

# RESENE MICA BOND

## Resene Paints Ltd

Version No: 1.1  
Safety Data Sheet according to HSNO Regulations

Issue Date: **20/02/2020**  
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L.GHS.NZL.EN

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

### Product Identifier

Product name	RESENE MICA BOND
Synonyms	Incl Medium Grey, Silver Grey, Dark Grey bases
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	9230, 9231, 9232
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### 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 preferred language then please dial 01

## SECTION 2 HAZARDS IDENTIFICATION

### Classification of the substance or mixture

Classification [1]	Flammable Liquid Category 3, Chronic Aquatic Hazard Category 2, Eye Irritation Category 2, Reproductive Toxicity Category 2, Skin Sensitizer Category 1, Aspiration Hazard Category 1, Carcinogenicity Category 2, Skin Corrosion/Irritation Category 3, Acute Aquatic Hazard Category 2
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 (aspiration), 6.3B, 6.4A, 6.5B (contact), 6.7B, 6.8B, 9.1B, 9.1D

### Label elements

Hazard pictogram(s)	
SIGNAL WORD	<b>DANGER</b>

### Hazard statement(s)

H226	Flammable liquid and vapour.
H411	Toxic to aquatic life with long lasting effects.
H319	Causes serious eye irritation.
H361	Suspected of damaging fertility or the unborn child.
H317	May cause an allergic skin reaction.
H304	May be fatal if swallowed and enters airways.
H351	Suspected of causing cancer.
H316	Causes mild skin irritation.

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## RESENE MICA BOND

## Precautionary statement(s) Prevention

P201	Obtain special instructions before use.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233	Keep container tightly closed.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P240	Ground and bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting/intrinsically safe equipment.
P242	Use non-sparking tools.
P243	Take action to prevent static discharges.
P261	Avoid breathing mist/vapours/spray.
P273	Avoid release to the environment.
P272	Contaminated work clothing should not be allowed out of the workplace.

## Precautionary statement(s) Response

P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor/physician/first aider.
P308+P313	IF exposed or concerned: Get medical advice/ attention.
P321	Specific treatment (see advice on this label).
P331	Do NOT induce vomiting.
P370+P378	In case of fire: Use alcohol resistant foam or normal protein foam to extinguish.
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.
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.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

## Precautionary statement(s) Storage

P403+P235	Store in a well-ventilated place. Keep cool.
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.
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## SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

## Substances

See section below for composition of Mixtures

Ingredients are required by the Hazard Substances (Safety Data Sheets) Notice 2017 to be identified:

## Mixtures

CAS No	%[weight]	Name
8052-41-3.	10-20	<u>naphtha petroleum, heavy, hydrodesulfurised</u>
64742-94-5	5-10	<u>solvent naphtha petroleum, heavy aromatic</u>
64742-95-6	1-5	<u>naphtha petroleum, light aromatic solvent</u>
91-20-3	0.1-0.5	<u>naphthalene</u>
557-09-5	0.1-0.5	<u>zinc octoate</u>

## SECTION 4 FIRST AID MEASURES

## Description of first aid measures

Eye Contact	<p>If this product comes in contact with the eyes:</p> <ul style="list-style-type: none"> <li>▶ Wash out immediately with fresh 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>▶ Seek medical attention without delay; if pain persists or recurs seek medical attention.</li> <li>▶ Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.</li> </ul>
Skin Contact	<p>If skin contact occurs:</p> <ul style="list-style-type: none"> <li>▶ Immediately remove all contaminated clothing, including footwear.</li> <li>▶ Flush skin and hair with running water (and soap if available).</li> <li>▶ Seek medical attention in event of irritation.</li> </ul>

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Inhalation	<ul style="list-style-type: none"> <li>▶ If fumes, aerosols or combustion products are inhaled remove from contaminated area.</li> <li>▶ Other measures are usually unnecessary.</li> </ul>
Ingestion	<ul style="list-style-type: none"> <li>▶ Immediately give a glass of water.</li> <li>▶ First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.</li> <li>▶ If spontaneous vomiting appears imminent or occurs, hold patient's head down, lower than their hips to help avoid possible aspiration of vomitus.</li> </ul>

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

Treat symptomatically

**SECTION 5 FIREFIGHTING MEASURES****Extinguishing media**

- ▶ 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
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**Advice for firefighters**

Fire Fighting	▶ Alert Fire Brigade and tell them location and nature of hazard.
Fire/Explosion Hazard	<ul style="list-style-type: none"> <li>▶ Liquid and vapour are flammable.</li> </ul> Combustion products include: carbon dioxide (CO <sub>2</sub> ) carbon monoxide (CO) metal oxides other pyrolysis products typical of burning organic material.

**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	<ul style="list-style-type: none"> <li>▶ Containers, even those that have been emptied, may contain explosive vapours.</li> <li>▶ Avoid unnecessary personal contact, including inhalation.</li> <li>▶ <b>DO NOT allow clothing wet with material to stay in contact with skin</b></li> </ul>
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)

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## INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
New Zealand Workplace Exposure Standards (WES)	naphtha petroleum, heavy, hydrodesulfurised	White spirits (Stoddard solvent)	100 ppm / 525 mg/m3	Not Available	Not Available	Not Available
New Zealand Workplace Exposure Standards (WES)	naphthalene	Naphthalene	10 ppm / 52 mg/m3	79 mg/m3 / 15 ppm	Not Available	‡ - Currently under review; 6.7B - Suspected carcinogen

## EMERGENCY LIMITS

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
naphtha petroleum, heavy, hydrodesulfurised	Stoddard solvent; (Mineral spirits, 85% nonane and 15% trimethyl benzene)	300 mg/m3	1,800 mg/m3	29500 mg/m3
naphthalene	Naphthalene	15 ppm	83 ppm	500 ppm

Ingredient	Original IDLH	Revised IDLH
naphtha petroleum, heavy, hydrodesulfurised	20,000 mg/m3	Not Available
solvent naphtha petroleum, heavy aromatic	Not Available	Not Available
naphtha petroleum, light aromatic solvent	Not Available	Not Available
naphthalene	250 ppm	Not Available
zinc octoate	Not Available	Not Available

## OCCUPATIONAL EXPOSURE BANDING

Ingredient	Occupational Exposure Band Rating	Occupational Exposure Band Limit
naphtha petroleum, light aromatic solvent	E	≤ 0.1 ppm
<b>Notes:</b>	<i>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.</i>	

## MATERIAL DATA

for naphthalene:

Odour Threshold Value: 0.038 ppm

The TLV-TWA is thought to be low enough to prevent ocular toxicity but the margin of safety associated with the TLV for hypersusceptible individuals (with glucose-6-phosphate dehydrogenase defective erythrocytes) to naphthalene-induced blood dyscrasias is unknown.

For amorphous crystalline silica (precipitated silicic acid):

Amorphous crystalline silica shows little potential for producing adverse effects on the lung and exposure standards should reflect a particulate of low intrinsic toxicity.

For trimethyl benzene as mixed isomers (of unstated proportions)

Odour Threshold Value: 2.4 ppm (detection)

Use care in interpreting effects as a single isomer or other isomer mix.

Exposed individuals are **NOT** reasonably expected to be warned, by smell, that the Exposure Standard is being exceeded.

for kerosene CAS 8008-20-6

TLV TWA: 100 mg/m3 as total hydrocarbon vapour Skin A3

OEL TWA: 14 ppm, 100 mg/m3 [NIOSH, 1985]

REL TWA: 150 ppm [Shell]

CEL TWA: 300 ppm, 900 mg/m3

(CEL = Chemwatch Exposure Limit)

for petroleum distillates:


CEL TWA: 500 ppm, 2000 mg/m3 (compare OSHA TWA)

(CEL = Chemwatch Exposure Limit)

NOTE P: The classification as a carcinogen need not apply if it can be shown that the substance contains less than 0.01% w/w benzene (EINECS No 200-753-7).

NOTE H: Special requirements exist in relation to classification and labelling of this substance.

## Exposure controls

<b>Appropriate engineering controls</b>	Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard.
<b>Personal protection</b>	
<b>Eye and face protection</b>	▶ Safety glasses with side shields.
<b>Skin protection</b>	See Hand protection below
<b>Hands/feet protection</b>	▶ Wear chemical protective gloves, e.g. PVC. <b>NOTE:</b> ▶ The material may produce skin sensitisation in predisposed individuals. 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.
<b>Body protection</b>	See Other protection below

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## 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 **computer-generated** selection:

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Material	CPI
TEFLON	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.

## Respiratory protection

Type A 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 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(SO<sub>2</sub>), G = Agricultural chemicals, K = Ammonia(NH<sub>3</sub>), 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	Dark mixture with solvent odour		
Physical state	Liquid	Relative density (Water = 1)	1.67
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Available
pH (as supplied)	Not Available	Decomposition temperature	Not Available
Melting point / freezing point (°C)	Not Available	Viscosity (cSt)	540
Initial boiling point and boiling range (°C)	145	Molecular weight (g/mol)	Not Available
Flash point (°C)	37	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Flammable.	Oxidising properties	Not Available
Upper Explosive Limit (%)	6.0	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	1.6	Volatile Component (%vol)	50
Vapour pressure (kPa)	Not Available	Gas group	Not Available
Solubility in water	Immiscible	pH as a solution (1%)	Not Available
Vapour density (Air = 1)	Not Available	VOC g/L	400

## 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	Inhalation of vapours may cause drowsiness and dizziness. High inhaled concentrations of mixed hydrocarbons may produce narcosis characterised by nausea, vomiting and lightheadedness.
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	Central nervous system (CNS) depression may include nonspecific discomfort, symptoms of giddiness, headache, dizziness, nausea, anaesthetic effects, slowed reaction time, slurred speech and may progress to unconsciousness.
<b>Ingestion</b>	Swallowing of the liquid may cause aspiration of vomit into the lungs with the risk of haemorrhaging, pulmonary oedema, progressing to chemical pneumonitis; serious consequences may result. Ingestion of petroleum hydrocarbons may produce irritation of the pharynx, oesophagus, stomach and small intestine with oedema and mucosal ulceration resulting; symptoms include a burning sensation in the mouth and throat.  Ingestion of naphthalene and its congeners may produce abdominal cramps with nausea, vomiting, diarrhoea, headache, profuse perspiration, listlessness, confusion, and in severe poisonings, coma with or without convulsions.
<b>Skin Contact</b>	Repeated exposure may cause skin cracking, flaking or drying following normal handling and use.  Limited evidence exists, or practical experience predicts, that the material either produces inflammation of the skin in a substantial number of individuals following direct contact, and/or produces significant inflammation when applied to the healthy intact skin of animals, for up to four hours, such inflammation being present twenty-four hours or more after the end of the exposure period.  Workers sensitised to naphthalene and its congeners show exfoliative dermatitis. 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.
<b>Eye</b>	Evidence exists, or practical experience predicts, that the material may cause eye irritation in a substantial number of individuals and/or may produce significant ocular lesions which are present twenty-four hours or more after instillation into the eye(s) of experimental animals.
<b>Chronic</b>	On the basis, primarily, of animal experiments, concern has been expressed that the material may produce carcinogenic or mutagenic effects; in respect of the available information, however, there presently exists inadequate data for making a satisfactory assessment. Exposure to the material may cause concerns for human fertility, generally on the basis that results in animal studies provide sufficient evidence to cause a strong suspicion of impaired fertility in the absence of toxic effects, or evidence of impaired fertility occurring at around the same dose levels as other toxic effects, but which are not a secondary non-specific consequence of other toxic effects. Prolonged or repeated skin contact may cause drying with cracking, irritation and possible dermatitis following. Repeated or prolonged exposure to mixed hydrocarbons may produce narcosis with dizziness, weakness, irritability, concentration and/or memory loss, tremor in the fingers and tongue, vertigo, olfactory disorders, constriction of visual field, paraesthesias of the extremities, weight loss and anaemia and degenerative changes in the liver and kidney.

<b>RESENE MICA BOND</b>	<b>TOXICITY</b> Not Available	<b>IRRITATION</b> Not Available
<b>naphtha petroleum, heavy, hydrodesulfurised</b>	<b>TOXICITY</b> Dermal (rabbit) LD50: >1900 mg/kg <sup>[1]</sup> Oral (rat) LD50: >4500 mg/kg <sup>[1]</sup>	<b>IRRITATION</b> Eye: no adverse effect observed (not irritating) <sup>[1]</sup> Skin: adverse effect observed (irritating) <sup>[1]</sup> Skin: no adverse effect observed (not irritating) <sup>[1]</sup>
<b>solvent naphtha petroleum, heavy aromatic</b>	<b>TOXICITY</b> dermal (rat) LD50: >2000 mg/kg <sup>[1]</sup> Inhalation (rat) LC50: >0.59 mg/l/4H <sup>[2]</sup> Oral (rat) LD50: >2000 mg/kg <sup>[1]</sup>	<b>IRRITATION</b> Eye (rabbit): Irritating Eye: no adverse effect observed (not irritating) <sup>[1]</sup> Skin: adverse effect observed (irritating) <sup>[1]</sup>
<b>naphtha petroleum, light aromatic solvent</b>	<b>TOXICITY</b> Dermal (rabbit) LD50: >1900 mg/kg <sup>[1]</sup> Inhalation (rat) LC50: >7331.62506 mg/l/8h <sup>[2]</sup> Oral (rat) LD50: >4500 mg/kg <sup>[1]</sup>	<b>IRRITATION</b> Eye: no adverse effect observed (not irritating) <sup>[1]</sup> Skin: adverse effect observed (irritating) <sup>[1]</sup>
<b>naphthalene</b>	<b>TOXICITY</b> dermal (rat) LD50: >2500 mg/kg <sup>[2]</sup> Oral (rat) LD50: 490 mg/kg <sup>[2]</sup>	<b>IRRITATION</b> Eye (rabbit): 100 mg - mild Skin (rabbit): 495 mg (open) - mild
<b>zinc octoate</b>	<b>TOXICITY</b> Oral (mouse) LD50: 2370 mg/kg <sup>[2]</sup>	<b>IRRITATION</b> Eye: adverse effect observed (irritating) <sup>[1]</sup> Skin: no adverse effect observed (not irritating) <sup>[1]</sup>
<b>Legend:</b>	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	

<b>RESENE MICA BOND</b>	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.
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NAPHTHA PETROLEUM, HEAVY, HYDRODESULFURISED	No significant acute toxicological data identified in literature search.			
NAPHTHA PETROLEUM, LIGHT AROMATIC SOLVENT	Asthma-like symptoms may continue for months or even years after exposure to the material ceases. * [Devoe] .			
NAPHTHALENE	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). <b>WARNING:</b> This substance has been classified by the IARC as Group 2B: Possibly Carcinogenic to Humans.			
ZINC OCTOATE	<p>For aliphatic fatty acids (and salts) Acute oral (gavage) toxicity: The acute oral LD50 values in rats for both were greater than &gt;2000 mg/kg bw Clinical signs were generally associated with poor condition following administration of high doses (salivation, diarrhoea, staining, piloerection and lethargy). There were no adverse effects on body weight in any study. In some studies, excess test substance and/or irritation in the gastrointestinal tract was observed at necropsy. Skin and eye irritation potential, with a few stated exceptions, is chain length dependent and decreases with increasing chain length. According to several OECD test regimes the animal skin irritation studies indicate that the C6-10 aliphatic acids are severely irritating or corrosive, while the C12 aliphatic acid is irritating, and the C14-22 aliphatic acids generally are not irritating or mildly irritating. Human skin irritation studies using more realistic exposures (30-minute, 1-hour or 24-hours) indicate that the aliphatic acids have sufficient, good or very good skin compatibility.</p> <p>Fatty acid salts are of low acute toxicity. For fatty acids, C8-10, zinc salts (CAS RN: 91051-00-2) Repeat dose toxicity: Under the test conditions, NOEL of the test material in rats was determined to be 3,000 ppm (approximately equivalent to 234 mg/kg/day in male rats and 243 mg/kg/day in female rats) An inhalation study was conducted to evaluate the low-level exposures together with occasional intense exposures of ultrafine test material particles in guinea pigs. Under the test conditions, Exposures to 2.7 mg/ m3, using the same 3 hr/ day, 5 day time frame, did not alter any parameters measured Under the test conditions, the short peaks occurring during normal low-level exposures can induce rapid pulmonary functional changes and greater extent of pulmonary damage and oedema. Genetic toxicity: in vivo A study was conducted to determine the potential genotoxicity of the test material using chromosomal aberration assay. Non-inbred female white rats were exposed to the test material aerosols at a concentration of 0.5 and 0.1 mg/m3 continuously for 5 months. Statistically significant increase in the frequency of damaged cells, primarily hyperdiploid cells were observed at both tested concentration. Toxicity to reproduction: A study was conducted to evaluate the reproductive toxicity potential of test material in rats for two generations. Under the test conditions, administration of test material to adult male and female rats throughout maturation, mating, gestation and early lactation resulted in significant effects on adults and offspring at 30 and 15 mg/kg/d.</p>			
RESENE MICA BOND & NAPHTHA PETROLEUM, HEAVY, HYDRODESULFURISED & SOLVENT NAPHTHA PETROLEUM, HEAVY AROMATIC	Studies indicate that normal, branched and cyclic paraffins are absorbed from the mammalian gastrointestinal tract and that the absorption of n-paraffins is inversely proportional to the carbon chain length, with little absorption above C30.			
RESENE MICA BOND & NAPHTHA PETROLEUM, HEAVY, HYDRODESULFURISED & NAPHTHA PETROLEUM, LIGHT AROMATIC SOLVENT	For trimethylbenzenes: Absorption of 1,2,4-trimethylbenzene occurs after oral, inhalation, or dermal exposure.			
NAPHTHA PETROLEUM, HEAVY, HYDRODESULFURISED & NAPHTHA PETROLEUM, LIGHT AROMATIC SOLVENT	For C9 aromatics (typically trimethylbenzenes - TMBs) Acute Toxicity Acute toxicity studies (oral, dermal and inhalation routes of exposure) have been conducted in rats using various solvent products containing predominantly mixed C9 aromatic hydrocarbons (CAS RN 64742-95-6).			
NAPHTHA PETROLEUM, HEAVY, HYDRODESULFURISED & SOLVENT NAPHTHA PETROLEUM, HEAVY AROMATIC	for petroleum: Altered mental state, drowsiness, peripheral motor neuropathy, irreversible brain damage (so-called Petrol Sniffer's Encephalopathy), delirium, seizures, and sudden death have been reported from repeated overexposure to some hydrocarbon solvents, naphthas, and gasoline This product may contain benzene which is known to cause acute myeloid leukaemia and n-hexane which has been shown to metabolize to compounds which are neuropathic. This product contains toluene.			
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: ✘ – Data either not available or does not fill the criteria for classification  
✔ – Data available to make classification

## SECTION 12 ECOLOGICAL INFORMATION

## Toxicity

RESENE MICA BOND	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
	Not Available	Not Available	Not Available	Not Available	Not Available

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naphtha petroleum, heavy, hydrodesulfurised	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
	LC50	96	Fish	4.1mg/L	2
	EC50	48	Crustacea	4.5mg/L	2
	EC50	72	Algae or other aquatic plants	>1-mg/L	2
	LC50	96	Fish	0.14mg/L	2
	EC50	96	Algae or other aquatic plants	0.277mg/L	2
	NOEC	720	Crustacea	0.024mg/L	2

solvent naphtha petroleum, heavy aromatic	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
	LC50	96	Fish	0.58mg/L	2
	EC50	48	Crustacea	0.76mg/L	2
	EC50	72	Algae or other aquatic plants	<1mg/L	1
	NOEC	96	Algae or other aquatic plants	0.12mg/L	2

naphtha petroleum, light aromatic solvent	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
	LC50	96	Fish	4.1mg/L	2
	EC50	48	Crustacea	3.2mg/L	2
	EC50	72	Algae or other aquatic plants	>1-mg/L	2
	NOEC	72	Algae or other aquatic plants	=1mg/L	1

naphthalene	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
	LC50	96	Fish	0.213mg/L	4
	EC50	48	Crustacea	1.6mg/L	4
	EC50	72	Algae or other aquatic plants	ca.0.4mg/L	1
	BCF	12	Fish	10.2mg/L	4
	NOEC	48	Fish	0.0001mg/L	4

zinc octoate	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
	LC50	96	Fish	0.001-0.81mg/L	2
	EC50	48	Crustacea	0.001-0.014mg/L	2
	EC50	72	Algae or other aquatic plants	0.0396mg/L	2
	NOEC	72	Algae or other aquatic plants	0.00035179mg/L	2

**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*

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.

When spilled this product may act as a typical oil, causing a film, sheen, emulsion or sludge at or beneath the surface of the body of water.

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 m<sup>3</sup>/mol: 385-627

Bioaccumulation : not significant

1,2,4-Trimethylbenzene is a volatile organic compound (VOC) substance.

Within an aromatic series, acute toxicity increases with increasing alkyl substitution on the aromatic nucleus.

For petroleum distillates:

Environmental fate:

When petroleum substances are released into the environment, four major fate processes will take place: dissolution in water, volatilization, biodegradation and adsorption.

For C9 aromatics (typically trimethylbenzene - TMBs)

Chemicals in this category possess properties indicating a hazard for the environment (acute toxicity for fish, invertebrates, and algae from 1 to 10 mg/L).

For xylenes :

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 m<sup>3</sup>/mol: 637-879

Henry's atm m<sup>3</sup>/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

**Environmental Fate**



## RESENE MICA BOND

**Terrestrial fate:** Measured Koc values of 166 and 182, indicate that 3-xylene is expected to have moderate mobility in soil.

for naphthalene:

Environmental fate:

Naphthalene released to the atmosphere may be transported to surface water and/or soil by wet or dry deposition.

**DO NOT discharge into sewer or waterways.**

**Persistence and degradability**

Ingredient	Persistence: Water/Soil	Persistence: Air
naphthalene	HIGH (Half-life = 258 days)	LOW (Half-life = 1.23 days)
zinc octoate	LOW	LOW

**Bioaccumulative potential**

Ingredient	Bioaccumulation
solvent naphtha petroleum, heavy aromatic	LOW (BCF = 159)
naphthalene	HIGH (BCF = 18000)
zinc octoate	LOW (LogKOW = 3.0334)

**Mobility in soil**

Ingredient	Mobility
naphthalene	LOW (KOC = 1837)
zinc octoate	LOW (KOC = 25.62)

**SECTION 13 DISPOSAL CONSIDERATIONS****Waste treatment methods**



<b>Product / Packaging disposal</b>	<ul style="list-style-type: none"> <li>▶ Containers may still present a chemical hazard/ danger when empty.</li> <li>Legislation addressing waste disposal requirements may differ by country, state and/ or territory.</li> <li>▶ <b>DO NOT allow wash water from cleaning or process equipment to enter drains.</b></li> <li>▶ Recycle wherever possible.</li> </ul>
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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 package.

**SECTION 14 TRANSPORT INFORMATION****Labels Required**

	
Marine Pollutant	
HAZCHEM	*3Y

**Land transport (UN)**

<b>UN number</b>	1263
<b>UN proper shipping name</b>	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)
<b>Transport hazard class(es)</b>	Class : 3 Subrisk : Not Applicable
<b>Packing group</b>	III
<b>Environmental hazard</b>	Environmentally hazardous
<b>Special precautions for user</b>	Special provisions : 163; 223; 367 Limited quantity : 5 L

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

## RESENE MICA BOND

<b>UN number</b>	1263	
<b>UN proper shipping name</b>	Paint (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base); Paint related material (including paint thinning or reducing compounds)	
<b>Transport hazard class(es)</b>	ICAO/IATA Class	3
	ICAO / IATA Subrisk	Not Applicable
	ERG Code	3L
<b>Packing group</b>	III	
<b>Environmental hazard</b>	Environmentally hazardous	
<b>Special precautions for user</b>	Special provisions	A3 A72 A192
	Cargo Only Packing Instructions	366
	Cargo Only Maximum Qty / Pack	220 L
	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)

<b>UN number</b>	1263	
<b>UN proper shipping name</b>	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)	
<b>Transport hazard class(es)</b>	IMDG Class	3
	IMDG Subrisk	Not Applicable
<b>Packing group</b>	III	
<b>Environmental hazard</b>	Marine Pollutant	
<b>Special precautions for user</b>	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
HSR002669	Surface Coatings and Colourants (Flammable, Toxic [6.7]) Group Standard 2017

## NAPHTHA PETROLEUM, HEAVY, HYDRODESULFURISED IS FOUND ON THE FOLLOWING REGULATORY LISTS

Chemical Footprint Project - Chemicals of High Concern List	International Maritime Dangerous Goods Requirements (IMDG Code)
IMO IBC Code Chapter 17: Summary of minimum requirements	New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals
IMO MARPOL (Annex II) - List of Noxious Liquid Substances Carried in Bulk	New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals - Classification Data
IMO Provisional Categorization of Liquid Substances - List 2: Pollutant only mixtures containing at least 99% by weight of components already assessed by IMO	New Zealand Inventory of Chemicals (NZIoC)
International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs	New Zealand Land Transport Rule; Dangerous Goods 2005 - Schedule 2 Dangerous Goods in Limited Quantities and Consumer Commodities
International Air Transport Association (IATA) Dangerous Goods Regulations	New Zealand Workplace Exposure Standards (WES)
International FOSFA List of Banned Immediate Previous Cargoes	United Nations Recommendations on the Transport of Dangerous Goods Model Regulations

## SOLVENT NAPHTHA PETROLEUM, HEAVY AROMATIC IS FOUND ON THE FOLLOWING REGULATORY LISTS

International Air Transport Association (IATA) Dangerous Goods Regulations	New Zealand Land Transport Rule: Dangerous Goods 2005 - Schedule 1 Quantity limits
International Maritime Dangerous Goods Requirements (IMDG Code)	United Nations Recommendations on the Transport of Dangerous Goods Model Regulations
New Zealand Inventory of Chemicals (NZIoC)	

## NAPHTHA PETROLEUM, LIGHT AROMATIC SOLVENT IS FOUND ON THE FOLLOWING REGULATORY LISTS

Chemical Footprint Project - Chemicals of High Concern List	International Air Transport Association (IATA) Dangerous Goods Regulations
GESAMP/EHS Composite List - GESAMP Hazard Profiles	International Maritime Dangerous Goods Requirements (IMDG Code)
IMO IBC Code Chapter 17: Summary of minimum requirements	New Zealand Inventory of Chemicals (NZIoC)
IMO MARPOL (Annex II) - List of Noxious Liquid Substances Carried in Bulk	New Zealand Land Transport Rule; Dangerous Goods 2005 - Schedule 2 Dangerous Goods in Limited Quantities and Consumer Commodities
IMO Provisional Categorization of Liquid Substances - List 2: Pollutant only mixtures containing at least 99% by weight of components already assessed by IMO	United Nations Recommendations on the Transport of Dangerous Goods Model Regulations

Continued...

## RESENE MICA BOND

**NAPHTHALENE IS FOUND ON THE FOLLOWING REGULATORY LISTS**

Chemical Footprint Project - Chemicals of High Concern List  
 GESAMP/EHS Composite List - GESAMP Hazard Profiles  
 IMO IBC Code Chapter 17: Summary of minimum requirements  
 IMO MARPOL (Annex II) - List of Noxious Liquid Substances Carried in Bulk  
 IMO Provisional Categorization of Liquid Substances - List 1: Pure or technically pure products  
 IMO Provisional Categorization of Liquid Substances - List 2: Pollutant only mixtures containing at least 99% by weight of components already assessed by IMO  
 IMO Provisional Categorization of Liquid Substances - List 3: (Trade-named) mixtures containing at least 99% by weight of components already assessed by IMO, presenting safety hazards  
 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  
 International Air Transport Association (IATA) Dangerous Goods Regulations  
 International Maritime Dangerous Goods Requirements (IMDG Code)  
 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)  
 United Nations Recommendations on the Transport of Dangerous Goods Model Regulations

**ZINC OCTOATE IS FOUND ON THE FOLLOWING REGULATORY LISTS**

International Air Transport Association (IATA) Dangerous Goods Regulations  
 International Maritime Dangerous Goods Requirements (IMDG Code)  
 New Zealand Inventory of Chemicals (NZIoC)

New Zealand Land Transport Rule: Dangerous Goods 2005 - Schedule 1 Quantity limits  
 United Nations Recommendations on the Transport of Dangerous Goods Model Regulations

**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
New Zealand - NZIoC	Yes
<b>Legend:</b>	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**

<b>Revision Date</b>	20/02/2020
<b>Initial Date</b>	27/03/2015

**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.

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