RESENE COLORWOOD ENHANCE

Resene Paints Ltd

Version No: **2.5**Safety Data Sheet according to HSNO Regulations

Chemwatch Hazard Alert Code: 3

Issue Date: 30/03/2015 Print Date: 10/04/2015 Initial Date: 30/03/2015 S.GHS.NZL.EN

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

Product Identifier Product name RESENE COLORWOOD ENHANCE Synonyms Incl White, Black, Jarrah, Red Brown, Walnut Other means of identification Not Available Relevant identified uses of the substance or mixture and uses advised against Relevant identified uses 9313, 9314, 9315, 9316, 9317

Details of the manufacturer/importer

Registered company name	Resene Paints Ltd
Address	32-50 Vogel Street Wellington 5011 Naenae 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)
Emergency telephone numbers	0800 764766
Other emergency telephone numbers	Not Available

CHEMWATCH EMERGENCY RESPONSE

Primary Number	Alternative Number 1	Alternative Number 2
+800 2436 2255	+612 9186 1132	Not Available

Once connected and if the message is not in your prefered language then please dial 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. Not regulated for transport of Dangerous Goods.

GHS Classification [1]	Chronic Aquatic Hazard Category 3, Eye Irritation Category 2A, Reproductive Toxicity Category 2, Skin Corrosion/Irritation Category 3, Skin Sensitizer Category 1, STOT - RE Category 2
Legend:	1. Classified by Chemwatch; 2. Classification drawn from CCID EPA NZ; 3. Classification drawn from EC Directive 1272/2008 - Annex VI
Determined by Chemwatch using GHS/HSNO criteria	6.5B (contact), 9.1C, 6.3B, 6.4A, 6.9B, 6.8B

Label elements

GHS label elements





SIGNAL WORD

WARNING

Hazard statement(s)

H316

Causes mild skin irritation

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H317	May cause an allergic skin reaction	
H319	Causes serious eye irritation	
H361	Suspected of damaging fertility or the unborn child	
H373	May cause damage to organs through prolonged or repeated exposure	
H412	Harmful to aquatic life with long lasting effects	
Precautionary statement(s) Prevention	
P201	Obtain special instructions before use.	
Precautionary statement(s) Response	
P308+P313	IF exposed or concerned: Get medical advice/attention.	
Precautionary statement(s) Storage		
P405	Store locked up.	
Precautionary statement(s) Disposal		

P501 Dispose of contents/container to authorised chemical landfill or if organic to high temperature incineration

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
107-98-2	1-3	propylene glycol monomethyl ether - mixture of isomers
2687-91-4	0.1-1	1-ethyl-2-pyrrollidinone
709014-50-6	0.1-1	propenonic acid, ethoxylated, alkyl ethers

SECTION 4 FIRST AID MEASURES

NZ Poisons Centre 0800 POISON (0800 764 766) | NZ Emergency Services: 111 $\,$

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Description of first aid measures

Eye Contact	If this product comes in contact with the eyes: Wash out immediately with fresh running water. Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. Seek medical attention without delay; if pain persists or recurs seek medical attention. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	If skin contact occurs: Immediately remove all contaminated clothing, including footwear. Flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation.
Inhalation	 If fumes, aerosols or combustion products are inhaled remove from contaminated area. Other measures are usually unnecessary.
Ingestion	 Immediately give a glass of water. First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5 FIREFIGHTING MEASURES

Extinguishing media

▶ There is no restriction on the type of extinguisher which may be used.

Special hazards arising from the substrate or mixture

Fire Incompatibility None known.

Advice for firefighters

Fire Fighting	► Alert Fire Brigade and tell them location and nature of hazard.
Fire/Explosion Hazard	▶ Non combustible.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Minor Spills ▶ Clean up all spills immediately.

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Major Spills

Moderate hazard.

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

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Safe handling

- ▶ DO NOT allow clothing wet with material to stay in contact with skin
- ▶ Avoid all personal contact, including inhalation.

Other information

Conditions for safe storage, including any incompatibilities

Suitable container

Polyethylene or polypropylene container.

Storage incompatibility

None known

PACKAGE MATERIAL INCOMPATIBILITIES

Not Available

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	propylene glycol monomethyl ether - mixture	Propylene glycol monomethyl	369 mg/m3 / 100	553 mg/m3 / 150	Not	Not
Exposure Standards (WES)	of isomers	ether	ppm	ppm	Available	Available

EMERGENCY LIMITS

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
propylene glycol monomethyl ether - mixture of isomers	Propylene glycol monomethyl ether; (Ucar Triol HG-170)	150 ppm	150 ppm	470 ppm

Ingredient	Original IDLH	Revised IDLH
propylene glycol monomethyl ether - mixture of isomers	Not Available	Not Available
1-ethyl-2-pyrrolidinone	Not Available	Not Available
propenonic acid, ethoxylated, alkyl ethers	Not Available	Not Available

Exposure controls

Appropriate engineering controls	Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard.
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	See Other protection below
Other protection	▶ Overalls.
Thermal hazards	Not Available

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:

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Material	СРІ
BUTYL	С
NATURAL RUBBER	С
NATURAL+NEOPRENE	С

Respiratory protection

Type AK-P Filter of sufficient capacity.

Where the concentration of gas/particulates in the breathing zone, approaches or exceeds the "Exposure Standard" (or ES), respiratory protection is required.

Degree of protection varies with both face-piece and Class of filter; the nature of protection varies with Type of filter.

Required Minimum Protection Factor	Half-Face Respirator	Full-Face Respirator	Powered Air Respirator
up to 5 x ES	AK-AUS / Class 1 P2	-	AK-PAPR-AUS / Class 1 P2
up to 25 x ES	Air-line*	AK-2 P2	AK-PAPR-2 P2

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Pri	nt	Date:	1	n/c	14	120	115	

NEOPRENE	С
NITRILE	С
PVC	С

^{*} CPI - Chemwatch Performance Index

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.

up to 50 x ES	-	AK-3 P2	-
50+ x ES	-	Air-line**	-

 $^{^{\}star}$ - Continuous-flow; $\,^{\star\star}$ - Continuous-flow or positive pressure demand

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

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance

Note that all of the monopropylene glycol ethers may exist in two isomeric forms, alpha or beta.

Note that all of the monopropylene glycol ethers may exist in two isomeric forms, alpha or beta. |Coloured liquid

Physical state	Liquid	Relative density (Water = 1)	1.14
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Available
pH (as supplied)	9	Decomposition temperature	Not Available
Melting point / freezing point (°C)	Not Available	Viscosity (cSt)	Not Available
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)	91
Vapour pressure (kPa)	Not Available	Gas group	Not Available
Solubility in water (g/L)	Miscible	pH as a solution	Not Available
Vapour density (Air = 1)	Not Available	VOC g/L	84

SECTION 10 STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical stability	► Unstable in the presence of incompatible materials.
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	The material is not thought to produce adverse health effects or skin irritation following contact (as classified by EC Directives using animal models).
Eye	This material can cause eye irritation and damage in some persons.
Chronic	Substance accumulation, in the human body, is likely and may cause some concern following repeated or long-term occupational exposure.

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TOXICITY	IRRITATION
Not Available	Not Available

A: Best Selection

B: Satisfactory; may degrade after 4 hours continuous immersion

C: Poor to Dangerous Choice for other than short term immersion

^{^ -} Full-face

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	TOXICITY	IRRITATION		
propylene glycol	dermal (rat) LD50: >2000 mg/kg ^[1]	Eye (rabbit) 230	mg mild	
monomethyl ether - mixture of isomers	Inhalation (rat) LC50: 10000 ppm/5 h.d ^[2]	Eye (rabbit) 500) mg/24 h.	
	Oral (rat) LD50: 5207.2 mg/kg ^[1]	Skin (rabbit) 50	0 mg open - mild	
	TOXICITY	IRRITATION		
	dermal (rat) LD50: >2000 mg/kg ^[1]	Eye (rabbit): 10	0 mg - mod	
1-ethyl-2-pyrrolidinone	Inhalation (rat) LC50: >5.1 mg/l4 h ^[1]			
	Oral (rat) LD50: 1350 mg/kgd ^[2]	i i		
propenonic acid,	TOXICITY	IRRITATION		
ethoxylated, alkyl ethers	Not Available	Not Available		
Legend: 1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2.* Value obtained from manufacturer's msds. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances				
	3			
PROPYLENE GLYCOL MONOMETHYL ETHER - MIXTURE OF ISOMERS	The material may be irritating to the eye, with prolonged conta NOTE: Exposure of pregnant rats and rabbits to the substance	act causing inflammation.	ffects at concentrations up to 3000 ppm.	
MONOMETHYL ETHER -	The material may be irritating to the eye, with prolonged contr	act causing inflammation. se did not give rise to teratogenic e	ffects at concentrations up to 3000 ppm.	
MONOMETHYL ETHER - MIXTURE OF ISOMERS 1-ETHYL-	The material may be irritating to the eye, with prolonged conta NOTE: Exposure of pregnant rats and rabbits to the substance. The material may produce moderate eye irritation leading to irritation.	act causing inflammation. ee did not give rise to teratogenic e nflammation.		
MONOMETHYL ETHER - MIXTURE OF ISOMERS 1-ETHYL- 2-PYRROLIDINONE RESENE COLORWOOD ENHANCE, PROPENONIC ACID, ETHOXYLATED, ALKYL ETHERS	The material may be irritating to the eye, with prolonged conta NOTE: Exposure of pregnant rats and rabbits to the substance. The material may produce moderate eye irritation leading to ir Gastrointestinal, liver and kidney changes recorded. The following information refers to contact allergens as a ground state of the con	act causing inflammation. Be did not give rise to teratogenic enflammation. But and may not be specific to this	product.	
MONOMETHYL ETHER- MIXTURE OF ISOMERS 1-ETHYL- 2-PYRROLIDINONE RESENE COLORWOOD ENHANCE, PROPENONIC ACID, ETHOXYLATED, ALKYL ETHERS Acute Toxicity	The material may be irritating to the eye, with prolonged contr. NOTE: Exposure of pregnant rats and rabbits to the substance. The material may produce moderate eye irritation leading to ir Gastrointestinal, liver and kidney changes recorded. The following information refers to contact allergens as a ground support of the product of the property	act causing inflammation. be did not give rise to teratogenic e inflammation. up and may not be specific to this Carcinogenicity	product.	
MONOMETHYL ETHER- MIXTURE OF ISOMERS 1-ETHYL- 2-PYRROLIDINONE RESENE COLORWOOD ENHANCE, PROPENONIC ACID, ETHOXYLATED, ALKYL ETHERS	The material may be irritating to the eye, with prolonged conta NOTE: Exposure of pregnant rats and rabbits to the substance. The material may produce moderate eye irritation leading to ir Gastrointestinal, liver and kidney changes recorded. The following information refers to contact allergens as a ground support of the product of the property of the product of	act causing inflammation. se did not give rise to teratogenic e inflammation. up and may not be specific to this Carcinogenicity Reproductivity	product.	
MONOMETHYL ETHER- MIXTURE OF ISOMERS 1-ETHYL- 2-PYRROLIDINONE RESENE COLORWOOD ENHANCE, PROPENONIC ACID, ETHOXYLATED, ALKYL ETHERS Acute Toxicity Skin Irritation/Corrosion	The material may be irritating to the eye, with prolonged contr. NOTE: Exposure of pregnant rats and rabbits to the substance. The material may produce moderate eye irritation leading to ir Gastrointestinal, liver and kidney changes recorded. The following information refers to contact allergens as a ground support of the product of the property	act causing inflammation. be did not give rise to teratogenic e inflammation. up and may not be specific to this Carcinogenicity	product.	
MONOMETHYL ETHER- MIXTURE OF ISOMERS 1-ETHYL- 2-PYRROLIDINONE RESENE COLORWOOD ENHANCE, PROPENONIC ACID, ETHOXYLATED, ALKYL ETHERS Acute Toxicity Skin Irritation/Corrosion Serious Eye	The material may be irritating to the eye, with prolonged conta NOTE: Exposure of pregnant rats and rabbits to the substance. The material may produce moderate eye irritation leading to ir Gastrointestinal, liver and kidney changes recorded. The following information refers to contact allergens as a ground support of the product of the property of the product of	act causing inflammation. se did not give rise to teratogenic e inflammation. up and may not be specific to this Carcinogenicity Reproductivity	product.	

Legend:

✓ - Data required to make classification available
 X - Data available but does not fill the criteria for classification
 S - Data Not Available to make classification

CMR STATUS

Not Applicable

SECTION 12 ECOLOGICAL INFORMATION

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

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
propylene glycol monomethyl ether - mixture of isomers	LOW (Half-life = 56 days)	LOW (Half-life = 1.7 days)
1-ethyl-2-pyrrolidinone	LOW	LOW

Bioaccumulative potential

Ingredient	Bioaccumulation
propylene glycol monomethyl ether - mixture of isomers	LOW (BCF = 2)
1-ethyl-2-pyrrolidinone	LOW (LogKOW = -0.04)

Mobility in soil

Ingredient	Mobility
propylene glycol monomethyl ether - mixture of isomers	HIGH (KOC = 1)
1-ethyl-2-pyrrolidinone	LOW (KOC = 40.46)

SECTION 13 DISPOSAL CONSIDERATIONS

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Waste treatment methods

Product / Packaging disposal

▶ Containers may still present a chemical hazard/ danger when empty.

Ensure that the disposal of material is carried out in accordance with Hazardous Substances (Disposal) Regulations 2001.

SECTION 14 TRANSPORT INFORMATION

Labels Required

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 73 / 78 and the IBC code

Source	Ingredient	Pollution Category
IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk	propylene glycol monomethyl ether - mixture of isomers	Z

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
HSR002670	Surface Coatings and Colourants (Subsidiary Hazard) Group Standard 2006

propylene glycol
monomethyl ether - mixture
of isomers(107-98-2) is
found on the following
regulatory lists
4 -411

"New Zealand Inventory of Chemicals (NZIoC)","New Zealand Workplace Exposure Standards (WES)","New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals"

1-ethyl-2-pyrrolidinone(2687-91-4) is found on the following regulatory lists

"New Zealand Inventory of Chemicals (NZIoC)"

propenonic acid, ethoxylated, alkyl ethers(709014-50-6) is found on the following regulatory lists

"New Zealand Inventory of Chemicals (NZIoC)"

Location Test Certificate

Subject to Regulation 55 of the Hazardous Substances (Classes 1 to 5 Controls) Regulations, a location test certificate is required when quantity greater than or equal to those indicated below are present.

Hazard Class	Quantity beyond which controls apply for closed containers	Quantity beyond which controls apply when use occurring in open containers
Not Applicable	Not Applicable	Not Applicable

Approved Handler

Subject to Regulation 56 of the Hazardous Substances (Classes 1 to 5 Controls) Regulations and Regulation 9 of the Hazardous Substances (Classes 6, 8, and 9 Controls) Regulations, the substance must be under the personal control of an Approved Handler when present in a quantity greater than or equal to those indicated below.

Class of substance	Quantities
Not Applicable	Not Applicable
National Inventory	Status
Australia - AICS	N (1-ethyl-2-pyrrolidinone)
Canada - DSL	Υ
China - IECSC	Υ
Europe - EINEC / ELINCS / NLP	N (propenonic acid, ethoxylated, alkyl ethers)
Japan - ENCS	N (propenonic acid, ethoxylated, alkyl ethers)
Korea - KECI	N (1-ethyl-2-pyrrolidinone)
New Zealand - NZIoC	Υ
Philippines - PICCS	Υ
USA - TSCA	Y

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Legend:

Y = All ingredients are on the inventory N = Not determined or one or more ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets)

SECTION 16 OTHER INFORMATION

Other information

Ingredients with multiple cas numbers

Name	CAS No
propylene glycol monomethyl ether - mixture of isomers	107-98-2, 1320-67-8., 28677-93-2
propenonic acid, ethoxylated, alkyl ethers	151789-05-8, 70247-97-1, 709014-50-6, 72207-84-2

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

A list of reference resources used to assist the committee may be found at:

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

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