

Ardex (Ardex NZ)

Chemwatch: **15-6685** Version No: **3.1.1.1**

Safety Data Sheet according to HSNO Regulations

Chemwatch Hazard Alert Code:

Issue Date: **12/01/2017**Print Date: **13/01/2017**S.GHS.NZL.EN

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

Product Identifier

| Product name | Dunlop Wallfix Tile Adhesive |
|-------------------------------|--------------------------------|
| Synonyms | premixed ceramic tile adhesive |
| Other means of identification | Not Available |

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

Relevant identified uses Premixed adhesive used to fix ceramic wall tiles in interior situations.

Details of the supplier of the safety data sheet

| Registered company name | Ardex (Ardex NZ) | Ardex (Ardex Australia) |
|--|------------------|---|
| Address 32 Lane Street Christchurch Woolston New Zealand 20 Powers Road NSW Seven Hills 2147 Australia | | 20 Powers Road NSW Seven Hills 2147 Australia |
| Telephone +64 3384 3029 1800 224 070 | | 1800 224 070 |
| Fax +64 3384 9779 +61 2 9838 7817 | | +61 2 9838 7817 |
| Website | Not Available | Not Available |
| Email | Not Available | Not Available |

Emergency telephone number

| Association / Organisation | Not Available | Not Available |
|-----------------------------------|------------------------------------|---------------|
| Emergency telephone numbers | 1800 222 841 (General information) | 1800 222 841 |
| Other emergency telephone numbers | Not Available | Not Available |

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

| 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

Precautionary statement(s) Prevention

Not Applicable

Precautionary statement(s) Response

Not Applicable

Precautionary statement(s) Storage

Not Applicable

Precautionary statement(s) Disposal

Not Applicable

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SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

| CAS No | %[weight] | Name |
|---------------|-----------|----------------------|
| Not Available | 10-60 | acrylic emulsion |
| Not Available | 10-60 | fillers |
| Not Available | 1-10 | cellulosic thickener |
| Not Available | 0-1 | bacteriacide |
| 107-21-1 | <0.5 | ethylene glycol |
| 7732-18-5 | 30-60 | water |

SECTION 4 FIRST AID MEASURES

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

Description of first aid measures

| Eye Contact | If this product comes in contact with eyes: • 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 | If skin or hair contact occurs: ▶ Flush skin and hair with running water (and soap if available). ▶ Seek medical attention in event of irritation. |
| Inhalation | If fumes, aerosols or combustion products are inhaled remove from contaminated area. Other measures are usually unnecessary. |
| Ingestion | 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

The product contains a substantial proportion of water, therefore there are no restrictions on the type of extinguishing media which may be used. Choice of extinguishing media should take into account surrounding areas

Though the material is non-combustible, evaporation of water from the mixture, caused by the heat of nearby fire, may produce floating layers of combustible substances. In such an event consider:

foam.

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. Wear breathing apparatus plus protective gloves in the event of a fire. Prevent, by any means available, spillage from entering drains or water courses. Use fire fighting procedures suitable for surrounding area. |
| Fire/Explosion Hazard | Non combustible. Not considered to be a significant fire risk. Expansion or decomposition on heating may lead to violent rupture of containers. Decomposes on heating and may produce toxic fumes of carbon monoxide (CO). |

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

See section 8

Environmental precautions

See section 12

Methods and material for containment and cleaning up

Minor Spills

- Clean up all spills immediately.
- Avoid breathing vapours and contact with skin and eyes.
- Control personal contact with the substance, by using protective equipment.
- ▶ Contain and absorb spill with sand, earth, inert material or vermiculite.

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Major Spills

Minor hazard.

- Clear area of personnel.
- ► Alert Fire Brigade and tell them location and nature of hazard.
- ▶ Control personal contact with the substance, by using protective equipment as required.

Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Safe handling

- Limit all unnecessary personal contact.
- Wear protective clothing when risk of exposure occurs.
- ▶ Use in a well-ventilated area.
- ► Avoid contact with incompatible materials.

Other information

- ▶ Store in original containers. ▶ Keep containers securely sealed.
- ▶ Store in a cool, dry, well-ventilated area.
- ▶ Store away from incompatible materials and foodstuff containers.

Conditions for safe storage, including any incompatibilities

Suitable container

- ▶ Polyethylene or polypropylene container.
- Packing as recommended by manufacturer.
- Check all containers are clearly labelled and free from leaks.

Storage incompatibility

Avoid contamination of water, foodstuffs, feed or seed None known

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Material name

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

| Source | Ingredient | Material name | TWA | STEL | Peak | Notes |
|---|-----------------|-----------------------------------|---------------|---------------|--------------------|---------------|
| New Zealand Workplace Exposure Standards (WES) | ethylene glycol | Ethylene glycol (vapour and mist) | Not Available | Not Available | 127 mg/m3 / 50 ppm | Not Available |

EMERGENCY LIMITS

Ingradiant

| ingrealent | wateriai name | TEEL-1 | | IEEL-Z | IEEL-3 | |
|----------------------|-----------------|--------|---------------|---------------|--------|--|
| ethylene glycol | Ethylene glycol | 30 ppm | | 40 ppm | 60 ppm | |
| Ingredient | Original IDLH | | Revise | d IDLH | | |
| acrylic emulsion | Not Available | | Not Ava | Not Available | | |
| fillers | Not Available | | Not Available | | | |
| cellulosic thickener | Not Available | | Not Available | | | |
| bacteriacide | Not Available | | Not Available | | | |
| ethylene glycol | Not Available | | Not Available | | | |
| water | Not Available | | Not Available | | | |

Exposure controls

| Appropriate engineering | |
|-------------------------|--|
| 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.

TEEL 2

The basic types of engineering controls are:

Process controls which involve changing the way a job activity or process is done to reduce the risk.

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.

Personal protection









- Safety glasses with side shields
- Chemical goggles. Eye and face protection
 - 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

Skin protection

See Hand protection below

chemicals in use and an account of injury experience.

Hands/feet protection **Body protection**

Wear general protective gloves, eg. light weight rubber gloves.

See Other protection below

No special equipment needed when handling small quantities. OTHERWISE:

Other protection

- Overalls.
- ► Barrier cream.

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| | ► Eyewash unit. |
|-----------------|-----------------|
| 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:

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| Material | СРІ |
|------------------|-----|
| NEOPRENE | A |
| BUTYL | С |
| NATURAL RUBBER | С |
| NATURAL+NEOPRENE | С |
| NEOPRENE/NATURAL | С |
| NITRILE | С |
| NITRILE+PVC | С |
| PE/EVAL/PE | С |
| PVA | С |
| PVC | С |
| TEFLON | С |
| VITON | 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. -

Respiratory protection

Type A-P Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

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 10 x ES | A-AUS P2 | - | A-PAPR-AUS / Class 1 P2 |
| up to 50 x ES | - | A-AUS / Class 1 P2 | - |
| up to 100 x ES | - | A-2 P2 | A-PAPR-2 P2 ^ |

^ - 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 | Thick white paste with a slight odour; does not mix with water. | | |
|--|---|---|----------------|
| Physical state | Non Slump Paste | Relative density (Water = 1) | 1.6 approx. |
| Odour | Not Available | Partition coefficient n-octanol / water | Not Available |
| Odour threshold | Not Available | Auto-ignition temperature (°C) | Not Applicable |
| pH (as supplied) | 9 | Decomposition temperature | Not Available |
| Melting point / freezing point (°C) | Not Available | Viscosity (cSt) | Not Available |
| Initial boiling point and boiling range (°C) | 100 | Molecular weight (g/mol) | Not Applicable |
| Flash point (°C) | Not Applicable | Taste | Not Available |
| Evaporation rate | Not Available | Explosive properties | Not Available |
| Flammability | Not Applicable | Oxidising properties | Not Available |
| Upper Explosive Limit (%) | Not Applicable | Surface Tension (dyn/cm or mN/m) | Not Available |
| Lower Explosive Limit (%) | Not Applicable | Volatile Component (%vol) | Not Available |
| Vapour pressure (kPa) | Not Available | Gas group | Not Available |
| Solubility in water (g/L) | Immiscible | pH as a solution (1%) | Not Available |
| Vapour density (Air = 1) | Not Available | VOC g/L | Not Available |

SECTION 10 STABILITY AND REACTIVITY

| Reactivity | See section 7 |
|------------------------------------|---|
| Chemical stability | Product is considered stable and hazardous polymerisation will not occur. |
| Possibility of hazardous reactions | See section 7 |
| Conditions to avoid | See section 7 |

^{*} 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.

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| 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). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting. |
|--------------|--|
| Ingestion | Ingestion may result in nausea, abdominal irritation, pain and vomiting Considered an unlikely route of entry in commercial/industrial environments |
| 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). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable gloves be used in an occupational setting. |
| Еуе | Although the material 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). Prolonged or repeated skin contact may cause drying with cracking, irritation and possible dermatitis following. |
| Chronic | Long-term exposure to the product is not thought to produce chronic effects adverse to the health (as classified by EC Directives using animal models); nevertheless exposure by all routes should be minimised as a matter of course. As with any chemical product, contact with unprotected bare skin; inhalation of vapour, mist or dust in work place atmosphere; or ingestion in any form, should be avoided by observing good occupational work practice. |

| TOXICITY | IRRITATION |
|--|---|
| Not Available | Not Available |
| TOXICITY | IRRITATION |
| Dermal (rabbit) LD50: 9530 mg/kg ^[2] | Eye (rabbit): 100 mg/1h - mild |
| Inhalation (rat) LC50: 50.1 mg/L/8 hr ^[2] | Eye (rabbit): 12 mg/m3/3D |
| Oral (rat) LD50: 4700 mg/kg ^[2] | Eye (rabbit): 1440mg/6h-moderate |
| | Eye (rabbit): 500 mg/24h - mild |
| | Skin (rabbit): 555 mg(open)-mild |
| TOXICITY | IRRITATION |
| Oral (rat) LD50: >90000 mg/kg ^[2] | Not Available |
| | Not Available TOXICITY Dermal (rabbit) LD50: 9530 mg/kg ^[2] Inhalation (rat) LC50: 50.1 mg/L/8 hr ^[2] Oral (rat) LD50: 4700 mg/kg ^[2] TOXICITY |

| Legend: | 1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2.* Value obtained from manufacturer's SDS. Unless otherwise specified data |
|---------|---|
| | extracted from RTECS - Register of Toxic Effect of chemical Substances |

| Dunlop Wallfix Tile Adhesive | Not available for mixture or identified for ingredient(s). | | |
|-----------------------------------|--|------------------------|---|
| ETHYLENE GLYCOL | For ethylene glycol: Ethylene glycol is quickly and extensively absorbed through the gastrointestinal tract. Limited information suggests that it is also absorbed through the respiratory tract; dermal absorption is apparently slow. Following absorption, ethylene glycol is distributed throughout the body according to total body water. In most mammalian species, including humans, ethylene glycol is initially metabolised by alcohol. [Estimated Lethal Dose (human) 100 ml; RTECS quoted by Orica] Substance is reproductive effector in rats (birth defects). Mutagenic to rat cells. | | |
| WATER | No significant acute toxicological data identified in literature search. | | |
| Acute Toxicity | 0 | Carcinogenicity | 0 |
| Skin Irritation/Corrosion | 0 | Reproductivity | 0 |
| Serious Eye Damage/Irritation | 0 | STOT - Single Exposure | 0 |
| Respiratory or Skin sensitisation | ○ STO | OT - Repeated Exposure | 0 |
| Mutagenicity | 0 | Aspiration Hazard | 0 |

- Legend: X Data available but does not fill the criteria for classification

 v Data required to make classification available
 - O Data Not Available to make classification

Toxicity

SECTION 12 ECOLOGICAL INFORMATION

| Ingredient | Endpoint | Test Duration (hr) | Species | Value | Source |
|-----------------|----------|--------------------|-------------------------------|----------------|--------|
| ethylene glycol | LC50 | 96 | Fish | 2284.940mg/L | 3 |
| ethylene glycol | EC50 | 48 | Crustacea | 5046.29mg/L | 5 |
| ethylene glycol | EC50 | 96 | Algae or other aquatic plants | 6500-13000mg/L | 1 |
| ethylene glycol | EC50 | Not Applicable | Crustacea | =10mg/L | 1 |
| ethylene glycol | NOEC | 552 | Crustacea | >=1000mg/L | 2 |

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Legend:

Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 3. EPIWIN Suite V3.12 -Aquatic Toxicity Data (Estimated) 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) -Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data

Persistence and degradability

| Ingredient | Persistence: Water/Soil | Persistence: Air |
|-----------------|---------------------------|-----------------------------|
| ethylene glycol | LOW (Half-life = 24 days) | LOW (Half-life = 3.46 days) |
| water | LOW | LOW |

Bioaccumulative potential

| Ingredient | Bioaccumulation |
|-----------------|----------------------|
| ethylene glycol | LOW (BCF = 200) |
| water | LOW (LogKOW = -1.38) |

Mobility in soil

| Ingredient | Mobility |
|-----------------|------------------|
| ethylene glycol | HIGH (KOC = 1) |
| water | LOW (KOC = 14.3) |

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods

Product / Packaging disposal

- Recycle wherever possible or consult manufacturer for recycling options.
- Consult State Land Waste Authority for disposal
- Bury or incinerate residue at an approved site
- ▶ Recycle containers if possible, or dispose of in an authorised landfill.

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 and the IBC code

Not Applicable

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 |
|----------------|----------------|
| Not Applicable | Not Applicable |

ETHYLENE GLYCOL(107-21-1) IS FOUND ON THE FOLLOWING REGULATORY LISTS

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

New Zealand Workplace Exposure Standards (WES)

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.

| 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 and Regulation 9 of the Hazardous Substances (Classes 6, 8, and 9 Controls) Regulations, the

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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

Tracking Requirements

Not Applicable

| National Inventory | Status |
|----------------------------------|---|
| Australia - AICS | Y |
| Canada - DSL | Y |
| Canada - NDSL | N (water; ethylene glycol) |
| China - IECSC | Y |
| Europe - EINEC / ELINCS / NLP | Y |
| Japan - ENCS | N (water) |
| Korea - KECI | Y |
| New Zealand - NZIoC | Y |
| Philippines - PICCS | Y |
| USA - TSCA | Υ |
| 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

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:

The 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.

Definitions and abbreviations

PC – TWA: Permissible Concentration-Time Weighted Average

PC-STEL: Permissible Concentration-Short Term Exposure Limit

IARC: International Agency for Research on Cancer

ACGIH: American Conference of Governmental Industrial Hygienists

STEL: Short Term Exposure Limit

TEEL: Temporary Emergency Exposure Limit。

IDLH: Immediately Dangerous to Life or Health Concentrations

OSF: Odour Safety Factor

NOAEL: No Observed Adverse Effect Level

LOAEL: Lowest Observed Adverse Effect Level

TLV: Threshold Limit Value

LOD: Limit Of Detection

OTV: Odour Threshold Value

BCF: BioConcentration Factors

BEI: Biological Exposure Index

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