

# Resene ArmourX All-in-One

## Resene Paints (Australia) Ltd

Version No: 1.2

Safety Data Sheet according to Work Health and Safety Regulations (Hazardous Chemicals) 2023 and ADG requirements

Issue Date: 23/04/2025

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

#### Product Identifier

Product name	Resene ArmourX All-in-One
Synonyms	Incl. Clear and all colours
Other means of identification	Not Available

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

Relevant identified uses	11844, 11845, 11846, 11847, 11848, 11849, 11850, 11851
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#### Details of the manufacturer or supplier of the safety data sheet

Registered company name	Resene Paints (Australia) Ltd	Resene Paints Ltd
Address	7 Production Avenue, Molendinar Queensland Australia	32-50 Vogel Street Wellington New Zealand
Telephone	+61 7 55126600	+64 4 5770500
Fax	+61 7 55126697	+64 4 5773327
Website	<a href="http://www.resene.com.au">www.resene.com.au</a>	<a href="http://www.resene.co.nz">www.resene.co.nz</a>
Email	Not Available	advice@resene.co.nz

#### Emergency telephone number

Association / Organisation	AUSTRALIAN POISONS CENTRE	NZ POISONS (24hr 7days)	CHEMWATCH EMERGENCY RESPONSE (24/7)
Emergency telephone number(s)	131126	0800 764766	+61 1800 951 288 (ID#: 9-c22569)
Other emergency telephone number(s)	Not Available	Not Available	+61 3 9573 3188


### SECTION 2 Hazards identification

#### Classification of the substance or mixture

HAZARDOUS CHEMICAL. NON-DANGEROUS GOODS. According to the WHS Regulations and the ADG Code.

Poisons Schedule	Not Applicable
Classification [1]	Serious Eye Damage/Eye Irritation Category 2A, Hazardous to the Aquatic Environment Acute Hazard Category 3, Hazardous to the Aquatic Environment Long-Term Hazard Category 3
Legend:	1. Classified by Chemwatch; 2. Classification drawn from HCIS; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI

#### Label elements

Hazard pictogram(s)	
Signal word	Warning

#### Hazard statement(s)

H319	Causes serious eye irritation.
H412	Harmful to aquatic life with long lasting effects.

#### Supplementary statement(s)

Not Applicable

#### Precautionary statement(s) Prevention

P273	Avoid release to the environment.
P280	Wear protective gloves, protective clothing, eye protection and face protection.
P264	Wash all exposed external body areas thoroughly after handling.

#### Precautionary statement(s) Response

## Resene ArmourX All-in-One

<b>P305+P351+P338</b>	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
<b>P337+P313</b>	If eye irritation persists: Get medical advice/attention.

**Precautionary statement(s) Storage**

Not Applicable

**Precautionary statement(s) Disposal**

<b>P501</b>	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

**Mixtures**

CAS No	%[weight]	Name
25322-68-3	<0.5	<u>polyethylene glycol</u>
Not Available	0.1-1	benzotriazole derivatives
1336-21-6	0.1-0.5	<u>ammonium hydroxide</u>
57-55-6	1-3	<u>propylene glycol</u>
5131-66-8	0.1-1	<u>propylene glycol monobutyl ether - alpha isomer</u>
84133-50-6	0.1-0.5	<u>alcohols C12-14 secondary ethoxylated</u>
<b>Legend:</b>	1. Classified by Chemwatch; 2. Classification drawn from HCIS; 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**

<b>Eye Contact</b>	<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>
<b>Skin Contact</b>	<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>
<b>Inhalation</b>	<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>
<b>Ingestion</b>	<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> </ul>

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

Treat symptomatically.

**SECTION 5 Firefighting measures****Extinguishing media**

- ▶ There is no restriction on the type of extinguisher which may be used.
- ▶ Use extinguishing media suitable for surrounding area.

**Special hazards arising from the substrate or mixture**

<b>Fire Incompatibility</b>	▶ 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**

<b>Fire Fighting</b>	▶ Alert Fire Brigade and tell them location and nature of hazard.
<b>Fire/Explosion Hazard</b>	<p>Non-combustible            Burning release:            carbon dioxide (CO<sub>2</sub>)            other pyrolysis products typical of burning organic material.            May emit poisonous fumes.            May emit corrosive fumes.</p>
<b>HAZCHEM</b>	Not Applicable

**SECTION 6 Accidental release measures****Personal precautions, protective equipment and emergency procedures**

See section 8

**Environmental precautions**

See section 12

## Resene ArmourX All-in-One

## Methods and material for containment and cleaning up

<b>Minor Spills</b>	<ul style="list-style-type: none"> <li>Contain spill with sawdust or sand then place in suitable container for disposal. Clean area with large quantity of water to complete clean-up.</li> </ul>
<b>Major Spills</b>	Clear area of personnel and move upwind. Alert Fire Brigade and tell them location and nature of hazard. Wear appropriate personnel protective equipment and clothing to prevent exposure. Avoid breathing in mists or vapours and skin or eyes contact. Contain spill with sawdust or sand then place in suitable container for disposal. Clean area with large quantity of water to complete clean-up.

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

## SECTION 7 Handling and storage

## Precautions for safe handling

<b>Safe handling</b>	<ul style="list-style-type: none"> <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>
<b>Other information</b>	

## Conditions for safe storage, including any incompatibilities

<b>Suitable container</b>	<ul style="list-style-type: none"> <li>As supplied by manufacturer.</li> </ul>
<b>Storage incompatibility</b>	<ul style="list-style-type: none"> <li>Avoid reaction with oxidising agents</li> </ul>

## SECTION 8 Exposure controls / personal protection

## Control parameters

## Occupational Exposure Limits (OEL)

## INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
Australia Exposure Standards	propylene glycol	Propane-1,2-diol: particulates only	10 mg/m3	Not Available	Not Available	Not Available
Australia Exposure Standards	propylene glycol	Propane-1,2-diol total: (vapour & particulates)	150 ppm / 474 mg/m3	Not Available	Not Available	Not Available

Ingredient	Original IDLH	Revised IDLH
polyethylene glycol	Not Available	Not Available
ammonium hydroxide	Not Available	Not Available
propylene glycol	Not Available	Not Available
propylene glycol monobutyl ether - alpha isomer	Not Available	Not Available
alcohols C12-14 secondary ethoxylated	Not Available	Not Available

## MATERIAL DATA

for polyethylene glycols:

For powdered forms:

The polyethylene glycols are extremely low in oral toxicity, are not significantly irritating to the eyes or skin, and are not absorbed through the skin in toxic amounts.

for propylene glycol:


Saturated vapour concentration @ 20 deg C.= 65.8 ppm, 204.6 mg/m3; i.e higher concentrations can only occur as aerosols or at higher temperatures.

for exposure to ammonia gas/ vapours:

Odour Threshold Value: Various reported as 0.019 ppm and 55 ppm; AIHA Value 16.7 ppm (detection)

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

## Exposure controls

<b>Appropriate engineering controls</b>	CARE: Explosive vapour air mixtures may be present on opening vessels which have contained liquid ammonia. Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard.
<b>Individual protection measures, such as personal protective equipment</b>	
<b>Eye and face protection</b>	<ul style="list-style-type: none"> <li>Safety glasses with side shields.</li> </ul>
<b>Skin protection</b>	See Hand protection below
<b>Hands/feet protection</b>	<ul style="list-style-type: none"> <li>Wear chemical protective gloves, e.g. PVC.</li> </ul> <p><b>NOTE:</b></p> <ul style="list-style-type: none"> <li>The material may produce skin sensitisation in predisposed individuals.</li> </ul> <p>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.</p>
<b>Body protection</b>	Overalls
<b>Respiratory protection</b>	<ul style="list-style-type: none"> <li>Not usually required. Where the concentration of vapours in the breathing zone approaches or exceeds the "Exposure Standards" respiratory protection is required. Type A-P Filter of sufficient capacity.</li> </ul>

## SECTION 9 Physical and chemical properties

## Resene ArmourX All-in-One

## Information on basic physical and chemical properties

<b>Appearance</b>	Acrylic dispersion		
<b>Physical state</b>	Liquid	<b>Relative density (Water = 1)</b>	1.1-1.3
<b>Odour</b>	Not Available	<b>Partition coefficient n-octanol / water</b>	Not Available
<b>Odour threshold</b>	Not Available	<b>Auto-ignition temperature (°C)</b>	Not Available
<b>pH (as supplied)</b>	8-9	<b>Decomposition temperature (°C)</b>	Not Available
<b>Melting point / freezing point (°C)</b>	Not Available	<b>Viscosity (cSt)</b>	1000-2000
<b>Initial boiling point and boiling range (°C)</b>	100	<b>Molecular weight (g/mol)</b>	Not Available
<b>Flash point (°C)</b>	Not Available	<b>Taste</b>	Not Available
<b>Evaporation rate</b>	Not Available	<b>Explosive properties</b>	Not Available
<b>Flammability</b>	Not Applicable	<b>Oxidising properties</b>	Not Available
<b>Upper Explosive Limit (%)</b>	Not Available	<b>Surface Tension (dyn/cm or mN/m)</b>	Not Available
<b>Lower Explosive Limit (%)</b>	Not Available	<b>Volatile Component (%vol)</b>	58-59
<b>Vapour pressure (kPa)</b>	Not Available	<b>Gas group</b>	Not Available
<b>Solubility in water</b>	Miscible	<b>pH as a solution (1%)</b>	Not Available
<b>Vapour density (Air = 1)</b>	Not Available	<b>VOC g/L</b>	<35
<b>Heat of Combustion (kJ/g)</b>	Not Available	<b>Ignition Distance (cm)</b>	Not Available
<b>Flame Height (cm)</b>	Not Available	<b>Flame Duration (s)</b>	Not Available
<b>Enclosed Space Ignition Time Equivalent (s/m3)</b>	Not Available	<b>Enclosed Space Ignition Deflagration Density (g/m3)</b>	Not Available

## SECTION 10 Stability and reactivity

<b>Reactivity</b>	See section 7
<b>Chemical stability</b>	▶ stable
<b>Possibility of hazardous reactions</b>	See section 7
<b>Conditions to avoid</b>	See section 7
<b>Incompatible materials</b>	See section 7
<b>Hazardous decomposition products</b>	See section 5

## SECTION 11 Toxicological information

## Information on toxicological effects

<b>a) Acute Toxicity</b>	Based on available data, the classification criteria are not met.
<b>b) Skin Irritation/Corrosion</b>	Based on available data, the classification criteria are not met.
<b>c) Serious Eye Damage/Irritation</b>	There is sufficient evidence to classify this material as eye damaging or irritating
<b>d) Respiratory or Skin sensitisation</b>	Based on available data, the classification criteria are not met.
<b>e) Mutagenicity</b>	Based on available data, the classification criteria are not met.
<b>f) Carcinogenicity</b>	Based on available data, the classification criteria are not met.
<b>g) Reproductivity</b>	Based on available data, the classification criteria are not met.
<b>h) STOT - Single Exposure</b>	Based on available data, the classification criteria are not met.
<b>i) STOT - Repeated Exposure</b>	Based on available data, the classification criteria are not met.
<b>j) Aspiration Hazard</b>	Based on available data, the classification criteria are not met.

<b>Inhaled</b>	The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified by EC Directives using animal models). The highly irritant properties of ammonia vapour result as the gas dissolves in mucous fluids and forms irritant, even corrosive solutions.
<b>Ingestion</b>	Ingestion of propylene glycol produced reversible central nervous system depression in humans following ingestion of 60 ml. Human metabolism allows detoxification of ammonia, however toxic effects appear if this mechanism is overwhelmed by other than small doses.
<b>Skin Contact</b>	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. 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. Mild irritation is produced on moist skin when vapour concentrations of ammonia exceed 10000 ppm.
<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.

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## Resene ArmourX All-in-One

<b>Chronic</b>	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. Prolonged or repeated minor exposure to ammonia gas/vapour may cause long-term irritation to the eyes, nose and upper respiratory tract. Propylene glycol is though, by some, to be a sensitising principal following the regular use of topical creams by eczema patients.	
<b>Resene ArmourX All-in-One</b>	<b>TOXICITY</b> Not Available	<b>IRRITATION</b> Not Available
<b>polyethylene glycol</b>	<b>TOXICITY</b> dermal (rat) LD50: >2000 mg/kg <sup>[1]</sup> Oral (Rat) LD50: 600 mg/kg <sup>[2]</sup>	<b>IRRITATION</b> Eye (Rodent - rabbit): 100uL - Mild Eye (Rodent - rabbit): 100uL - Mild Eye (Rodent - rabbit): 500mg - Mild Eye (Rodent - rabbit): 500mg - Mild Eye (Rodent - rabbit): 500mg - Mild Eye (Rodent - rabbit): 500mg - Mild Eye (Rodent - rabbit): 500mg - Mild Eye (Rodent - rabbit): 500mg/24H - Mild Eye (Rodent - rabbit): 500mg/24H - Mild Eye (Rodent - rabbit): 500mg/24H - Mild Eye (Rodent - rabbit): 500mg/24H - Mild Eye: no adverse effect observed (not irritating) <sup>[1]</sup> Skin (Human): 500mg/48H Skin (Rodent - rabbit): 500mg - Mild Skin (Rodent - rabbit): 500mg - Mild Skin (Rodent - rabbit): 500mg - Mild Skin (Rodent - rabbit): 500mg/24H - Mild Skin (Rodent - rabbit): 500mg/24H - Mild Skin: no adverse effect observed (not irritating) <sup>[1]</sup>
<b>ammonium hydroxide</b>	<b>TOXICITY</b> Inhalation (Rat) LC50: 2000 ppm4h <sup>[2]</sup> Oral (Rat) LD50: 350 mg/kg <sup>[2]</sup>	<b>IRRITATION</b> Eye (Rodent - rabbit): 1mg/30S - Severe Eye (Rodent - rabbit): 250ug - Severe Eye (Rodent - rabbit): 44ug - Severe
<b>propylene glycol</b>	<b>TOXICITY</b> Dermal (rabbit) LD50: 11890 mg/kg <sup>[2]</sup> Inhalation (Rat) LC50: >44.9 mg/4h <sup>[1]</sup> Oral (Rat) LD50: 20000 mg/kg <sup>[2]</sup>	<b>IRRITATION</b> Eye (Rodent - rabbit): 100mg - Mild Eye (Rodent - rabbit): 500mg/24H - Mild Eye: no adverse effect observed (not irritating) <sup>[1]</sup> Skin (Human - child): 30%/96H(continuous) - Moderate Skin (Human - man): 10%/2D Skin (Human - woman): 30%/96H - Mild Skin (Human): 104mg/3D (intermittent) - Moderate Skin (Human): 20% Skin (Human): 500mg/7D - Mild Skin: no adverse effect observed (not irritating) <sup>[1]</sup>
<b>propylene glycol monobutyl ether - alpha isomer</b>	<b>TOXICITY</b> dermal (rat) LD50: >2000 mg/kg <sup>[1]</sup> Oral (Rat) LD50: >2000 mg/kg <sup>[1]</sup>	<b>IRRITATION</b> Eye: adverse effect observed (irritating) <sup>[1]</sup> Skin: adverse effect observed (irritating) <sup>[1]</sup>
<b>alcohols C12-14 secondary ethoxylated</b>	<b>TOXICITY</b> Not Available	<b>IRRITATION</b> Not Available

**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

<b>Resene ArmourX All-in-One</b>	The following information refers to contact allergens as a group and may not be specific to this product.
<b>POLYETHYLENE GLYCOL</b>	for molecular weights (200-8000) * Oral (rat) LD50: 31000->50000 mg/kg Oral (mice) LD50: 38000->50000 mg/kg Oral (g.pig) LD50: 17000->50000 mg/kg Oral (rabbit) LD50: 14000->50000 mg/kg * AIHA WEEL Guides Intraperitoneal (mice) LD50: 3100-12900 mg/kg for polyethylene glycols Pure polyethylene glycols have essentially similar toxicity, with toxicity being inverse to molecular weights.

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## Resene ArmourX All-in-One

	The material may be irritating to the eye, with prolonged contact causing inflammation.
<b>AMMONIUM HYDROXIDE</b>	The material may produce severe irritation to the eye causing pronounced inflammation. Asthma-like symptoms may continue for months or even years after exposure to the material ends.
<b>PROPYLENE GLYCOL MONOBUTYL ETHER - ALPHA ISOMER</b>	for propylene glycol ethers (PGEs): Typical propylene glycol ethers include propylene glycol n-butyl ether (PnB); dipropylene glycol n-butyl ether (DPnB); dipropylene glycol methyl ether acetate (DPMA); tripropylene glycol methyl ether (TPM). Testing of a wide variety of propylene glycol ethers Testing of a wide variety of propylene glycol ethers has shown that propylene glycol-based ethers are less toxic than some ethers of the ethylene series.
<b>ALCOHOLS C12-14 SECONDARY ETHOXYLATED</b>	No significant acute toxicological data identified in literature search. Human beings have regular contact with alcohol ethoxylates through a variety of industrial and consumer products such as soaps, detergents, and other cleaning products . Alcohol ethoxylates are according to CESIO (2000) classified as Irritant or Harmful depending on the number of EO-units: EO < 5 gives Irritant (Xi) with R38 (Irritating to skin) and R41 (Risk of serious damage to eyes) EO > 5-15 gives Harmful (Xn) with R22 (Harmful if swallowed) - R38/41 EO > 15-20 gives Harmful (Xn) with R22-41 >20 EO is not classified (CESIO 2000) Oxo-AE, C13 EO10 and C13 EO15, are Irritating (Xi) with R36/38 (Irritating to eyes and skin) . AE are not included in Annex 1 of the list of dangerous substances of the Council Directive 67/548/EEC  In general, alcohol ethoxylates (AE) are readily absorbed through the skin of guinea pigs and rats and through the gastrointestinal mucosa of rats. For high boiling ethylene glycol ethers (typically triethylene- and tetraethylene glycol ethers): <b>Skin absorption:</b> Available skin absorption data for triethylene glycol ether (TGBE), triethylene glycol methyl ether (TGME), and triethylene glycol ethylene ether (TGEE) suggest that the rate of absorption in skin of these three glycol ethers is 22 to 34 micrograms/cm <sup>2</sup> /hr, with the methyl ether having the highest permeation constant and the butyl ether having the lowest.
<b>Resene ArmourX All-in-One &amp; PROPYLENE GLYCOL</b>	The acute oral toxicity of propylene glycol is very low, and large quantities are required to cause perceptible health damage in humans.
<b>POLYETHYLENE GLYCOL &amp; ALCOHOLS C12-14 SECONDARY ETHOXYLATED</b>	Polyethers (such as ethoxylated surfactants and polyethylene glycols) are highly susceptible to being oxidized in the air.
<b>POLYETHYLENE GLYCOL &amp; PROPYLENE GLYCOL</b>	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.
<b>Acute Toxicity</b>	<b>X</b>
<b>Skin Irritation/Corrosion</b>	<b>X</b>
<b>Serious Eye Damage/Irritation</b>	<b>✓</b>
<b>Respiratory or Skin sensitisation</b>	<b>X</b>
<b>Mutagenicity</b>	<b>X</b>
	<b>Carcinogenicity</b> <b>X</b>
	<b>Reproductivity</b> <b>X</b>
	<b>STOT - Single Exposure</b> <b>X</b>
	<b>STOT - Repeated Exposure</b> <b>X</b>
	<b>Aspiration Hazard</b> <b>X</b>

**Legend:** **X** – Data either not available or does not fill the criteria for classification  
**✓** – Data available to make classification

## SECTION 12 Ecological information

## Toxicity

<b>Resene ArmourX All-in-One</b>	<b>Endpoint</b>	<b>Test Duration (hr)</b>	<b>Species</b>	<b>Value</b>	<b>Source</b>
	Not Available	Not Available	Not Available	Not Available	Not Available
<b>polyethylene glycol</b>	<b>Endpoint</b>	<b>Test Duration (hr)</b>	<b>Species</b>	<b>Value</b>	<b>Source</b>
	EC50(ECx)	48h	Crustacea	>100mg/l	2
	LC50	96h	Fish	>100mg/l	2
	EC50	48h	Crustacea	>100mg/l	2
	EC50	96h	Algae or other aquatic plants	>100mg/l	2
<b>ammonium hydroxide</b>	<b>Endpoint</b>	<b>Test Duration (hr)</b>	<b>Species</b>	<b>Value</b>	<b>Source</b>
	EC50(ECx)	96h	Crustacea	0.83mg/L	5
	LC50	96h	Fish	33.3mg/L	4
<b>propylene glycol</b>	<b>Endpoint</b>	<b>Test Duration (hr)</b>	<b>Species</b>	<b>Value</b>	<b>Source</b>
	LC50	96h	Fish	710mg/L	4
	EC50	48h	Crustacea	>114.4mg/L	4
	EC50	72h	Algae or other aquatic plants	19300mg/l	2
	NOEC(ECx)	336h	Algae or other aquatic plants	<5300mg/l	1
	EC50	96h	Algae or other aquatic plants	19000mg/l	2
<b>propylene glycol monobutyl ether - alpha isomer</b>	<b>Endpoint</b>	<b>Test Duration (hr)</b>	<b>Species</b>	<b>Value</b>	<b>Source</b>
	LC50	96h	Fish	>560<1000mg/l	2
	EC0(ECx)	48h	Crustacea	>100mg/l	2
	EC50	48h	Crustacea	>100mg/l	2
	EC50	72h	Algae or other aquatic plants	519mg/l	2

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## Resene ArmourX All-in-One

	EC50	96h	Algae or other aquatic plants	525mg/l	2
alcohols C12-14 secondary ethoxylated	Endpoint	Test Duration (hr)	Species	Value	Source
	Not Available	Not Available	Not Available	Not Available	Not Available
<b>Legend:</b>	Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 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				

Harmful 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.

Propylene glycol is known to exert high levels of biochemical oxygen demand (BOD) during degradation in surface waters.

For Ammonia:

Atmospheric Fate: Ammonia reacts rapidly with available acids (mainly sulfuric, nitric, and sometimes hydrochloric acid) to form the corresponding salts.

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

## Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
polyethylene glycol	LOW	LOW
propylene glycol	LOW	LOW
propylene glycol monobutyl ether - alpha isomer	LOW	LOW

## Bioaccumulative potential

Ingredient	Bioaccumulation
polyethylene glycol	LOW (LogKOW = -1.1996)
ammonium hydroxide	LOW (LogKOW = -2.66)
propylene glycol	LOW (BCF = 1)
propylene glycol monobutyl ether - alpha isomer	LOW (LogKOW = 0.9842)
alcohols C12-14 secondary ethoxylated	LOW (LogKOW = 3.32)

## Mobility in soil

Ingredient	Mobility
polyethylene glycol	HIGH (Log KOC = 1)
propylene glycol	HIGH (Log KOC = 1)
propylene glycol monobutyl ether - alpha isomer	HIGH (Log KOC = 1.289)

## SECTION 13 Disposal considerations

## Waste treatment methods

Product / Packaging disposal	<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> <li>Consult manufacturer for recycling option.</li> <li>Resene Paintwise accepts residual unwanted paint and packaging. See Resene website for Paintwise information. Or contact a Local Authority for the disposal information. Do not discharge the substance into the environment.</li> </ul>
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## SECTION 14 Transport information

## Labels Required

Marine Pollutant	NO
HAZCHEM	Not Applicable

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

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

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

## 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
polyethylene glycol	Not Available
benzotriazole derivatives	Not Available

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## Resene ArmourX All-in-One

Product name	Group
ammonium hydroxide	Not Available
propylene glycol	Not Available
propylene glycol monobutyl ether - alpha isomer	Not Available
alcohols C12-14 secondary ethoxylated	Not Available

## 14.7.3. Transport in bulk in accordance with the IGC Code

Product name	Ship Type
polyethylene glycol	Not Available
benzotriazole derivatives	Not Available
ammonium hydroxide	Not Available
propylene glycol	Not Available
propylene glycol monobutyl ether - alpha isomer	Not Available
alcohols C12-14 secondary ethoxylated	Not Available

## SECTION 15 Regulatory information

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

## polyethylene glycol is found on the following regulatory lists

Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 2  
 Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 3  
 Australian Inventory of Industrial Chemicals (AIIC)

## ammonium hydroxide is found on the following regulatory lists

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals  
 Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 6  
 Australian Inventory of Industrial Chemicals (AIIC)

## propylene glycol is found on the following regulatory lists

Australian Inventory of Industrial Chemicals (AIIC)

## propylene glycol monobutyl ether - alpha isomer is found on the following regulatory lists

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals  
 Australian Inventory of Industrial Chemicals (AIIC)

## alcohols C12-14 secondary ethoxylated is found on the following regulatory lists

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals  
 Australian Inventory of Industrial Chemicals (AIIC)

## Additional Regulatory Information

Not Applicable

## National Inventory Status

National Inventory	Status
Australia - AIIC / Australia Non-Industrial Use	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. These ingredients may be exempt or will require registration.

## SECTION 16 Other information

Revision Date	23/04/2025
Initial Date	22/04/2025

## SDS Version Summary

Version	Date of Update	Sections Updated
0.2	22/04/2025	Toxicological information - Chronic Health, Hazards identification - Classification, Firefighting measures - Fire Fighter (fire/explosion hazard)

## 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,

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**Resene ArmourX All-in-One**

- ▶ 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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