Resene Paints LTD Version No: 1.1

Safety Data Sheet according to the Health and Safety at Work (Hazardous Substances) Regulations 2017

Issue Date: 16/06/2022 Print Date: 16/06/2022 L.GHS.NZL.EN

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

Product Identifier

Product name	RESENE QRISTAL CLEARFLOOR 1K		
Synonyms	Not Available		
Other means of identification	Not Available		

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

T

Relevant identified uses	11170
--------------------------	-------

Details of the supplier of the safety data sheet

Registered company name	Resene Paints LTD
Address	32-50 Vogel Street Wellington 5011 New Zealand
Telephone	+64 4 5770500
Fax	+64 4 5773327
Website	www.resene.co.nz
Email	advice@resene.co.nz

Emergency telephone number

Association / Organisation	NZ POISONS (24hr 7days)	CHEMWATCH EMERGENCY RESPONSE	
Emergency telephone numbers	0800 764766	+64 800 700 112	
Other emergency telephone numbers	Not Available	+61 3 9573 3188	

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

SECTION 2 Hazards identification

Classification ^[1]	Specific Target Organ Toxicity - Repeated Exposure Category 2		
Legend:	1. Classified by Chernwatch; 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	6.9B		
abel elements			
Hazard pictogram(s)			
Signal word	Warning		
C C	Warning		
Ū Ū	Warning May cause damage to organs through prolonged or repeated exposure. (Inhalation)		
lazard statement(s) H373	May cause damage to organs through prolonged or repeated exposure. (Inhalation)		
lazard statement(s) H373	May cause damage to organs through prolonged or repeated exposure. (Inhalation)		
Hazard statement(s) H373 Precautionary statement(s) Pre	May cause damage to organs through prolonged or repeated exposure. (Inhalation) evention Do not breathe mist/vapours/spray.		

Precautionary statement(s) Disposal

Not Applicable

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

SECTION 3 Composition / information on ingredients

P501

Substances

See section below for composition of Mixtures

Ingredients are required by the Hazard Substances (Safety Data Sheets) Notice 2017, EPA consolidation 30 April 2021 to be identified:

Mixtures

CAS No	%[weight] Name	
112-34-5	1-5 diethylene glycol monobutyl ether	
25265-77-4	1-5 2.2.4-trimethyl-1.3-pentanediol monoisobutyrate	
Legend: 1. Classified by Chemwatch; 2. Classification drawn from CCID EPA NZ; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex 4. Classification drawn from C&L * EU IOELVs available		

SECTION 4 First aid measures

Description of first aid measures				
Eye Contact	If this product comes in contact with eyes: • Wash out immediately with water. • If irritation continues, seek medical attention. • Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.			
Skin Contact	If skin or hair contact occurs: Flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation. 			
Inhalation	If aerosols or fumes are inhaled, remove affected person from contaminated area. Keep at rest until recovered. If symptoms develop seek medical attention.			
Ingestion	 Immediately give a glass of water. First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor. If spontaneous vomiting appears imminent or occurs, hold patient's head down, lower than their hips to help avoid possible aspiration of vomitus. 			

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		
Advice for firefighters			
Fire Fighting	Alert Fire Brigade and tell them location and nature of hazard.		
Fire/Explosion Hazard	 Non combustible. Burning release: carbon dioxide (CO2) other pyrolysis products typical of burning organic material. May emit poisonous fumes. 		

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	Control personal contact with the substance, by using personal protective equipment. Contain spill with sawdust, sand, earth, inert material or vermiculite then place in suitable, labelled container for waste disposal. Wipe up. Clean area with large quantity of water to complete clean- up.
--------------	--

Continued...

RESENE QRISTAL CLEARFLOOR 1K

Major Spills Place in

Clear area of personnel and move upwind. Alert Fire Brigade and tell them location and nature of hazard. Wear appropriate personnel protective equipment and clothing to prevent exposure. Avoid breathing in mists or vapours and skin or eyes contact. Prevent, by any means available, spillage from entering drains or water course. Stop leak if safe to do so. Contain spill with sawdust, sand, earth, inert material or vermiculite then place in suitable, labelled container for waste disposal. Wipe up. Wash area and prevent runoff into drains. If contamination of drains or waterways occurs, advise emergency services.

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

SECTION 7 Handling and storage

Precautions for safe handling			
Safe handling	Avoid unnecessary personal contact, including inhalation.		
Other information	Store in original containers.		

Conditions for safe storage, including any incompatibilities

Suitable container	 Packaging as recommended by manufacturer. 	
Storage incompatibility	Strong oxidisers	

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
diethylene glycol monobutyl ether	30 ppm	33 ppm		200 ppm
2,2,4-trimethyl-1,3-pentanediol monoisobutyrate	13 mg/m3	140 mg/m3		840 mg/m3
Ingredient	Original IDLH		Revised IDLH	
diethylene glycol monobutyl ether	Not Available		Not Available	
2,2,4-trimethyl-1,3-pentanediol monoisobutyrate	Not Available		Not Available	
Occupational Exposure Banding				

Ingredient	Occupational Exposure Band Rating	Occupational Exposure Band Limit	
diethylene glycol monobutyl ether	E	≤ 0.1 ppm	
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.		

MATERIAL DATA

For diethylene glycol monobutyl ether:

CEL TWA: 15.5 ppm, 100 mg/m3

(CEL = Chemwatch Exposure Limit)

In studies involving the inhalation toxicity of diethylene glycol monobutyl ether, exposure for 6 hours daily at 100 mg/m3 had no effect.

Exposure 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.
Body protection	Overalls

Respiratory protection

Respiratory protection required in insufficiently ventilated working areas. 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 circumstances. Recommended filter type: Type A filter (organic vapour).

SECTION 9 Physical and chemical properties

Information on basic physical and chemical properties

Appearance	Colourless clear to hazy liquid with mild odour		
Physical state	Liquid	Relative density (Water = 1)	1.04
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Available
pH (as supplied)	7-9	Decomposition temperature	Not Available
Melting point / freezing point (°C)	Not Available	Viscosity (cSt)	150-250
Initial boiling point and boiling range (°C)	100	Molecular weight (g/mol)	Not Available
Flash point (°C)	Not Available	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Not Available	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Available	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	Not Available	Volatile Component (%vol)	67
Vapour pressure (kPa)	Not Available	Gas group	Not Available
Solubility in water	Immiscible	pH as a solution (Not Available%)	Not Available
Vapour density (Air = 1)	Not Available	VOC g/L	42

SECTION 10 Stability and reactivity

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

 Ingestion
 The material has NOT been classified by EC Directives or other classification systems as 'harmful by ingestion'.

 Skin Contact
 Open cuts, abraded or irritated skin should not be exposed to this material Entry into the blood-stream through, for example, cuts, abrasions, puncture wounds or lesions, may produce systemic injury with harmful effects.

 Eye
 Although the liquid 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).

 Chronic
 Repeated or long-term occupational exposure is likely to produce cumulative health effects.

RESENE QRISTAL	TOXICITY IRRITATION			
CLEARFLOOR 1K	Not Available	able		
	ΤΟΧΙΟΙΤΥ	IRRITA	TION	
diethylene glycol monobutyl	Dermal (rabbit) LD50: 4120 mg/kg ^[2]	Eye (ra	abbit): 20 mg/24h moderate	
ether	Oral (Rat) LD50; 5660 mg/kg ^[2]	Eye (ra	Eye (rabbit): 5 mg - SEVERE	
	ΤΟΧΙΟΙΤΥ	IRRITATION		
	dermal (guinea pig) LD50: >19 mg/kg ^[2]	Eye: no adverse	effect observed (not irritating) ^[1]	
2,2,4-trimethyl-1,3-pentanediol	Oral (Rat) LD50; >3200 mg/kg ^[2]	Eyes - Moderate	irritant *	
monoisobutyrate		Skin - Slight irrita	int *	
		Skin (rabbit): mild ***		
		Skin: no adverse effect observed (not irritating) ^[1]		
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			
RESENE QRISTAL CLEARFLOOR 1K	Generally, linear and branched-chain alkyl esters are hydrolysed to their component alcohols and carboxylic acids in the intestinal tract, blood and most tissues throughout the body.			
DIETHYLENE GLYCOL MONOBUTYL ETHER	The material may produce severe irritation to the eye causing pronounced inflammation. For diethylene glycol monoalkyl ethers and their acetates: This category includes diethylene glycol ethyl ether (DGEE), diethylene glycol propyl ether (DGPE) diethylene glycol butyl ether (DGBE) and diethylene glycol hexyl ether (DGHE) and their acetates. Acute toxicity: There are adequate oral, inhalation and/or dermal toxicity studies on the category members.			
2,2,4-TRIMETHYL- 1,3-PENTANEDIOL MONOISOBUTYRATE	Not a skin sensitiser (guinea pig, Magnusson-Kligman) *** Ames Test: negative *** Micronucleus, mouse: negative *** Not mutagenic *** No effects on fertility or foetal development seen in the rat *** * [SWIFT] ** [Eastman] *** [Perstop] The material may be irritating to the eye, with prolonged contact causing inflammation. The material may cause skin irritation after prolonged or repeated exposure and may produce a contact dermatitis (nonallergic).			
Acute Toxicity	×	Carcinogeni	city X	
Skin Irritation/Corrosion	×	Reproducti		
Serious Eye Damage/Irritation	×	STOT - Single Expos	sure 🗙	
Respiratory or Skin sensitisation	×	STOT - Repeated Expos	sure 🗸	
Mutagenicity	×	Aspiration Hazard 🗙		

 Data either not available or does not fill the criteria for classification
 Data available to make classification Legend:

SECTION 12 Ecological information

RESENE QRISTAL CLEARFLOOR 1K	Endpoint	Test Duration (hr)		Species	Value		Source	
	Not Available	Not Available Not Available		Not Available	Not Available		Not Available	
	Endpoint	Test Duration (hr)	Spec	es		Value		Source
	EC50	72h	Algae or other aquatic plants		nts	1101mg/l		2
diethylene glycol monobutyl	NOEC(ECx)	96h	Algae or other aquatic plants		nts	>=100mg/l		1
ether	EC50	48h	Crustacea			>100mg/l		1
	EC50	96h	96h Algae or other aquatic plants		ts >100m		g/l	1
	LC50	96h	Fish			1300mg	µ∕I	2
	Endpoint	Test Duration (hr)	Species			Value	Sourc	••
	EC50	72h		Algae or other aquatic plants		15mg/l	Not Available	
2,2,4-trimethyl-1,3-pentanediol monoisobutyrate	NOEC(ECx)	72h		Algae or other aquatic plants		3.28mg/l	1	
	EC50	48h	Crustac	Crustacea >1		>19mg/l	2	
	LC50	96h	Fish	Fish 16mg/l		16mg/l	Not A	vailable

DO NOT discharge into sewer or waterways.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
diethylene glycol monobutyl ether	LOW	LOW
2,2,4-trimethyl-1,3-pentanediol monoisobutyrate	LOW	LOW

Bioaccumulative potential

Ingredient	Bioaccumulation
diethylene glycol monobutyl ether	LOW (BCF = 0.46)
2,2,4-trimethyl-1,3-pentanediol monoisobutyrate	LOW (LogKOW = 2.9966)

Mobility in soil

Ingredient	Mobility
diethylene glycol monobutyl ether	LOW (KOC = 10)
2,2,4-trimethyl-1,3-pentanediol monoisobutyrate	LOW (KOC = 22.28)

SECTION 13 Disposal considerations

Waste treatment methods	
Product / Packaging disposal	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 or consult manufacturer for recycling options. Consult manufacturer for recycling option. Resene Paintwise accepts residual unwanted paint and packaging. See Resene website for Paintwise information. Or contact a Local Authority for the disposal information. Do not discharge the substance into the environment.

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 package.

Do not allow product or wash water from cleaning or process equipment to enter drains or watercourses. It may be necessary to collect all wash water for treatment before disposal. The generation of waste should be avoided or minimised wherever possible. Disposal of this product should comply with Hazard Substances (Disposal) Notice 2017 (EPA Consolidation 30 April 2021).

For treating and discharging processes contact your local authority.

SECTION 14 Transport information

Labels Required

_asono noquinou	
Marine Pollutant	NO
HAZCHEM	Not Applicable

Land transport (UN): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

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

```
Not Applicable
```

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

Product name	Group
diethylene glycol monobutyl ether	Not Available
2,2,4-trimethyl-1,3-pentanediol monoisobutyrate	Not Available

Transport in bulk in accordance with the ICG Code

Product name	Ship Type
diethylene glycol monobutyl ether	Not Available
2,2,4-trimethyl-1,3-pentanediol monoisobutyrate	Not Available

SECTION 15 Regulatory information

	nanaged using the conditions specified in an applicable Group Sta	Indard		
HSR Number	Group Standard			
HSR002670	Surface Coatings and Colourants Subsidiary Hazard	Surface Coatings and Colourants Subsidiary Hazard Group Standard 2020		
	of the SDS for any applicable tolerable exposure limit or Section	12 for environmental exposure limit.		
	butyl ether is found on the following regulatory lists			
New Zealand Approved Hazardous Substances with controls		New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification		
New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals		of Chemicals - Classification Data		
		New Zealand Inventory of Chemicals (NZIoC)		
2,2,4-trimethyl-1,3-pent	anediol monoisobutyrate 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 - Classification Data		
New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification				
	e ()	New Zealand Inventory of Chemicals (NZIoC)		

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

Hazard Class	Quantities
Not Applicable	Not Applicable

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

Maximum quantities of certain hazardous substances permitted on passenger service vehicles

Subject to Regulation 13.14 of the Health and Safety at Work (Hazardous Substances) Regulations 2017.

Hazard Class	Gas (aggregate water capacity in mL)	Liquid (L)	Solid (kg)	Maximum quantity per package for each classification
Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

Tracking Requirements

Not Applicable

National Inventory Status

National Inventory	Status
Australia - AIIC / Australia Non-Industrial Use	Yes
New Zealand - NZIoC	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	16/06/2022
Initial Date	16/06/2022

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

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 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.

