RESENE CONCRETESEAL 3 IN 1

Resene Paints Ltd

Version No: 1.2

Safety Data Sheet according to HSNO Regulations

Chemwatch Hazard Alert Code: 3

Issue Date: **28/04/2020**Print Date: **04/05/2020**S.GHS.NZL.EN

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

Product Identifier

Product name	RESENE CONCRETESEAL 3 IN 1
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

Relevant identified uses 8963

Details of the supplier of the safety data sheet

Registered company name	Resene Paints Ltd					
Address	32-50 Vogel Street Wellington New Zealand					
Telephone	+64 4 577 0500					
Fax	+64 4 5773327					
Website	www.resene.co.nz					
Email	advice@resene.co.nz					

Emergency telephone number

Association / Organisation	NZ POISONS (24hr 7 days)	CHEMWATCH EMERGENCY RESPONSE		
Emergency telephone numbers	0800 764766	+64 800 700 112		
Other emergency telephone numbers	Not Available	+61 2 9186 1132		

Once connected and if the message is not in your prefered language then please dial ${\bf 01}$

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

Considered a Hazardous Substance according to the criteria of the New Zealand Hazardous Substances New Organisms legislation. Classified as Dangerous Goods for transport purposes.

Classification ^[1]	Flammable Liquid Category 3, Specific target organ toxicity - single exposure Category 2, Skin Corrosion/Irritation Category 2, Eye Irritation Category 2, Reproductive Toxicity Category 2, Acute Toxicity (Oral) Category 5, Chronic Aquatic Hazard Category 3					
Legend:	1. Classified by Chemwatch; 2. Classification drawn from CCID EPA NZ; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI					
Determined by Chemwatch using GHS/HSNO criteria	3.1C, 6.1E (oral), 6.3A, 6.4A, 6.8B, 6.9B, 9.1C					

Label elements

Hazard pictogram(s)







SIGNAL WORD WARNING

Hazard statement(s)

nazara statement(s)							
H226	Flammable liquid and vapour.						
H371	May cause damage to organs. (Respiratory system) (Inhalation)						
H315	Causes skin irritation.						
H319	Causes serious eye irritation.						
H361	Suspected of damaging fertility or the unborn child.						
H303	May be harmful if swallowed.						
H412	Harmful to aquatic life with long lasting effects.						

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Precautionary statement(s) Prevention

P201 Obtain special instructions before use.

Precautionary statement(s) Response

P312 Call a POISON CENTER/doctor/physician/first aider/if you feel unwell.

Precautionary statement(s) Storage

P403+P235 Store in a well-ventilated place. Keep cool.

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			
95-63-6	1-10	1,2,4-trimethyl benzene			
763-69-9	1-10	ethyl-3-ethoxypropionate			
108-67-8	1-10	1.3.5-trimethyl benzene			
26354-11-0	2-5	cresol/ phenol/ formaldehyde resin			
98-82-8	1-5	cumene			
1330-20-7	1-10	xylene			
108-95-2	0.1-1	phenol			
100-41-4	0.1-0.5	<u>ethylbenzene</u>			

SECTION 4 FIRST AID MEASURES

Description of first aid measures

Eye Contact	If this product comes in contact with the eyes: Wash out immediately with fresh running water. Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. Seek medical attention if pain persists or recurs. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	If skin contact occurs: Immediately remove all contaminated clothing, including footwear. Flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation.
Inhalation	▶ If fumes or combustion products are inhaled remove from contaminated area.
Ingestion	 If swallowed doNOT induce vomiting. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. Observe the patient carefully. Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious. Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink. Seek medical advice.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5 FIREFIGHTING MEASURES

Extinguishing media

► Alcohol stable foam.

Special hazards arising from the substrate or mixture

Fire Incompatibility	 Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result 					
Advice for firefighters						
Fire Fighting	Alert Fire Brigade and tell them location and nature of hazard.					
	▶ Liquid and vapour are flammable.					

Fire/Explosion Hazard	Liquid and vapour are flammable. Combustion products include: carbon dioxide (CO2) carbon monoxide (CO) other pyrolysis products typical of burning organic material.

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SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

See section 8

Environmental precautions

See section 12

Methods and material for containment and cleaning up

Minor Spills	Remove all ignition sources. Contain spill with inert non- combustible absorbent then place in suitable, labelled container for waste disposal. Wipe up. Clean area with large quantity of water to complete clean- up.
Major Spills	Remove all ignition sources. Clear area of personnel and move upwind. Wear appropriate personnel protective equipment and clothing to prevent exposure. Avoid breathing in mists or vapours and skin or eyes contact. Extinguish or remove all sources of ignition and stop leak if safe to do so. Increase ventilation. Evacuate all unprotected personnel. If possible contain the spill. Place inert absorbent, non- combustible material onto spillage. Use clean non- sparking tools to collect the material and place into suitable labelled containers for subsequent recycling or disposal. Dispose of waste according to the applicable local and national regulations. If contamination of sewers or waterways occurs inform the local water and waste management authority.

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

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Safe handling

- ▶ Containers, even those that have been emptied, may contain explosive vapours.
- $\qquad \qquad \textbf{Electrostatic discharge may be generated during pumping this may result in fire. } \\$
- ► Avoid unnecessary personal contact, including inhalation.
- ▶ DO NOT allow clothing wet with material to stay in contact with skin
- Other information
- ▶ Store in original containers in approved flammable liquid storage area.

Conditions for safe storage, including any incompatibilities

Suitable container	▶ Packing as supplied by manufacturer.
Storage incompatibility	strong oxidisers

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
New Zealand Workplace Exposure Standards (WES)	cumene	Cumene	25 ppm / 125 mg/m3	375 mg/m3 / 75 ppm	Not Available	skin-Skin absorption
New Zealand Workplace Exposure Standards (WES)	xylene	Dimethylbenzene	50 ppm / 217 mg/m3	Not Available	Not Available	Not Available
New Zealand Workplace Exposure Standards (WES)	phenol	Phenol	5 ppm	Not Available	Not Available	skin-Skin absorption
New Zealand Workplace Exposure Standards (WES)	ethylbenzene	Ethyl benzene	100 ppm / 434 mg/m3	543 mg/m3 / 125 ppm	Not Available	Not Available

EMERGENCY LIMITS

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
1,2,4-trimethyl benzene	Permafluor E+	140 mg/m3	360 mg/m3	2,200 mg/m3
1,2,4-trimethyl benzene	Trimethylbenzene, 1,2,4-; (Pseudocumene)	Not Available	Not Available	480 ppm
ethyl-3-ethoxypropionate	Propionic acid, 3-ethoxy-, ethyl ester; (Ethyl-3-ethoxypropionate)	1.6 ppm	18 ppm	110 ppm
1,3,5-trimethyl benzene	Trimethylbenzene, -1,3,5; (Mesitylene)	Not Available	Not Available	480 ppm
cumene	Cumene; (Isopropyl benzene)	Not Available	Not Available	Not Available
xylene	Xylenes	Not Available	Not Available	Not Available
phenol	Phenol	Not Available	Not Available	Not Available
ethylbenzene	Ethyl benzene	Not Available	Not Available	Not Available

Ingredient	Original IDLH	Revised IDLH
1,2,4-trimethyl benzene	Not Available	Not Available
ethyl-3-ethoxypropionate	Not Available	Not Available
1,3,5-trimethyl benzene	Not Available	Not Available
cresol/ phenol/ formaldehyde resin	Not Available	Not Available
cumene	900 ppm	Not Available
xylene	900 ppm	Not Available

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phenol	250 ppm	Not Available
ethylbenzene	800 ppm	Not Available

OCCUPATIONAL EXPOSURE BANDING

Ingredient	Occupational Exposure Band Rating	Occupational Exposure Band Limit	
1,2,4-trimethyl benzene	E	≤ 0.1 ppm	
ethyl-3-ethoxypropionate	E	≤ 0.1 ppm	
1,3,5-trimethyl benzene	E	≤ 0.1 ppm	
cresol/ phenol/ formaldehyde resin	Е	≤ 0.01 mg/m³	
Notes:	Occupational exposure banding is a process of assigning chemicals into specific categories or bands based on a chemical's potency and the adverse health outcomes associated with exposure. The output of this process is an occupational exposure band (OEB), which corresponds to a range of exposure concentrations that are expected to protect worker health.		

Exposure controls

.xposure controls	
Appropriate engineering controls	Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard.
Personal protection	
Eye and face protection	► Safety glasses with side shields.
Skin protection	See Hand protection below
Hands/feet protection	 Wear chemical protective gloves, e.g. PVC. For esters: Do NOT use natural rubber, butyl rubber, EPDM or polystyrene-containing materials. The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer.
Body protection	See Other protection below
Other protection	 Overalls. Some plastic personal protective equipment (PPE) (e.g. gloves, aprons, overshoes) are not recommended as they may produce static electricity.

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 computergenerated selection:

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Material	СРІ
BUTYL	С
BUTYL/NEOPRENE	С
HYPALON	С
NAT+NEOPR+NITRILE	С
NATURAL RUBBER	С
NATURAL+NEOPRENE	С
NEOPRENE	С
NEOPRENE/NATURAL	С
NITRILE	С
NITRILE+PVC	С
PE	С
PE/EVAL/PE	С
PVA	С
PVC	С
PVDC/PE/PVDC	С
SARANEX-23	С
TEFLON	С
VITON	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. -

Respiratory protection

Respiratory protection required in insufficiently ventilated working areas and during spraying. An approved respirator with a replaceable vapour/ mist filter should be used. Refer to relevant regulations for further information concerning respiratory protective requirements. Reference should be made to AS/NZS 1715 Standard, Selection, Use and Maintenance of Respiratory Protective Devices; and AS/NZS 1716 Standard, Respiratory Protective Devices, in order to make any necessary changes for individual

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

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

^ - 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 = $\frac{1}{2}$ Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 degC)

^{*} Where the glove is to be used on a short term, casual or infrequent basis, factors such

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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	Liquid with solvent odour		
Physical state	Liquid	Relative density (Water = 1)	1.10-1.12
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	409
pH (as supplied)	Not Available	Decomposition temperature	Not Available
Melting point / freezing point (°C)	Not Available	Viscosity (cSt)	Not Available
Initial boiling point and boiling range (°C)	82	Molecular weight (g/mol)	Not Available
Flash point (°C)	44-49	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Flammable.	Oxidising properties	Not Available
Upper Explosive Limit (%)	8.0	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	1.1	Volatile Component (%vol)	82
Vapour pressure (kPa)	1.1	Gas group	Not Available
Solubility in water	Immiscible	pH as a solution (1%)	Not Available
Vapour density (Air = 1)	4.2	VOC g/L	744

SECTION 10 STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical stability	► stable
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. Inhalation of vapours may cause drowsiness and dizziness. Headache, fatigue, tiredness, irritability and digestive disturbances (nausea, loss of appetite and bloating) are the most common symptoms of xylene overexposure.		
Ingestion	Swallowing of the liquid may cause aspiration into the lungs with the risk of chemical pneumonitis; serious consequences may result. Accidental ingestion of the material may be damaging to the health of the individual.		
Skin Contact	This material can cause inflammation of the skin on contact in some persons. The material may accentuate any pre-existing dermatitis condition Open cuts, abraded or irritated skin should not be exposed to this material		
Eye	This material can cause eye irritation and damage in some persons.		
Chronic	Long-term exposure to respiratory irritants may result in airways disease, involving difficulty breathing and related whole-body problems. Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure. There has been some concern that this material can cause cancer or mutations but there is not enough data to make an assessment.		
RESENE CONCRETESEAL 3	TOXICITY	IRRITATION	
IN 1	Not Available	Not Available	
	TOXICITY	IRRITATION	
	Dermal (rabbit) LD50: >3160 mg/kg ^[2]	Not Available	
1,2,4-trimethyl benzene	Inhalation (rat) LC50: 18 mg/l/4hd ^[2]		
Oral (rat) LD50: 5000 mg/kg ^[1]			
	TOXICITY	IRRITATION	
ethyl-3-ethoxypropionate	Dermal (rabbit) LD50: 4076 mg/kg ^[2]	Eye (rabbit): 500mg/24h - mild	
	Inhalation (rat) LC50: 1248.57375 mg/l/4h ^[2]	Skin (rabbit):10 mg/24h open mild	

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	Oral (rat) LD50: ~3200-5000 mg/kg ^[2]		
	TOXICITY	IRRITATION	
	Inhalation (rat) LC50: 24 mg/l/4hd ^[2]	Eye (rabbit): 500 mg/24h mild	
1,3,5-trimethyl benzene	Oral (rat) LD50: 5000 mg/kg ^[1]	Eye: adverse effect observed (irritating) ^[1]	
		Skin (rabbit): 20 mg/24h moderate	
		Skin: adverse effect observed (irritating) ^[1]	
	TOXICITY	IRRITATION	
cresol/ phenol/ formaldehyde	Dermal (rabbit) LD50: >5000 mg/kg ^[2]	Not Available	
resin	Oral (rat) LD50: >5000 mg/kg ^[2]		
	TOXICITY	IRRITATION	
	Dermal (rabbit) LD50: 2000 mg/kg ^[2]	Eye (rabbit): 500 mg/24h mild	
	Inhalation (rat) LC50: 39 mg/l/4H ^[2]	Eye (rabbit): 86 mg mild	
cumene	Oral (rat) LD50: 1400 mg/kg ^[2]	Eye: no adverse effect observed (not irritating) ^[1]	
		Skin (rabbit): 10 mg/24h mild	
		Skin (rabbit):100 mg/24h moderate	
		Skin: no adverse effect observed (not irritating) ^[1]	
	TOXICITY	IRRITATION	
	Dermal (rabbit) LD50: >1700 mg/kg ^[2]	Eye (human): 200 ppm irritant	
	Inhalation (rat) LC50: 4994.295 mg/l/4h ^[2]	Eye (rabbit): 5 mg/24h SEVERE	
xylene	Oral (rat) LD50: 3523-8700 mg/kg ^[2]	Eye (rabbit): 87 mg mild	
		Eye: adverse effect observed (irritating) ^[1]	
		Skin (rabbit):500 mg/24h moderate	
		Skin: adverse effect observed (irritating) ^[1]	
	TOXICITY	IRRITATION	
	dermal (rat) LD50: =525 mg/kg ^[2]	Eye(rabbit): 100 mg rinse - mild	
phenol	Inhalation (rat) LC50: 0.316 mg/l/4H ^[2]	Eye(rabbit): 5 mg - SEVERE	
	Oral (rat) LD50: 317 mg/kg ^[2]	Skin(rabbit): 500 mg open -SEVERE	
		Skin(rabbit): 500 mg/24hr - SEVERE	
	TOXICITY	IRRITATION	
	Dermal (rabbit) LD50: >5000 mg/kg ^[2]	Eye (rabbit): 500 mg - SEVERE	
ethylbenzene	Inhalation (mouse) LC50: 17.75 mg/l/2H ^[2]	Eye: no adverse effect observed (not irritating) ^[1]	
etityibetizetie	Oral (rat) LD50: 3500 mg/kg ^[2]	Skin (rabbit): 15 mg/24h mild	
	oral (rat) 2500. 0000 mg/kg- 1	Skin: no adverse effect observed (not irritating) ^[1]	
Legend:	Value obtained from Europe ECHA Registered Substances specified data extracted from RTECS - Register of Toxic Effect	 Acute toxicity 2.* Value obtained from manufacturer's SDS. Unless otherwise of of chemical Substances 	
	The chemical structure of hydroxylated diphenylalkanes or bis For propylene glycol ethers (PGEs):	sphenols consists of two phenolic rings joined together through a bridging carbon.	
	Typical propylene glycol etners (PGES): Typical propylene glycol ethers include propylene glycol n-butyl ether (PnB); dipropylene glycol n-butyl ether (DPnB); dipropylene glycol methyl ether acetate (DPMA) and tripropylene glycol methyl ether (TPM). Testing of a wide variety of propylene glycol ethers has shown that propylene glycol-based ethers are less toxic than some ethers of the ethylene		
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IN 1	series.		
	cause adverse effects.	.5%) are associated with birth defects but lower exposures have not been shown to	
	The beta isomer of PGMEA comprises only 10% of the comm	ercial material; the remaining 90% is alpha isomer.	
1,2,4-TRIMETHYL BENZENE	CHEMWATCH 2325 1,3,5-trimethylbenzene		
ETHYL- 3-ETHOXYPROPIONATE	* Union Carbide ** Endura Manufacturing		
1,3,5-TRIMETHYL BENZENE	The material may be irritating to the eye, with prolonged conta	act causing inflammation. CHEMWATCH 12171 1,2,4-trimethylbenzene	
CRESOL/ PHENOL/ FORMALDEHYDE RESIN	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. for phenol/ formaldehyde analogue		
CUMENE	Cumene is reasonably anticipated to be a human carcinogen based on sufficient evidence of carcinogenicity from studies in experimental animals. similar metabolic pathways. The relevance of the kidney tumors to cancer in humans is uncertain; there is evidence that a species-specific mechanism not relevant to humans contributes to their induction, but it is possible that other mechanisms relevant to humans, such as genotoxicity, may also contribute to kidney-tumour formation in male rats. For aromatic terpenes: p-cymene and cumene have low toxic potential and are excreted in the urine. Tenth Annual Report on Carcinogens: Substance anticipated to be Carcinogen		

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	[National Toxicology Program: U.S. Dep.		
XYLENE	Reproductive effector in rats		
PHENOL	The material may cause severe 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.		
ETHYLBENZENE	Liver changes, utheral tract, effects on fertility, foetotoxicity, specific developmental abnormalities (musculoskeletal system) recorded. Ethylbenzene is readily absorbed when inhaled, swallowed or in contact with the skin. NOTE: Substance has been shown to be mutagenic in at least one assay, or belongs to a family of chemicals producing damage or change to cellular DNA.		
RESENE CONCRETESEAL 3 IN 1 & 1,2,4-TRIMETHYL BENZENE & 1,3,5-TRIMETHYL BENZENE & CRESOL/ PHENOL/ FORMALDEHYDE RESIN & CUMENE & PHENOL	Asthma-like symptoms may continue for months or even years after exposure to the material ends.		
RESENE CONCRETESEAL 3 IN 1 & 1,2,4-TRIMETHYL BENZENE & 1,3,5-TRIMETHYL BENZENE	For trimethylbenzenes: Absorption of 1,2,4-trimethylbenzene occurs after exposure by swallowing, inhalation, or skin contact.		
1,2,4-TRIMETHYL BENZENE & 1,3,5-TRIMETHYL BENZENE	Other Toxicity data is available for CHEMWATCH 12172 1,2,3-trimethylbenzene		
ETHYL- 3-ETHOXYPROPIONATE & 1,3,5-TRIMETHYL BENZENE & CUMENE & XYLENE & ETHYLBENZENE	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.		
CUMENE & ETHYLBENZENE	WARNING: This substance has been classified by the IARC as Group 2B: Possibly Carcinogenic to Humans.		
XYLENE & PHENOL & ETHYLBENZENE	The material may produce severe irritation to the eye	causing pronounced inflammation.	
XYLENE & PHENOL	The substance is classified by IARC as Group 3: NOT classifiable as to its carcinogenicity to humans. Evidence of carcinogenicity may be inadequate or limited in animal testing.		
Acute Toxicity	✓	Carcinogenicity	×
Skin Irritation/Corrosion	✓	Reproductivity	✓
Serious Eye Damage/Irritation	✓	STOT - Single Exposure	✓
Respiratory or Skin sensitisation	×	STOT - Repeated Exposure	×
Mutagenicity	X Aspiration Hazard X		

Legend:

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

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

Oxicity					
RESENE CONCRETESEAL 3 IN 1	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
	Not Available	Not Available	Not Available	Not Available	Not Available
	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
40445	LC50	96	Fish	1.318mg/L	3
1,2,4-trimethyl benzene	EC50	48	Crustacea	ca.6.14mg/L	2
	EC50	96	Algae or other aquatic plants	2.154mg/L	3
	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
	LC50	96	Fish	45.3mg/L	2
ethyl-3-ethoxypropionate	EC50	48	Crustacea	>95mg/L	1
	EC50	96	Algae or other aquatic plants	5.289mg/L	3
	NOEC	48	Crustacea	=9.5mg/L	1
	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
	LC50	96	Fish	1.318mg/L	3
1,3,5-trimethyl benzene	EC50	48	Crustacea	13mg/L	5
	EC50	96	Algae or other aquatic plants	2.154mg/L	3
	NOEC	384	Crustacea	0.257mg/L	2
	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
cresol/ phenol/ formaldehyde resin	Not Available	Not Available	Not Available	Not Available	Not Available

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	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
	LC50	96	Fish	1.784mg/L	3
cumene	EC50	48	Crustacea	0.6mg/L	2
	EC50	72	Algae or other aquatic plants	1.29mg/L	2
	NOEC	72	Algae or other aquatic plants	0.22mg/L	2
	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
	LC50	96	Fish	2.6mg/L	2
xylene	EC50	48	Crustacea	1.8mg/L	2
	EC50	72	Algae or other aquatic plants	3.2mg/L	2
	NOEC	73	Algae or other aquatic plants	0.44mg/L	2
	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
	LC50	96	Fish	0.00175mg/L	4
	EC50	48	Crustacea	=3.1mg/L	1
phenol	EC50	96	Algae or other aquatic plants	0.0611mg/L	4
	BCF	24	Fish	60mg/L	4
	EC10	504	Crustacea	0.05mg/L	2
	NOEC	144	Crustacea	0.01mg/L	4
	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
	LC50	96	Fish	0.0043mg/L	4
ethylbenzene	EC50	48	Crustacea	1.184mg/L	4
·	EC50	96	Algae or other aquatic plants	3.6mg/L	4
	NOEC	168	Crustacea	0.96mg/L	5
Legend:	Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 3. EPIWIN Suite V3.12 (QSAR) - Aquatic Toxicity Data (Estimated) 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data				

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.

For Propylene Glycol Ethers: log Kow's range from 0.309 for TPM to 1.523 for DPnB.

For 1,2,4 - Trimethylbenzene:

Half-life (hr) air: 0.48-16;

Half-life (hr) H2O surface water: 0.24 -672;

Half-life (hr) H2O ground: 336-1344;

Half-life (hr) soil: 168-672;

Henry's Pa m3 /mol: 385 -627;

Bioaccumulation: not significant.

For Aromatic Substances Series:

Environmental Fate: Large, molecularly complex polycyclic aromatic hydrocarbons, or PAHs, are persistent in the environment longer than smaller PAHs.

For bisphenol A and related bisphenols:

Environmental fate:

Biodegradability (28 d) 89% - Easily biodegradable

Bioconcentration factor (BCF) 7.8 mg/l

Bisphenol A, its derivatives and analogues, can be released from polymers, resins and certain substances by metabolic products

Substance does not meet the criteria for PBT or vPvB according to Regulation (EC) No 1907/2006, Annex XIII

As an environmental contaminant, bisphenol A interferes with nitrogen fixation at the roots of leguminous plants associated with the bacterial symbiont Sinorhizobium meliloti.

log Koc : 2.05-3.08; Koc : 25.4-204; Half-life (hr) air : 0.24-42; Half-life (hr) H2O surface water : 24-672; Half-life (hr) H2O ground : 336-8640; Half-life (hr) soil : 52-672; Henry's Pa m3

/mol : 637-879; Henry's atm m3 /mol - 7.68E-03; BOD 5 if unstated - 1.4,1%; COD - 2.56,13% ThOD - 3.125 : BCF : 23; log BCF : 1.17-2.41.

For Glycol Ethers:

Environmental Fate: Several glycol ethers have been shown to biodegrade however; biodegradation slows as molecular weight increases.

For Formaldehyde:

Environmental Fate: Formaldehyde is common in the environment as a contaminant of smoke and as photochemical smog.

DO NOT discharge into sewer or waterways

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
1,2,4-trimethyl benzene	LOW (Half-life = 56 days)	LOW (Half-life = 0.67 days)
ethyl-3-ethoxypropionate	LOW	LOW
1,3,5-trimethyl benzene	HIGH	HIGH
cumene	HIGH	HIGH
xylene	HIGH (Half-life = 360 days)	LOW (Half-life = 1.83 days)
phenol	LOW (Half-life = 10 days)	LOW (Half-life = 0.95 days)
ethylbenzene	HIGH (Half-life = 228 days)	LOW (Half-life = 3.57 days)

Bioaccumulative potential

Ingredient	Bioaccumulation
1,2,4-trimethyl benzene	LOW (BCF = 275)

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ethyl-3-ethoxypropionate	LOW (LogKOW = 1.0809)
1,3,5-trimethyl benzene	LOW (BCF = 342)
cumene	LOW (BCF = 35.5)
xylene	MEDIUM (BCF = 740)
phenol	LOW (BCF = 17.5)
ethylbenzene	LOW (BCF = 79.43)

Mobility in soil

Ingredient	Mobility
1,2,4-trimethyl benzene	LOW (KOC = 717.6)
ethyl-3-ethoxypropionate	LOW (KOC = 10)
1,3,5-trimethyl benzene	LOW (KOC = 703)
cumene	LOW (KOC = 817.2)
phenol	LOW (KOC = 268)
ethylbenzene	LOW (KOC = 517.8)

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods

Product / Packaging disposal

- ▶ Containers may still present a chemical hazard/ danger when empty.
- Legislation addressing waste disposal requirements may differ by country, state and/ or territory.
- ▶ DO NOT allow wash water from cleaning or process equipment to enter drains.
- ► Recycle wherever possible.

Ensure that the hazardous substance is disposed in accordance with the Hazardous Substances (Disposal) Notice 2017

Disposal Requirements

Packages that have been in direct contact with the hazardous substance must be only disposed if the hazardous substance was appropriately removed and cleaned out from the

SECTION 14 TRANSPORT INFORMATION

Labels Required



Land transport (UN)

UN number	1263		
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 3 Subrisk Not Applicable		
Packing group	III		
Environmental hazard	Not Applicable		
Special precautions for user	Special provisions 163; 223; 367 Limited quantity 5 L		

Air transport (ICAO-IATA / DGR)

UN number	1263		
UN proper shipping name	Paint (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base); Paint related material (including paint thinning or reducing compounds)		
Transport hazard class(es)	ICAO/IATA Class 3 ICAO / IATA Subrisk Not Applicable ERG Code 3L		
Packing group	III		
Environmental hazard	Not Applicable		

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	Special provisions	A3 A72 A192
	Cargo Only Packing Instructions	366
	Cargo Only Maximum Qty / Pack	220 L
Special precautions for user	Passenger and Cargo Packing Instructions	355
	Passenger and Cargo Maximum Qty / Pack	60 L
	Passenger and Cargo Limited Quantity Packing Instructions	Y344
	Passenger and Cargo Limited Maximum Qty / Pack	10 L

Sea transport (IMDG-Code / GGVSee)

UN number	1263		
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 3 IMDG Subrisk Not Applicable		
Packing group			
Environmental hazard	Not Applicable		
Special precautions for user	EMS Number F-E , S-E Special provisions 163 223 367 955 Limited Quantities 5 L		

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

Not Applicable

SECTION 15 REGULATORY INFORMATION

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

This substance is to be managed using the conditions specified in an applicable Group Standard

HSR Number	Group Standard
HSR002662	Surface Coatings and Colourants (Flammable) Group Standard 2017

1,2,4-TRIMETHYL BENZENE IS FOUND ON THE FOLLOWING REGULATORY LISTS

New Zealand Approved Hazardous Substances with controls

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

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

New Zealand Inventory of Chemicals (NZIoC)

ETHYL-3-ETHOXYPROPIONATE IS FOUND ON THE FOLLOWING REGULATORY LISTS

New Zealand Approved Hazardous Substances with controls

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

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

New Zealand Inventory of Chemicals (NZIoC)

1,3,5-TRIMETHYL BENZENE IS FOUND ON THE FOLLOWING REGULATORY LISTS

New Zealand Approved Hazardous Substances with controls

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

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

New Zealand Inventory of Chemicals (NZIoC)

CRESOL/ PHENOL/ FORMALDEHYDE RESIN IS FOUND ON THE FOLLOWING REGULATORY LISTS

New Zealand Inventory of Chemicals (NZIoC)

CUMENE IS FOUND ON THE FOLLOWING REGULATORY LISTS

Chemical Footprint Project - Chemicals of High Concern List

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

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs - Group 2B: Possibly carcinogenic to humans

New Zealand Approved Hazardous Substances with controls

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

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

New Zealand Inventory of Chemicals (NZIoC)

New Zealand Workplace Exposure Standards (WES)

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XYLENE IS FOUND ON THE FOLLOWING REGULATORY LISTS

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

New Zealand Approved Hazardous Substances with controls

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

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

New Zealand Inventory of Chemicals (NZIoC)

New Zealand Workplace Exposure Standards (WES)

PHENOL IS FOUND ON THE FOLLOWING REGULATORY LISTS

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

New Zealand Approved Hazardous Substances with controls

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

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

New Zealand Inventory of Chemicals (NZIoC)

New Zealand Workplace Exposure Standards (WES)

ETHYLBENZENE IS FOUND ON THE FOLLOWING REGULATORY LISTS

Chemical Footprint Project - Chemicals of High Concern List

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

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs - Group 2B: Possibly carcinogenic to humans

New Zealand Approved Hazardous Substances with controls

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

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

New Zealand Inventory of Chemicals (NZIoC)

New Zealand Workplace Exposure Standards (WES)

Hazardous Substance Location

Subject to the Health and Safety at Work (Hazardous Substances) Regulations 2017.

Hazard Class	Quantity beyond which controls apply for closed containers	Quantity beyond which controls apply when use occurring in open containers
3.1C	500 L in containers greater than 5 L 1500 L in containers up to and including 5 L	250 L 250 L

Certified Handler

Subject to Part 4 of the Health and Safety at Work (Hazardous Substances) Regulations 2017.

Class of substance	Quantities
Not Applicable	Not Applicable

Refer Group Standards for further information

Tracking Requirements

Not Applicable

National Inventory Status

National Inventory	Status		
Australia - AICS	Yes		
Canada - DSL	Yes		
Canada - NDSL	No (1,2,4-trimethyl benzene; ethyl-3-ethoxypropionate; 1,3,5-trimethyl benzene; cresol/ phenol/ formaldehyde resin; cumene; xylene; phenol; ethylbenzene)		
China - IECSC	Yes		
Europe - EINEC / ELINCS / NLP	No (cresol/ phenol/ formaldehyde resin)		
Japan - ENCS	Yes		
Korea - KECI	Yes		
New Zealand - NZIoC	Yes		
Philippines - PICCS	Yes		
USA - TSCA	Yes		
Taiwan - TCSI	Yes		
Mexico - INSQ	Yes		
Vietnam - NCI	Yes		
Russia - ARIPS	No (cresol/ phenol/ formaldehyde resin)		
Legend:	Yes = All CAS declared ingredients are on the inventory No = One or more of the CAS listed ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets)		

SECTION 16 OTHER INFORMATION

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Initial Date	02/10/2015

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0.2.1.1.1	28/04/2020	Classification		

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.

Definitions and abbreviations

 ${\sf PC-TWA} : {\sf Permissible\ Concentration-Time\ Weighted\ Average}$ PC-STEL: Permissible Concentration-Short Term Exposure Limit

IARC: International Agency for Research on Cancer

ACGIH: American Conference of Governmental Industrial Hygienists

STEL: Short Term Exposure Limit

TEEL: Temporary Emergency Exposure Limit。
IDLH: Immediately Dangerous to Life or Health Concentrations

OSF: Odour Safety Factor

NOAEL :No Observed Adverse Effect Level LOAEL: Lowest Observed Adverse Effect Level

TLV: Threshold Limit Value LOD: Limit Of Detection OTV: Odour Threshold Value BCF: BioConcentration Factors BEI: Biological Exposure Index

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