

Resene 81A Etch Primer Yellow

Resene Automotive & Light Industrial Limited

Version No: 2.4

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

Initial Date: 20/04/2026

Revision Date: 21/04/2026

Print Date: 21/04/2026

L.GHS.NZL.EN

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

Product Identifier

Product name	Resene 81A Etch Primer Yellow
Synonyms	Not Available
Proper shipping name	PAINT, FLAMMABLE, CORROSIVE (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base)
Other means of identification	Not Available

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

Relevant identified uses	10547
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Details of the manufacturer or importer of the safety data sheet

Registered company name	Resene Automotive & Light Industrial Limited
Address	32-50 Vogel Street Naenae Wellington 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 7 days)	CHEMWATCH EMERGENCY RESPONSE (24/7)
Emergency telephone number(s)	0800 764766	+64 800 700 112 (ID#: 9-d37304)
Other emergency telephone number(s)	0800 737636	+61 3 9573 3188

SECTION 2 Hazards identification

Classification of the substance or mixture

Classification ^[1]	Flammable Liquids Category 2, Acute Toxicity (Oral) Category 4, Acute Toxicity (Dermal) Category 4, Skin Corrosion/Irritation Category 1A, Sensitisation (Skin) Category 1, Serious Eye Damage/Eye Irritation Category 1, Acute Toxicity (Inhalation) Category 4, Germ Cell Mutagenicity Category 1, Carcinogenicity Category 1, Reproductive Toxicity Category 1, Specific Target Organ Toxicity - Single Exposure Category 2, Specific Target Organ Toxicity - Repeated Exposure Category 2, Hazardous to the Aquatic Environment Acute Hazard Category 1, Hazardous to the Aquatic Environment Long-Term Hazard Category 1
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	3.1B, 6.1D (dermal), 6.1D (inhalation), 6.1D (oral), 8.2A, 8.3A, 6.5B (contact), 6.6A, 6.7A, 6.8A, 6.9B, 9.1A

Label elements

Hazard pictogram(s)	
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Signal word	Danger
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Hazard statement(s)

Resene 81A Etch Primer Yellow

H225	Highly flammable liquid and vapour.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H332	Harmful if inhaled.
H340	May cause genetic defects.
H350	May cause cancer.
H360	May damage fertility or the unborn child.
H371	May cause damage to organs. (Oral, Dermal, Inhalation)
H373	May cause damage to organs through prolonged or repeated exposure. (Oral, Dermal, Inhalation)
H410	Very toxic to aquatic life with long lasting effects.

Precautionary statement(s) Prevention

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233	Keep container tightly closed.
P260	Do not breathe mist/vapours/spray.
P264	Wash all exposed external body areas thoroughly after handling.
P271	Use only a well-ventilated area.
P280	Wear protective gloves, protective clothing, eye protection and 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.
P270	Do not eat, drink or smoke when using this product.
P273	Avoid release to the environment.
P202	Do not handle until all safety precautions have been read and understood.
P272	Contaminated work clothing should not be allowed out of the workplace.

Precautionary statement(s) Response

P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. If more than 15 mins from Doctor, INDUCE VOMITING (if conscious).
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor/physician/first aider.
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.
P363	Wash contaminated clothing before reuse.
P308+P311	IF exposed or concerned: Call a POISON CENTER/doctor/physician/first aider.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P391	Collect spillage.
P301+P312	IF SWALLOWED: Call a POISON CENTER/doctor/physician/first aider if you feel unwell.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Precautionary statement(s) Storage

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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No further product hazard information.

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, EPA consolidation 30 September 2022 to be identified:

Mixtures

CAS No	%[weight]	Name
49663-84-5	1-10	zinc chromate hydroxide
14808-60-7	<=0.1	<u>silica crystalline - quartz</u>
26354-11-0	1-5	<u>cresol/ phenol/ formaldehyde resin</u>
108-95-2	0.1-1	<u>phenol</u>
67-63-0	5-15	<u>isopropanol</u>

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CAS No	%[weight]	Name
71-36-3	1-10	<u>n-butanol</u>
64742-95-6	1-10	<u>naphtha petroleum, light aromatic solvent</u>
108-88-3	10-20	<u>toluene</u>
78-93-3	10-20	<u>methyl ethyl ketone</u>
108-94-1	1-10	<u>cyclohexanone</u>
67-64-1	1-10	<u>acetone</u>
Legend:	1. Classified by Chemwatch; 2. Classification drawn from CCID EPA NZ; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI; 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 the eyes: ▶ Immediately hold eyelids apart and flush the eye continuously with 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. ▶ Continue flushing for at least 15 minutes. ▶ Transport to hospital or doctor without delay if symptoms occur. ▶ Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	If skin or hair contact occurs: ▶ Immediately flush body and clothes with large amounts of water, using safety shower if available. ▶ Quickly remove all contaminated clothing, including footwear. ▶ Wash skin and hair with running water. ▶ Transport to hospital, or doctor if symptoms persist.
Inhalation	If vapours, fumes or combustion products are inhaled, remove affected person from contaminated area. Keep at rest until recovered. If symptoms develop transport to hospital, or doctor without delay.
Ingestion	▶ For advice, contact a Poisons Information Centre or a doctor at once. ▶ Urgent hospital treatment is likely to be needed. ▶ If swallowed do NOT 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. ▶ Transport to hospital or doctor without delay. ▶ If spontaneous vomiting appears imminent or occurs, hold patient's head down, lower than their hips to help avoid possible aspiration of vomitus. ▶ Avoid giving milk or oils. ▶ Avoid giving alcohol.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically

SECTION 5 Firefighting measures

Extinguishing media

Foam, dry agent e.g. carbon dioxide (CO2) or dry chemical powder.

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	▶ Liquid and vapour are highly flammable. Combustion products include: ▶ carbon dioxide (CO2) metal oxides ▶ other pyrolysis products typical of burning organic material. Contains low boiling substance: Closed containers may rupture due to pressure buildup under fire conditions. WARNING: Long standing in contact with air and light may result in the formation of potentially explosive peroxides.

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 container for disposal. 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

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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	Even with proper grounding and bonding, this material can still accumulate an electrostatic charge. - Containers, even those that have been emptied, may contain explosive vapours. Contains low boiling substance: Storage in sealed containers may result in pressure buildup causing violent rupture of containers not rated appropriately. - 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 flame-proof area.

Conditions for safe storage, including any incompatibilities

Suitable container	Packing as supplied by manufacturer.
Storage incompatibility	Methyl ethyl ketone: - reacts violently with strong oxidisers, aldehydes, nitric acid, perchloric acid - is incompatible with inorganic acids, aliphatic amines, ammonia, caustic - attacks some plastics - may generate electrostatic charges, due to low conductivity, on flow or agitation Toluene: - reacts violently with strong oxidisers - forms explosive mixtures with strong acids, strong oxidisers - attacks some plastics, rubber and coatings - may generate electrostatic charges, due to low conductivity, on flow or agitation. For alkyl aromatics: The alkyl side chain of aromatic rings can undergo oxidation by several mechanisms. - Vigorous reactions, sometimes amounting to explosions, can result from the contact between aromatic rings and strong oxidising agents. Alcohols - are incompatible with strong acids, acid chlorides, acid anhydrides, oxidising and reducing agents. Ketones in this group: - are reactive with many acids and bases liberating heat and flammable gases (e.g., H2).

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)	silica crystalline - quartz	Silica-Crystalline (all forms) respirable dust	0.025 mg/m3	Not Available	Not Available	carcinogen category 1 - Known or presumed human carcinogen α-quartz and cristobalite are confirmed carcinogens. Significant risk to workers will remain at WES-TWA exposures of 0.025mg/m3. The US Occupational Safety and Health Administration (OSHA) has estimated the lifetime silicosis mortality risk for workers exposed at this level for 8 hours per day at between 4 and 22 deaths per 1,000 workers and the lifetime lung cancer mortality risk for workers exposed at this level for 8 hours per day at between 3 and 23 deaths per 1,000 workers.
New Zealand Workplace Exposure Standards (WES)	cresol/ phenol/ formaldehyde resin	Respirable dust (not otherwise classified)	3 mg/m3	Not Available	Not Available	Not Available
New Zealand Workplace Exposure Standards (WES)	cresol/ phenol/ formaldehyde resin	Inhalable dust (not otherwise classified)	10 mg/m3	Not Available	Not Available	Not Available
New Zealand Workplace Exposure Standards (WES)	phenol	Phenol	1 ppm / 3.8 mg/m3	7.7 mg/m3 / 2 ppm	Not Available	skin - Skin absorption
New Zealand Workplace Exposure Standards (WES)	isopropanol	Isopropyl alcohol	200 ppm / 491 mg/m3	983 mg/m3 / 400 ppm	Not Available	Not Available
New Zealand Workplace Exposure Standards (WES)	n-butanol	n-Butyl alcohol	20 ppm / 61 mg/m3	Not Available	Not Available	Not Available
New Zealand Workplace Exposure Standards (WES)	toluene	Toluene (Toluol)	20 ppm / 75 mg/m3	377 mg/m3 / 100 ppm	Not Available	skin - Skin absorption oto - Ototoxin bio - Exposure can also be estimated by biological monitoring
New Zealand Workplace Exposure Standards (WES)	methyl ethyl ketone	2-Butanone (Methyl ethyl ketone, MEK)	150 ppm / 445 mg/m3	890 mg/m3 / 300 ppm	Not Available	bio - Exposure can also be estimated by biological monitoring
New Zealand Workplace Exposure Standards (WES)	cyclohexanone	Cyclohexanone	10 ppm / 41 mg/m3	82 mg/m3 / 20 ppm	Not Available	skin - Skin absorption

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Source	Ingredient	Material name	TWA	STEL	Peak	Notes
New Zealand Workplace Exposure Standards (WES)	acetone	Acetone	500 ppm / 1185 mg/m3	2375 mg/m3 / 1000 ppm	Not Available	bio - Exposure can also be estimated by biological monitoring

MATERIAL DATA

WARNING: This substance has been classified by the ACGIH as A1 **CONFIRMED HUMAN CARCINOGEN**

WARNING: For inhalation exposure **ONLY:**

This substance has been classified by the ACGIH as A2 Suspected Human Carcinogen.

IFRA Prohibited Fragrance Substance

The International Fragrance Association (IFRA) Standards form the basis for the globally accepted and recognized risk management system for the safe use of fragrance ingredients and are part of the IFRA Code of Practice.

WARNING: This substance is classified by the NOHSC as Category 1 **ESTABLISHED HUMAN CARCINOGEN**

WARNING: This substance is classified by the NOHSC as Category 2 Probable Human Carcinogen

WARNING: For inhalation exposure **ONLY:** This substance has been classified by the IARC as Group 1: **CARCINOGENIC TO HUMANS**

The International Agency for Research on Cancer (IARC) has classified occupational exposures to **respirable** (<5 µm) crystalline silica as being carcinogenic to humans .
For cyclohexanone

Odour Threshold Value: 0.12 ppm (detection and recognition)

Exposure at the TLV-TWA produces minimal irritation and this limit is significantly lower than the concentration reported to just induce demonstrable changes in the liver and kidneys of rabbits repeatedly exposed to the substance (190 ppm).

These exposure guidelines have been derived from a screening level of risk assessment and should not be construed as unequivocally safe limits.

Odour Threshold Value: 3.6 ppm (detection), 699 ppm (recognition)

NOTE: Detector tubes measuring in excess of 40 ppm, are available.

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.

Because the margin of safety of the quartz TLV is not known with certainty and given the associated link between silicosis and lung cancer it is recommended that quartz concentrations be maintained as far below the TLV as prudent practices will allow.

Odour Threshold Value for phenol: 0.060 ppm (detection)

NOTE: Detector tubes for phenol, measuring in excess of 1 ppm, are commercially available.

Odour Threshold Value: 3.3 ppm (detection), 7.6 ppm (recognition)

Exposure at or below the recommended isopropanol TLV-TWA and STEL is thought to minimise the potential for inducing narcotic effects or significant irritation of the eyes or upper respiratory tract.

For n-butanol:

Odour Threshold Value: 0.12-3.4 ppm (detection), 1.0-3.5 ppm (recognition)

NOTE: Detector tubes for n-butanol, measuring in excess of 5 ppm are commercially available.

For toluene:

Odour Threshold Value: 0.16-6.7 (detection), 1.9-69 (recognition)

NOTE: Detector tubes measuring in excess of 5 ppm, are available.

For methyl ethyl ketone:

Odour Threshold Value: Variously reported as 2 ppm and 4.8 ppm

Odour threshold: 2 ppm (detection); 5 ppm (recognition) 25 ppm (easy recognition); 300 ppm IRRITATING

Exposures at or below the recommended TLV-TWA are thought to prevent injurious systemic effects and to minimise objections to odour and irritation.

Exposure controls

Appropriate engineering controls	Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard.
Individual protection measures, such as personal protective equipment	
Eye and face protection	Safety glasses with unperforated side shields may be used where continuous eye protection is desirable, as in laboratories; spectacles are not sufficient where complete eye protection is needed such as when handling bulk-quantities, where there is a danger of splashing, or if the material may be under pressure.
Skin protection	See Hand protection below
Hands/feet protection	- Elbow length PVC gloves - When handling corrosive liquids, wear trousers or overalls outside of boots, to avoid spills entering boots. NOTE: - 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.
Body protection	Overalls
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 circumstances. Recommended filter type: Type AX filter. Cartridge respirators should never be used for emergency ingress or in areas of unknown vapour concentrations or oxygen content. The wearer must be warned to leave the contaminated area immediately on detecting any odours through the respirator. The odour may indicate that the mask is not functioning properly, that the vapour concentration is too high, or that the mask is not properly fitted. Because of these limitations, only restricted use of cartridge respirators is considered appropriate. Cartridge performance is affected by humidity. Cartridges should be changed after 2 hr of continuous use unless it is determined that the humidity is less than 75%, in which case, cartridges can be used for 4 hr. Used cartridges should be discarded daily, regardless of the length of time used

SECTION 9 Physical and chemical properties

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Information on basic physical and chemical properties

Appearance	Yellow dispersion with characteristic odour		
Physical state	Liquid	Relative density (Water = 1)	0.95-1.00
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	466
pH (as supplied)	Not Available	Decomposition temperature (°C)	Not Available
Melting point / freezing point (°C)	Not Available	Viscosity (cSt)	80-150
Initial boiling point and boiling range (°C)	120	Molecular weight (g/mol)	Not Available
Flash point (°C)	10	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	HIGHLY FLAMMABLE.	Oxidising properties	Not Available
Upper Explosive Limit (%)	10.3	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	1.7	Volatile Component (%vol)	85
Vapour pressure (kPa)	5.94	Gas group	Not Available
Solubility in water	Immiscible	pH as a solution (1%)	Not Available
Vapour density (Air = 1)	2.7	VOC g/L	695
Heat of Combustion (kJ/g)	Not Available	Ignition Distance (cm)	Not Available
Flame Height (cm)	Not Available	Flame Duration (s)	Not Available
Enclosed Space Ignition Time Equivalent (s/m3)	Not Available	Enclosed Space Ignition Deflagration Density (g/m3)	Not Available

SECTION 10 Stability and reactivity

Reactivity	See section 7
Chemical stability	Stable under normal condition of use and storage.
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

a) Acute Toxicity	There is sufficient evidence to classify this material as acutely toxic.
b) Skin Irritation/Corrosion	There is sufficient evidence to classify this material as skin corrosive or irritating.
c) Serious Eye Damage/Irritation	There is sufficient evidence to classify this material as eye damaging or irritating
d) Respiratory or Skin sensitisation	There is sufficient evidence to classify this material as sensitising to skin or the respiratory system
e) Mutagenicity	There is sufficient evidence to classify this material as mutagenic
f) Carcinogenicity	There is sufficient evidence to classify this material as carcinogenic
g) Reproductivity	There is sufficient evidence to classify this material as toxic to reproductivity
h) STOT - Single Exposure	There is sufficient evidence to classify this material as toxic to specific organs through single exposure
i) STOT - Repeated Exposure	There is sufficient evidence to classify this material as toxic to specific organs through repeated exposure
j) Aspiration Hazard	Based on available data, the classification criteria are not met.

Inhaled	Inhalation of vapours or aerosols (mists, fumes), generated by the material during the course of normal handling, may be harmful. Inhalation of vapours may cause drowsiness and dizziness. Inhalation may result in chrome ulcers or sores of nasal mucosa and lung damage. Acute effects from inhalation of high concentrations of vapour are pulmonary irritation, including coughing, with nausea; central nervous system depression - characterised by headache and dizziness, increased reaction time, fatigue and loss of co-ordination 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. A significant number of individuals exposed to mixed trimethylbenzenes complained of nervousness, tension, anxiety and asthmatic bronchitis. The acute toxicity of inhaled alkylbenzene is best described by central nervous system depression. The odour of isopropanol may give some warning of exposure, but odour fatigue may occur. Acute exposure of humans to high concentrations of methyl ethyl ketone produces irritation to the eyes, nose, and throat. The use of a quantity of material in an unventilated or confined space may result in increased exposure and an irritating atmosphere developing.
Ingestion	The material can produce severe chemical burns within the oral cavity and gastrointestinal tract following ingestion. Overexposure to non-ring alcohols causes nervous system symptoms. At sufficiently high doses the material may be hepatotoxic (i.e. poisonous to the liver). Chromate salts are corrosive because of their oxidising potency and produce tissue injury similar to acid burns.

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	Swallowing of n-butanol may cause breathing difficulty, headache, nausea, vomiting, upper respiratory tract irritation, mucous membrane irritation, central nervous system depression. Swallowing 10 millilitres of isopropanol may cause serious injury; 100 millilitres may be fatal if not properly treated.																
Skin Contact	Skin contact with the material may be harmful; systemic effects may result following absorption. The material can produce severe chemical burns following direct contact with the skin. Skin contact may result in severe irritation particularly to broken skin. Dermatitis has been reported in humans following dermal exposure to methyl ethyl ketone. Most liquid alcohols appear to act as primary skin irritants in humans. 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	The material can produce severe chemical burns to the eye following direct contact. When applied to the eye(s) of animals, the material produces severe ocular lesions which are present twenty-four hours or more after instillation. Workers exposed to 200 ppm n-butanol showed ocular symptoms including corneal inflammation, burning sensation, blurring of vision, lachrymation, and photophobia. Isopropanol vapour may cause mild eye irritation at 400 ppm.																
Chronic	Long-term exposure to respiratory irritants may result in disease of the airways involving difficult breathing and related systemic problems. Practical experience shows that skin contact with the material is capable either of inducing a sensitisation reaction in a substantial number of individuals, and/or of producing a positive response in experimental animals. There is sufficient evidence to provide a strong presumption that human exposure to the material may produce heritable genetic damage. There is sufficient evidence to provide a strong presumption that human exposure to the material may result in the development of heritable genetic damage, generally on the basis of - appropriate animal studies, - other relevant information Toxic: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed. There is sufficient evidence to establish a causal relationship between human exposure to the material and impaired fertility Limited evidence suggests that repeated or long-term occupational exposure may produce cumulative health effects involving organs or biochemical systems. Chronic toluene habituation occurs following intentional abuse (glue sniffing) or from occupational exposure. Animal testing shows that methyl ethyl ketone may have slight effects on the nervous system, liver, kidney and respiratory system; there may also be developmental effects and an increase in birth defects. On the basis, primarily, of animal experiments, concern has been expressed by at least one classification body 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. Long term, or repeated exposure of isopropanol may cause inco-ordination and tiredness.																
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TOXICITY	IRRITATION																
Dermal (rabbit) LD50: 850 mg/kg ^[2]	Eye (Rodent - rabbit): 5mg - Severe																
Inhalation (Mouse) LC50: 0.177 mg/L4h ^[2]	Eye (Rodent - rabbit): 5mg/30S - Mild																
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	Skin (Rodent - rabbit): 535mg - Severe																
	Skin: adverse effect observed (corrosive) ^[1]																
isopropanol	<table> <tr> <th>TOXICITY</th><th>IRRITATION</th></tr> <tr> <td>Dermal (rabbit) LD50: 12800 mg/kg^[2]</td><td>Eye (Rodent - rabbit): 100mg - Severe</td></tr> <tr> <td>Inhalation (Mouse) LC50: 53 mg/L4h^[2]</td><td>Eye (Rodent - rabbit): 100mg/24H - Moderate</td></tr> <tr> <td>Oral (Mouse) LD50; 3600 mg/kg^[2]</td><td>Eye (Rodent - rabbit): 10mg - Moderate</td></tr> <tr> <td></td><td>Eye: adverse effect observed (irritating)^[1]</td></tr> <tr> <td></td><td>Skin (Rodent - rabbit): 500mg - Mild</td></tr> <tr> <td></td><td>Skin: no adverse effect observed (not irritating)^[1]</td></tr> </table>	TOXICITY	IRRITATION	Dermal (rabbit) LD50: 12800 mg/kg ^[2]	Eye (Rodent - rabbit): 100mg - Severe	Inhalation (Mouse) LC50: 53 mg/L4h ^[2]	Eye (Rodent - rabbit): 100mg/24H - Moderate	Oral (Mouse) LD50; 3600 mg/kg ^[2]	Eye (Rodent - rabbit): 10mg - Moderate		Eye: adverse effect observed (irritating) ^[1]		Skin (Rodent - rabbit): 500mg - Mild		Skin: no adverse effect observed (not irritating) ^[1]		
TOXICITY	IRRITATION																
Dermal (rabbit) LD50: 12800 mg/kg ^[2]	Eye (Rodent - rabbit): 100mg - Severe																
Inhalation (Mouse) LC50: 53 mg/L4h ^[2]	Eye (Rodent - rabbit): 100mg/24H - Moderate																
Oral (Mouse) LD50; 3600 mg/kg ^[2]	Eye (Rodent - rabbit): 10mg - Moderate																
	Eye: adverse effect observed (irritating) ^[1]																
	Skin (Rodent - rabbit): 500mg - Mild																
	Skin: no adverse effect observed (not irritating) ^[1]																

Resene 81A Etch Primer Yellow

n-butanol	TOXICITY	IRRITATION
	Dermal (rabbit) LD50: 3400 mg/kg ^[2]	Eye (Human): 50ppm
	Inhalation (Rat) LC50: 8000 ppm4h ^[2]	Eye (Human): 990ppm/1H
	Oral (Rat) LD50: 790 mg/kg ^[2]	Eye (Rodent - rabbit): 0.005mL - Severe
		Eye (Rodent - rabbit): 0.1mL
		Eye (Rodent - rabbit): 1.62mg - Severe
		Eye (Rodent - rabbit): 2mg/24H - Severe
		Eye: adverse effect observed (irreversible damage) ^[1]
		Skin (Human): 20uL/20M
		Skin (Rodent - rabbit): 20mg/24H - Moderate
		Skin: adverse effect observed (irritating) ^[1]
naphtha petroleum, light aromatic solvent	TOXICITY	IRRITATION
	Dermal (rabbit) LD50: >1900 mg/kg ^[1]	Eye (Rodent - rabbit): 100uL/24H - Mild
	Inhalation (Rat) LC50: >4.42 mg/L4h ^[1]	Eye: no adverse effect observed (not irritating) ^[1]
	Oral (Rat) LD50: >4500 mg/kg ^[1]	Skin: adverse effect observed (irritating) ^[1]
toluene	TOXICITY	IRRITATION
	Dermal (rabbit) LD50: 12124 mg/kg ^[2]	Eye (Human): 300ppm
	Inhalation (Rat) LC50: >13350 ppm4h ^[2]	Eye (Rodent - rabbit): 0.1mL
	Oral (Rat) LD50: 636 mg/kg ^[2]	Eye (Rodent - rabbit): 0.1mL - Severe
		Eye (Rodent - rabbit): 100mg/30S - Mild
		Eye (Rodent - rabbit): 2mg/24H - Severe
		Eye (Rodent - rabbit): 870ug - Mild
		Eye: adverse effect observed (irritating) ^[1]
		Skin (Mammal - pig): 250uL/24H - Mild
		Skin (Rodent - rabbit): 20mg/24H - Moderate
		Skin (Rodent - rabbit): 435mg - Mild
		Skin (Rodent - rabbit): 500mg - Moderate
		Skin: adverse effect observed (irritating) ^[1]
		Skin: no adverse effect observed (not irritating) ^[1]
methyl ethyl ketone	TOXICITY	IRRITATION
	Dermal (rabbit) LD50: 6480 mg/kg ^[2]	Eye (Human): 350ppm
	Inhalation (Mouse) LC50: 32 mg/L4h ^[2]	Eye (Rodent - rabbit): 80mg
	Oral (Rat) LD50: 2054 mg/kg ^[1]	Eye: adverse effect observed (irritating) ^[1]
		Skin (Rodent - rabbit): 14mg/24H - Mild
		Skin (Rodent - rabbit): 402mg/24H - Mild
		Skin (Rodent - rabbit): 500mg/24H - Moderate
		Skin: no adverse effect observed (not irritating) ^[1]
cyclohexanone	TOXICITY	IRRITATION
	Dermal (rabbit) LD50: 948 mg/kg ^[2]	Eye (Human): 75ppm
	Inhalation (Rat) LC50: 8000 ppm4h ^[2]	Eye (Rodent - rabbit): 250ug/24H - Severe
	Oral (Rat) LD50: 1535 mg/kg ^[2]	Eye: adverse effect observed (irritating) ^[1]
		Skin (Human): 50%/48H - Mild
		Skin (Rodent - rabbit): 500mg - Mild
		Skin: adverse effect observed (irritating) ^[1]

Resene 81A Etch Primer Yellow

acetone	TOXICITY	IRRITATION
	Dermal (rabbit) LD50: 20000 mg/kg ^[2]	Eye (Human): 186300ppm - Mild
	Inhalation (Mouse) LC50: 44 mg/L4h ^[2]	Eye (Human): 500ppm
	Oral (Rat) LD50: 5800 mg/kg ^[2]	Eye (Rodent - rabbit): 10uL - Mild
		Eye (Rodent - rabbit): 20mg - Severe
		Eye (Rodent - rabbit): 20mg/24H - Moderate
		Eye: adverse effect observed (irritating) ^[1]
		Skin (Rodent - rabbit): 395mg - Mild
		Skin (Rodent - rabbit): 500mg/24H - 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 81A Etch Primer Yellow	Data demonstrate that during inhalation exposure,aromatic hydrocarbons undergo substantial partitioning into adipose tissues.		
SILICA CRYSTALLINE - QUARTZ	WARNING: For inhalation exposure <u>ONLY</u> : This substance has been classified by the IARC as Group 1: CARCINOGENIC TO HUMANS The International Agency for Research on Cancer (IARC) has classified occupational exposures to respirable (<5 um) crystalline silica as being carcinogenic to humans .		
CRESOL/ PHENOL/ FORMALDEHYDE RESIN	for phenol/ formaldehyde analogue		
PHENOL	The material may produce severe skin irritation after prolonged or repeated exposure, and may produce a contact dermatitis (nonallergic).		
ISOPROPANOL	For isopropanol (IPA): Acute toxicity: Isopropanol has a low order of acute toxicity.		
N-BUTANOL	for n-butanol Acute toxicity: n-Butanol (BA) was only slightly toxic to experimental animals following acute oral, dermal, or inhalation exposure.		
NAPHTHA PETROLEUM, LIGHT AROMATIC SOLVENT	* [Devoe] . 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).		
TOLUENE	For toluene: Acute Toxicity Humans exposed to intermediate to high levels of toluene for short periods of time experience adverse central nervous system effects ranging from headaches to intoxication, convulsions, narcosis, and death.		
CYCLOHEXANONE	Cyclohexanone: Acute toxicity: Cyclohexanone exhibits low to slight acute toxicity by the oral and inhalation routes and is moderately toxic by the dermal route.		
ACETONE	For acetone: The acute toxicity of acetone is low.		
Resene 81A Etch Primer Yellow & CRESOL/ PHENOL/ FORMALDEHYDE RESIN & PHENOL & ISOPROPANOL & N-BUTANOL & NAPHTHA PETROLEUM, LIGHT AROMATIC SOLVENT & METHYL ETHYL KETONE	Asthma-like symptoms may continue for months or even years after exposure to the material ends.		
Resene 81A Etch Primer Yellow & CRESOL/ PHENOL/ FORMALDEHYDE RESIN	The following information refers to contact allergens as a group and may not be specific to this product.		
Resene 81A Etch Primer Yellow & NAPHTHA PETROLEUM, LIGHT AROMATIC SOLVENT	For trimethylbenzenes: Absorption of 1,2,4-trimethylbenzene occurs after oral, inhalation, or dermal exposure.		
Resene 81A Etch Primer Yellow & METHYL ETHYL KETONE	Methyl ethyl ketone is considered to have a low order of toxicity; however methyl ethyl ketone is often used in combination with other solvents and the toxic effects of the mix may be greater than either solvent alone.		
PHENOL & N-BUTANOL & CYCLOHEXANONE	The material may produce severe irritation to the eye causing pronounced inflammation.		
PHENOL & ISOPROPANOL & CYCLOHEXANONE	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.		
ISOPROPANOL & N-BUTANOL & TOLUENE & METHYL ETHYL KETONE & CYCLOHEXANONE & ACETONE	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.		
Acute Toxicity	✓	Carcinogenicity	✓
Skin Irritation/Corrosion	✓	Reproductivity	✓
Serious Eye Damage/Irritation	✓	STOT - Single Exposure	✓

Resene 81A Etch Primer Yellow

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 81A Etch Primer Yellow	Endpoint	Test Duration (hr)	Species	Value	Source
	Not Available	Not Available	Not Available	Not Available	Not Available
silica crystalline - quartz	Endpoint	Test Duration (hr)	Species	Value	Source
	Not Available	Not Available	Not Available	Not Available	Not Available
cresol/ phenol/ formaldehyde resin	Endpoint	Test Duration (hr)	Species	Value	Source
	Not Available	Not Available	Not Available	Not Available	Not Available
phenol	Endpoint	Test Duration (hr)	Species	Value	Source
	EC50	72h	Algae or other aquatic plants	48.937-57.407mg/L	4
	EC50	48h	Crustacea	3.1mg/l	1
	EC50(ECx)	24h	Crustacea	<0.001mg/L	4
	EC50	96h	Algae or other aquatic plants	0.019-0.104mg/L	4
	LC50	96h	Fish	0.002mg/L	4
isopropanol	Endpoint	Test Duration (hr)	Species	Value	Source
	EC50	72h	Algae or other aquatic plants	>1000mg/l	1
	EC50	48h	Crustacea	7550mg/l	4
	EC50	96h	Algae or other aquatic plants	>1000mg/l	1
	EC50(ECx)	24h	Algae or other aquatic plants	0.011mg/L	4
	LC50	96h	Fish	>1400mg/L	4
n-butanol	Endpoint	Test Duration (hr)	Species	Value	Source
	EC50	72h	Algae or other aquatic plants	>500mg/l	1
	EC50	48h	Crustacea	>500mg/l	1
	EC50	96h	Algae or other aquatic plants	225mg/l	2
	NOEC(ECx)	504h	Crustacea	4.1mg/l	2
	LC50	96h	Fish	100-500mg/l	4
naphtha petroleum, light aromatic solvent	Endpoint	Test Duration (hr)	Species	Value	Source
	EC50	72h	Algae or other aquatic plants	19mg/l	1
	EC50	48h	Crustacea	6.14mg/l	1
	EC50	96h	Algae or other aquatic plants	64mg/l	2
	NOEC(ECx)	72h	Algae or other aquatic plants	1mg/l	1
toluene	Endpoint	Test Duration (hr)	Species	Value	Source
	EC50	72h	Algae or other aquatic plants	12.5mg/L	4
	EC50	48h	Crustacea	3.78mg/L	5
	NOEC(ECx)	168h	Crustacea	0.74mg/l	2
	EC50	96h	Algae or other aquatic plants	>376.71mg/L	4
	LC50	96h	Fish	5-35mg/l	4
methyl ethyl ketone	Endpoint	Test Duration (hr)	Species	Value	Source
	EC50	72h	Algae or other aquatic plants	1220mg/l	2
	EC50	48h	Crustacea	308mg/l	2
	EC50	96h	Algae or other aquatic plants	>500mg/L	4
	NOEC(ECx)	48h	Crustacea	68mg/l	2
	LC50	96h	Fish	>324mg/L	4

Continued...

Resene 81A Etch Primer Yellow

cyclohexanone	Endpoint	Test Duration (hr)	Species	Value	Source
	EC50	72h	Algae or other aquatic plants	17.7-85.6mg/l	4
	EC50	48h	Crustacea	>100mg/l	2
	EC10(ECx)	72h	Algae or other aquatic plants	0.4-7.93mg/l	4
	LC50	96h	Fish	481-578mg/L	4
acetone	Endpoint	Test Duration (hr)	Species	Value	Source
	EC50	72h	Algae or other aquatic plants	5600-10000mg/L	4
	EC50	48h	Crustacea	6098.4mg/L	5
	EC50	96h	Algae or other aquatic plants	9.873-27.684mg/l	4
	NOEC(ECx)	12h	Fish	0.001mg/L	4
	LC50	96h	Fish	3744.6-5000.7mg/L	4
Legend:	Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 3. US EPA, Ecotox database - Aquatic Toxicity Data 4. ECETOC Aquatic Hazard Assessment Data 5. NITE (Japan) - Bioconcentration Data 6. METI (Japan) - Bioconcentration Data 7. Vendor Data				

Very toxic to aquatic organisms.
Do NOT allow product to come in contact with surface waters or to intertidal areas below the mean high water mark.
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 isopropanol (IPA):
log Kow : -0.16- 0.28
Half-life (hr) air : 33-84
Half-life (hr) H2O surface water : 130
Henry's atm m3 /mol: 8.07E-06
BOD 5: 1.19,60%
COD : 1.61-2.30,97%
ThOD : 2.4
BOD 20: >70% * [Akzo Nobel]
Environmental Fate
Based on calculated results from a lever 1 fugacity model,IPA is expected to partition primarily to the aquatic compartment (77.7%) with the remainder to the air (22.3%).
For Methyl Ethyl Ketone:
log Kow: 0.26-0.69;
log Koc: 0.69;
Koc: 34;
Half-life (hr) air: 2.3;
Half-life (hr) H2O surface water: 72-288;
Henry's atm m3 /mol: 1.05E-05;
BOD 5: 1.5-2.24, 46%;
COD: 2.2-2.31, 100%;
ThOD: 2.44;
BCF: 1.
for organic pigments:
With only a few recognised exceptions, color pigments, both organic and inorganic, are extremely insoluble in water and in the vehicles in which they are mixed.
Since chromium compounds cannot volatilize from water, transport of chromium from water to the atmosphere is not likely, except by transport in windblown sea sprays.
For Ketones: Ketones, unless they are alpha, beta--unsaturated ketones, can be considered as narcosis or baseline toxicity compounds.

Chromium in the oxidation state +3 (the trivalent form) is poorly absorbed by cells found in microorganisms, plants and animals.
For Toluene:
log Kow : 2.1-3;
log Koc : 1.12-2.85;
Koc : 37-260;
log Kom : 1.39-2.89;
Half-life (hr) air : 2.4-104;
Half-life (hr) H2O surface water : 5.55-528;
Half-life (hr) H2O ground : 168-2628;
Half-life (hr) soil : <48-240;
Henry's Pa m3 /mol : 518-694;
Henry's atm m3 /mol : 5.94;
E-03BOD 5 0.86-2.12, 5%COD - 0.7-2.52,21-27%;
ThOD - 3.13 ; BCF - 1.67-380;
log BCF - 0.22-3.28.
DO NOT discharge into sewer or waterways.
for acetone:
log Kow: -0.24
Half-life (hr) air: 312-1896
Half-life (hr) H2O surface water: 20
Henry's atm m3 /mol: 3.67E-05
BOD 5: 0.31-1.76,46-55%
COD: 1.12-2.07
ThOD: 2.2
BCF: 0.69
Environmental fate:
Acetone preferentially locates in the air compartment when released to the environment.

Persistence and degradability

Resene 81A Etch Primer Yellow

Ingredient	Persistence: Water/Soil	Persistence: Air
phenol	LOW (Half-life = 10 days)	LOW (Half-life = 0.95 days)
isopropanol	LOW (Half-life = 14 days)	LOW (Half-life = 3 days)
n-butanol	LOW (Half-life = 54 days)	LOW (Half-life = 3.65 days)
toluene	LOW (Half-life = 28 days)	LOW (Half-life = 4.33 days)
methyl ethyl ketone	LOW (Half-life = 14 days)	LOW (Half-life = 26.75 days)
cyclohexanone	LOW	LOW
acetone	LOW (Half-life = 14 days)	MEDIUM (Half-life = 116.25 days)

Bioaccumulative potential

Ingredient	Bioaccumulation
phenol	LOW (BCF = 17.5)
isopropanol	LOW (LogKOW = 0.05)
n-butanol	LOW (BCF = 0.64)
toluene	LOW (BCF = 90)
methyl ethyl ketone	LOW (LogKOW = 0.29)
cyclohexanone	LOW (BCF = 2.45)
acetone	LOW (BCF = 0.69)

Mobility in soil

Ingredient	Mobility
phenol	LOW (Log KOC = 268)
isopropanol	HIGH (Log KOC = 1.06)
n-butanol	MEDIUM (Log KOC = 2.443)
toluene	LOW (Log KOC = 268)
methyl ethyl ketone	MEDIUM (Log KOC = 3.827)
cyclohexanone	LOW (Log KOC = 15.15)
acetone	HIGH (Log KOC = 1.981)

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. - Consult manufacturer for recycling option.
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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) and local regulations.

Flammable substance can be disposed of if the substance is treated by using a method that changes the characteristics or composition of the substance so that the substance is no longer a hazardous substance or exporting the substance from New Zealand as waste.

For treating and discharging processes contact your local authority.

The treating may include burning the substance if the burning is managed to ensure that no person, or place where a person may legally be present.

The substance may be discharged into the environment as waste or disposed into a landfill if the substance will not come into contact with oxidising substances and where is in ignition source which is capable to ignite the substance.

SECTION 14 Transport information

Labels Required

	 
Marine Pollutant	
HAZCHEM	●3WE

Land transport (UN)

14.1. UN number or ID number	3469
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Resene 81A Etch Primer Yellow

14.2. UN proper shipping name	PAINT, FLAMMABLE, CORROSIVE (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base)	
14.3. Transport hazard class(es)	Class	3
	Subsidiary Hazard	8
14.4. Packing group	II	
14.5. Environmental hazard	Environmentally hazardous	
14.6. Special precautions for user	Special provisions	163; 367
	Limited quantity	1 L

Air transport (ICAO-IATA / DGR)

14.1. UN number	3469	
14.2. UN proper shipping name	Paint, flammable, corrosive (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base)	
14.3. Transport hazard class(es)	ICAO/IATA Class	3
	ICAO / IATA Subsidiary Hazard	8
	ERG Code	3CH
14.4. Packing group	II	
14.5. Environmental hazard	Environmentally hazardous	
14.6. Special precautions for user	Special provisions	A3 A72 A192 A803
	Cargo Only Packing Instructions	363
	Cargo Only Maximum Qty / Pack	5 L
	Passenger and Cargo Packing Instructions	352
	Passenger and Cargo Maximum Qty / Pack	1 L
	Passenger and Cargo Limited Quantity Packing Instructions	Y340
	Passenger and Cargo Limited Maximum Qty / Pack	0.5 L

Sea transport (IMDG-Code / GGVSee)

14.1. UN number	3469	
14.2. UN proper shipping name	PAINT, FLAMMABLE, CORROSIVE (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base)	
14.3. Transport hazard class(es)	IMDG Class	3
	IMDG Subsidiary Hazard	8
14.4. Packing group	II	
14.5. Environmental hazard	Marine Pollutant	
14.6. Special precautions for user	EMS Number	F-E, S-C
	Special provisions	163 367
	Limited Quantities	1 L

14.7. Maritime transport in bulk according to IMO instruments

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

Not Applicable

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

Product name	Group
zinc chromate hydroxide	Not Applicable
silica crystalline - quartz	Not Applicable
cresol/ phenol/ formaldehyde resin	Not Applicable
phenol	Not Applicable
isopropanol	Not Applicable
n-butanol	Not Applicable
naphtha petroleum, light aromatic solvent	Not Applicable
toluene	Not Applicable
methyl ethyl ketone	Not Applicable
cyclohexanone	Not Applicable
acetone	Not Applicable

14.7.3. Transport in bulk in accordance with the IGC Code

Product name	Ship Type
zinc chromate hydroxide	Not Applicable

Resene 81A Etch Primer Yellow

Product name	Ship Type
silica crystalline - quartz	Not Applicable
cresol/ phenol/ formaldehyde resin	Not Applicable
phenol	Not Applicable
isopropanol	Not Applicable
n-butanol	Not Applicable
naphtha petroleum, light aromatic solvent	Not Applicable
toluene	Not Applicable
methyl ethyl ketone	Not Applicable
cyclohexanone	Not Applicable
acetone	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
HSR002663	Surface Coatings and Colourants Flammable, Corrosive Group Standard 2020

Please refer to Section 8 of the SDS for any applicable tolerable exposure limit or Section 12 for environmental exposure limit.

silica crystalline - quartz 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 1: 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)

cresol/ phenol/ formaldehyde resin is found on the following regulatory lists

- International WHO List of Proposed Occupational Exposure Limit (OEL) Values for Manufactured Nanomaterials (MNMS)
- 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 - Not Classified as Carcinogenic
- 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)

isopropanol is found on the following regulatory lists

- International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs - Not Classified as Carcinogenic
- 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)

n-butanol 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)
- New Zealand Workplace Exposure Standards (WES)

naphtha petroleum, light aromatic solvent 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 - Not Classified as Carcinogenic
- New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals
- New Zealand Inventory of Chemicals (NZIoC)
- New Zealand Land Transport Rule; Dangerous Goods 2005 - Schedule 2 Dangerous Goods in Limited Quantities and Consumer Commodities

toluene 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 - Not Classified as Carcinogenic
- 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)

methyl ethyl ketone 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)
New Zealand Workplace Exposure Standards (WES)

cyclohexanone is found on the following regulatory lists
International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs - Not Classified as Carcinogenic
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)

acetone 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)
New Zealand Workplace Exposure Standards (WES)

Additional Regulatory Information
Not Applicable

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

Hazard Class	Quantity (Closed Containers)	Quantity (Open Containers)	Quantity (Compliance Certificate)	Quantity (Compliance Certificate - Farms >4 ha)
3.1B	100 L in containers more than 5 L	50 L		
3.1B	250 L in containers up to and including 5 L	50 L		
8.2A			50 kg or 50 L	500 kg or 500 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

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
6.5A or 6.5B	120	1	3	
8.2A	prohibited	prohibited	prohibited	
3.1B				1 L

Tracking Requirements
Not Applicable

National Inventory	Status
Australia - AIC / Australia Non-Industrial Use	No (zinc chromate hydroxide)
China - IECSC	Yes
Europe - EINEC / ELINCS / NLP	No (cresol/ phenol/ formaldehyde resin)
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	21/04/2026
Initial Date	20/04/2026

SDS Version Summary

Version	Date of Update	Sections Updated
1.4	21/04/2026	Hazards identification - Classification, Disposal considerations - Disposal, Transport Information

Other information

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
- DNEL: Derived No-Effect Level
- PNEC: Predicted no-effect concentration
- MARPOL: International Convention for the Prevention of Pollution from Ships
- IMSBC: International Maritime Solid Bulk Cargoes Code
- IGC: International Gas Carrier Code
- IBC: International Bulk Chemical Code

- 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

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