipe. Velocity generally dec<br>should be adjusted, accordingly, a<br>a minimum of 1-2 m/s (200-400 f/m<br>ons, producing performance deficit<br>extraction systems are installed o | reases with the square<br>fter reference to<br>iin) for extraction of<br>s within the extraction<br>r used. |  |  |
| Personal protection     |   |  |   |  |  |
| Eye and face protection | <ul> <li>Safety glasses with side shields.</li> <li>Chemical goggles.</li> <li>Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59], [AS/NZS 1336 or national equivalent]</li> </ul>   |  |   |  |  |
| Skin protection         | See Hand protection below   |  |   |  |  |
| Hands/feet protection   | <ul> <li>Wear chemical protection below</li> <li>Wear chemical protective gloves, e.g. PVC.</li> <li>Wear safety footwear or safety gumboots, e.g. Rubber</li> <li>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. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.</li> <li>The exact break through time for substances has to be obtained from the manufacturer of the protective gloves and has to be observed when making a final choice.</li> <li>Suitability and durability of glove type is dependent on usage. Important factors in the selection of gloves include:         <ul> <li>Frequency and duration of contact,</li> <li>chemical resistance of glove material,</li> <li>glove thickness and</li> <li>dexterity</li> </ul> </li> <li>Select gloves tested to a relevant standard (e.g. Europe EN 374, US F739, AS/NZS 2161.1 or national equivalent).</li> <li>When prolonged or frequently repeated contact may occur, a glove with a protection class of 5 or higher (breakthrough time greater than 240 minutes according to EN 374, AS/NZS 2161.1.0 r or ational equivalent) is recommended.</li> </ul>  |  |   |  |  |

|                  | <ul> <li>2161.10.1 or national equivalent) is recommended.</li> <li>Some glove polymer types are less affected by movement and this should be taken into account when considering gloves for long-term use.</li> <li>Contaminated gloves should be replaced.</li> <li>Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturiser is recommended.</li> </ul> |
|------------------|--|
| Body protection  | See Other protection below   |
| Other protection | <ul> <li>Overalls.</li> <li>P.V.C. apron.</li> <li>Barrier cream.</li> <li>Skin cleansing cream.</li> <li>Eye wash unit.</li> </ul>  |
| 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: Valspar Interior - Kitchen & Bathroom Low Sheen White

| Material       | CPI |
|----------------|-----|
| BUTYL          | A   |
| NEOPRENE       | A   |
| VITON          | A   |
| NATURAL RUBBER | С   |
| PVA            | С   |

\* 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.

#### SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

#### Information on basic physical and chemical properties

White liquid with a characteristic acrylic odour; miscible with water. Appearance Physical state Liauid Relative density (Water = 1) 1.25-1.29 Partition coefficient Not Available Not Available Odour n-octanol / water Auto-ignition temperature Odour threshold Not Available Not Available (°C) Decomposition 9 Not Available pH (as supplied) temperature Melting point / freezing Not Available Viscosity (cSt) Not Available point (°C) Initial boiling point and Not Available Molecular weight (g/mol) Not Applicable boiling range (°C) Flash point (°C) Not Applicable Taste Not Available Evaporation rate as for water Explosive properties Not Available Flammability **Oxidising properties** Not Available Not Applicable Surface Tension (dyn/cm or Upper Explosive Limit (%) Not Applicable Not Available mN/m) Lower Explosive Limit (%) Volatile Component (%vol) 40-50 Not Applicable Vapour pressure (kPa) as for water Gas group Not Available Solubility in water (g/L) Miscible pH as a solution (1%) Not Available Vapour density (Air = 1) as for water VOC g/L Not Available

## SECTION 10 STABILITY AND REACTIVITY

| Reactivity         | See section 7  |
|--------------------|--|
| Chemical stability | <ul> <li>Unstable in the presence of incompatible materials.</li> <li>Product is considered stable.</li> <li>Hazardous polymerisation will not occur.</li> </ul> |

# Respiratory protection

Not Applicable

| Possibility of hazardous<br>reactions | See section 7 |
|---------------------------------------|---------------|
| Conditions to avoid                   | See section 7 |
| Incompatible materials                | See section 7 |
| Hazardous decomposition<br>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).<br>Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting.   |
|--------------|--|
| Ingestion    | The material has NOT been classified by EC Directives or other classification systems as "harmful by ingestion". This is because of the lack of corroborating animal or human evidence.  |
| Skin Contact | There is some evidence to suggest that this material can cause inflammation of the skin on contact in some persons.<br>Open cuts, abraded or irritated skin should not be exposed to this material<br>Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use<br>of the material and ensure that any external damage is suitably protected. |
| Eye          | There is some evidence to suggest that this material can cause eye irritation and damage in some persons.  |
| Chronic      | Prolonged or repeated skin contact may cause drying with cracking, irritation and possible dermatitis following.   |

| Valspar Interior - Kitchen & | TOVICITY   |                                       |  |
|------------------------------|--|---------------------------------------|--|
| Bathroom Low Sheen           | Not Available  |                                       |  |
| White                        |  |                                       |  |
|                              | ΤΟΧΙΟΙΤΥ   | IRRITATION                            |  |
|                              | Inhalation (rat) LC50: >2.28 mg/l4 h <sup>[1]</sup>  | Skin (human): 0.3 mg /3D (int)-mild * |  |
|                              | Inhalation (rat) LC50: >3.56 mg/l4 h <sup>[1]</sup>  | <br> <br> <br>                        |  |
| titanium dioxide             | Inhalation (rat) LC50: >6.82 mg/l4 h <sup>[1]</sup>  | 1<br>1<br>1<br>1                      |  |
|                              | Inhalation (rat) LC50: 3.43 mg/l4 h <sup>[1]</sup>   | 1<br>1<br>1<br>1                      |  |
|                              | Inhalation (rat) LC50: 5.09 mg/l4 h <sup>[1]</sup>   |                                       |  |
|                              | Oral (rat) LD50: >2000 mg/kg <sup>[1]</sup>  |                                       |  |
|                              | ΤΟΧΙΟΙΤΥ   | IRRITATION                            |  |
| calcium carbonate            | dermal (rat) LD50: >2000 mg/kg <sup>[1]</sup>  | Eye (rabbit): 0.75 mg/24h - SEVERE    |  |
|                              | Oral (rat) LD50: >2000 mg/kge <sup>[1]</sup>   | Skin (rabbit): 500 mg/24h-moderate    |  |
|                              | ΤΟΧΙΟΙΤΥ   | IRRITATION                            |  |
| water                        | Oral (rat) LD50: >90000 mg/kg <sup>[2]</sup>   | Not Available                         |  |
| Legend:                      | <ol> <li>Value obtained from Europe ECHA Registered Substances - Acute toxicity 2.* Value obtained from manufacturer's msds. Unless otherwise specified data<br/>extracted from RTECS - Register of Toxic Effect of chemical Substances</li> </ol>   |                                       |  |
|                              |  |                                       |  |
| TITANIUM DIOXIDE             | The material may produce moderate eye irritation leading to inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.<br>The material may cause skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin.<br>Exposure to titanium dioxide is via inhalation, swallowing or skin contact. When inhaled, it may deposit in lung tissue and lymph nodes causing dysfunction of the lungs and immune system. Absorption by the stomach and intestines depends on the size of the particle. It penetrated only the outermost layer of the skin, suggesting that healthy skin may be an effective barrier. There is no substantive data on genetic damage, though cases have been reported in experimental animals. Studies have differing conclusions on its cancer-causing potential.<br>WARNING: This substance has been classified by the IARC as Group 2B: Possibly Carcinogenic to Humans.<br>* IUCLID   |                                       |  |
| CALCIUM CARBONATE            | Asthma-like symptoms may continue for months or even years after exposure to the material ceases. This may be due to a non-allergenic condition known as reactive airways dysfunction syndrome (RADS) which can occur following exposure to high levels of highly irritating compound. Key criteria for the diagnosis of RADS include the absence of preceding respiratory disease, in a non-atopic individual, with abrupt onset of persistent asthma-like symptoms within minutes to hours of a documented exposure to the irritant. A reversible airflow pattern, on spirometry, with the presence of moderate to severe bronchial hyperreactivity on methacholine challenge testing and the lack of minimal lymphocytic inflammation, without eosinophilia, have also been included in the criteria for diagnosis of RADS. RADS (or asthma) following an irritating inhalation is an infrequent disorder with rates related to the concentration of and duration of exposure to the irritating substance. Industrial bronchitis, on the other hand, is a disorder that occurs as result of exposure due to high concentrations of irritating substance (often particulate in nature) and is completely reversible after exposure ceases. The disorder is characterised by dyspnea, cough and mucus produces content. |                                       |  |
| WATER                        | No significant acute toxicological data identified in literature search.   |                                       |  |

| Acute Toxicity                       | 0       | Carcinogenicity          | 0  |
|--------------------------------------|---------|--------------------------|--|
| Skin Irritation/Corrosion            | 0       | Reproductivity           | 0  |
| Serious Eye<br>Damage/Irritation     | ✓       | STOT - Single Exposure   | 0  |
| Respiratory or Skin<br>sensitisation | 0       | STOT - Repeated Exposure | 0  |
| Mutagenicity                         | $\odot$ | Aspiration Hazard        | $\odot$  |
|                                      |         | Legend: 🗸                | <ul> <li>Data required to make classification available</li> <li>Data available but does not fill the criteria for classification</li> </ul> |

S – Data Not Available to make classification

## SECTION 12 ECOLOGICAL INFORMATION

#### Toxicity

DO NOT discharge into sewer or waterways.

#### Persistence and degradability

| Ingredient       | Persistence: Water/Soil | Persistence: Air |
|------------------|-------------------------|------------------|
| titanium dioxide | HIGH                    | HIGH             |
| water            | LOW                     | LOW              |

#### **Bioaccumulative potential**

| Ingredient       | Bioaccumulation      |
|------------------|----------------------|
| titanium dioxide | LOW (BCF = 10)       |
| water            | LOW (LogKOW = -1.38) |

#### Mobility in soil

| Ingredient       | Mobility          |
|------------------|-------------------|
| titanium dioxide | LOW (KOC = 23.74) |
| water            | LOW (KOC = 14.3)  |

## SECTION 13 DISPOSAL CONSIDERATIONS

#### Waste treatment methods

| Product / Packaging<br>disposal | <ul> <li>Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area. In some areas, certain wastes must be tracked.</li> <li>A Hierarchy of Controls seems to be common - the user should investigate: <ul> <li>Reduction</li> <li>Reuse</li> <li>Recycling</li> <li>Disposal (if all else fails)</li> </ul> </li> <li>This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use. If it has been contaminated, it may be possible to reclaim the product by filtration, distillation or some other means. Shelf life considerations should also be applied in making decisions of this type. Note that properties of a material may change in use, and recycling or reuse may not always be appropriate.</li> <li>DO NOT allow wash water from cleaning or process equipment to enter drains.</li> <li>It may be necessary to collect all wash water for treatment before disposal.</li> <li>In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.</li> <li>Where in doubt contact the responsible authority.</li> <li>Recycle wherever possible.</li> <li>Consult manufacturer for recycling options or consult local or regional waste management authority for disposal if no suitable treatment or disposal facility can be identified.</li> <li>Dispose of by: burial in a land-fill specifically licenced to accept chemical and / or pharmaceutical wastes or incineration in a licenced apparatus (after admixture with suitable combustible material).</li> </ul> |
|---------------------------------|--|
|                                 | admixture with suitable combustible material).   |
|                                 | Decontaminate empty containers. Observe all label safeguards until containers are cleaned and destroyed.   |
|                                 |  |
|                                 | Ensure 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

IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid titanium dioxide Substances Carried in Bulk

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### 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

| HSR Number | Group Standard   |
|------------|--|
| HSR002624  | N.O.S. (Subsidiary Hazard) Group Standard 2006   |
| HSR002535  | Compressed Gas Mixtures (Subsidiary Hazard) Group Standard 2006  |
| HSR002596  | Laboratory Chemicals and Reagent Kits Group Standard 2006  |
| HSR002530  | Cleaning Products (Subsidiary Hazard) Group Standard 2006  |
| HSR002585  | Fuel Additives (Subsidiary Hazard) Group Standard 2006   |
| HSR002519  | Aerosols (Subsidiary Hazard) Group Standard 2006   |
| HSR002521  | Animal Nutritional and Animal Care Products Group Standard 2006  |
| HSR002606  | Lubricants, Lubricant Additives, Coolants and Anti-freeze Agents (Subsidiary Hazard) Group Standard 2006 |
| HSR002644  | Polymers (Subsidiary Hazard) Group Standard 2006   |
| HSR002647  | Reagent Kits Group Standard 2006   |
| HSR002612  | Metal Industry Products (Subsidiary Hazard) Group Standard 2006  |
| HSR002670  | Surface Coatings and Colourants (Subsidiary Hazard) Group Standard 2006                                  |
| HSR002503  | Additives, Process Chemicals and Raw Materials (Subsidiary Hazard) Group Standard 2006                   |
| HSR002638  | Photographic Chemicals (Subsidiary Hazard) Group Standard 2006   |
| HSR002565  | Embalming Products (Subsidiary Hazard) Group Standard 2006   |
| HSR002578  | Food Additives and Fragrance Materials (Subsidiary Hazard) Group Standard 2006                           |
| HSR002558  | Dental Products (Subsidiary Hazard) Group Standard 2006  |
| HSR002684  | Water Treatment Chemicals (Subsidiary Hazard) Group Standard 2006  |
| HSR002573  | Fire Fighting Chemicals Group Standard 2006  |
| HSR100425  | Pharmaceutical Active Ingredients Group Standard 2010  |
| HSR002600  | Leather and Textile Products (Subsidiary Hazard) Group Standard 2006                                     |
| HSR002598  | Leather and Textile products (Corrosive) Group Standard 2006   |
| HSR002605  | Lubricants (Low Hazard) Group Standard 2006  |
| HSR002571  | Fertilisers (Subsidiary Hazard) Group Standard 2006  |
| HSR002648  | Refining Catalysts Group Standard 2006   |
| HSR002653  | Solvents (Subsidiary Hazard) Group Standard 2006   |
| HSR002544  | Construction Products (Subsidiary Hazard) Group Standard 2006  |
| HSR002549  | Corrosion Inhibitors (Subsidiary Hazard) Group Standard 2006   |
| HSR002552  | Cosmetic Products Group Standard 2006  |
| HSR100757  | Veterinary Medicine (Limited Pack Size, Finished Dose) Standard 2012                                     |
| HSR100758  | Veterinary Medicines (Non-dispersive Closed System Application) Group Standard 2012                      |
| HSR100759  | Veterinary Medicines (Non-dispersive Open System Application) Group Standard 2012                        |
| HSR100628  | Straight-chained Lepidopteran Sex Pheromone Group Standard 2012  |
| HSR100580  | Tattoo and Permanent Makeup Substances Group Standard 2011   |

#### TITANIUM DIOXIDE(13463-67-7) IS FOUND ON THE FOLLOWING REGULATORY LISTS

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

New Zealand Inventory of Chemicals (NZIoC)

#### CALCIUM CARBONATE(471-34-1) IS FOUND ON THE FOLLOWING REGULATORY LISTS

New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals

New Zealand Inventory of Chemicals (NZIoC)

#### WATER(7732-18-5) IS FOUND ON THE FOLLOWING REGULATORY LISTS

New Zealand Inventory of Chemicals (NZIoC)

## 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.

New Zealand Workplace Exposure Standards (WES)

New Zealand Workplace Exposure Standards (WES)

| 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   |

Subject to Regulation 56 of the Hazardous Substances (Classes 1 to 5 Controls) Regulations and Regulation 9 of the Hazardous Substances (Classes 6, 8, and 9 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 |
| Refer Group Standards for further information |                |
|   |                |

| National Inventory               | Status  |
|----------------------------------|---|
| Australia - AICS                 | Y   |
| Canada - DSL                     | Y   |
| Canada - NDSL                    | N (water)   |
| China - IECSC                    | Y   |
| Europe - EINEC / ELINCS /<br>NLP | Y   |
| Japan - ENCS                     | N (water)   |
| Korea - KECI                     | Y   |
| New Zealand - NZIoC              | Y   |
| Philippines - PICCS              | Y   |
| USA - TSCA                       | Y   |
| Legend:                          | Y = All ingredients are on the inventory $N = Not$ determined or one or more ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets) |

## **SECTION 16 OTHER INFORMATION**

#### Other information

#### Ingredients with multiple cas numbers

| Name              | CAS No  |
|-------------------|---|
| titanium dioxide  | 100292-32-8, 101239-53-6, 116788-85-3, 12000-59-8, 12188-41-9, 12701-76-7, 12767-65-6, 12789-63-8, 1309-63-3, 1317-70-0, 1317-80-2, 1344-29-2, 13463-67-7, 185323-71-1, 185828-91-5, 188357-76-8, 188357-79-1, 195740-11-5, 221548-98-7, 224963-00-2, 246178-32-5, 252962-41-7, 37230-92-5, 37230-94-7, 37230-95-8, 37230-96-9, 39320-58-6, 39360-64-0, 39379-02-7, 416845-43-7, 494848-07-6, 494848-23-6, 494851-77-3, 494851-98-8, 55068-84-3, 55068-85-4, 552316-51-5, 62338-64-1, 767341-00-4, 97929-50-5, 98084-96-9 |
| calcium carbonate | 1317-65-3, 13397-26-7, 146358-95-4, 15634-14-7, 198352-33-9, 459411-10-0, 471-34-1, 63660-97-9, 72608-12-9, 878759-26-3   |

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

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

www.chemwatch.net

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.

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