

Ardex (Ardex Australia)

Chemwatch: 32-0297 Version No: 2.1.1.1 Safety Data Sheet according to WHS and ADG requirements

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

Product Identifier

Product name	ABA Barrierflex Liquid
Synonyms	cement based ceramic tile adhesive
Other means of identification	Not Available
Relevant identified uses of the substance or mixture and uses advised against	

Relevant identified uses	Material is mixed and used in accordance with manufacturers directions
	Mixed with Barrierflex Powder used to fix ceramic tiles over walls and floor surfaces. May be used for water-proofing.

Details of the supplier of the safety data sheet

Registered company name	Ardex (Ardex Australia)	Ardex (Ardex NZ)
Address	20 Powers Road Seven Hills NSW 2147 Australia	32 Lane Street Woolston Christchurch New Zealand
Telephone	1800 224 070	+64 3373 6928
Fax	1300 780 102	+64 3384 9779
Website	Not Available	Not Available
Email	Not Available	Not Available

Emergency telephone number

Association / Organisation	Not Available	Not Available
Emergency telephone numbers	1800 224 070 (Mon-Fri, 9am-5pm)	+64 3373 6900
Other emergency telephone numbers	Not Available	Not Available

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

NON-HAZARDOUS CHEMICAL. NON-DANGEROUS GOODS. According to the WHS Regulations and the ADG Code.

CHEMWATCH HAZARD RATINGS

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

Poisons Schedule	Not Applicable
Classification	Not Applicable
Label elements	
Hazard pictogram(s)	Not Applicable
SIGNAL WORD	NOT APPLICABLE

Hazard statement(s)

Chemwatch Hazard Alert Code: 2

Issue Date: 01/01/2013 Print Date: 18/05/2017

S.GHS.AUS.EN

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

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
Not Available	>60	synthetic latex dispersion
Not Available	0-2	thickener
Not Available	0-1	biocide
7732-18-5	30-60	water

SECTION 4 FIRST AID MEASURES

Description of first aid measures

Eye Contact	 If this product comes in contact with the eyes: Wash out immediately with fresh running water. 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. Seek medical attention without delay; if pain persists or recurs seek medical attention. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	 If skin contact occurs: Immediately remove all contaminated clothing, including footwear. 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

- There is no restriction on the type of extinguisher which may be used.
- Use extinguishing media suitable for surrounding area.

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 a significant fire risk, however containers may burn. May emit corrosive fumes. 	
HAZCHEM	Not Applicable	

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.
Major Spills	Moderate hazard. Clear area of personnel and move upwind. Alert Fire Brigade and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves.

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

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Safe handling	 Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. Prevent concentration in hollows and sumps. DO NOT allow clothing wet with material to stay in contact with skin
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	None known

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

Not Available

EMERGENCY LIMITS

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
ABA Barrierflex Liquid	Not Available	Not Available	Not Available	Not Available
Ingredient	Original IDLH		Revised IDLH	
Ingrealent	Onginariden		Revised IDLH	
synthetic latex dispersion	Not Available		Not Available	
thickener	Not Available		Not Available	
biocide	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. 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	
Eye and face protection	 Safety glasses with side shields. Chemical goggles. 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.
Skin protection	See Hand protection below
Hands/feet protection	 Wear chemical protective gloves, e.g. PVC. Wear safety footwear or safety gumboots, e.g. Rubber 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. 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. Personal hygiene is a key element of effective hand care.

Body protection	See Other protection below
Other protection	 Overalls. P.V.C. apron. Barrier cream.
Thermal hazards	Not Available

Recommended material(s)

GLOVE SELECTION INDEX

ABA Barrierflex Liquid

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:

Material	СРІ
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

Appearance White milky liquid with a mild odour; partly mixes with water. Physical state Relative density (Water = 1) 1.02 approx. Liquid Partition coefficient Not Available Not Available Odour n-octanol / water Auto-ignition temperature Odour threshold Not Available Not Applicable (°C) Decomposition pH (as supplied) 9.0 Not Available temperature Melting point / freezing Not Available Viscosity (cSt) Not Available point (°C) Initial boiling point and 100 Molecular weight (g/mol) Not Applicable boiling range (°C) Flash point (°C) Not Available Not Available Taste Evaporation rate Not Available Explosive properties Not Available Flammability Not Available **Oxidising properties** Not Available Surface Tension (dyn/cm or Upper Explosive Limit (%) Not Applicable Not Available mN/m) Lower Explosive Limit (%) Not Applicable Volatile Component (%vol) Not Available Vapour pressure (kPa) Not Available Gas group Not Available Solubility in water (g/L) Partly Miscible pH as a solution (1%) Not Available Vapour density (Air = 1) VOC g/L Not Applicable Not Available

SECTION 10 STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical stability	 Unstable in the presence of incompatible materials. Product is considered stable. Hazardous polymerisation will not occur.
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

sensitisation Mutagenicity	S Aspira	ration Hazard
concitication		
Respiratory or Skin	STOT - Repeate	ted Exposure
Serious Eye Damage/Irritation	STOT - Sing	gle Exposure
Skin Irritation/Corrosion	⊗ Re	eproductivity
Acute Toxicity	⊗ Car	rcinogenicity 🛇
WATER	No significant acute toxicological data identified in literature search.	
ABA Barrierflex Liquid	Not available for mixture or identified for ingredient(s).	
Legend:	1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2.* extracted from RTECS - Register of Toxic Effect of chemical Substances	Value obtained from manufacturer's SDS. Unless otherwise specified data
	Not Available	Not Available
water	TOXICITY	IRRITATION
ABA Barrierflex Liquid	Not Available	Not Available
	TOXICITY	IRRITATION
Chronic	Long-term exposure to the product is not thought to produce chronic effects adver nevertheless exposure by all routes should be minimised as a matter of course.	rse to the health (as classified by EC Directives using animal models);
Eye	The material may be irritating to the eye, with prolonged contact causing inflamma	ation. Repeated or prolonged exposure to irritants may produce conjunctivit
Skin Contact	The material may cause skin irritation after prolonged or repeated exposure and m scaling and thickening of the skin.	nay produce on contact skin redness, swelling, the production of vesicles,
Ingestion	Ingestion may result in nausea, abdominal irritation, pain and vomiting Considered an unlikely route of entry in commercial/industrial environments	
	lung damage.	

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE SOURCE
ABA Barrierflex Liquid	Not Applicable	Not Applicable	Not Applicable	Not Not Applicable Applicable
	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE SOURCE
water	Not Applicable	Not Applicable	Not Applicable	Not Not Applicable Applicable
Legend:	(QSAR) - Aquai	. IUCLID Toxicity Data 2. Europe ECHA Registere tic Toxicity Data (Estimated) 4. US EPA, Ecotox dat ncentration Data 7. METI (Japan) - Bioconcentratio	abase - Aquatic Toxicity Data 5. ECETOC	1 3

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
water	LOW	LOW

Bioaccumulative potential

water LOW (LoaKOW = -1.38)	Ingredient	Bioaccumulation
	water	LOW (LOUNOW = -1.30)

Mobility in soil

Ingredient	Mobility
water	LOW (KOC = 14.3)

SECTION 13 DISPOSAL CONSIDERATIONS

areas, certai A Hierarchy F Reducti P Reuse Newse Disposa disposal Product / Packaging disposal P nal ca No NO I tray b I n all ca No Sonsult Consult can be i Dispose admixtu	

SECTION 14 TRANSPORT INFORMATION

Labels Required Marine Pollutant NO HAZCHEM Not Applicable

Land transport (ADG): 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

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

Australia Inventory of Chemical Substances (AICS)

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

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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Ardex (Ardex Australia)

Chemwatch: 32-0298 Version No: 3.1.1.1 Safety Data Sheet according to WHS and ADG requirements

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

Product Identifier

ABA Barrierflex Powder
Not Available
Not Available

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

Relevant identified uses

▶ Material is mixed and used in accordance with manufacturers directions

Details of the supplier of the safety data sheet

Registered company name	Ardex (Ardex Australia)	Ardex (Ardex NZ)
Address	20 Powers Road Seven Hills NSW 2147 Australia	32 Lane Street Woolston Christchurch New Zealand
Telephone	1800 224 070	+64 3373 6928
Fax	1300 780 102	+64 3384 9779
Website	Not Available	Not Available
Email	Not Available	Not Available

Emergency telephone number

Association / Organisation	Not Available	Not Available
Emergency telephone numbers	1800 224 070 (Mon-Fri, 9am-5pm)	+64 3373 6900
Other emergency telephone numbers	Not Available	Not Available

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

HAZARDOUS CHEMICAL. NON-DANGEROUS GOODS. According to the WHS Regulations and the ADG Code.

CHEMWATCH HAZARD RATINGS

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

Poisons Schedule	Not Applicable
Classification ^[1]	Skin Corrosion/Irritation Category 2, Serious Eye Damage Category 1, Skin Sensitizer Category 1, Specific target organ toxicity - single exposure Category 3 (respiratory tract irritation)*
Legend:	1. Classified by Chemwatch; 2. Classification drawn from HSIS ; 3. Classification drawn from EC Directive 1272/2008 - Annex VI

Label elements

Hazard pictogram(s)



Chemwatch Hazard Alert Code: 3

Issue Date: 17/11/2015 Print Date: 18/05/2017

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SIGNAL WORD	DANGER	
Hazard statement(s)		
H315	Causes skin irritation.	
H318	Causes serious eye damage.	
H317	May cause an allergic skin reaction.	
H335	May cause respiratory irritation.*	
Precautionary statement(s) Prevention		
P271	Use only outdoors or in a well-ventilated area.	
P280	Wear protective gloves/protective clothing/eye protection/face protection.	
P261	Avoid breathing dust/fumes.	
P272	Contaminated work clothing should not be allowed out of the workplace.	

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.	
P310	Immediately call a POISON CENTER or doctor/physician.	
P362	Take off contaminated clothing and wash before reuse.	
P302+P352	IF ON SKIN: Wash with plenty of soap and water.	

Precautionary statement(s) Storage

P405	Store locked up.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.

Precautionary statement(s) Disposal

P501

Dispose of contents/container in accordance with local regulations.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
65997-15-1	10-60	portland cement
14808-60-7.	10-60	graded sand
Not Available	0-5	cellulosic thickener

SECTION 4 FIRST AID MEASURES

Description of first aid measures

Eye Contact	If this product comes in contact with the eyes: Immediately hold eyelids apart and flush the eye continuously with running water. 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. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes. Transport to hospital or doctor without delay. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	If skin contact occurs: Immediately remove all contaminated clothing, including footwear. Flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation.
Inhalation	 If furnes or combustion products are inhaled remove from contaminated area. Lay patient down. Keep warm and rested. Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures. Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary. Transport to hospital, or doctor, without delay.
Ingestion	 If swallowed do NOT induce vomiting. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. Observe the patient carefully. Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious. Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink. Seek medical advice.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

- For acute or short-term repeated exposures to highly alkaline materials:
- ▶ Respiratory stress is uncommon but present occasionally because of soft tissue edema.
- Unless endotracheal intubation can be accomplished under direct vision, cricothyroidotomy or tracheotomy may be necessary.

- Oxygen is given as indicated.
- The presence of shock suggests perforation and mandates an intravenous line and fluid administration.
- Damage due to alkaline corrosives occurs by liquefaction necrosis whereby the saponification of fats and solubilisation of proteins allow deep penetration into the tissue.
- Alkalis continue to cause damage after exposure.
- INGESTION:
- Milk and water are the preferred diluents
- No more than 2 glasses of water should be given to an adult.
- Neutralising agents should never be given since exothermic heat reaction may compound injury.
- * Catharsis and emesis are absolutely contra-indicated.
- * Activated charcoal does not absorb alkali.
- * Gastric lavage should not be used.
- Supportive care involves the following:
- Withhold oral feedings initially.
- ▶ If endoscopy confirms transmucosal injury start steroids only within the first 48 hours.
- Carefully evaluate the amount of tissue necrosis before assessing the need for surgical intervention.
- Patients should be instructed to seek medical attention whenever they develop difficulty in swallowing (dysphagia).
- SKIN AND EYE

Injury should be irrigated for 20-30 minutes.

Eye injuries require saline. [Ellenhorn & Barceloux: Medical Toxicology]

SECTION 5 FIREFIGHTING MEASURES

Extinguishing media

- There is no restriction on the type of extinguisher which may be used.
- Use extinguishing media suitable for surrounding area.

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 a significant fire risk, however containers may burn. , silicon dioxide (SiO2) When aluminium oxide dust is dispersed in air, firefighters should wear protection against inhalation of dust particles, which can also contain hazardous substances from the fire absorbed on the alumina particles. May emit poisonous fumes. May emit corrosive fumes. 	
HAZCHEM	Not Applicable	

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	 Remove all ignition sources. Clean up all spills immediately. Avoid contact with skin and eyes. Control personal contact with the substance, by using protective equipment.
Major Spills	Moderate hazard. CAUTION: Advise personnel in area. Alert Emergency Services and tell them location and nature of hazard. Control personal contact by wearing protective clothing.

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

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Safe handling	 Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. Prevent concentration in hollows and sumps.
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.

Suitable container	 Polyethylene or polypropylene container. Check all containers are clearly labelled and free from leaks.
Storage incompatibility	 WARNING: Avoid or control reaction with peroxides. All <i>transition metal</i> peroxides should be considered as potentially explosive. For example transition metal complexes of alkyl hydroperoxides may decompose explosively. The pi-complexes formed between chromium(0), vanadium(0) and other transition metals (haloarene-metal complexes) and mono-or poly-fluorobenzene show extreme sensitivity to heat and are explosive. Avoid strong acids, acid chlorides, acid anhydrides and chloroformates. Avoid contact with copper, aluminium and their alloys.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
Australia Exposure Standards	portland cement	Portland cement	10 mg/m3	Not Available	Not Available	Not Available
Australia Exposure Standards	graded sand	Silica - Crystalline / Quartz (respirable dust)	0.1 mg/m3	Not Available	Not Available	Not Available

EMERGENCY LIMITS

EMERGENOT EMITO					
Ingredient	Material name TEEL-1			TEEL-2	TEEL-3
graded sand	Silica, crystalline-quartz; (Silicon dioxide) 0.075 mg/m3		3	33 mg/m3	200 mg/m3
Ingredient	Original IDLH		Revised IDLH		
portland cement	N.E. mg/m3 / N.E. ppm		5,000 mg/m3		
graded sand	N.E. mg/m3 / N.E. ppm		50 mg/m3		
cellulosic thickener	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. 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	
Eye and face protection	 Safety glasses with side shields. Chemical goggles. 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.
Skin protection	See Hand protection below
Hands/feet protection	 NOTE: The material may produce skin sensitisation in predisposed individuals. Care must be taken, when removing gloves and other protective equipment, to avoid all possible skin contact. Contaminated leather items, such as shoes, belts and watch-bands should be removed and destroyed. 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. 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. Personal hygiene is a key element of effective hand care. Neoprene rubber gloves Experience indicates that the following polymers are suitable as glove materials for protection against undissolved, dry solids, where abrasive particles are not present. polychloroprene. hitrile rubber. butyl rubber.
Body protection	See Other protection below
Other protection	Overalls. P.V.C. apron. Barrier cream.
Thermal hazards	Not Available

Respiratory protection

Particulate. (AS/NZS 1716 & 1715, EN 143:2000 & 149:001, ANSI Z88 or national equivalent)

Required Minimum Protection Factor	Half-Face Respirator	Full-Face Respirator	Powered Air Respirator
up to 10 x ES	P1 Air-line*	-	PAPR-P1 -

up to 50 x ES	Air-line**	P2	PAPR-P2
up to 100 x ES	-	P3	-
		Air-line*	-
100+ x ES	-	Air-line**	PAPR-P3

* - Negative pressure demand ** - Continuous flow

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)

• Respirators may be necessary when engineering and administrative controls do not adequately prevent exposures.

The decision to use respiratory protection should be based on professional judgment that takes into account toxicity information, exposure measurement data, and frequency and likelihood of the worker's exposure - ensure users are not subject to high thermal loads which may result in heat stress or distress due to personal protective equipment (powered, positive flow, full face apparatus may be an option).

Published occupational exposure limits, where they exist, will assist in determining the adequacy of the selected respiratory protection. These may be government mandated or vendor recommended.

Certified respirators will be useful for protecting workers from inhalation of particulates when properly selected and fit tested as part of a complete respiratory protection program.

▶ Use approved positive flow mask if significant quantities of dust becomes airborne.

Try to avoid creating dust conditions.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Fine off-white powder; insoluble in water. Bulk density: 1.5 kg/dm3 (approximately).			
Physical state	Divided Solid	Relative density (Water = 1)	Not Available	
Odour	Not Available	Partition coefficient n-octanol / water	Not Available	
Odour threshold	Not Available	Auto-ignition temperature (°C)	>200	
pH (as supplied)	Not Applicable	Decomposition temperature	Not Available	
Melting point / freezing point (°C)	Not Available	Viscosity (cSt)	Not Applicable	
Initial boiling point and boiling range (°C)	>200	Molecular weight (g/mol)	Not Applicable	
Flash point (°C)	Not Applicable	Taste	Not Available	
Evaporation rate	Not Applicable	Explosive properties	Not Available	
Flammability	Not Applicable	Oxidising properties	Not Available	
Upper Explosive Limit (%)	Not Applicable	Surface Tension (dyn/cm or mN/m)	Not Applicable	
Lower Explosive Limit (%)	Not Applicable	Volatile Component (%vol)	Not Applicable	
Vapour pressure (kPa)	Not Applicable	Gas group	Not Available	
Solubility in water (g/L)	Immiscible	pH as a solution (1%)	11 (suspension)	
Vapour density (Air = 1)	Not Applicable	VOC g/L	Not Applicable	

SECTION 10 STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical stability	 Unstable in the presence of incompatible materials. Product is considered stable. Hazardous polymerisation will not occur.
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 can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage. Persons with impaired respiratory function, airway diseases and conditions such as emphysema or chronic bronchitis, may incur further disability if excessive concentrations of particulate are inhaled. If prior damage to the circulatory or nervous systems has occurred or if kidney damage has been sustained, proper screenings should be conducted on individuals who may be exposed to further risk if handling and use of the material result in excessive exposures. Effects on lungs are significantly enhanced in the presence of respirable particles.
Ingestion	Accidental ingestion of the material may be damaging to the health of the individual.

Skin Contact	This material can cause inflammation of the skin on contact in some persons. The material may accentuate any pre-existing dermatitis condition Handling wet cement can cause dermatitis. Cement when wet is quite alkaline and this alkali action on the skin contributes strongly to cement contact dermatitis since it may cause drying and defatting of the skin which is followed by hardening, cracking, lesions developing, possible infections of lesions and penetration by soluble salts. Open cuts, abraded or irritated skin should not be exposed to this material 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 of the material and ensure that any external damage is suitably protected.			
Eye	If applied to the eyes, this material causes severe eye damage			
Chronic	Long-term exposure to respiratory irritants may result in airwa Skin contact with the material is more likely to cause a sensitis Substance accumulation, in the human body, may occur and m There is some evidence that inhaling this product is more likel Cernent contact dermatitis (CCD) may occur when contact si chromates (chromate compounds) present in trace amounts ir dermatitis can be characterised by fissures, eczematous rash necrosis. Overexposure to the breathable dust may cause coughing, w decreased vital lung capacity and chest infections. Repeated e pneumoconiosis, which is the lodgement of any inhaled dusts particles less than 0.5 microns (1/50000 inch) are present.	ation reaction in some persons com ay cause some concern following re y to cause a sensitisation reaction ir ows an allergic response, which ma some cements and cement produc dystrophic nails, and dry skin; acute eezing, difficulty in breathing and im xposures in the workplace to high le	apared to the general population. sepeated or long-term occupational exposure. In some persons compared to the general population. ay progress to sensitisation. Sensitisation is due to soluble ts. Soluble chromates readily penetrate intact skin. Cement e contact with highly alkaline mixtures may cause localised apaired lung function. Chronic symptoms may include evels of fine-divided dusts may produce a condition known as	
	ΤΟΧΙΟΙΤΥ	IRRITATION		
ABA Barrierflex Powder	Not Available	Not Available		
	ΤΟΧΙCΙΤΥ	IRRITATION		
portland cement	Not Available	Not Available		
	тохісіту	IRRITATION		
graded sand	Not Available	Not Available		
graded sand	Not Available 1. Value obtained from Europe ECHA Registered Substances extracted from RTECS - Register of Toxic Effect of chemical	- Acute toxicity 2.* Value obtained t	from manufacturer's SDS. Unless otherwise specified data	
	 Value obtained from Europe ECHA Registered Substances extracted from RTECS - Register of Toxic Effect of chemical The following information refers to contact allergens as a grou Contact allergies quickly manifest themselves as contact ecze a cell-mediated (T lymphocytes) immune reaction of the delay reactions. 	- Acute toxicity 2.* Value obtained I Substances p and may not be specific to this pr ma, more rarely as urticaria or Quin ad type. Other allergic skin reactions after exposure to the material ends. exposure to high levels of highly irr fual, with sudden onset of persisten is of RADS include a reversible airfl	oduct. icke's oedema. The pathogenesis of contact eczema involves s, e.g. contact urticaria, involve antibody-mediated immune This may be due to a non-allergic condition known as reactive itating compound. Main criteria for diagnosing RADS include t asthma-like symptoms within minutes to hours of a low pattern on lung function tests, moderate to severe	
Legend:	 Value obtained from Europe ECHA Registered Substances extracted from RTECS - Register of Toxic Effect of chemical The following information refers to contact allergens as a grou Contact allergies quickly manifest themselves as contact ecze a cell-mediated (T lymphocytes) immune reaction of the delay reactions. Asthma-like symptoms may continue for months or even years airways dysfunction syndrome (RADS) which can occur after the absence of previous airways disease in a non-atopic indivi documented exposure to the irritant. Other criteria for diagnos 	- Acute toxicity 2.* Value obtained I Substances p and may not be specific to this pr ma, more rarely as urticaria or Quin ed type. Other allergic skin reactions after exposure to the material ends. exposure to high levels of highly in fual, with sudden onset of persisten is of RADS include a reversible airf d the lack of minimal lymphocytic in	oduct. icke's oedema. The pathogenesis of contact eczema involves s, e.g. contact urticaria, involve antibody-mediated immune This may be due to a non-allergic condition known as reactive itating compound. Main criteria for diagnosing RADS include t asthma-like symptoms within minutes to hours of a low pattern on lung function tests, moderate to severe	
PORTLAND CEMENT &	 Value obtained from Europe ECHA Registered Substances extracted from RTECS - Register of Toxic Effect of chemical The following information refers to contact allergens as a grou Contact allergies quickly manifest themselves as contact ecze a cell-mediated (T lymphocytes) immune reaction of the delay reactions. Asthma-like symptoms may continue for months or even years airways dysfunction syndrome (RADS) which can occur after the absence of previous airways disease in a non-atopic indivi documented exposure to the irritant. Other criteria for diagnos bronchial hyperreactivity on methacholine challenge testing, and 	- Acute toxicity 2.* Value obtained I Substances p and may not be specific to this pr ma, more rarely as urticaria or Quin ed type. Other allergic skin reactions after exposure to the material ends. exposure to high levels of highly in fual, with sudden onset of persisten is of RADS include a reversible airf d the lack of minimal lymphocytic in	oduct. icke's oedema. The pathogenesis of contact eczema involves s, e.g. contact urticaria, involve antibody-mediated immune This may be due to a non-allergic condition known as reactive itating compound. Main criteria for diagnosing RADS include t asthma-like symptoms within minutes to hours of a low pattern on lung function tests, moderate to severe	
PORTLAND CEMENT PORTLAND CEMENT & GRADED SAND	 Value obtained from Europe ECHA Registered Substances extracted from RTECS - Register of Toxic Effect of chemical The following information refers to contact allergens as a grou Contact allergies quickly manifest themselves as contact ecze a cell-mediated (T lymphocytes) immune reaction of the delay reactions. Asthma-like symptoms may continue for months or even years airways dysfunction syndrome (RADS) which can occur after the absence of previous airways disease in a non-atopic indivi documented exposure to the irritant. Other criteria for diagnos bronchial hyperreactivity on methacholine challenge testing, an No significant acute toxicological data identified in literature s 	- Acute toxicity 2.* Value obtained I Substances p and may not be specific to this pr ma, more rarely as urticaria or Quin ad type. Other allergic skin reactions after exposure to the material ends. exposure to high levels of highly irr fual, with sudden onset of persisten is of RADS include a reversible airfl ad the lack of minimal lymphocytic ir earch.	oduct. acke's oedema. The pathogenesis of contact eczema involves s, e.g. contact urticaria, involve antibody-mediated immune This may be due to a non-allergic condition known as reactive itating compound. Main criteria for diagnosing RADS include t asthma-like symptoms within minutes to hours of a low pattern on lung function tests, moderate to severe iflammation, without eosinophilia.	
PORTLAND CEMENT PORTLAND CEMENT & GRADED SAND Acute Toxicity	 1. Value obtained from Europe ECHA Registered Substances extracted from RTECS - Register of Toxic Effect of chemical The following information refers to contact allergens as a grou Contact allergies quickly manifest themselves as contact ecze a cell-mediated (T lymphocytes) immune reaction of the delay reactions. Asthma-like symptoms may continue for months or even years airways dysfunction syndrome (RADS) which can occur after the absence of previous airways disease in a non-atopic individ documented exposure to the irritant. Other criteria for diagnos bronchial hyperreactivity on methacholine challenge testing, at No significant acute toxicological data identified in literature s 	- Acute toxicity 2.* Value obtained I Substances p and may not be specific to this pr ma, more rarely as urticaria or Quin ad type. Other allergic skin reactions after exposure to the material ends. exposure to high levels of highly in tual, with sudden onset of persistent is of RADS include a reversible airfl ad the lack of minimal lymphocytic in earch. Carcinogenicity	oduct. Icke's oedema. The pathogenesis of contact eczema involves s, e.g. contact urticaria, involve antibody-mediated immune This may be due to a non-allergic condition known as reactive itating compound. Main criteria for diagnosing RADS include t asthma-like symptoms within minutes to hours of a low pattern on lung function tests, moderate to severe Iflammation, without eosinophilia.	
PORTLAND CEMENT PORTLAND CEMENT & GRADED SAND Acute Toxicity Skin Irritation/Corrosion Serious Eye	 1. Value obtained from Europe ECHA Registered Substances extracted from RTECS - Register of Toxic Effect of chemical sector and the following information refers to contact allergens as a group Contact allergies quickly manifest themselves as contact eczed a cell-mediated (T lymphocytes) immune reaction of the delay reactions. Asthma-like symptoms may continue for months or even years airways dysfunction syndrome (RADS) which can occur after the absence of previous airways disease in a non-atopic individe documented exposure to the irritant. Other criteria for diagnos bronchial hyperreactivity on methacholine challenge testing, an No significant acute toxicological data identified in literature set is a set of the set of the	- Acute toxicity 2.* Value obtained I Substances p and may not be specific to this pr ma, more rarely as urticaria or Quin ed type. Other allergic skin reactions after exposure to the material ends. exposure to high levels of highly irr lual, with sudden onset of persistent is of RADS include a reversible aif ad the lack of minimal lymphocytic ir earch. Carcinogenicity Reproductivity	oduct. acke's oedema. The pathogenesis of contact eczema involves s, e.g. contact urticaria, involve antibody-mediated immune This may be due to a non-allergic condition known as reactive itating compound. Main criteria for diagnosing RADS include t asthma-like symptoms within minutes to hours of a low pattern on lung function tests, moderate to severe iflammation, without eosinophilia.	

Data available to make classification

S – Data Not Available to make classification

SECTION 12 ECOLOGICAL INFORMATION

ity				
	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE SOURCE
ABA Barrierflex Powder	Not Applicable	Not Applicable	Not Applicable	Not Not Applicable Applicabl
	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE SOURCE
portland cement	Not Applicable	Not Applicable	Not Applicable	Not Not Applicable Applicabl
	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE SOURCE
graded sand	Not Applicable	Not Applicable	Not Applicable	Not Not Applicable Applicabl

Legend:	Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 3. EPIWIN Suite V3.12 (QSAR) - 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		
DO NOT discharge into sewer of	r waterways.		
Persistence and degradab	ility		
Ingredient	Persistence: Water/Soil	Persistence: Air	
	No Data available for all ingredients	No Data available for all ingredients	
Bioaccumulative potentia			
Ingredient	Bioaccumulation		
	No Data available for all ingredients		
Mobility in soil			
Ingredient	Mobility		
	No Data available for all ingredients		

SECTION 13 DISPOSAL CONSIDERATIONS

aste treatment methods	
Product / Packaging disposal	 DO NOT allow wash water from cleaning or process equipment to enter drains. It may be necessary to collect all wash water for treatment before disposal. In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first. Where in doubt contact the responsible authority. Recycle wherever possible or consult manufacturer for recycling options. Consult State Land Waste Management Authority for disposal. Bury residue in an authorised landfill. Recycle containers if possible, or dispose of in an authorised landfill.

SECTION 14 TRANSPORT INFORMATION

Labels Required Marine Pollutant NO HAZCHEM Not Applicable

Land transport (ADG): 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

•	15-1) IS FOUND ON THE FOLLOWING REGULATORY LISTS	
Australia Exposure Standards		Australia Inventory of Chemical Substances (AICS)
GRADED SAND(14808-60-7.)	IS FOUND ON THE FOLLOWING REGULATORY LISTS	
Australia Exposure Standards		Australia Inventory of Chemical Substances (AICS)
Australia Hazardous Substances Information System - Consolidated Lists		International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs
National Inventory	Status	
Australia - AICS	Y	
Canada - DSL	Y	
Canada - NDSL	N (portland cement; graded sand)	
China - IECSC	Y	
Europe - EINEC / ELINCS / NLP	Y	
Japan - ENCS	N (portland cement; graded sand)	
Korea - KECI	Υ	
New Zealand - NZIoC	Y	
Philippines - PICCS	N (portland cement)	
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.

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_o IDLH: Immediately Dangerous to Life or Health Concentrations OSF: Odour Safety Factor NOAEL: No Observed Adverse Effect Level LOAEL: Lowest Observed Adverse Effect Level LOAEL: Lowest Observed Adverse Effect Level LOD: Limit of Detection OTV: Odour Threshold Value BCF: BioConcentration Factors BEI: Biological Exposure Index

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