# **Resene Paints (Australia) Limited**

Version No: 5.6

Safety Data Sheet according to WHS Regulations (Hazardous Chemicals) Amendment 2020 and ADG requirements

Chemwatch Hazard Alert Code: 4

Issue Date: 27/10/2022 Print Date: 27/10/2022 S.GHS.AUS.EN

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

## Product Identifier

Product name	Altex Epoxy Filler Part A
Synonyms	Not Available
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Other means of identification	Not Available

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

Relevant identified uses	Part A of a two pack industrial epoxy filler	

## Details of the manufacturer or supplier of the safety data sheet

Registered company name	Resene Paints (Australia) Limited	Altex Coatings Ltd
Address	7 Production Avenue, Molendinar Queensland 4214 Australia	91-111 Oropi Road Tauranga 3112 New Zealand
Telephone	+61 7 55126600	+64 7 541 1221
Fax	+61 7 55126697	+64 7 541 1310
Website	www.resene.com.au	www.altexcoatings.com
Email	Not Available	neil.debenham@carboline.co.nz

#### Emergency telephone number

Association / Organisation	AUSTRALIAN POISONS CENTRE	NZ POISONS (24hr 7 days)	CHEMWATCH EMERGENCY RESPONSE
Emergency telephone numbers	131126	0800 764766	+61 1800 951 288
Other emergency telephone numbers	Not Available	Not Available	+61 3 9573 3188

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

## **SECTION 2 Hazards identification**

#### Classification of the substance or mixture

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

Poisons Schedule	Not Applicable
Classification <sup>[1]</sup>	Serious Eye Damage/Eye Irritation Category 2A, Hazardous to the Aquatic Environment Long-Term Hazard Category 2, Specific Target Organ Toxicity - Repeated Exposure Category 2, Skin Corrosion/Irritation Category 2, Reproductive Toxicity Category 2, Sensitisation (Skin) Category 1
Legend:	1. Classified by Chernwatch; 2. Classification drawn from HCIS; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI

#### Label elements

Hazard pictogram(s)	
Signal word	Warning

#### Hazard statement(s)

H319	Causes serious eye irritation.
H411	Toxic to aquatic life with long lasting effects.
H373	May cause damage to organs through prolonged or repeated exposure.
H315	Causes skin irritation.
H361	Suspected of damaging fertility or the unborn child.
H317	May cause an allergic skin reaction.

## Not Applicable

## Precautionary statement(s) Prevention

P260	Do not breathe mist/vapours/spray.
P280	Wear protective gloves, protective clothing, eye protection and face protection.
P273	Avoid release to the environment.
P264	Wash all exposed external body areas thoroughly after handling.
P272	Contaminated work clothing should not be allowed out of the workplace.

#### Precautionary statement(s) Response

P308+P313	IF exposed or concerned: Get medical advice/ attention.
P302+P352	IF ON SKIN: Wash with plenty of water and soap.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P314	Get medical advice/attention if you feel unwell.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P391	Collect spillage.

# Precautionary statement(s) Storage

P405 Store locked up.

## Precautionary statement(s) Disposal

P501 Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation.

# **SECTION 3 Composition / information on ingredients**

#### Substances

See section below for composition of Mixtures

# Mixtures

CAS No	%[weight]	Name
25085-99-8	50-70	bisphenol A/ diglycidyl ether resin, liquid
28064-14-4	5-25	bisphenol F diglycidyl ether copolymer
100-51-6	5-25	benzyl alcohol
Legend:	1. Classified by Chemwatch; 2. Clas Classification drawn from C&L: * EL	ssification drawn from HCIS; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI; 4. J IOELVs available

#### **SECTION 4 First aid measures**

Description of first aid measures		
Eye Contact	If this product comes in contact with eyes: Vash out immediately with water. If irritation continues, seek medical attention. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.	
Skin Contact	<ul> <li>If skin or hair contact occurs:</li> <li>Quickly but gently, wipe material off skin with a dry, clean cloth.</li> <li>Immediately remove all contaminated clothing, including footwear.</li> <li>Wash skin and hair with running water. Continue flushing with water until advised to stop by the Poisons Information Centre.</li> <li>Transport to hospital, or doctor.</li> </ul>	
Inhalation	<ul> <li>If fumes or combustion products are inhaled remove from contaminated area.</li> <li>Lay patient down. Keep warm and rested.</li> <li>Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.</li> <li>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.</li> <li>Transport to hospital, or doctor, without delay.</li> </ul>	
Ingestion	<ul> <li>IF SWALLOWED, REFER FOR MEDICAL ATTENTION, WHERE POSSIBLE, WITHOUT DELAY.</li> <li>For advice, contact a Poisons Information Centre or a doctor.</li> <li>Urgent hospital treatment is likely to be needed.</li> <li>In the mean time, qualified first-aid personnel should treat the patient following observation and employing supportive measures as indicated by the patient's condition.</li> <li>If the services of a medical officer or medical doctor are readily available, the patient should be placed in his/her care and a copy of the SDS should be provided. Further action will be the responsibility of the medical specialist.</li> <li>If medical attention is not available on the worksite or surroundings send the patient to a hospital together with a copy of the SDS.</li> <li>Where medical attention is not immediately available or where the patient is more than 15 minutes from a hospital or unless instructed otherwise:</li> <li>INDUCE vomiting with fingers down the back of the throat, ONLY IF CONSCIOUS. Lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.</li> </ul>	

NOTE: Wear a protective glove when inducing vomiting by mechanical means.
Indication of any immediate medical attention and special treatment needed

#### Treat symptomatically.

# **SECTION 5 Firefighting measures**

# Extinguishing media

- Foam.
- Dry chemical powder.
- BCF (where regulations permit).Carbon dioxide.
- Water spray or fog Large fires only.

#### 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
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## Advice for firefighters

Fire Fighting	<ul> <li>Alert Fire Brigade and tell them location and nature of hazard.</li> <li>Wear breathing apparatus plus protective gloves.</li> <li>Prevent, by any means available, spillage from entering drains or water courses.</li> <li>Use water delivered as a fine spray to control fire and cool adjacent area.</li> <li>DO NOT approach containers suspected to be hot.</li> <li>Cool fire exposed containers with water spray from a protected location.</li> <li>If safe to do so, remove containers from path of fire.</li> <li>Equipment should be thoroughly decontaminated after use.</li> </ul>
Fire/Explosion Hazard	Combustible. Will burn if ignited. Combustion products include: carbon monoxide (CO) carbon dioxide (CO2) aldehydes other pyrolysis products typical of burning organic material. WARNING: Long standing in contact with air and light may result in the formation of potentially explosive peroxides.
HAZCHEM	•3Z

#### **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	<ul> <li>In the event of a spill of a reactive diluent, the focus is on containing the spill to prevent contamination of soil and surface or ground water.</li> <li>If irritating vapors are present, an approved air-purifying respirator with organic vapor canister is recommended for cleaning up spills and leaks.</li> <li>For small spills, reactive diluents should be absorbed with sand.</li> <li>Environmental hazard - contain spillage.</li> <li>Clean up all spills immediately.</li> <li>Avoid contact with skin and eyes.</li> <li>Wear impervious gloves and safety goggles.</li> <li>Trowel up/scrape up.</li> <li>Place spilled material in clean, dry, sealed container.</li> <li>Flush spill area with water.</li> </ul>
Major Spills	<ul> <li>Environmental hazard - contain spillage.</li> <li>Industrial spills or releases of reactive diluents are infrequent and generally contained. If a large spill does occur, the material should be captured, collected, and reprocessed or disposed of according to applicable governmental requirements.</li> <li>An approved air-purifying respirator with organic-vapor canister is recommended for emergency work.</li> <li>Minor hazard.</li> <li>Clear area of personnel.</li> <li>Alert Fire Brigade and tell them location and nature of hazard.</li> <li>Control personal contact with the substance, by using protective equipment as required.</li> <li>Prevent spillage from entering drains or water ways.</li> <li>Contain spill with sand, earth or vermiculite.</li> <li>Collect recoverable product into labelled containers for recycling.</li> <li>Absorb remaining product with sand, earth or vermiculite and place in appropriate containers for disposal.</li> <li>Wash area and prevent runoff into drains or waterways.</li> <li>If contamination of drains or waterways occurs, advise emergency services.</li> </ul>

# **SECTION 7 Handling and storage**

Precautions for safe handling	
Safe handling	<ul> <li>Avoid all personal contact, including inhalation.</li> <li>Wear protective clothing when risk of exposure occurs.</li> <li>Use in a well-ventilated area.</li> <li>Prevent concentration in hollows and sumps.</li> <li>DO NOT enter confined spaces until atmosphere has been checked.</li> <li>DO NOT allow material to contact humans, exposed food or food utensils.</li> <li>Avoid contact with incompatible materials.</li> <li>When handling, DO NOT eat, drink or smoke.</li> <li>Keep containers securely sealed when not in use.</li> <li>Avoid physical damage to containers.</li> <li>Always wash hands with soap and water after handling.</li> <li>Work clothes should be laundered separately. Launder contaminated clothing before re-use.</li> <li>Use good occupational work practice.</li> <li>Observe manufacturer's storage and handling recommendations contained within this SDS.</li> <li>Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions are maintained.</li> </ul>
Other information	<ul> <li>Store in original containers.</li> <li>Keep containers securely sealed.</li> <li>Store in a cool, dry, well-ventilated area.</li> <li>Store away from incompatible materials and foodstuff containers.</li> <li>Protect containers against physical damage and check regularly for leaks.</li> <li>Observe manufacturer's storage and handling recommendations contained within this SDS.</li> </ul>

#### Conditions for safe storage, including any incompatibilities

	Suitable conta	► Me iner ► Pao ► Che	<ul> <li>Metal can or drum</li> <li>Packaging as recommended by manufacturer.</li> <li>Check all containers are clearly labelled and free from leaks.</li> </ul>				
Stora	age incompatib	► Avc ► If tv evc ► Thi ► Avc	<ul> <li>Avoid cross contamination between the two liquid parts of product (kit).</li> <li>If two part products are mixed or allowed to mix in proportions other than manufacturer's recommendation, polymerisation with evolution of heat (exotherm) may occur.</li> <li>This excess heat may generate toxic vapour</li> <li>Avoid reaction with amines, mercaptans, strong acids and oxidising agents</li> </ul>				
	$\wedge$					$\wedge$	



X — Must not be stored together

0 — May be stored together with specific preventions

+ — May be stored together

Note: Depending on other risk factors, compatibility assessment based on the table above may not be relevant to storage situations, particularly where large volumes of dangerous goods are stored and handled. Reference should be made to the Safety Data Sheets for each substance or article and risks assessed accordingly.

#### **SECTION 8 Exposure controls / personal protection**

#### **Control parameters**

Occupational Exposure Limits (OEL)

#### INGREDIENT DATA

Not Available

#### Emergency Limits

Ingredient	TEEL-1	TEEL-2		TEEL-3
bisphenol A/ diglycidyl ether resin, liquid	90 mg/m3 990 mg/m3			5,900 mg/m3
bisphenol F diglycidyl ether copolymer	30 mg/m3	330 mg/m3		2,000 mg/m3
benzyl alcohol	30 ppm	52 ppm		740 ppm
Ingredient	Original IDLH		Revised IDLH	
bisphenol A/ diglycidyl ether resin, liquid	Not Available		Not Available	
bisphenol F diglycidyl ether copolymer	Not Available		Not Available	
benzyl alcohol	Not Available		Not Available	
Occupational Exposure Banding				
Ingredient	Occupational Exposure Band Rating		Occupational E	xposure Band Limit
bisphenol A/ diglycidyl ether resin, liquid	E		≤ 0.1 ppm	

Ingredient	Occupational Exposure Band Rating	Occupational Ex	posure Band Limit	
bisphenol F diglycidyl ether	E	≤ 0.1 ppm	-	
benzyl alcohol	F	≤ 0.1 ppm		
Notes:	Occupational exposure banding is a process of assigning of adverse health outcomes associated with exposure. The o range of exposure concentrations that are expected to pro	chemicals into specific categories o utput of this process is an occupati tect worker health.	r bands based on a chemic onal exposure band (OEB),	al's potency and the which corresponds to a
Exposure controls				
Appropriate engineering controls	Engineering controls are used to remove a hazard or place be highly effective in protecting workers and will typically b The basic types of engineering controls are: Process controls which involve changing the way a job act Enclosure and/or isolation of emission source which keeps 'adds' and 'removes' air in the work environment. Ventilatio ventilation system must match the particular process and of Employers may need to use multiple types of controls to pr General exhaust is adequate under normal operating cond essential to obtain adequate protection. Provide adequate workplace possess varying 'escape' velocities which, in tur remove the contaminant. Type of Contaminant: solvent, vapours, degreasing etc., evaporating from tank aerosols, fumes from pouring operations, intermittent con drift, plating acid fumes, pickling (released at low velocity direct spray, spray painting in shallow booths, drum filling generation into zone of rapid air motion) grinding, abrasive blasting, tumbling, high speed wheel gr very high rapid air motion). Within each range the appropriate value depends on: Lower end of the range 1: Room air currents minimal or favourable to capture 2: Contaminants of low toxicity or of nuisance value only 3: Intermittent, low production. 4: Large hood or large air mass in motion Simple theory shows that air velocity falls rapidly with dista with the square of distance from the extraction point (in sin accordingly, after reference to distance from the contamina 1-2 m/s (200-400 f/min.) for extraction of solvents generater considerations, producing performance deficits within the effects of 10 or more when extraction systems are installed factors of 10 or more when extraction systems are installed	e a barrier between the worker and i e independent of worker interaction ivity or process is done to reduce th a selected hazard 'physically' away on can remove or dilute an air conta chemical or contaminant in use. revent employee overexposure. litions. If risk of overexposure exists ventilation in warehouse or closed a m, determine the 'capture velocities' (in still air) ttainer filling, low speed conveyer tra- into zone of active generation) , conveyer loading, crusher dusts, g enerated dusts (released at high ini 2: Contaminants of high toxicity 3: High production, heavy use 4: Small hood - local control only unce away from the opening of a sin mple cases). Therefore the air speed ating source. The air velocity at the ed in a tank 2 meters distant from th extraction apparatus, make it essen d or used.	the hazard. Well-designed e s to provide this high level of the risk. y from the worker and ventil minant if designed properly. , wear SAA approved respin storage areas. Air contamin of fresh circulating air requinant ansfers, welding, spray gas discharge (active tial velocity into zone of tial velocity into zone of the extraction pipe. Velocity d at the extraction point sho extraction fan, for example, e extraction point. Other me tial that theoretical air veloc	<ul> <li>angineering controls can of protection.</li> <li>ation that strategically. The design of a</li> <li>rator. Correct fit is ants generated in the irred to effectively</li> <li>Air Speed:</li> <li>0.25-0.5 m/s (50-100 f/min)</li> <li>0.5-1 m/s (100-200 f/min.)</li> <li>1-2.5 m/s (200-500 f/min.)</li> <li>2.5-10 m/s (500-2000 f/min.)</li> <li>2.5-10 m/s (500-2000 f/min.)</li> </ul>
Personal protection				
Eye and face protection	<ul> <li>Safety glasses with side shields.</li> <li>Chemical goggles.</li> <li>Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59], [AS/NZS 1336 or national equivalent]</li> </ul>			
Skin protection	See Hand protection below			
Hands/feet protection	<ul> <li>NOTE:</li> <li>The material may produce skin sensitisation in predisp equipment, to avoid all possible skin contact.</li> <li>Contaminated leather items, such as shoes, belts and When handling liquid-grade epoxy resins wear chemically The performance, based on breakthrough times ,of:</li> <li>Ethyl Vinyl Alcohol (EVAL laminate) is generally exc</li> <li>Butyl Rubber ranges from excellent to good</li> <li>Nitrile Butyl Rubber (NBR) from excellent to fair.</li> <li>Neoprene from excellent to poor</li> <li>As defined in ASTM F-739-96</li> <li>Excellent breakthrough time &gt; 480 min</li> </ul>	oosed individuals. Care must be tak watch-bands should be removed a protective gloves , boots and apron ellent	en, when removing gloves a nd destroyed. S.	and other protective

	<ul> <li>Good breakthrough time &gt; 20 min</li> <li>Fair breakthrough time &lt; 20 min</li> <li>Poor glove material degradation</li> <li>Gloves should be tested against each resin system prior to making a selection of the most suitable type. Systems include both the resin and any hardener, individually and collectively)</li> <li>DO NOT use cotton or leather (which absorb and concentrate the resin), natural rubber (latex), medical or polyethylene gloves (which absorb the resin).</li> <li>DO NOT use barrier creams containing emulsified fats and oils as these may absorb the resin; silicone-based barrier creams should be reviewed prior to use.</li> <li>Replacement time should be considered when selecting the most appropriate glove. It may be more effective to select a glove with lower chemical resistance but which is replaced frequently than to select a more resistant glove which is reused many times</li> </ul>
Body protection	See Other protection below
Other protection	<ul> <li>Overalls.</li> <li>P.V.C apron.</li> <li>Barrier cream.</li> <li>Skin cleansing cream.</li> <li>Eye wash unit.</li> </ul>

# Recommended material(s)

GLOVE SELECTION INDEX

Glove selection is based on a modified presentation of the:

## Respiratory protection

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

'Forsberg Clothing Performance Index'.

The effect(s) of the following substance(s) are taken into account in the *computer-generated* selection:

Altex Epoxy Filler Part A

Material	CPI
BUTYL	A
VITON	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

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			
Physical state	Free-flowing Paste	Relative density (Water = 1)	0.6
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	300
pH (as supplied)	Not Available	Decomposition temperature (°C)	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 Available
Flash point (°C)	251	Taste	Not Available
Evaporation rate	Not Available BuAC = 1	Explosive properties	Not Available
Flammability	Not Applicable	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Available	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	Not Available	Volatile Component (%vol)	Not Available
Vapour pressure (kPa)	0.60	Gas group	Not Available
Solubility in water	Immiscible	pH as a solution (Not Available%)	Not Available
Vapour density (Air = 1)	>1	VOC g/L	Not Available

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)

Reactivity	See section 7
Chemical stability	<ul> <li>Unstable in the presence of incompatible materials.</li> <li>Product is considered stable.</li> <li>Hazardous polymerisation will not occur.</li> </ul>
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

# **SECTION 11 Toxicological information**

# Information on toxicological effects

Inhaled	The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting. There is strong evidence to suggest that this material can cause, if inhaled once, serious, irreversible damage of organs. There is strong evidence to suggest that this material, on a single contact with skin, can cause serious, irreversible damage of organs.
Ingestion	Strong evidence exists that exposure to the material may cause irreversible damage (other than cancer, mutations and birth defects) following a single exposure by swallowing. The material has <b>NOT</b> been classified by EC Directives or other classification systems as 'harmful by ingestion'. This is because of the lack of corroborating animal or human evidence.
Skin Contact	There is strong evidence to suggest that this material, on a single contact with skin, can cause serious, irreversible damage of organs. The material is not thought to produce adverse health effects or skin irritation following contact (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable gloves be used in an occupational setting. Toxic effects may result from skin absorption 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	Although the material is not thought to be an irritant (as classified by EC Directives), direct contact with the eye may produce transient discomfort characterised by tearing or conjunctival redness (as with windburn). Eye contact with reactive diluents may cause slight to severe irritation with the possibility of chemical burns or moderate to severe damage to the cornea.
Chronic	Repeated or long-term occupational exposure is likely to produce cumulative health effects involving organs or biochemical systems. Skin contact with the material is more likely to cause a sensitisation reaction in some persons compared to the general population. Ample evidence from experiments exists that there is a suspicion this material directly reduces fertility. Based on experience with animal studies, exposure to the material may result in toxic effects to the development of the foetus, at levels which do not cause significant toxic effects to the mother. This product contains a polymer with reactive functional groups (aldehydes and phenolics) regarded as being of moderate concern. Aldehydes are reactive, soluble and are highly irritating. Glycidyl ethers can cause genetic damage and cancer. There has been some concern that this material can cause cancer or mutations but there is not enough data to make an assessment.

Alter Energy Filler Part A	ΤΟΧΙCΙΤΥ	1	IRRITATION		
Altex Epoxy Filler Fart A	Not Available		Not Available		
	ΤΟΧΙCΙΤΥ		IRRITATION		
bisphenol A/ diglycidyl ether resin. liquid	dermal (rat) LD50: >1200 mg/kg <sup>[2]</sup>		Eye (rabbit): 100mg - Mild		
· · · · · · · · · · · ·	Oral (Mouse) LD50; >500 mg/kg <sup>[2]</sup>				
	TOXICITY		IRRITATION		
bisphenol F diglycidyl ether copolymer	dermal (rat) LD50: 4000 mg/kg <sup>[2]</sup>			Eyes * (-) (-) Slight irritant	
	Oral (Rat) LD50; 4000 mg/kg <sup>[2]</sup>			Skin * (-) (-) Slight irritant	
					_
	ΤΟΧΙCITY	IRRITAT	ΓΙΟΝ		
	Dermal (rabbit) LD50: 2000 mg/kg <sup>[2]</sup>	Eye (rab	obit): 0.7	75 mg open SEVERE	
bonzul alaabal	Inhalation(Rat) LC50: >4.178 mg/L4h <sup>[1]</sup>	L4h <sup>[1]</sup> Eye: adverse		effect observed (irritating) <sup>[1]</sup>	
benzyl alconol	Oral (Rat) LD50; 1230 mg/kg <sup>[2]</sup>	Skin (ma	an): 16 ı	mg/48h-mild	
		Skin (ral	bbit):10	mg/24h open-mild	
		Skin: no	Skin: no adverse effect observed (not irritating) <sup>[1]</sup>		

Legend:	1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2. Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances
	The various members of the bisphenol family produce hormone like effects, seemingly as a result of binding to estrogen receptor-related
Altex Epoxy Filler Part A	receptors (ERRs; not to be confused with estrogen receptors) A suspected estrogen-related receptors (ERR) binding agent: Estrogen-related receptors (ERR, oestrogen-related receptors) are so named because of sequence homology with estrogen receptors but do not appear to bind estrogens or other tested steroid hormones. The ERR family have been demonstrated to control energy homeostasis, oxidative metabolism and mitochondrial biogenesis, while effecting mammalian physiology in the heart, brown adipose tissue, white adipose tissue, placenta, macrophages, and demonstrated additional roles in diabetes and cancer. ERRs bind enhancers throughout the genome where they exert effects on gene regulation Although their overall functions remain uncertain, they also share DNA-binding sites, co-regulators, and target genes with the conventional estrogen receptors ERalpha and ERbeta and may function to modulate estrogen signaling pathways. • ERR-alpha has wide tissue distribution but it is most highly expressed in tissues that preferentially use fatty acids as energy sources such as kidney, heart, brown adipose tissue, cerebellum, intestine, and skeletal muscle. ERRalpha has been detected in normal adrenal cortex tissues, in which its expression is possibly related to adrenal development, with a possible role in fetal adrenal function, in dehydroepiandrosterone (DHEAS) production in adrenarche, and also in steroid production of post-adrenarche/adult life. DHEA and other adrenal and rogens such as androstenedione, although relatively weak androgens, are responsible for the androgenic effects of adrenarche, such as early pubic and axillary hair growth, adult-type body odor, increased oiliness of hair and skin, and mild acne. • ERR-beta is a nuclear receptor . Its function is unknown; however, a similar protein in mouse plays an essential role in placental development • ERR-gamma is a nuclear receptor that behaves as a constitutive activator of transcription. There is evidence that bisphenol A functions as an endo
BISPHENOL A/ DIGLYCIDYL ETHER RESIN, LIQUID	Foetoxicity has been observed in animal studies Oral (rabbit, female) NOEL 180 mg/kg (teratogenicity; NOEL (maternal 60 mg/kg The substance is classified by IARC as Group 3: <b>NOT</b> classifiable as to its carcinogenicity to humans. Evidence of carcinogenicity may be inadequate or limited in animal testing.
BENZYL ALCOHOL	Unlike benzylic alcohols, the beta-hydroxyl group of the members of benzyl alkyl alcohols contributes to break down reactions but do not undergo phase II metabolic activation. Though structurally similar to cancer causing ethyl benzene, phenethyl alcohol is only of negligible concern due to limited similarity in their pattern of activity. For benzoates: Benzyl alcohol, benzoic acid and its sodium and potassium salt have a common metabolic and excretion pathway. All but benzyl alcohol are considered to be unharmful and of low acute toxicity. They may cause slight irritation by oral, dermal or inhalation exposure except sodium benzoate which doesn't irritate the skin. Studies showed increased mortality, reduced weight gain, liver and kidney effects at higher doses, also, lesions of the brains, thymus and skeletal muscles may occur with benzyl alcohol. However, they do not cause cancer, genetic or reproductive toxicity. Developmental toxicity may occur but only at maternal toxic level. The material may cause skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin. This is a member or analogue of a group of benzyl derivatives generally regarded as safe (GRAS), based partly on their self-limiting properties as flavouring substances in food. In humans and other animals, they are rapidly absorbed, broken down and excreted, with a wide safety margin. They also lack significant potential to cause genetic toxicity and mutations. The intake of benzyl derivatives as natural components of traditional foods is actually higher than the intake as intentionally added flavouring substances. The aryl alkyl alcohol (AAA) fragrance ingredients have diverse chemical structures, with similar metabolic and toxicity profiles. The AAA fragrance ingredients are non-irritating to the skin. The potential for eye irritation is minimal. With the exception of benzyl alcohol, phenethyl and 2-phenoxyethyl AAA alcohols, testing in human
Altex Epoxy Filler Part A & BISPHENOL A/ DIGLYCIDYL ETHER RESIN, LIQUID & BISPHENOL F DIGLYCIDYL ETHER COPOLYMER & BENZYL ALCOHOL	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. The significance of the contact allergen is not simply determined by its sensitisation potential: the distribution of the substance and the opportunities for contact with it are equally important. A weakly sensitising substance which is widely distributed can be a more important allergen than one with stronger sensitising potential with which few individuals come into contact. From a clinical point of view, substances are noteworthy if they produce an allergic test reaction in more than 1% of the persons tested.
Altex Epoxy Filler Part A & BENZYL ALCOHOL	Adverse reactions to fragrances in perfumes and fragranced cosmetic products include allergic contact dermatitis, irritant contact dermatitis, sensitivity to light, immediate contact reactions, and pigmented contact dermatitis. Airborne and connubial contact dermatitis occurs. Contact allergy is a lifelong condition, so symptoms may occur on re-exposure. Allergic contact dermatitis can be severe and widespread, with significant impairment of quality of life and potential consequences for fitness for work. If the perfume contains a sensitizing component, intolerance to perfumes by inhalation may occur. Symptoms may include general unwellness, coughing, phlegm, wheezing, chest tightness, headache, shortness of breath with vertion, acute respiratory illness, hayfever, asthma and other respiratory diseases. Perfumes can induce excess reactivity of the airway without producing allergy or airway obstruction. Breathing through a carbon filter mask had no protective effect. Occupational asthma caused by perfume substances, such as isoamyl acetate, limonene, cinnamaldehyde and benzaldehyde, tend to give persistent symptoms, even though the exposure is below occupational exposure limits. Prevention of contact sensitization to fragrances is an important objective of public health risk management. Hands: Contact sensitization may be the primary cause of hand eczema or a complication of irritant or atopic hand eczema. However hand eczema is a disease involving many factors, and the clinical significance of fragrance contact allergy in severe, it may spread down the arms and to other areas of the body. In individuals who consulted a skin specialist, a history of such first-time symptoms was significantly related to the later diagnosis of perfume allergy. Fagrance allergy from the use of cosmetic products is eczema of the face. In men, after-shave products can acuse eczema around the beard area and the adjacent part of the neck. Men using wet shaving as opposed to dry have been shown to have an increased risk of allergic to f

	Light reactions: Musk ambrette produced a number of allergic reactions mediated by light and was later banned from use in Europe. Furocoumarins (psoralens) in some plant-derived fragrances have caused phototoxic reactions, with redness. There are now limits for the amount of furocoumarins in fragrances. Phototoxic reactions still occur, but are rare. General/respiratory: Fragrances are volatile, and therefore, in addition to skin exposure, a perfume also exposes the eyes and the nose / airway. It is estimated that 2-4% of the adult population is affected by respiratory or eye symptoms by such an exposure. It is known that exposure to fragrances may exacerbate pre-existing asthma. Asthma-like symptoms can be provoked by sensory mechanisms. A significant association was found between respiratory complaints related to fragrances and contact allergy to fragrance ingredients and hand eczema. Fragrance allergens act as haptens, low molecular weight chemicals that cause an immune response only when attached to a carrier protein. However, not all sensitizing fragrance chemicals are directly reactive, but require previous activation. A prehapten is a chemical that itself causes little or no sensitization, but is transformed into a hapten in the skin (bioactivation), usually via enzyme catalysis. It is not always possible to know whether a particular allergen that is not directly reactive acts as a prehapten or a prohapten, or both. Prohaptens: Compounds that are bioactivated in the skin and thereby form haptens are referred to prohaptens. The possibility of a prohapten being activated cannot be avoided by outside measures. Activation processes increase the risk for cross-reactivity between fragrance substances. Various enzymes play roles in both activating and deactivating prohaptens. Skin-sensitizing prohaptens can be recognized and grouped into chemical classes based on knowledge of xenobiotic bioactivation reactions, clinical observations and/or studies of sensitization. QSAR prediction: Prediction of				
Altex Epoxy Filler Part A & BISPHENOL A/ DIGLYCIDYL ETHER RESIN, LIQUID	Animal testing over 13 weeks showed bisphenol A diglycidyl ether (BADGE) caused mild to moderate, chronic, inflammation of the skin. Reproductive and Developmental Toxicity: Animal testing showed BADGE given over several months caused reduction in body weight but had no reproductive effects. Cancer-causing potential: It has been concluded that bisphenol A diglycidyl ether cannot be classified with respect to its cancer-causing potential in humans. Genetic toxicity: Laboratory tests on genetic toxicity of BADGE have so far been negative. Immunotoxicity: Animal testing suggests regular injections of diluted BADGE may result in sensitization. Consumer exposure: Comsumer exposure to BADGE is almost exclusively from migration of BADGE from can coatings into food. Testing has not found any evidence of hormonal disruption				
Altex Epoxy Filler Part A & BISPHENOL A/ DIGLYCIDYL ETHER RESIN, LIQUID & BISPHENOL F DIGLYCIDYL ETHER COPOLYMER	The chemical structure of hydroxylated diphenylalkanes or bisphenols consists of two phenolic rings joined together through a bridging carbon. This class of endocrine disruptors that mimic oestrogens is widely used in industry, particularly in plastics. Bisphenol A (BPA) and some related compounds exhibit oestrogenic activity in human breast cancer cell line MCF-7, but there were remarkable differences in activity. Several derivatives of BPA exhibited significant thyroid hormonal activity towards rat pituitary cell line GH3, which releases growth hormone in a thyroid hormone-dependent manner. However, BPA and several other derivatives did not show such activity. Results suggest that the 4-hydroxyl group of the A-phenyl ring and the B-phenyl ring of BPA derivatives are required for these hormonal activities, and substituents at the 3,5-positions of the phenyl rings and the bridging alkyl moiety markedly influence the activities. Bisphenols promoted cell proliferation and increased the synthesis and secretion of cell type-specific proteins. When ranked by proliferative potency, the longer the alkyl substituent at the bridging carbon, the lower the concentration needed for maximal cell yield; the most active compound contained two propyl chains at the bridging carbon. Bisphenols with two hydroxyl groups in the para position and angular configuration are suitable for appropriate hydrogen bonding to the acceptor site of the oestrogen receptor. In vitro cell models were used to evaluate the ability of 22 bisphenols (BPs) to induce or inhibit estrogenic and androgenic activity. BPA, Bisphenol AF (BPAF), bisphenol Z (BPZ), bisphenol B (BPB), tetrachlorobisphenol A (TCBPA), and benzylparaben (PHBB) induced estrogen receptor (ER)alpha and/or ERbeta-mediated activity. With the exception of BPS, TCBPA, and PHBB, these same BPs were also androgen receptor (AR) antagonists. Cnly 3 BPs were found to be ER antagonists. Bisphenol P (BPP) selectively inhibited ERbeta-mediated activity and 4-(4-phenylmethoxyphenyl)sulfonylphenol				
Altex Epoxy Filler Part A & BISPHENOL F DIGLYCIDYL ETHER COPOLYMER	Oxiranes (including glycidyl ethers and alkyl oxides, a such oxirane is ethyloxirane; data presented here ma	nd epoxides) share many common ch y be taken as representative.	aracteristics with respect to animal toxicology. One		
Acute Toxicity	×	Carcinogenicity	×		
Skin Irritation/Corrosion	*	Reproductivity	×		
Serious Eye Damage/Irritation	¥	STOT - Single Exposure	×		
Respiratory or Skin sensitisation	✓	STOT - Repeated Exposure	✓		
Mutagenicity	×	Aspiration Hazard	×		

Legend:

X − Data either not available or does not fill the criteria for classification
→ − Data available to make classification

# **SECTION 12 Ecological information**

Altex Epoxy Filler Part A	Endpoint	Test Duration (hr)	S	pecies	Value		Source	
	Not Available	Not Available	N	ot Available	Not Availab	le	Not Available	
	Endpoint	Test Duration (hr)		Species	Value	S	ource	
sphenol A/ diglycidyl ether	EC50	48h		Crustacea	~2mg/l	2	2	
resin, liquid	EC50(ECx)	24h Crustacea		3mg/l	N	ot Available		
	LC50	96h	96h Fish 2.4mg/l		N	Not Available		
isphenol F dialycidyl ether	Endpoint	Test Duration (hr)	SI	pecies	Value		Source	
copolymer	Not Available	Not Available	N	ot Available	Not Availab	le	Not Available	
	<b>-</b>	Test Densities (LA)	• • • • •			Mala a		
benzyl alcohol	Enapoint	lest Duration (nr)	Species			value	Sou	

Continued...

## Altex Epoxy Filler Part A

EC50	48h	Crustacea	230mg/l	2
NOEC(ECx)	336h	Fish	5.1mg/l	2
LC50	96h	Fish	10mg/l	2
EC50	96h	Algae or other aquatic plants	76.828mg/l	2

Legend: Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 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

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Do NOT allow product to come in contact with surface waters or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash-waters.

Wastes resulting from use of the product must be disposed of on site or at approved waste sites.

DO NOT discharge into sewer or waterways.

#### Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
bisphenol A/ diglycidyl ether resin, liquid	HIGH	HIGH
benzyl alcohol	LOW	LOW

#### Bioaccumulative potential

Ingredient	Bioaccumulation
bisphenol A/ diglycidyl ether resin, liquid	LOW (LogKOW = 2.6835)
benzyl alcohol	LOW (LogKOW = 1.1)

# Mobility in soil

Ingredient	Mobility
bisphenol A/ diglycidyl ether resin, liquid	LOW (KOC = 51.43)
benzyl alcohol	LOW (KOC = 15.66)

#### **SECTION 13 Disposal considerations**

## Waste treatment methods

Product / Packaging disposal	<ul> <li>Containers may still present a chemical hazard/ danger when empty.</li> <li>Return to supplier for reuse/ recycling if possible.</li> <li>Otherwise: <ul> <li>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.</li> <li>Where possible retain label warnings and SDS and observe all notices pertaining to the product.</li> </ul> </li> <li>Waste Management <ul> <li>Production waste from epoxy resins and resin systems should be treated as hazardous waste in accordance with National regulations. Fire retarded resins containing halogenated compounds should also be treated as special waste. Accidental spillage of resins, curing agents and their formulations should be contained and absorbed by special mineral absorbents to prevent them from entering the environment.</li> <li>Contaminated or surplus product should not be washed down the sink, but preferably be fully reacted to form cross-linked solids which is non-hazardous and can be more easily disposed.</li> <li>Finished articles made from fully cured epoxy resins are hard, infusible solids presenting no hazard to the environment. However, finished articles from flame-retarded material containing halogenated resins should be considered hazardous waste, and disposed as required by National laws.</li> <li>Articles made from epoxy resins, like other thermosets, can be recycled by grinding and used as fillers in other products. Another way of disposal and recovery is combustion with energy recovery.</li> <li>Do NOT allow wash water from cleaning or process equipment to enter drains.</li> <li>It may be necessary to collect all wash water for treatment before disposal.</li> <li>In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.</li> <li>Where in doubt contact the responsible authority.</li> <li>Recycle wherever possible or consu</li></ul></li></ul>

## **SECTION 14 Transport information**

## Labels Required



•3Z

HAZCHEM

Marine Pollutant

## Land transport (ADG)

UN number	082			
UN proper shipping name	VVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.			
Transport hazard class(es)	Class     9       Subrisk     Not Applicable			
Packing group	1			
Environmental hazard	Environmentally hazardous			
Special precautions for user	Special provisions274 331 335 375 AU01Limited quantity5 L			

Environmentally Hazardous Substances meeting the descriptions of UN 3077 or UN 3082 are not subject to this Code when transported by road or rail in;

(a) packagings;(b) IBCs; or

(c) any other receptacle not exceeding 500 kg(L).
 Australian Special Provisions (SP AU01) - ADG Code 7th Ed.

# Air transport (ICAO-IATA / DGR)

UN number	3082	3082		
UN proper shipping name	Environmentally hazardo	nvironmentally hazardous substance, liquid, n.o.s.		
Transport hazard class(es)	ICAO/IATA Class ICAO / IATA Subrisk ERG Code	9 Not Applicable 9L		
Packing group	Ш	III		
Environmental hazard	Environmentally hazardo	Environmentally hazardous		
Special precautions for user	Special provisions         Cargo Only Packing Instructions         Cargo Only Maximum Qty / Pack         Passenger and Cargo Packing Instructions         Passenger and Cargo Maximum Qty / Pack         Passenger and Cargo Limited Quantity Packing Instructions         Passenger and Cargo Limited Quantity Packing Instructions		A97 A158 A197 A215 964 450 L 964 450 L 450 L Y964 30 kg G	

## Sea transport (IMDG-Code / GGVSee)

	•				
UN number	3082	)82			
UN proper shipping name	ENVIRONMENTALI	NVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.			
Transport hazard class(es)	IMDG Class IMDG Subrisk	IMDG Class9IMDG SubriskNot Applicable			
Packing group	ш	III III III III III III III III III II			
Environmental hazard	Marine Pollutant				
Special precautions for user	EMS Number Special provisions Limited Quantities	F-A, S-F       3       274 335 969       3       5 L			

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

Not Applicable

Transport in bulk in accordance with MARPOL Annex V and the IMSBC Code

Product name	Group
bisphenol A/ diglycidyl ether resin, liquid	Not Available
bisphenol F diglycidyl ether copolymer	Not Available
benzyl alcohol	Not Available

#### Transport in bulk in accordance with the ICG Code

Product name	Ship Type
bisphenol A/ diglycidyl ether resin, liquid	Not Available
bisphenol F diglycidyl ether copolymer	Not Available
benzyl alcohol	Not Available

## **SECTION 15 Regulatory information**

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

## bisphenol A/ diglycidyl ether resin, liquid is found on the following regulatory lists

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals	Chemical Footprint Project - Chemicals of High Concern List	
Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 5	International WHO List of Proposed Occupational Exposure Limit (OEL) Values for Manufactured Nanomaterials (MNMS)	
Australian Inventory of Industrial Chemicals (AIIC)		
bisphenol F diglycidyl ether copolymer is found on the following regulatory lists		
Australian Inventory of Industrial Chemicals (AIIC)	Chemical Footprint Project - Chemicals of High Concern List	
benzyl alcohol is found on the following regulatory lists		
Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals	Australian Inventory of Industrial Chemicals (AIIC)	

### **National Inventory Status**

National Inventory	Status
Australia - AIIC / Australia Non-Industrial Use	Yes
Canada - DSL	Yes
Canada - NDSL	No (bisphenol A/ diglycidyl ether resin, liquid; bisphenol F diglycidyl ether copolymer; benzyl alcohol)
China - IECSC	Yes
Europe - EINEC / ELINCS / NLP	No (bisphenol F diglycidyl ether copolymer)
Japan - ENCS	Yes
Korea - KECI	Yes
New Zealand - NZIoC	Yes
Philippines - PICCS	Yes
USA - TSCA	Yes
Taiwan - TCSI	Yes
Mexico - INSQ	No (bisphenol F diglycidyl ether copolymer)
Vietnam - NCI	Yes
Russia - FBEPH	Yes
Legend:	Yes = All CAS declared ingredients are on the inventory No = One or more of the CAS listed ingredients are not on the inventory. These ingredients may be exempt or will require registration.

# **SECTION 16 Other information**

Revision Date	27/10/2022
Initial Date	31/10/2017

#### SDS Version Summary

Version	Date of Update	Sections Updated
4.6	27/10/2022	Acute Health (eye), Acute Health (inhaled), Acute Health (skin), Acute Health (swallowed), Advice to Doctor, Appearance, Chronic Health, Classification, Disposal, Engineering Control, Environmental, Exposure Standard, Fire Fighter (fire/explosion hazard), Fire Fighter (fire fighting), First Aid (eye), First Aid (inhaled), First Aid (skin), Ingredients, Personal Protection (Respirator), Physical Properties, Spills (major), Storage (storage incompatibility), Supplier Information, Use

#### 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

ES: Exposure Standard 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 AIIC: Australian Inventory of Industrial Chemicals DSL: Domestic Substances List NDSL: Non-Domestic Substances List NDSL: Non-Domestic Substances List IECSC: Inventory of Existing Chemical Substance in China EINECS: European INventory of Existing Commercial chemical Substances ELINCS: European List of Notified Chemical Substances NLP: No-Longer Polymers ENCS: Existing and New Chemical Substances Inventory KECI: Korea Existing Chemicals Inventory NZIOC: New Zealand Inventory of Chemicals PICCS: Philippine Inventory of Chemicals and Chemical Substances TSCA: Toxic Substances Control Act TSCA: Toxic Substances Control Act TCSI: Taiwan Chemical Substance Inventory INSQ: Inventario Nacional de Sustancias Químicas NCI: National Chemical Inventory FBEPH: Russian Register of Potentially Hazardous Chemical and Biological Substances

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# **Resene Paints (Australia) Limited**

Version No: 3.6

Safety Data Sheet according to WHS Regulations (Hazardous Chemicals) Amendment 2020 and ADG requirements

Chemwatch Hazard Alert Code: 4

Issue Date: 27/10/2022 Print Date: 27/10/2022 S.GHS.AUS.EN

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

#### **Product Identifier**

Product name	Altex Epoxy Filler Part B
Synonyms	Not Available
Proper shipping name	PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning or reducing compound)
Other means of identification	Not Available

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

## Details of the manufacturer or supplier of the safety data sheet

Registered company name	Resene Paints (Australia) Limited	Altex Coatings Ltd
Address	7 Production Avenue, Molendinar Queensland 4214 Australia	91-111 Oropi Road Tauranga 3112 New Zealand
Telephone	+61 7 55126600	+64 7 541 1221
Fax	+61 7 55126697	+64 7 541 1310
Website	www.resene.com.au	www.altexcoatings.com
Email	Not Available	neil.debenham@carboline.co.nz

#### Emergency telephone number

Association / Organisation	AUSTRALIAN POISONS CENTRE	N7 POISONS (24br 7 days)	CHEMWATCH EMERGENCY RESPONSE
Association, organisation	ACCTRALIANT CICCIC CENTRE	142 1 0100140 (2411 7 days)	
Emergency telephone numbers	131126	0800 764766	+61 1800 951 288
Other emergency telephone numbers	Not Available	Not Available	+61 3 9573 3188

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

#### **SECTION 2 Hazards identification**

#### Classification of the substance or mixture

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

Poisons Schedule	Not Applicable
Classification <sup>[1]</sup>	Skin Corrosion/Irritation Category 1B, Reproductive Toxicity Category 1A, Acute Toxicity (Dermal) Category 4, Serious Eye Damage/Eye Irritation Category 1, Acute Toxicity (Inhalation) Category 4, Acute Toxicity (Oral) Category 4, Carcinogenicity Category 1A, Sensitisation (Skin) Category 1, Specific Target Organ Toxicity - Repeated Exposure Category 1, Hazardous to the Aquatic Environment Long-Term Hazard Category 4
Legend:	1. Classified by Chernwatch; 2. Classification drawn from HCIS; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI

#### Label elements

Hazard pictogram(s)			
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Signal word Danger

Hazard statement(s)

H314	Causes severe skin burns and eye damage.
H360	May damage fertility or the unborn child.
H312	Harmful in contact with skin.
H332	Harmful if inhaled.
H302	Harmful if swallowed.
H350	May cause cancer.
H317	May cause an allergic skin reaction.
H372	Causes damage to organs through prolonged or repeated exposure.

H413 May cause long lasting harmful effects to aquatic life.

#### Supplementary statement(s)

Not Applicable

## Precautionary statement(s) Prevention

Do not breathe mist/vapours/spray.
Wash all exposed external body areas thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Wear protective gloves, protective clothing, eye protection and face protection.
Do not eat, drink or smoke when using this product.
Avoid release to the environment.
Contaminated work clothing should not be allowed out of the workplace.

#### Precautionary statement(s) Response

P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313	IF exposed or concerned: Get medical advice/ attention.
P310	Immediately call a POISON CENTER/doctor/physician/first aider.
P302+P352	IF ON SKIN: Wash with plenty of water and soap.
P363	Wash contaminated clothing before reuse.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P301+P312	IF SWALLOWED: Call a POISON CENTER/doctor/physician/first aider if you feel unwell.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.

## Precautionary statement(s) Storage

P405 Store locked up.

## Precautionary statement(s) Disposal

P501

Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation.

# **SECTION 3 Composition / information on ingredients**

#### Substances

See section below for composition of Mixtures

# Mixtures

CAS No	%[weight]	Name	
32610-77-8	30-50	formaldehyde/ phenol/ triethylenetetramine copolymer	
112-24-3	10-15	triethylenetetramine	
108-95-2	10-15	phenol	
50815-87-7	15-30	sodium borosilicate	
112-57-2	15-25	tetraethylenepentamine	
Legend:	<ol> <li>Classified by Chemwatch; 2. Classification drawn from HCIS; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI; 4. Classification drawn from C&amp;L * EU IOELVs available</li> </ol>		

# **SECTION 4 First aid measures**

## Description of first aid measures

Eye Contact	<ul> <li>If this product comes in contact with the eyes:</li> <li>Immediately hold eyelids apart and flush the eye continuously with running water.</li> <li>Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.</li> <li>Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes.</li> <li>Transport to hospital or doctor without delay.</li> <li>Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.</li> </ul>
Skin Contact	<ul> <li>If skin or hair contact occurs:</li> <li>Immediately flush body and clothes with large amounts of water, using safety shower if available.</li> <li>Quickly remove all contaminated clothing, including footwear.</li> <li>Wash skin and hair with running water. Continue flushing with water until advised to stop by the Poisons Information Centre.</li> <li>Transport to hospital, or doctor.</li> </ul>

Inhalation	<ul> <li>If fumes or combustion products are inhaled remove from contaminated area.</li> <li>Lay patient down. Keep warm and rested.</li> <li>Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.</li> <li>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.</li> <li>Transport to hospital, or doctor, without delay.</li> <li>Inhalation of vapours or aerosols (mists, fumes) may cause lung oedema.</li> <li>Corrosive substances may cause lung damage (e.g. lung oedema, fluid in the lungs).</li> <li>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.</li> <li>Before any such manifestation, the administration of a spray containing a dexamethasone derivative or beclomethasone derivative may be considered.</li> <li>This must definitely be left to a doctor or person authorised by him/her. (ICSC13719)</li> </ul>
Ingestion	<ul> <li>For advice, contact a Poisons Information Centre or a doctor at once.</li> <li>Urgent hospital treatment is likely to be needed.</li> <li>If swallowed do NOT induce vomiting.</li> <li>If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.</li> <li>Observe the patient carefully.</li> <li>Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious.</li> <li>Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink.</li> <li>Transport to hospital or doctor without delay.</li> </ul>

## Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

# **SECTION 5 Firefighting measures**

# Extinguishing media

- Foam.
- Dry chemical powder.
  BCF (where regulations permit).
- Carbon dioxide.
- Water spray or fog Large fires only.

## 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	<ul> <li>Alert Fire Brigade and tell them location and nature of hazard.</li> <li>Wear full body protective clothing with breathing apparatus.</li> <li>Prevent, by any means available, spillage from entering drains or water course.</li> <li>Use fire fighting procedures suitable for surrounding area.</li> <li>Do not approach containers suspected to be hot.</li> <li>Cool fire exposed containers with water spray from a protected location.</li> <li>If safe to do so, remove containers from path of fire.</li> <li>Equipment should be thoroughly decontaminated after use.</li> </ul>
Fire/Explosion Hazard	Combustible. Will burn if ignited. Combustion products include: carbon monoxide (CO) carbon dioxide (CO2) aldehydes nitrogen oxides (NOx) other pyrolysis products typical of burning organic material. May emit corrosive fumes.
HAZCHEM	2X

# **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	<ul> <li>Drains for storage or use areas should have retention basins for pH adjustments and dilution of spills before discharge or disposal of material.</li> <li>Check regularly for spills and leaks.</li> <li>Clean up all spills immediately.</li> <li>Avoid breathing vapours/ aerosols or dusts and avoid contact with skin and eyes.</li> <li>Place in a suitable, labelled container for waste disposal.</li> </ul>
--------------	--

	<ul> <li>Clear area of personnel and move upwind.</li> <li>Alert Fire Brigade and tell them location and nature of hazard.</li> <li>Wear full body protective clothing with breathing apparatus.</li> <li>Prevent, by all means available, spillage from entering drains or water courses.</li> <li>Consider evacuation (or protect in place).</li> </ul>
	No smoking, naked lights or ignition sources.
	r increase ventilation.
Major Spills	Stop leak if safe to do so.
	Water spray or fog may be used to disperse / absorb vapour.
	Contain or absorb spill with sand, earth or vermiculite.
	Collect recoverable product into labelled containers for recycling.
	Collect solid residues and seal in labelled drums for disposal.
	Wash area and prevent runoff into drains.
	<ul> <li>After clean up operations, decontaminate and launder all protective clothing and equipment before storing and re-using.</li> <li>If contamination of drains or waterways occurs, advise emergency services.</li> </ul>

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

# SECTION 7 Handling and storage

Precautions for safe handling	
Safe handling	<ul> <li>Avoid all personal contact, including inhalation.</li> <li>Wear protective clothing when risk of exposure occurs.</li> <li>Use in a well-ventilated area.</li> <li>WARNING: To avoid violent reaction, ALWAYS add material to water and NEVER water to material.</li> <li>Avoid smoking, naked lights or ignition sources.</li> <li>Avoid contact with incompatible materials.</li> <li>When handling, DO NOT eat, drink or smoke.</li> <li>Keep containers securely sealed when not in use.</li> <li>Avoid physical damage to containers.</li> <li>Always wash hands with soap and water after handling.</li> <li>Work clothes should be laundered separately. Launder contaminated clothing before re-use.</li> <li>Use good occupational work practice.</li> <li>Observe manufacturer's storage and handling recommendations contained within this SDS.</li> <li>Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions are maintained.</li> </ul>
Other information	<ul> <li>Store in original containers.</li> <li>Keep containers securely sealed.</li> <li>Store in a cool, dry, well-ventilated area.</li> <li>Store away from incompatible materials and foodstuff containers.</li> <li>Protect containers against physical damage and check regularly for leaks.</li> <li>Observe manufacturer's storage and handling recommendations contained within this SDS.</li> <li>DO NOT store near acids, or oxidising agents</li> <li>No smoking, naked lights, heat or ignition sources.</li> </ul>

## Conditions for safe storage, including any incompatibilities

Suitable container	<ul> <li>For materials with a viscosity of at least 2680 cSt. (23 deg. C) and solids (between 15 C deg. and 40 deg C.):</li> <li>Removable head packaging;</li> <li>Cans with friction closures and</li> <li>Iow pressure tubes and cartridges</li> <li>may be used.</li> </ul>
Storage incompatibility	<ul> <li>Avoid strong acids, bases.</li> <li>Avoid contact with copper, aluminium and their alloys.</li> <li>Avoid reaction with oxidising agents</li> </ul>



X — Must not be stored together

**0** — May be stored together with specific preventions

+ — May be stored together

Note: Depending on other risk factors, compatibility assessment based on the table above may not be relevant to storage situations, particularly where large volumes of dangerous goods are stored and handled. Reference should be made to the Safety Data Sheets for each substance or article and risks assessed accordingly.

# **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	phenol	Phenol	1 ppm / 4 mg/m3	Not Available	Not Available	Not Available

Ingredient	TEEL-1	TEEL-2		TEEL-3	
triethylenetetramine	3 ppm	14 ppm		83 ppm	
phenol	Not Available	Not Available		Not Available	
tetraethylenepentamine	15 mg/m3	130 mg/m3		790 mg/m3	
Ingredient	Original IDLH		Revised IDLH		
formaldehyde/ phenol/ triethylenetetramine copolymer	Not Available		Not Available		
triethylenetetramine	Not Available		Not Available		
phenol	250 ppm		Not Available		
sodium borosilicate	Not Available		Not Available		
tetraethylenepentamine	Not Available		Not Available		

# Occupational Exposure Banding

Ingredient	Occupational Exposure Band Rating	Occupational Exposure Band Limit
formaldehyde/ phenol/ triethylenetetramine copolymer	D	> 0.1 to ≤ 1 ppm
triethylenetetramine	E	≤ 0.1 ppm
tetraethylenepentamine	E	≤ 0.1 ppm
Notes:	Occupational exposure banding is a process of assigning chemicals into s adverse health outcomes associated with exposure. The output of this pro range of exposure concentrations that are expected to protect worker hea	specific categories or bands based on a chemical's potency and the ccess is an occupational exposure band (OEB), which corresponds to a lth.

## Exposure controls

Appropriate engineering controls	<ul> <li>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.</li> <li>The basic types of engineering controls are:</li> <li>Process controls which involve changing the way a job activity or process is done to reduce the risk.</li> <li>Enclosure and/or isolation of emission source which keeps a selected hazard 'physically' away from the worker and ventilation that strategically 'adds' and 'removes' air in the work environment. Ventilation can remove or dilute an air contaminant if designed properly. The design of a ventilation system must match the particular process and chemical or contaminant in use.</li> <li>Employeers may need to use multiple types of controls to prevent employee overexposure.</li> <li>Mork should be undertaken in an isolated system such as a 'glove-box'. Employees should wash their hands and arms upon completion of the assigned task and before engaging in other activities not associated with the isolated system.</li> <li>Within regulated areas, the carcinogen should be stored in sealed containers, or enclosed in a closed system, including piping systems, with any sample ports or openings closed while the carcinogens are contained within.</li> <li>Open-vessel systems are prohibited.</li> <li>Each operation should be provided with continuous local exhaust ventilation so that air movement is always from ordinary work areas to the operation.</li> <li>Exhaust air should not be discharged to regulated areas, non-regulated areas or the external environment unless decontaminated. Clean make-up air should be introduced in sufficient volume to maintain correct operation of the local exhaust system.</li> <li>For maintenance and decontamination activities, authorized employees entering the area should be provided with and required to shower upon removal of the garments and ho</li></ul>
Personal protection	
Eye and face protection	<ul> <li>Safety glasses with unperforated side shields may be used where continuous eye protection is desirable, as in laboratories; spectacles are not sufficient where complete eye protection is needed such as when handling bulk-quantities, where there is a danger of splashing, or if the material may be under pressure.</li> <li>Chemical goggles.whenever there is a danger of the material coming in contact with the eyes; goggles must be properly fitted.</li> <li>Full face shield (20 cm, 8 in minimum) may be required for supplementary but never for primary protection of eyes; these afford face protection.</li> <li>Alternatively a gas mask may replace splash goggles and face shields.</li> <li>Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59], [AS/NZS 1336 or national equivalent]</li> </ul>
Skin protection	See Hand protection below
Hands/feet protection	<ul> <li>Elbow length PVC gloves</li> <li>NOTE:</li> <li>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.</li> <li>Contaminated leather items, such as shoes, belts and watch-bands should be removed and destroyed.</li> </ul>

	<ul> <li>When handling liquid-grade epoxy resins wear chemically protective gloves , boots and aprons.</li> <li>The performance, based on breakthrough times ,of: <ul> <li>Ethyl Vinyl Alcohol (EVAL laminate) is generally excellent</li> <li>Butyl Rubber ranges from excellent to good</li> <li>Nitrile Butyl Rubber (NBR) from excellent to fair.</li> <li>Neoprene from excellent to fair</li> <li>Polyvinyl (PVC) from excellent to poor</li> </ul> </li> <li>As defined in ASTM F-739-96</li> <li>Excellent breakthrough time &gt; 480 min</li> <li>Good breakthrough time &gt; 20 min</li> <li>Fair breakthrough time &lt; 20 min</li> <li>Poor glove material degradation</li> <li>Gloves should be tested against each resin system prior to making a selection of the most suitable type. Systems include both the resin and any hardener, individually and collectively)</li> <li>DO NOT use barrier creams containing emulsified fats and oils as these may absorb the resin; silicone-based barrier creams should be reviewed prior to use.</li> <li>Replacement time should be considered when selecting the most appropriate glove. It may be more effective to select a glove with lower chemical resistance but which is replaced frequently than to select a more resistant glove which is reused many times</li> </ul>
Body protection	See Other protection below
Other protection	<ul> <li>Employees working with confirmed human carcinogens should be provided with, and be required to wear, clean, full body protective clothing (smocks, coveralls, or long-sleeved shirt and pants), shoe covers and gloves prior to entering the regulated area. [AS/NZS ISO 6529:2006 or national equivalent]</li> <li>Employees engaged in handling operations involving carcinogens should be provided with, and required to wear and use half-face filter-type respirators with filters for dusts, mists and fumes, or air purifying canisters or cartridges. A respirator affording higher levels of protection may be substituted. [AS/NZS 1715 or national equivalent]</li> <li>Emergency deluge showers and eyewash fountains, supplied with potable water, should be located near, within sight of, and on the same level with locations where direct exposure is likely.</li> <li>Prior to each exit from an area containing confirmed human carcinogens, employees should be required to remove and leave protective clothing and equipment at the point of exit and at the last exit of the day, to place used clothing and equipment in impervious containers at the point of exit for purposes of decontamination or disposal. The contents of such impervious containers must be identified with suitable labels. For maintenance and decontamination activities, authorized employees entering the area should be provided with and required to wear impervious garments, including gloves, boots and continuous-air supplied hood.</li> <li>Prior to removing protective garments the employee should undergo decontamination and be required to shower upon removal of the garments and hood.</li> <li>Pvic Apron.</li> <li>PVC protective suit may be required if exposure severe.</li> <li>Eyewash unit.</li> <li>Ensure there is ready access to a safety shower.</li> </ul>

## Recommended material(s)

GLOVE SELECTION INDEX

Glove selection is based on a modified presentation of the:

'Forsberg Clothing Performance Index'.

The effect(s) of the following substance(s) are taken into account in the *computer-generated* selection:

Altex Epoxy Filler Part B

Material	CPI
BUTYL	A
NEOPRENE	A
VITON	A
BUTYL/NEOPRENE	С
NAT+NEOPR+NITRILE	С
NATURAL RUBBER	С
NATURAL+NEOPRENE	С
NEOPRENE/NATURAL	С
NITRILE	С
PE/EVAL/PE	С
PVA	С
PVC	С
TEFLON	С
VITON/NEOPRENE	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. Respiratory protection

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

Where the concentration of gas/particulates in the breathing zone, approaches or exceeds the 'Exposure Standard' (or ES), respiratory protection is required. Degree of protection varies with both face-piece and Class of filter; the nature of protection varies with Type of filter.

Required Minimum Protection Factor	Half-Face Respirator	Full-Face Respirator	Powered Air Respirator
up to 10 x ES	AK-AUS P2	-	AK-PAPR-AUS / Class 1 P2
up to 50 x ES	-	AK-AUS / Class 1 P2	-
up to 100 x ES	-	AK-2 P2	AK-PAPR-2 P2 ^

^ - Full-face

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

# **SECTION 9 Physical and chemical properties**

Information on basic physical	and chemical properties		
Appearance	black paste		
Physical state	Free-flowing Paste	Relative density (Water = 1)	0.56
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	294
pH (as supplied)	Not Available	Decomposition temperature (°C)	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 Available
Flash point (°C)	148	Taste	Not Available
Evaporation rate	Not Available BuAC = 1	Explosive properties	Not Available
Flammability	Not Applicable	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Available	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	Not Available	Volatile Component (%vol)	Not Available
Vapour pressure (kPa)	0.01	Gas group	Not Available
Solubility in water	Immiscible	pH as a solution (Not Available%)	Not Available
Vapour density (Air = 1)	5	VOC g/L	0

# **SECTION 10 Stability and reactivity**

Reactivity	See section 7
Chemical stability	<ul> <li>Unstable in the presence of incompatible materials.</li> <li>Product is considered stable.</li> <li>Hazardous polymerisation will not occur.</li> </ul>
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. Inhalation hazard is increased at higher temperatures. Inhalation of aerosols (mists, fumes), generated by the material during the course of normal handling, may be harmful.
Ingestion	Ingestion of alkaline corrosives may produce burns around the mouth, ulcerations and swellings of the mucous membranes, profuse saliva production, with an inability to speak or swallow. Both the oesophagus and stomach may experience burning pain; vomiting and diarrhoea may follow. The material is not thought to produce adverse health effects following ingestion (as classified by EC Directives using animal models). Nevertheless, adverse systemic effects have been produced following exposure of animals by at least one other route and good hygiene practice requires that exposure be kept to a minimum. 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.
Skin Contact	Skin contact with the material may produce toxic effects; systemic effects may result following absorption. The material can produce severe chemical burns following direct contact with the skin. Volatile amine vapours produce irritation and inflammation of the skin. Direct contact can cause burns. 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.

	Altex Epoxy	Filler Part B		Print Date: 27/10/2022		
	Direct eye contact with corrosive bases can ca inflammation of the iris. Mild cases often resol permanent cloudiness, bulging of the eye, cat The vapour when concentrated has pronounce occurs seek to reduce exposure with available	ause pain and burns. There m lve; severe cases can be prolo aracts, eyelids glued to the ey ed eye irritation effects and th e control measures, or evacua	ay be swelling, e onged with comp reball and blindn is gives some wate area.	epithelium destruction, clouding of the cornea and vlications such as persistent swelling, scarring, ess. arning of high vapour concentrations. If eye irritation		
Chronic	Studies show that inhaling this substance for of Long-term exposure to respiratory irritants ma Skin contact with the material is more likely to There is sufficient evidence to suggest that thi Based on experiments and other information, can be inherited. Toxic: danger of serious damage to health by This material can cause serious damage if one produce severe defects. Ample evidence exists that this material direct Ample evidence exists that developmental dis Substance accumulation, in the human body,	over a long period (e.g. in an or any result in airways disease, in cause a sensitisation reaction is material directly causes car there is ample evidence to pro- prolonged exposure through i e is exposed to it for long peri- tly causes reduced fertility worders are directly caused by may occur and may cause so	cocupational sett volving difficulty n in some persor incer in humans. esume that expo nhalation, in con ods. It can be as human exposure me concern follo	ting) may increase the risk of cancer. breathing and related whole-body problems. as compared to the general population. soure to this material can cause genetic defects that stact with skin and if swallowed. sourced that it contains a substance which can e to the material. wing repeated or long-term occupational exposure.		
Altex Epoxy Filler Part B	ΤΟΧΙCΙΤΥ	IF	RRITATION			
· · · · · · · · · · · · · · · · · · ·	Not Available	N	lot Available			
formaldehyde/ phenol/	ΤΟΧΙCΙΤΥ		IRRITATION			
Ample evidence exists that dev         Substance accumulation, in the         Altex Epoxy Filler Part B         formaldehyde/ phenol/ triethylenetetramine copolymer       TOXICITY         Oral (Rat) LD50; >2200 mg/kg         Dermal (rabbit) LD50: 805 mg         Oral (Rat) LD50; 2500 mg/kg         Oral (Rat) LD50; 2500 mg/kg         Image: Substance accumulation, in the         triethylenetetramine         Image: Substance accumulation, in the         Image: Substance accumulation, in the         Substance accumulation, in the         Image: Substance accumulation, in the     <	Oral (Rat) LD50; >2200 mg/kg <sup>[2]</sup>		Eye (rabbit): S	evere		
copolymer			Skin (rabbit): N	Ioderate irritant		
	ΤΟΧΙCΙΤΥ	IR	RITATION			
	Dermal (rabbit) LD50: 805 mg/kg <sup>[2]</sup>	Ey	e (rabbit):20 mg	/24 h - moderate		
triethylenetetramine	Oral (Rat) LD50: 2500 mg/kg <sup>[2]</sup>	Ey	e (rabbit); 49 mc	a - SEVERE		
triethylenetetramine		Sk	in (rabbit): 490 n	ng open SEVERE		
		Sk	in (rabbit): 5 mg/	/24 SEVERE		
	ΤΟΧΙΟΙΤΥ		IRRITATION			
	Dermal (rabbit)   D50: 850 mg/kg <sup>[2]</sup>		Eve(rabbit): 100 mg rinse - mild			
nhenol	Inhalation/Mouse)   C50: 0.177 mg/l 4b[2]		Eve(rabbit): 5 mg - SEV/ERE			
phenor	Oral (Bat)   DE0: 217 mg/kg <sup>[2]</sup>		Skin(rabbit): 500 mg opp _SE\/EPE			
			Skin(rabbit), 500 mg 04br SEVERE			
	<u> </u>		Skiri(Tabbit).	500 mg/24m - SEVERE		
Index provide the set of the set of the resolve, severe cases can be prolonged with corporate of the resolve, severe cases can be prolonged with corporate devides corporates, severe cases can be prolonged with corporate devides corporates, severe cases can be prolonged with corporates, building of the severe cases can be prolonged with corporates, building the severe cases can be prolonged with corporate devides corporates, severe cases can be prolonged with corporate devides corporates, severe cases can be prolonged with corporate devides corporates, severe cases can be prolonged with corporate devides corporates and severe information effects and the severe devides corporates and the prolonged exposure through inhalation, in one profits in cortact with mean fareit an environged exposure through inhalation, in or the material can cause carcumation, there is another information, there is another information is another information. There is another information is another information, there is another information is another information. There is another information is another information information is another information. There is another information is another information information is another information. There is another information is another information is another information. There is another information is another information information is another information. There is another information is another information information is another information. There is another information is another information information is another information information is another information. There is another information is another information information is another information information is another information. There is another information is another information information is another information is another information is another inf	RRITATION					
Deck case contracts with corrective bases can outse path and burns. There may be swelling, without in spreaker standing of the ins. Mill cancer, there is not a case can be pathoned with completion. The uppart with corrective the subtex cancer standing of the insertion of the ins. Mill cancer, there is not a case and the insertion of the inserti						
	ΤΟΧΙΟΙΤΥ	IF	RRITATION			
	Dermal (rabbit) LD50: 660 mg/kg <sup>[2]</sup>	E	e (rabbit): 100	mg/24h moderate		
tetraethylenepentamine	Oral (Rat) LD50; 3990 mg/kg <sup>[2]</sup>	E	iye (rabbit): 5 mg	g moderate		
		S	skin (rabbit): 495	mg SEVERE		
		S	skin (rabbit): 5 m	g/24h SEVERE		
Legend:	Value obtained from Europe ECHA Registe     specified data extracted from RTECS - Regist	ered Substances - Acute toxici ter of Toxic Effect of chemical	ity 2. Value obtai Substances	ined from manufacturer's SDS. Unless otherwise		
	✓	Ca.	rcinogenicity	×		
Skin Irritation/Corrosion	· · · · · · · · · · · · · · · · · · ·		eproductivity	· · · · · · · · · · · · · · · · · · ·		
Serious Eve Damage/Irritation	· · · · · · · · · · · · · · · · · · ·	STOT - Sin	ale Exposure	×		
Respiratory or Skin						
sensitisation	*	STOT - Repeat	ted Exposure	*		

# **SECTION 12 Ecological information**

Mutagenicity

×

×

X − Data either not available or does not fill the criteria for classification
→ − Data available to make classification

Aspiration Hazard

Legend:

Altex Enoxy Filler Part B	Endpoint Test Duration (hr)			Species		Value		Source		
	Not Available	Not Available		Not Available		Not Available Not Available		Not Available		able
formaldehyde/ phenol/	Endpoint		Test Duration (hr)		Species	Value	)		Source	
triethylenetetramine copolymer	Not Available		Not Available		Not Available	Not A	vailable		Not Availa	able
	Endpoint	-	Test Duration (hr)	Sr	pecies			Value Source		Source
	BCF		1008h	Fis	sh			<0.5		7
	EC50	7	72h	Ale	gae or other aquatic pla	nts		2.5mg/l		1
triethylenetetramine	EC50	4	48h	Cr	ustacea			31.1mg/	/I	1
	ErC50	7	72h	Alg	gae or other aquatic pla	nts		2.5mg/l		1
	EC10(ECx)	7	72h	Alg	gae or other aquatic pla	nts		0.67mg/	/I	1
	LC50	9	96h	Fis	Fish			180mg/l		1
	-									
	Endpoint	Tes	st Duration (hr)	Species	Species		Value			Sourc
	EC50(ECx)	36h		Fish	Fish		0.008mg/L			4
nhanal	LC50	96h		Fish	Fish 2.		2.809-5.55	2.809-5.554mg/L		4
pnenor	EC50	96h		Algae or	other aquatic plants		10.6mg/L			4
	EC50 72h		Algae or	Algae or other aquatic plants			.407mg/L		4	
	EC50	50 48h Cr		Crustace	rustacea 3.1mg/l		3.1mg/l			1
	Endneint		Toot Duration (br)		Species	Value			Sauraa	
sodium borosilicate			Net Available	Test Duration (nr) Specie		Value	Value		Net Available	
	Not Available         Not Available         Not Available         Not Available									
	Endpoint		Test Duration (hr)	s	Species		Value			Source
	EC50		72h	А	Algae or other aquatic plants		2 1mg/		1	1
tetraethylenepentamine	EC50		48h	С	Crustacea				ı/I	1
	NOEC(ECx)		72h	A	Igae or other aquatic pla	ants		0.5ma/l		1
			/2N							

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Do NOT allow product to come in contact with surface waters or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash-waters.

Wastes resulting from use of the product must be disposed of on site or at approved waste sites.

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	
triethylenetetramine	LOW	LOW	
phenol	LOW (Half-life = 10 days)	LOW (Half-life = 0.95 days)	
tetraethylenepentamine	LOW	LOW	

#### **Bioaccumulative potential**

Ingredient	Bioaccumulation
triethylenetetramine	LOW (BCF = 5)
phenol	LOW (BCF = 17.5)
tetraethylenepentamine	LOW (LogKOW = -3.1604)

# Mobility in soil

Ingredient	Mobility
triethylenetetramine	LOW (KOC = 309.9)
phenol	LOW (KOC = 268)
tetraethylenepentamine	LOW (KOC = 1098)

Waste treatment methods	
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Product / Packaging disposal	<ul> <li>Containers may still present a chemical hazard/ danger when empty.</li> <li>Return to supplier for reuse/ recycling if possible.</li> <li>Otherwise:</li> <li>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.</li> <li>Where possible retain label warnings and SDS and observe all notices pertaining to the product.</li> <li>DO NOT allow wash water from cleaning or process equipment to enter drains.</li> <li>It may be necessary to collect all wash water for treatment before disposal.</li> <li>In all cases disposal to sever may be subject to local laws and regulations and these should be considered first.</li> </ul>
	<ul> <li>Consult manufacturer for recycling options or consult local or regional waste management authority for disposal if no suitable treatment or disposal facility can be identified.</li> <li>Treat and neutralise at an approved treatment plant. Treatment should involve: Mixing or slurrying in water; Neutralisation followed by: burial in a land-fill specifically licensed to accept chemical and / or pharmaceutical wastes or Incineration in a licensed apparatus (after admixture with suitable combustible material)</li> <li>Decontaminate empty containers. Observe all label safeguards until containers are cleaned and destroyed.</li> </ul>

# **SECTION 14 Transport information**

#### Labels Required



HAZCHEM 2X

Marine Pollutant

# Land transport (ADG)

UN number	3066		
UN proper shipping name	PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning or reducing compound)		
Transport hazard class(es)	Class     8       Subrisk     Not Applicable		
Packing group	ll		
Environmental hazard	Not Applicable		
Special precautions for user	Special provisions163 367Limited quantity1 L		

#### Air transport (ICAO-IATA / DGR)

	-			
UN number	3066			
UN proper shipping name	Paint related material corrosive (including paint thinning or reducing compounds); Paint corrosive (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base)			
Transport hazard class(es)	ICAO/IATA Class ICAO / IATA Subrisk ERG Code	8 Not Applicable 8L		
Packing group	П			
Environmental hazard	Not Applicable			
Special precautions for user	Special provisions         Cargo Only Packing Instructions         Cargo Only Maximum Qty / Pack         Passenger and Cargo Packing Instructions         Passenger and Cargo Maximum Qty / Pack         Passenger and Cargo Limited Quantity Packing Instructions         Passenger and Cargo Limited Maximum Qty / Pack		A3 A72 A192 A803 855 30 L 851 1 L Y840 0.5 L	

# Sea transport (IMDG-Code / GGVSee)

UN number	3066
UN proper shipping name	PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning or reducing compound)

Transport hazard class(es)	IMDG Class IMDG Subrisk	8 Not Applicable	
Packing group	I		
Environmental hazard	Not Applicable		
Special precautions for user	EMS Number Special provision Limited Quantitie	F-A, S-B         s       163 367         s       1 L	

Transport in bulk according to Annex II of MARPOL and the IBC code Not Applicable

#### Transport in bulk in accordance with MARPOL Annex V and the IMSBC Code

Product name	Group
formaldehyde/ phenol/ triethylenetetramine copolymer	Not Available
triethylenetetramine	Not Available
phenol	Not Available
sodium borosilicate	Not Available
tetraethylenepentamine	Not Available

#### Transport in bulk in accordance with the ICG Code

Product name	Ship Type
formaldehyde/ phenol/ triethylenetetramine copolymer	Not Available
triethylenetetramine	Not Available
phenol	Not Available
sodium borosilicate	Not Available
tetraethylenepentamine	Not Available

## **SECTION 15 Regulatory information**

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

#### formaldehyde/ phenol/ triethylenetetramine copolymer is found on the following regulatory lists

Australian Inventory of Industrial Chemicals (AIIC)

#### triethylenetetramine is found on the following regulatory lists

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) -Schedule 10 / Appendix C

Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 4  $\ensuremath{\mathsf{4}}$ 

#### phenol is found on the following regulatory lists

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 2

Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 4  $\,$ 

Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 5

#### sodium borosilicate is found on the following regulatory lists

Australian Inventory of Industrial Chemicals (AIIC)

#### tetraethylenepentamine is found on the following regulatory lists

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) -Schedule 10 / Appendix C Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) -Schedule 5

Australian Inventory of Industrial Chemicals (AIIC)

Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 6

Australian Inventory of Industrial Chemicals (AIIC)

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

International WHO List of Proposed Occupational Exposure Limit (OEL) Values for Manufactured Nanomaterials (MNMS)

Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) -Schedule 5

Australian Inventory of Industrial Chemicals (AIIC)

#### **National Inventory Status**

National Inventory	Status	
Australia - AIIC / Australia Non-Industrial Use	Yes	
Canada - DSL	Yes	
Canada - NDSL	No (formaldehyde/ phenol/ triethylenetetramine copolymer; triethylenetetramine; phenol; sodium borosilicate; tetraethylenepentamine)	
China - IECSC	Yes	
Europe - EINEC / ELINCS / NLP	No (sodium borosilicate)	

National Inventory	Status		
Japan - ENCS	No (formaldehyde/ phenol/ triethylenetetramine copolymer)		
Korea - KECI	Yes		
New Zealand - NZIoC	Yes		
Philippines - PICCS	Yes		
USA - TSCA	No (sodium borosilicate)		
Taiwan - TCSI	Yes		
Mexico - INSQ	No (formaldehyde/ phenol/ triethylenetetramine copolymer; sodium borosilicate)		
Vietnam - NCI	No (formaldehyde/ phenol/ triethylenetetramine copolymer)		
Russia - FBEPH	No (formaldehyde/ phenol/ triethylenetetramine copolymer; sodium borosilicate)		
Legend:	Yes = All CAS declared ingredients are on the inventory No = One or more of the CAS listed ingredients are not on the inventory. These ingredients may be exempt or will require registration.		

#### **SECTION 16 Other information**

Revision Date	27/10/2022
Initial Date	29/05/2018

#### SDS Version Summary

Version	Date of Update	Sections Updated
2.6	27/10/2022	Acute Health (eye), Acute Health (inhaled), Acute Health (skin), Acute Health (swallowed), Advice to Doctor, Chronic Health, Classification, Engineering Control, Environmental, Exposure Standard, Handling Procedure, Personal Protection (other), Personal Protection (Respirator), Personal Protection (eye), Personal Protection (hands/feet), Physical Properties, Spills (major), Storage (storage incompatibility), Supplier Information, Synonyms, Transport 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  $\mathsf{Limit}_\circ$ IDLH: Immediately Dangerous to Life or Health Concentrations ES: Exposure Standard 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 AIIC: Australian Inventory of Industrial Chemicals DSL: Domestic Substances List NDSL: Non-Domestic Substances List IECSC: Inventory of Existing Chemical Substance in China EINECS: European INventory of Existing Commercial chemical Substances ELINCS: European List of Notified Chemical Substances NLP: No-Longer Polymers ENCS: Existing and New Chemical Substances Inventory KECI: Korea Existing Chemicals Inventory NZIoC: New Zealand Inventory of Chemicals PICCS: Philippine Inventory of Chemicals and Chemical Substances TSCA: Toxic Substances Control Act TCSI: Taiwan Chemical Substance Inventory INSQ: Inventario Nacional de Sustancias Químicas NCI: National Chemical Inventory FBEPH: Russian Register of Potentially Hazardous Chemical and Biological Substances Powered by AuthorITe, from Chemwatch.