Dunlop Builder’s Bond

Ardex (Ardex Australia)

Chemwatch:	40-4097	Print Date:	26/11/2013
Version No:	2.1.1.1	Issue Date:	26/11/2013
Material Safety Data Sheet according to NOHSC and ADG requirements		S.Local.AUS.EN	

SECTION 1 Identification of the substance / mixture and of the company / undertaking

Product Identifier

Product name:	Dunlop Builder’s Bond
Chemical Name:	Not Applicable
Synonyms:	Not Available
Proper shipping name:	CORROSIVE SOLID, N.O.S. (contains triethylenetetramine)
Chemical formula:	Not Applicable
Other means of identification:	Not Available
CAS number:	Not Applicable

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

Relevant identified uses:	Use according to manufacturer's directions.

Details of the supplier of the safety data sheet

Registered company name:	Ardex (Ardex Australia)		
Address:	20 Powers Road Seven Hills 2147 NSW Australia		
Telephone:	1800 224 070		
Fax:	+61 2 9838 7817		
Website:	Not Available		
Email:	Not Available		

Emergency telephone number

Association / Organisation:	Not Available		
Emergency telephone numbers:	1800 222 841		
Other emergency telephone numbers:	1800 222 841		

SECTION 2 Hazards identification

Classification of the substance or mixture

HAZARDOUS SUBSTANCE. DANGEROUS GOODS. According to the Criteria of NOHSC, and the ADG Code.

ChemWatch Hazard Ratings

		Min/Max
Flammability	0	
Toxicity	2	
Body Contact	3	
Reactivity	1	
Chronic	2	

0 = Minimum
1 = Low
2 = Moderate
3 = High
4 = Extreme

Poisons Schedule:	S5

Risk Phrases [1]

R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R43	May cause SENSITISATION by skin contact.
R34	Causes burns.
R41	Risk of serious damage to eyes.
R22	Harmful if swallowed.
R62(3)	Possible risk of impaired fertility.
R63(3)	Possible risk of harm to the unborn child.

Legend:*1. Classified by Chemwatch; 2. Classification drawn from HSIS ; 3. Classification drawn from EC Directive 1272/2008 - Annex VI*

Label elements

Relevant risk statements are found in section 2

Indication(s) of danger:	C, N

Safety advice:

S01	Keep locked up.
S20	When using do not eat or drink.
S25	Avoid contact with eyes.
S26	In case of contact with eyes, rinse with plenty of water and contact Doctor or Poisons Information Centre.
S28	After contact with skin, wash immediately with plenty of water
S29	Do not empty into drains.
S35	This material and its container must be disposed of in a safe way.
S36	Wear suitable protective clothing.

S37	Wear suitable gloves.
S39	Wear eye/face protection.
S40	To clean the floor and all objects contaminated by this material, use water and detergent.
S45	In case of accident or if you feel unwell IMMEDIATELY contact Doctor or Poisons Information Centre (show label if possible).
S46	If swallowed, seek medical advice immediately and show this container or label.
S53	Avoid exposure - obtain special instructions before use.
S56	Dispose of this material and its container at hazardous or special waste collection point.
S57	Use appropriate container to avoid environmental contamination.
S61	Avoid release to the environment. Refer to special instructions/Safety data sheets.
S64	If swallowed, rinse mouth with water (only if the person is conscious).

Other hazards

Skin contact may produce health damage*.

Limited evidence of a carcinogenic effect*.

Cumulative effects may result following exposure*.

Possible respiratory sensitizer*.

SECTION 3 Composition / information on ingredients

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
Part A Containing:		
25068-38-6	40-70	bisphenol A/ epichlorohydrin resin, liquid
65997-17-3	8.5-13	glass, oxide
13463-67-7	0.5-1.5	titanium dioxide
Part B Containing:		
140-31-8	10-20	N-aminoethylpiperazine
25154-52-3	10-20	nonylphenol
14807-96-6	10-20	talc
107-21-1	3-7	ethylene glycol
100-51-6	1-5	benzyl alcohol
112-24-3	0.5-1.5	triethylenetetramine
7631-86-9	0.1-1	silica amorphous
14808-60-7	<1	silica crystalline - quartz

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 or hair contact occurs:

- Immediately flush body and clothes with large amounts of water, using safety shower if available.
- Quickly remove all contaminated clothing, including footwear.
- Wash skin and hair with running water. Continue flushing with water until advised to stop by the Poisons Information Centre.
- Transport to hospital, or doctor.

Inhalation:

- If fumes 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.
- Inhalation of vapours or aerosols (mists, fumes) may cause lung oedema.
- Corrosive substances may cause lung damage (e.g. lung oedema, fluid in the lungs).
- As this reaction may be delayed up to 24 hours after exposure, affected individuals need complete rest (preferably in semi-recumbent posture) and must be kept under medical observation even if no symptoms are (yet) manifested.
- Before any such manifestation, the administration of a spray containing a dexamethasone derivative or beclomethasone derivative may be considered.

This must definitely be left to a doctor or person authorised by him/her. (ICSC13719)

Ingestion:

- For advice, contact a Poisons Information Centre or a doctor at once.
- Urgent hospital treatment is likely to be needed.
- 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.
- Transport to hospital or doctor without delay.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

For acute or short term repeated exposures to ethylene glycol:

- Early treatment of ingestion is important. Ensure emesis is satisfactory.
- Test and correct for metabolic acidosis and hypocalcaemia.
- Apply sustained diuresis when possible with hypertonic mannitol.
- Evaluate renal status and begin haemodialysis if indicated. [I.L.O]
- Rapid absorption is an indication that emesis or lavage is effective only in the first few hours. Cathartics and charcoal are generally not effective.

- Correct acidosis, fluid/electrolyte balance and respiratory depression in the usual manner. Systemic acidosis (below 7.2) can be treated with intravenous sodium bicarbonate solution.
- Ethanol therapy prolongs the half-life of ethylene glycol and reduces the formation of toxic metabolites.
- Pyridoxine and thiamine are cofactors for ethylene glycol metabolism and should be given (50 to 100 mg respectively) intramuscularly, four times per day for 2 days.
- Magnesium is also a cofactor and should be replenished. The status of 4-methylpyrazole, in the treatment regime, is still uncertain. For clearance of the material and its metabolites, haemodialysis is much superior to peritoneal dialysis.

[Ellenhorn and Barceloux: Medical Toxicology]
It has been suggested that there is a need for establishing a new biological exposure limit before a workshift that is clearly below 100 mmol ethoxy-acetic acids per mole creatinine in morning urine of people occupationally exposed to ethylene glycol ethers. This arises from the finding that an increase in urinary stones may be associated with such exposures.
Laitinen J., et al: Occupational & Environmental Medicine 1996; 53, 595-600
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]
For acute or short term repeated exposures to phenols/ cresols:

- Phenol is absorbed rapidly through lungs and skin. [Massive skin contact may result in collapse and death]*
- [Ingestion may result in ulceration of upper respiratory tract; perforation of oesophagus and/or stomach, with attendant complications, may occur. Oesophageal stricture may occur.]*
- An initial excitatory phase may present. Convulsions may appear as long as 18 hours after ingestion. Hypotension and ventricular tachycardia that require vasopressor and antiarrhythmic therapy, respectively, can occur.
- Respiratory arrest, ventricular dysrhythmias, seizures and metabolic acidosis may complicate severe phenol exposures so the initial attention should be directed towards stabilisation of breathing and circulation with ventilation, intubation, intravenous lines, fluids and cardiac monitoring as indicated.
- [Vegetable oils retard absorption; do NOT use paraffin oils or alcohols. Gastric lavage, with endotracheal intubation, should be repeated until phenol odour is no longer detectable; follow with vegetable oil. A saline cathartic should then be given.]* ALTERNATIVELY: Activated charcoal (1g/kg) may be given. A cathartic should be given after oral activated charcoal.
- Severe poisoning may require slow intravenous injection of methylene blue to treat methaemoglobinaemia.
- [Renal failure may require haemodialysis.]*
- Most absorbed phenol is biotransformed by the liver to ethereal and glucuronide sulfates and is eliminated almost completely after 24 hours. [*Ellenhorn and Barceloux: Medical Toxicology*] *[*Union Carbide*]

BIOLOGICAL EXPOSURE INDEX - BEI
These represent the determinants observed in specimens collected from a healthy worker who has been exposed to the Exposure Standard (ES or TLV):

Determinant	Index	Sampling Time	Comments
1. Total phenol in blood	250 mg/gm creatinine	End of shift	B, NS

B: Background levels occur in specimens collected from subjects **NOT** exposed
NS: Non-specific determinant; also seen in exposure to other materials

SECTION 5 Firefighting measures

Extinguishing media

- Alcohol stable foam.
- Dry chemical powder.
- BCF (where regulations permit).
- Carbon dioxide.

Special hazards arising from 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:

- Alert Fire Brigade and tell them location and nature of hazard.
- Wear full body protective clothing with breathing apparatus.
- Prevent, by any means available, spillage from entering drains or water course.
- Use fire fighting procedures suitable for surrounding area.

Fire/Explosion Hazard:

Combustible. Will burn if ignited.&Combustion products include:

SECTION 6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

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:

- Clear area of personnel and move upwind.
- Alert Fire Brigade and tell them location and nature of hazard.
- Wear full body protective clothing with breathing apparatus.
- Prevent, by any means available, spillage from entering drains or water course.

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

SECTION 7 Handling and storage

Precautions for safe handling

Safe handling

- Avoid all personal contact, including inhalation.
- Wear protective clothing when risk of exposure occurs.
- Use in a well-ventilated area.
- Avoid contact with moisture.

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:

- Lined metal can, lined metal pail/ can.
- Plastic pail.
- Polyliner drum.
- Packing as recommended by manufacturer.

Storage incompatibility:

- Avoid contact with copper, aluminium and their alloys.
- Avoid reaction with oxidising agents

Package Material Incompatibilities:

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	titanium dioxide	Titanium dioxide	10 (mgm3)	Not Available	Not Available	This value is for inspirable dust containing no asbestos and < 1% crystalline silica (see Chapter 14)
Australia Exposure Standards	talc	Soapstone (respirable dust) / Talc, (containing no asbestos fibres)	3 (mgm3) / 2.5 (mgm3)	Not Available	Not Available	(see also Soapstone;This value is for inspirable dust containing no asbestos and < 1% crystalline silica (see Chapter 14))
Australia Exposure Standards	ethylene glycol	Ethylene glycol (particulate) / Ethylene glycol (vapour)	10 (mgm3) / 52 (mgm3) / 20 (ppm)	104 (mgm3) / 40 (ppm)	Not Available	Not Available
Australia Exposure Standards	silica amorphous	Silica - Amorphous Fumed silica (respirable dust) / Fumed silica (respirable dust)	2 (mgm3)	Not Available	Not Available	(see Chapter 14) / (see Silica - Amorphous)
Australia Exposure Standards	silica amorphous	Silica - Amorphous Precipitated silica / Silica - Amorphous Silica gel / Precipitated silica / Silica gel	10 (mgm3)	Not Available	Not Available	This value is for inspirable dust containing no asbestos and < 1% crystalline silica (see Chapter 14) / (see Silica - Amorphous);This value is for inspirable dust containing no asbestos and < 1% crystalline silica (see Chapter 14)
Australia Exposure Standards	silica amorphous	Silica - Amorphous Diatomaceous earth (uncalcined) / Diatomaceous earth (uncalcined)	10 (mgm3)	Not Available	Not Available	This value is for inspirable dust containing no asbestos and < 1% crystalline silica (see Chapter 14) / (see Silica - Amorphous);This value is for inspirable dust containing no asbestos and < 1% crystalline silica (see Chapter 14)
Australia Exposure Standards	silica amorphous	Silica, fused	Not Available	Not Available	Not Available	No interim value (under review - see Chapter 14)
Australia Exposure Standards	silica crystalline - quartz	Silica - Crystalline Quartz (respirable dust) / Quartz (respirable dust)	0.1 (mgm3)	Not Available	Not Available	(see Chapter 14) / (see Silica - Crystalline)

Emergency Limits

Ingredient	TEEL-0	TEEL-1	TEEL-2	TEEL-3
bisphenol A/ epichlorohydrin resin, liquid	125 / 50 / 4(ppm)	350 / 150 / 12.5(ppm)	500 / 100(ppm)	500(ppm)
glass, oxide	5(ppm)	15(ppm)	60(ppm)	500(ppm)
titanium dioxide	15(ppm)	15(ppm)	15(ppm)	500(ppm)
N-aminoethylpiperazine	2.5(ppm)	7.5(ppm)	50(ppm)	500(ppm)
nonylphenol	6 / 5(ppm)	20 / 15(ppm)	125 / 100(ppm)	500(ppm)
talc	2(ppm)	2(ppm)	10(ppm)	500(ppm)

ethylene glycol	10(ppm)	39.4(ppm)	40(ppm)	60(ppm)
benzyl alcohol	10(ppm)	60(ppm)	150(ppm)	150(ppm)
triethylenetetramine	1(ppm)	7.5(ppm)	60(ppm)	150(ppm)
silica amorphous	6 / 0.3 / 2 / 10(ppm)	30 / 0.9 / 6 / 15 / 18(ppm)	50 / 1.5 / 200 / 125 / 10 / 30(ppm)	500 / 250 / 50(ppm)
silica crystalline - quartz	0.3(ppm)	0.3(ppm)	0.3(ppm)	50(ppm)

Ingredient	Original IDLH	Revised IDLH
titanium dioxide	N.E.(mgm3)N.E.(ppm)	5,000(mgm3)
talc	N.E.(mgm3)N.E.(ppm)	1,000 / 3,000(mgm3)
silica amorphous	N.E.(mgm3)N.E.(ppm)	3,000(mgm3)
silica crystalline - quartz	N.E.(mgm3)N.E.(ppm)	50(mgm3)

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.

Personal protection

Eye and face protection:

- Chemical goggles.
- Full face shield may be required for supplementary but never for primary protection of eyes
- Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lens or restrictions on use, should be created for each workplace or task.

Skin protection:

See Hand protection below

Hand 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.

Body protection:

See Other protection below

Other protection:

- Overalls.
- PVC Apron.
- PVC protective suit may be required if exposure severe.
- Eyewash unit.

Thermal hazards:

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
Dunlop Builder's Bond

Material	CPI
BUTYL	A

* 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

Respiratory protection:

Type KAX-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 5 x ES	KAX-AUS / Class 1 P3	-	KAX-PAPR-AUS / Class 1 P3
up to 25 x ES	Air-line*	KAX-2 P3	KAX-PAPR-2 P3
up to 50 x ES	-	KAX-3 P3	-
50+ x ES	-	Air-line**	-

^ - 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

Coloured paste with slight amine odour; does not mix with water.

Physical state	Non Slump Paste	**Relative density (Water = 1)**	1.27-1.35
Odour	Not Available	**Partition coefficient n-octanol / water**	Not Available
Odour threshold	Not Available	**Auto-ignition temperature (°C)**	Not Available
pH (as supplied)	Not Available	**Decomposition temperature**	Not Available
Melting point / freezing point (°C)	Not Available	**Viscosity (cSt)**	Not Available
Initial boiling point and boiling range (°C)	Not Available	**Molecular weight (g/mol)**	Not Applicable
Flash point (°C)	>93	**Taste**	Not Available
Evaporation rate	Not Available	**Explosive properties**	Not Available
Flammability	Not Available	**Oxidising properties**	Not Available
Upper Explosive Limit (%)	Not Available	**Surface Tension (dyn/cm or mN/m)**	Not Available

Lower Explosive Limit (%)	Not Available	**Volatile Component (%vol)**	79 g/l
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		

SECTION 10 Stability and reactivity

Reactivity:

See section 7

Chemical stability:

- 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:

Inhalation of epoxy resin amine hardener vapours (including polyamines and amine adducts) may produce bronchospasm and coughing episodes lasting days after cessation of the exposure. Even faint traces of these vapours may trigger an intense reaction in individuals showing "amine asthma". The literature records several instances of systemic intoxications following the use of amines in epoxy resin systems.
Excessive exposure to the vapours of epoxy amine curing agents may cause both respiratory irritation and central nervous system depression.

Ingestion:

Accidental ingestion of the material may be harmful; animal experiments indicate that ingestion of less than 150 gram may be fatal or may produce serious damage to the health of the individual.
The material can produce chemical burns within the oral cavity and gastrointestinal tract following ingestion.
Effects on the nervous system characterise over-exposure to higher aliphatic alcohols. These include headache, muscle weakness, giddiness, ataxia, (loss of muscle coordination), confusion, delirium and coma.

Skin Contact:

The material can produce chemical burns following direct contact with the skin.
Skin contact with the material may damage the health of the individual; systemic effects may result following absorption.
Amine epoxy-curing agents (hardeners) may produce primary skin irritation and sensitisation dermatitis in predisposed individuals. Cutaneous reactions include erythema, intolerable itching and severe facial swelling.

Eye:

The material can produce chemical burns to the eye following direct contact. Vapours or mists may be extremely irritating.
When applied to the eye(s) of animals, the material produces severe ocular lesions which are present twenty-four hours or more after instillation.

Chronic:

Repeated or prolonged exposure to corrosives may result in the erosion of teeth, inflammatory and ulcerative changes in the mouth and necrosis (rarely) of the jaw. Bronchial irritation, with cough, and frequent attacks of bronchial pneumonia may ensue. Gastrointestinal disturbances may also occur. Chronic exposures may result in dermatitis and/or conjunctivitis.

TOXICITY	IRRITATION
Dunlop Builder's Bond	
Not Available	Not Available
bisphenol A/ epichlorohydrin resin, liquid	
Oral (rat) LD50: 11400 mg/kg	Eye (rabbit): 100mg - Mild
Not Available	Not Available
glass, oxide	
Not Available	Not Available
titanium dioxide	
Oral (Mouse) LD50: >10000 mg/kg *	Skin (human): 0.3 mg /3D (int)-mild *
Oral (Rat) LD50: >20000 mg/kg *	
Not Available	Not Available
N-aminoethylpiperazine	
Dermal (rabbit) LD50: 880 mg/kg	Eye (rabbit): 20 mg/24h - mod
Intraperitoneal (Mouse) LD50: 250 mg/kg	Skin (rabbit): 0.1 mg/24h - mild
Oral (rat) LD50: 2410 mg/kg	Skin (rabbit): 5 mg/24h - SEVERE
Not Available	Not Available
nonylphenol	
Oral (rat) LD50: 1620 mg/kg	Skin(rabbit):10mg/24h(open)-SEVERE
Not Available	Not Available
talc	
	Skin (human): 0.3 mg/3d-I mild
Not Available	Not Available
ethylene glycol	
Dermal (rabbit) LD50: 9530 mg/kg	Eye (rabbit): 100 mg/1h - mild
Inhalation (rat) LC50: 50100 mg/m3/8 hr	Eye (rabbit): 12 mg/m3/3D
Oral (rat) LD50: 4700 mg/kg	Eye (rabbit): 1440mg/6h-moderate
	Eye (rabbit): 500 mg/24h - mild
	Skin (rabbit): 555 mg(open)-mild

Not Available	Not Available
benzyl alcohol	
Dermal (rabbit) LD50: 2000 mg/kg	Eye (rabbit): 0.75 mg open SEVERE
Inhalation (rat) LC50: >4178 mg/m3/4h	Skin (man): 16 mg/48h-mild
Inhalation (rat) LC50: 1000 ppm/8h	Skin (rabbit):10 mg/24h open-mild
Oral (rat) LD50: 1230 mg/kg	
Not Available	Not Available
triethylenetetramine	
Dermal (rabbit) LD50: 805 mg/kg	Eye (rabbit):20 mg/24 h - moderate
Oral (rat) LD50: 2500 mg/kg	Eye (rabbit); 49 mg - SEVERE
	Skin (rabbit): 490 mg open SEVERE
	Skin (rabbit): 5 mg/24 SEVERE
Not Available	Not Available
silica amorphous	
Dermal (rabbit) LD50: >5000 mg/kg *	* [Grace]
Inhalation (rat) LC50: >0.139 mg/l/14h *	Eye (rabbit): non-irritating *
Oral (rat) LD50: 3160 mg/kg	Skin (rabbit): non-irritating *
Not Available	Not Available
silica crystalline - quartz	
	Y
Not Available	Not Available

Not available. Refer to individual constituents.

GLASS, OXIDE

No significant acute toxicological data identified in literature search.
A similar spherical glass powder was nontoxic to rats at 5,000 mg/kg. All animals survived, gained weight and appeared active and healthy. There were no signs of gross toxicity, adverse pharmacologic effects or abnormal behavior. There are no known reports of subchronic toxicity of nonfibrous glass. There are no known reports of carcinogenicity of nonfibrous glass When tested for primary irritation potential, a similar material caused minimal irritation to eyes and was non-irritating to skin. Dust in excess of recommended exposure limits may result in irritation to the respiratory tract

TITANIUM DIOXIDE

The material may produce moderate eye irritation leading to inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.
The material may cause skin irritation after prolonged or repeated exposure and may produce a contact dermatitis (nonallergic). This form of dermatitis is often characterised by skin redness (erythema) and swelling epidermis.
* IUCLID

NONYLPHENOL

Skin (rabbit) LD50: 2140 mg/kg Skin (rabbit): 500 mg(open)-mod Eye (rabbit): 0.5 mg (open)-SEVERE
The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.
The material may produce severe skin irritation after prolonged or repeated exposure, and may produce a contact dermatitis (nonallergic). This form of dermatitis is often characterised by skin redness (erythema) thickening of the epidermis.

TALC

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.

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.
[Estimated Lethal Dose (human) 100 ml; RTECS quoted by Orica] Substance is reproductive effector in rats (birth defects). Mutagenic to rat cells.

BENZYL ALCOHOL

The material may cause skin irritation after prolonged or repeated exposure and may produce a contact dermatitis (nonallergic). This form of dermatitis is often characterised by skin redness (erythema) and swelling the epidermis. Histologically there may be intercellular oedema of the spongy layer (spongiosis) and intracellular oedema of the epidermis.
For benzyl alkyl alcohols:

SILICA AMORPHOUS

For silica amorphous:
When experimental animals inhale synthetic amorphous silica (SAS) dust, it dissolves in the lung fluid and is rapidly eliminated. If swallowed, the vast majority of SAS is excreted in the faeces and there is little accumulation in the body. Following absorption across the gut, SAS is eliminated via urine without modification in animals and humans.
Reports indicate high/prolonged exposures to amorphous silicas induced lung fibrosis in experimental animals; in some experiments these effects were reversible. [PATTYS]

SILICA CRYSTALLINE - QUARTZ

WARNING: For inhalation exposure ONLY: This substance has been classified by the IARC as Group 1:

BISPHENOL A/ EPICHLOROHYDRIN RESIN, LIQUID, N-AMINOETHYLPIPERAZINE, TRIETHYLENETETRAMINE

The following information refers to contact allergens as a group and may not be specific to this product.
Contact allergies quickly manifest themselves as contact eczema, more rarely as urticaria or Quincke's oedema. The pathogenesis of contact eczema involves a cell-mediated (T lymphocytes) immune reaction of the delayed type. Other allergic skin reactions, e.g. contact urticaria, involve antibody-mediated immune reactions.

Acute Toxicity:	Acute Toxicity (Oral) Category 4	**Carcinogenicity:**	Not Applicable
Skin Irritation/Corrosion:	Skin Corrosion/Irritation Category 1B	**Reproductivity:**	Reproductive Toxicity Category 2
Serious Eye Damage/Irritation:	Serious Eye Damage Category 1	**STOT - Single Exposure:**	Not Applicable
Respiratory or Skin sensitisation:	Skin Sensitizer Category 1	**STOT - Repeated Exposure:**	Not Applicable
Mutagenicity:	Not Applicable	**Aspiration Hazard:**	Not Applicable

CMR STATUS

SKIN

ethylene glycol	Australia Exposure Standards - Skin	Sk

SECTION 12 Ecological information

Toxicity

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Prevent, by any means available, spillage from entering drains or water courses.

DO NOT discharge into sewer or waterways.

Persistence and degradability

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

Bioaccumulative potential

Ingredient	Bioaccumulation
Not Available	Not Available

Mobility in soil

Ingredient	Mobility
Not Available	Not Available

SECTION 13 Disposal considerations

Waste treatment methods

Product / Packaging disposal:

- Containers may still present a chemical hazard/ danger when empty.
- Return to supplier for reuse/ recycling if possible.

Otherwise:

- If container can not be cleaned sufficiently well to ensure that residuals do not remain or if the container cannot be used to store the same product, then puncture containers, to prevent re-use, and bury at an authorised landfill.

SECTION 14 Transport information

Labels Required:

Marine Pollutant

HAZCHEM: 2X

Land transport (ADG)

UN number	1759	**Packing group**	III
UN proper shipping name	CORROSIVE SOLID, N.O.S. (contains triethylenetetramine)	**Environmental hazard**	No relevant data
Transport hazard class(es)	Class: 8 Subrisk:	**Special precautions for user**	Special provisions: 223 274 limited quantity: 5 kg

Air transport (ICAO-IATA / DGR)

UN number	1759	**Packing group**	III
UN proper shipping name	Corrosive solid, n.o.s. * (contains triethylenetetramine)	**Environmental hazard**	No relevant data
Transport hazard class(es)	ICAO/IATA Class: 8 ICAO / IATA Subrisk: ERG Code: 8L	**Special precautions for user**	Special provisions: A3A803 Cargo Only Packing Instructions: 864 Cargo Only Maximum Qty / Pack: 100 kg Passenger and Cargo Packing Instructions: 860 Passenger and Cargo Maximum Qty / Pack: 25 kg Passenger and Cargo Limited Quantity Packing Instructions: Y845 Passenger and Cargo Maximum Qty / Pack: 5 kg

Sea transport (IMDG-Code / GGVSee)

UN number	1759	**Packing group**	III
UN proper shipping name	CORROSIVE SOLID, N.O.S. (contains triethylenetetramine)	**Environmental hazard**	No relevant data
Transport hazard class(es)	IMDG Class: 8 IMDG Subrisk:	**Special precautions for user**	EMS Number: F-A,S-B Special provisions: 223 274 Limited Quantities: 5 kg

Transport in bulk according to Annex II of MARPOL 73 / 78 and the IBC code

Source	Ingredient	Pollution Category	Residual Concentration - Outside Special Area (% w/w)	Residual Concentrati
IMO MARPOL 73/78 (Annex II) - List of Other Liquid Substances	ethylene glycol	Not Available	Not Available	Not Available

SECTION 15 Regulatory information

Safety, health and environmental regulations / legislation specific for the substance or mixture

bisphenol A/ epichlorohydrin resin, liquid(25068-38-6) is found on the following regulatory lists

"Sigma-AldrichTransport Information","OECD List of High Production Volume (HPV) Chemicals","Australia High Volume Industrial Chemical List (HVICL)","Australia Hazardous Substances Information System - Consolidated Lists","Australia Inventory of Chemical Substances (AICS)","Regulations concerning the International Carriage of Dangerous Goods by Rail - Table A: Dangerous Goods List - RID 2013 (English)","International Air Transport Association (IATA) Dangerous Goods Regulations","International Maritime Dangerous Goods Requirements (IMDG Code) - Substance Index","Australia Dangerous Goods Code (ADG Code) - Dangerous Goods List","International Maritime Dangerous Goods Requirements (IMDG Code)","Australia Dangerous Goods Code (ADG Code) - List of Emergency Action Codes","Australia - New South Wales Protection of the Environment Operations (Waste) Regulation 2005 - Characteristics of trackable wastes","OSPAR National List of Candidates for Substitution – United Kingdom","Australia - Victoria Occupational Health and Safety Regulations - Schedule 9: Materials at Major Hazard Facilities (And Their Threshold Quantity) Table 2","Australia FAISD Handbook - First Aid Instructions, Warning Statements, and General Safety Precautions","Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Appendix E (Part 2)","Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Appendix F (Part 3)","Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 5","Australia National Pollutant Inventory"

glass, oxide(65997-17-3) is found on the following regulatory lists

"FisherTransport Information","Sigma-AldrichTransport Information","OECD List of High Production Volume (HPV) Chemicals","Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Appendix A","Australia Inventory of Chemical Substances (AICS)"

titanium dioxide(13463-67-7) is found on the following regulatory lists

"GESAMP/EHS Composite List - GESAMP Hazard Profiles","International Agency for Research on Cancer (IARC) - Agents Reviewed by the IARC Monographs","IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk","FisherTransport Information","Sigma-AldrichTransport Information","Australia Approved Active Constituents for Agricultural Chemical Products","Australia Exposure Standards","CODEX General Standard for Food Additives (GSFA) - Additives Permitted for Use in Food in General, Unless Otherwise Specified, in Accordance with GMP","Australia Therapeutic Goods Administration (TGA) Substances that may be used as active ingredients in Listed medicines","International Fragrance Association (IFRA) Survey: Transparency List","Australia Therapeutic Goods Administration (TGA) Sunscreening agents permitted as active ingredients in listed products","Australia Australian Pesticides and Veterinary Medicines Authority (APVM) Record of approved active constituents","International Numbering System for Food Additives","OECD List of High Production Volume (HPV) Chemicals","Australia High Volume Industrial Chemical List (HVICL)","Australia Inventory of Chemical Substances (AICS)","IMO IBC Code Chapter 17: Summary of minimum requirements"

N-aminoethylpiperazine(140-31-8) is found on the following regulatory lists

"GESAMP/EHS Composite List - GESAMP Hazard Profiles","IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk","Sigma-AldrichTransport Information","Acros Transport Information","OECD List of High Production Volume (HPV) Chemicals","International Council of Chemical Associations (ICCA) - High Production Volume List","Australia Hazardous Substances Information System - Consolidated Lists","Australia Inventory of Chemical Substances (AICS)","IMO IBC Code Chapter 17: Summary of minimum requirements","Regulations concerning the International Carriage of Dangerous Goods by Rail - Table A: Dangerous Goods List - RID 2013 (English)","International Air Transport Association (IATA) Dangerous Goods Regulations","International Maritime Dangerous Goods Requirements (IMDG Code) - Substance Index","Australia Dangerous Goods Code (ADG Code) - Dangerous Goods List","International Maritime Dangerous Goods Requirements (IMDG Code)","Australia Dangerous Goods Code (ADG Code) - List of Emergency Action Codes","OSPAR National List of Candidates for Substitution – United Kingdom","Australia National Pollutant Inventory"

nonylphenol(25154-52-3) is found on the following regulatory lists

"GESAMP/EHS Composite List - GESAMP Hazard Profiles","OSPAR List of Substances of Possible Concern","IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk","International Fragrance Association (IFRA) Survey: Transparency List","OECD List of High Production Volume (HPV) Chemicals","Australia Hazardous Substances Information System - Consolidated Lists","International Chemical Secretariat (ChemSec) SIN List (*Substitute It Now!)","Australia Inventory of Chemical Substances (AICS)","IMO IBC Code Chapter 17: Summary of minimum requirements","Regulations concerning the International Carriage of Dangerous Goods by Rail - Table A: Dangerous Goods List - RID 2013 (English)","International Air Transport Association (IATA) Dangerous Goods Regulations","International Maritime Dangerous Goods Requirements (IMDG Code) - Substance Index","Australia Dangerous Goods Code (ADG Code) - Dangerous Goods List","International Maritime Dangerous Goods Requirements (IMDG Code)","Australia Dangerous Goods Code (ADG Code) - List of Emergency Action Codes","Sigma-AldrichTransport Information","United Nations Consolidated List of Products Whose Consumption and/or Sale Have Been Banned, Withdrawn, Severely Restricted or Not Approved by Governments","International Maritime Dangerous Goods Requirements (IMDG Code) - Marine Pollutants"

talc(14807-96-6) is found on the following regulatory lists

"International Agency for Research on Cancer (IARC) - Agents Reviewed by the IARC Monographs","FisherTransport Information","Sigma-AldrichTransport Information","Australia Exposure Standards","WHO Food Additives Series - Food Additives considered for specifications only","CODEX General Standard for Food Additives (GSFA) - Additives Permitted for Use in Food in General, Unless Otherwise Specified, in Accordance with GMP","International Numbering System for Food Additives","OECD List of High Production Volume (HPV) Chemicals","Australia High Volume Industrial Chemical List (HVICL)","Australia Hazardous Substances Information System - Consolidated Lists","Australia Inventory of Chemical Substances (AICS)"

ethylene glycol(107-21-1) is found on the following regulatory lists

"IMO Provisional Categorization of Liquid Substances - List 2: Pollutant only mixtures containing at least 99% by weight of components already assessed by IMO","GESAMP/EHS Composite List - GESAMP Hazard Profiles","Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 6","IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk","FisherTransport Information","Sigma-AldrichTransport Information","Australia Exposure Standards","International Fragrance Association (IFRA) Survey: Transparency List","OECD List of High Production Volume (HPV) Chemicals","Australia High Volume Industrial Chemical List (HVICL)","International Council of Chemical Associations (ICCA) - High Production Volume List","Australia FAISD Handbook - First Aid Instructions, Warning Statements, and General Safety Precautions","Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Appendix E (Part 2)","Australia Hazardous Substances Information System - Consolidated Lists","Australia Inventory of Chemical Substances (AICS)","IMO IBC Code Chapter 17: Summary of minimum requirements","Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 5","Australia National Pollutant Inventory","IMO MARPOL 73/78 (Annex II) - List of Other Liquid Substances","Australia - Victoria Occupational Health and Safety Regulations - Schedule 9: Materials at Major Hazard Facilities (And Their Threshold Quantity) Table 2","OSPAR National List of Candidates for Substitution – Norway","International Numbering System for Food Additives"

benzyl alcohol(100-51-6) is found on the following regulatory lists

"GESAMP/EHS Composite List - GESAMP Hazard Profiles","IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk","Sigma-AldrichTransport Information","Acros Transport Information","International Fragrance Association (IFRA) Standards Restricted","IOFI Global Reference List of Chemically Defined Substances","International Fragrance Association (IFRA) Survey: Transparency List","International Numbering System for Food Additives","International Fragrance Association IFRA Standards Annex I","OECD List of High Production Volume (HPV) Chemicals","Australia High Volume Industrial Chemical List (HVICL)","International Council of Chemical Associations (ICCA) - High Production Volume List","Australia Hazardous Substances Information System - Consolidated Lists","Australia Inventory of Chemical Substances (AICS)","IMO IBC Code Chapter 17: Summary of minimum requirements","Regulations concerning the International Carriage of Dangerous Goods by Rail - Table A: Dangerous Goods List - RID 2013 (English)","International Air Transport Association (IATA) Dangerous Goods Regulations","International Maritime Dangerous Goods Requirements (IMDG Code) - Substance Index","Australia Dangerous Goods Code (ADG Code) - Dangerous Goods List","International Maritime Dangerous Goods Requirements (IMDG Code)","Australia Dangerous Goods Code (ADG Code) - List of Emergency Action Codes","Australia - Victoria Occupational Health and Safety Regulations - Schedule 9: Materials at Major Hazard Facilities (And Their Threshold Quantity) Table 2"

triethylenetetramine(112-24-3) is found on the following regulatory lists

"GESAMP/EHS Composite List - GESAMP Hazard Profiles","IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk","FisherTransport Information","Sigma-AldrichTransport Information","IMO Provisional Categorization of Liquid Substances - List 3: (Trade-named) mixtures containing at least 99% by weight of components already assessed by IMO, presenting safety hazards","OECD List of High Production Volume (HPV) Chemicals","Australia Hazardous Substances Information System - Consolidated Lists","Australia Inventory of Chemical Substances (AICS)","IMO IBC Code Chapter 17: Summary of minimum requirements","Regulations concerning the International Carriage of Dangerous Goods by Rail - Table A: Dangerous Goods List - RID 2013 (English)","International Air Transport Association (IATA) Dangerous Goods Regulations","International Maritime Dangerous Goods Requirements (IMDG Code) - Substance Index","Australia Dangerous Goods Code (ADG Code) - Dangerous Goods List","International Maritime Dangerous Goods Requirements (IMDG Code)","Australia Dangerous Goods Code (ADG Code) - List of Emergency Action Codes","OSPAR National List of Candidates for Substitution – Norway","Australia FAISD Handbook - First Aid Instructions, Warning Statements, and General Safety Precautions","Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Appendix E (Part 2)","Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Appendix F (Part 3)","Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 5","Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 4","Australia National Pollutant Inventory","OSPAR National List of Candidates for Substitution – United Kingdom"

silica amorphous(7631-86-9) is found on the following regulatory lists

"GESAMP/EHS Composite List - GESAMP Hazard Profiles","International Agency for Research on Cancer (IARC) - Agents Reviewed by the IARC Monographs","FisherTransport Information","Sigma-AldrichTransport Information","Acros Transport Information","Australia Drinking Water Guideline Values For Physical and Chemical Characteristics","Australia Exposure Standards","CODEX General Standard for Food Additives (GSFA) - Additives Permitted for Use in Food in General, Unless Otherwise Specified, in Accordance with GMP","Australia Therapeutic Goods Administration (TGA) Substances that may be used as active ingredients in Listed medicines","International Fragrance Association (IFRA) Survey: Transparency List","International Numbering System for Food Additives","OECD List of High Production Volume (HPV) Chemicals","Australia High Volume Industrial Chemical List (HVICL)","International Council of Chemical Associations (ICCA) - High Production Volume List","Australia Inventory of Chemical Substances (AICS)","Australia - Victoria Occupational Health and Safety Regulations - Schedule 5 Hazardous Substances: Substances Prohibited for Specified Uses","Australia Hazardous Substances Information System - Consolidated Lists","Australia - Tasmania Hazardous Substances Requiring Health Surveillance","Australia Work Health and Safety Regulations 2011 - Hazardous chemicals (other than lead) requiring health monitoring","Australia - New South Wales Hazardous Substances Requiring Health Surveillance","Australia - Western Australia Hazardous Substances Prohibited for Specified Uses or Methods of Handling","Australia - Western Australia Hazardous Substances Requiring Health

Surveillance","Australia Occupational Health and Safety (Commonwealth Employment) (National Standards) Regulations 1994 - Hazardous Substances Requiring Health Surveillance","Australia - South Australia - Hazardous Substances Requiring Health Surveillance","Australia - Queensland Work Health and Safety Regulation - Hazardous chemicals (other than lead) requiring health monitoring","Australia - Northern Territories Work Health and Safety National Uniform Legislation Regulations- Requirements for health monitoring - Hazardous chemicals (other than lead) requiring health monitoring","Australia - Tasmania - Work Health and Safety Regulations 2012 - Requirements for Health Monitoring - Hazardous chemicals (other than lead) requiring health monitoring","Australia - Tasmania - Work Health and Safety Regulations 2012 - Restricted hazardous chemicals","Australia - South Australia - Work Health and Safety Regulations 2012 - Requirements for health monitoring - Hazardous chemicals (other than lead) requiring health monitoring","Australia - South Australia - Work Health and Safety Regulations 2012 - Restricted hazardous chemicals","Australia - New South Wales - Work Health and Safety Regulation 2011 - Requirements for health monitoring -Hazardous chemicals (other than lead) requiring health monitoring","Australia - New South Wales - Work Health and Safety Regulation 2011 Restricted hazardous chemicals"

silica crystalline - quartz(14808-60-7) is found on the following regulatory lists

"Australia - New South Wales Hazardous Substances Prohibited for Specific Uses","Australia - Tasmania Hazardous Substances Prohibited for Specified Uses","Australia Work Health and Safety Regulations 2011 - Restricted hazardous chemicals","United Nations Consolidated List of Products Whose Consumption and/or Sale Have Been Banned, Withdrawn, Severely Restricted or Not Approved by Governments","International Agency for Research on Cancer (IARC) - Agents Reviewed by the IARC Monographs","FisherTransport Information","Sigma-AldrichTransport Information","Australia Exposure Standards","OECD List of High Production Volume (HPV) Chemicals","Australia High Volume Industrial Chemical List (HVICL)","Australia - Queensland Work Health and Safety Regulation - Restricted hazardous chemicals","Australia - Northern Territories Work Health and Safety National Uniform Legislation Regulations- Restricted hazardous chemicals","Australia Hazardous Substances Information System - Consolidated Lists","Australia Inventory of Chemical Substances (AICS)","Australia Hazardous Substances Requiring Health Surveillance","Australia - Tasmania Hazardous Substances Requiring Health Surveillance","Australia Work Health and Safety Regulations 2011 - Hazardous chemicals (other than lead) requiring health monitoring","Australia - New South Wales Hazardous Substances Requiring Health Surveillance","Australia - Western Australia Hazardous Substances Prohibited for Specified Uses or Methods of Handling","Australia - Western Australia Hazardous Substances Requiring Health Surveillance","Australia Occupational Health and Safety (Commonwealth Employment) (National Standards) Regulations 1994 - Hazardous Substances Requiring Health Surveillance","Australia - South Australia - Hazardous Substances Requiring Health Surveillance","Australia - Queensland Work Health and Safety Regulation - Hazardous chemicals (other than lead) requiring health monitoring","Australia - Northern Territories Work Health and Safety National Uniform Legislation Regulations- Requirements for health monitoring - Hazardous chemicals (other than lead) requiring health monitoring","Australia - Tasmania - Work Health and Safety Regulations 2012 - Requirements for Health Monitoring - Hazardous chemicals (other than lead) requiring health monitoring","Australia - Tasmania - Work Health and Safety Regulations 2012 - Restricted hazardous chemicals","Australia - South Australia - Work Health and Safety Regulations 2012 - Requirements for health monitoring - Hazardous chemicals (other than lead) requiring health monitoring","Australia - South Australia - Work Health and Safety Regulations 2012 - Restricted hazardous chemicals","Australia - New South Wales - Work Health and Safety Regulation 2011 - Requirements for health monitoring -Hazardous chemicals (other than lead) requiring health monitoring","Australia - New South Wales - Work Health and Safety Regulation 2011 Restricted hazardous chemicals"

SECTION 16 Other information

Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.
A list of reference resources used to assist the committee may be found at:
www.chemwatch.net/references

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