

RESENE ARMOURBOND HARDENER

Resene Paints Ltd

Version No: 1.2
Safety Data Sheet according to HSNO Regulations

Issue Date: **13/06/2019**
Print Date: **13/06/2019**
L.GHS.NZLEN

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

Product Identifier

| | |
|-------------------------------|----------------------------|
| Product name | RESENE ARMOURBOND HARDENER |
| Synonyms | Not Available |
| Other means of identification | Not Available |

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

| | |
|--------------------------|------|
| Relevant identified uses | 9342 |
|--------------------------|------|

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 | Resene Paints Ltd | CHEMWATCH EMERGENCY RESPONSE |
| Emergency telephone numbers | 0800 764766 | +64 800 700 112 |
| Other emergency telephone numbers | Not Available | +61 2 9186 1132 |

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

| | |
|---|--|
| Classification ^[1] | Eye Irritation Category 2A, Flammable Liquid Category 4, Specific target organ toxicity - single exposure Category 3 (respiratory tract irritation), Skin Corrosion/Irritation Category 2, Reproductive Toxicity Category 2, Acute Toxicity (Oral) Category 5, Acute Toxicity (Dermal) Category 5, Skin Sensitizer Category 1, Carcinogenicity Category 2, Chronic Aquatic Hazard Category 3 |
| 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 | 3.1D, 6.1E (dermal), 6.1E (oral), 6.1E (respiratory), 6.3A, 6.4A, 6.5B (contact), 6.7B, 6.8B, 9.1C |

Label elements

| | |
|---------------------|---|
| Hazard pictogram(s) |  |
|---------------------|---|

SIGNAL WORD **WARNING**

Hazard statement(s)

| | |
|------|--|
| H319 | Causes serious eye irritation. |
| H227 | Combustible liquid. |
| H335 | May cause respiratory irritation. |
| H315 | Causes skin irritation. |
| H361 | Suspected of damaging fertility or the unborn child. |
| H303 | May be harmful if swallowed. |
| H313 | May be harmful in contact with skin. |
| H317 | May cause an allergic skin reaction. |
| H351 | Suspected of causing cancer. |
| H412 | Harmful to aquatic life with long lasting effects. |

Continued...

RESENE ARMOURBOND HARDENER

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. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |
| 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

| | |
|----------------|--|
| P308+P313 | IF exposed or concerned: Get medical advice/ attention. |
| P312 | Call a POISON CENTER/doctor/physician/first aider/if you feel unwell. |
| 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. |
| P304+P340 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. |

Precautionary statement(s) Storage

| | |
|-----------|--|
| P405 | Store locked up. |
| P403+P233 | Store in a well-ventilated place. Keep container tightly closed. |

Precautionary statement(s) Disposal

| | |
|------|---|
| P501 | Dispose of contents/container in accordance with local regulations. |
|------|---|

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 |
|----------|-----------|--|
| 90-72-2 | <3 | <u>2,4,6-tris[(dimethylamino)methyl]phenol</u> |
| 100-51-6 | 10-20 | <u>benzyl alcohol</u> |
| 111-40-0 | <3 | <u>diethylenetriamine</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"> ▶ Wash out immediately with fresh running water. ▶ Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. ▶ Seek medical attention without delay if pain persists or recurs. ▶ Removal of contact lenses after an eye injury should only be undertaken by skilled personnel. |
| Skin Contact | <p>If skin contact occurs:</p> <ul style="list-style-type: none"> ▶ Immediately remove all contaminated clothing, including footwear. ▶ Flush skin and hair with running water (and soap if available). ▶ Seek medical attention in event of irritation. |
| Inhalation | <p>If aerosols, fumes or combustion products are inhaled, remove affected person from contaminated area. Keep at rest until recovered. If symptoms develop seek medical attention.</p> |
| Ingestion | <ul style="list-style-type: none"> ▶ 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. ▶ Seek medical advice. |

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 |
|-----------------------------|---|

Advice for firefighters

| | |
|------------------------------|---|
| Fire Fighting | ▶ Alert Fire Brigade and tell them location and nature of hazard. |
| Fire/Explosion Hazard | ▶ Combustible. Combustion products include: carbon dioxide (CO ₂) aldehydes other pyrolysis products typical of burning organic material. May emit poisonous fumes. May emit corrosive fumes. |

SECTION 6 ACCIDENTAL RELEASE MEASURES**Personal precautions, protective equipment and emergency procedures**

See section 8

Environmental precautions

See section 12

Methods and material for containment and cleaning up

| | |
|---------------------|--|
| Minor Spills | 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 | Moderate hazard. 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 | ▶ 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. |

Conditions for safe storage, including any incompatibilities

| | |
|--------------------------------|---|
| Suitable container | ▶ Packaging as recommended by manufacturer. |
| Storage incompatibility | ▶ Avoid reaction with oxidising agents |

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) | diethylenetriamine | Diethylene triamine | 1 ppm / 4.2 mg/m ³ | Not Available | Not Available | (skin) - Skin absorption |

EMERGENCY LIMITS


| Ingredient | Material name | TEEL-1 | TEEL-2 | TEEL-3 |
|---|---|-----------------------|----------------------|-----------------------|
| 2,4,6-tris[(dimethylamino)methyl]phenol | Tris(dimethylaminomethyl)phenol, 2,4,6- | 3.6 mg/m ³ | 40 mg/m ³ | 240 mg/m ³ |
| benzyl alcohol | Benzyl alcohol | 30 ppm | 52 ppm | 740 ppm |
| diethylenetriamine | Diethylenetriamine | 3 ppm | 8.5 ppm | 51 ppm |

| Ingredient | Original IDLH | Revised IDLH |
|---|---------------|---------------|
| 2,4,6-tris[(dimethylamino)methyl]phenol | Not Available | Not Available |
| benzyl alcohol | Not Available | Not Available |
| diethylenetriamine | Not Available | Not Available |

MATERIAL DATA

Sensory irritants are chemicals that produce temporary and undesirable side-effects on the eyes, nose or throat.
Fragrance substance with is an established contact allergen in humans.

Exposure controls

| | |
|---|--|
| Appropriate engineering controls | Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. |
| Personal protection |  |
| Eye and face protection | ▶ Safety glasses with side shields. |
| Skin protection | See Hand protection below |
| Hands/feet protection | ▶ Wear chemical protective gloves, e.g. PVC. 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 | See Other protection below |
| Other protection | ▶ Overalls. |

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 |
|----------|-----|
| BUTYL | A |
| VITON | A |
| NEOPRENE | C |
| PVC | C |

* 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(SO₂), G = Agricultural chemicals, K = Ammonia(NH₃), Hg = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 degC)

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES**Information on basic physical and chemical properties**

| | | | |
|---|-----------------------|--|---------------|
| Appearance | Clear to amber liquid | | |
| Physical state | Liquid | Relative density (Water = 1) | 0.98-1.01 |
| 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) | Not Available |
| Initial boiling point and boiling range (°C) | >100 | Molecular weight (g/mol) | Not Available |
| Flash point (°C) | 80-95 | Taste | Not Available |
| Evaporation rate | Not Available | Explosive properties | Not Available |
| Flammability | Combustible. | Oxidising properties | Not Available |
| Upper Explosive Limit (%) | Not Available | Surface Tension (dyn/cm or mN/m) | Not Available |
| Lower Explosive Limit (%) | Not Available | Volatile Component (%vol) | 1 |
| 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 | 4 |

SECTION 10 STABILITY AND REACTIVITY

RESENE ARMOURBOND HARDENER

| | |
|---|---------------|
| 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 | Evidence shows, or practical experience predicts, that the material produces irritation of the respiratory system, in a substantial number of individuals, following inhalation. |
| Ingestion | Accidental ingestion of the material may be damaging to the health of the individual. |
| Skin Contact | 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. The material may accentuate any pre-existing dermatitis condition Skin contact with the material may damage the health of the individual; systemic effects may result following absorption. 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 | 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. |
| Chronic | Long-term exposure to respiratory irritants may result in disease of the airways involving difficult breathing and related systemic problems. 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. 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. 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 exposure to benzyl alcohol may cause allergic contact dermatitis. |

| RESENE ARMOURBOND HARDENER | TOXICITY | IRRITATION |
|---|--|---|
| | Not Available | Not Available |
| 2,4,6-tris[(dimethylamino)methyl]phenol | TOXICITY | IRRITATION |
| | dermal (rat) LD50: >973 mg/kg ^[1] | Eye (rabbit): 0.05 mg/24h - SEVERE |
| | Inhalation (rat) LC50: >0.125 mg/l/1hr. ^[2] | Eye: adverse effect observed (irreversible damage) ^[1] |
| | Oral (rat) LD50: 1200 mg/kg ^[2] | Skin (rabbit): 2 mg/24h - SEVERE |
| | | Skin: adverse effect observed (corrosive) ^[1] |
| benzyl alcohol | TOXICITY | IRRITATION |
| | Dermal (rabbit) LD50: 2000 mg/kg ^[2] | Eye (rabbit): 0.75 mg open SEVERE |
| | Inhalation (rat) LC50: >4.178 mg/l/4h ^[2] | Eye: adverse effect observed (irritating) ^[1] |
| | Oral (rat) LD50: 1230 mg/kg ^[2] | Skin (man): 16 mg/48h-mild |
| | | Skin (rabbit):10 mg/24h open-mild |
| | Skin: no adverse effect observed (not irritating) ^[1] | |
| diethylenetriamine | TOXICITY | IRRITATION |
| | Dermal (rabbit) LD50: ~672 mg/kg ^[2] | Eye: adverse effect observed (irritating) ^[1] |
| | Oral (rat) LD50: ~819-1430 mg/kg ^[2] | Skin (rabbit): 10 mg/24h - SEVERE |
| | | Skin (rabbit):500 mg open moderate |
| | Skin: adverse effect observed (corrosive) ^[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

| | |
|--|--|
| 2,4,6-TRIS[(DIMETHYLAMINO)METHYL]PHENOL | While it is difficult to generalise about the full range of potential health effects posed by exposure to the many different amine compounds, characterised by those used in the manufacture of polyurethane and polyisocyanurate foams, it is agreed that overexposure to the majority of these materials may cause adverse health effects. No significant acute toxicological data identified in literature search. |
|--|--|

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| | |
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| BENZYL ALCOHOL | <p>For benzyl alkyl alcohols: Unlike benzylic alcohols, the beta-hydroxyl group of the members of this cluster is unlikely to undergo phase II metabolic activation.</p> <p>For benzoates: Acute toxicity: Benzyl alcohol, benzoic acid and its sodium and potassium salt can be considered as a single category regarding human health, as they are all rapidly metabolised and excreted via a common pathway within 24 hrs.</p> <p>The material may cause skin irritation after prolonged or repeated exposure and may produce a contact dermatitis (nonallergic). A member or analogue of a group of benzyl derivatives generally regarded as safe (GRAS) based in part on their self-limiting properties as flavouring substances in food; their rapid absorption. The aryl alkyl alcohol (AAA) fragrance ingredients are a diverse group of chemical structures with similar metabolic and toxicity profiles.</p> |
| DIETHYLENETRIAMINE | <p>Allergic reactions which develop in the respiratory passages as bronchial asthma or rhinoconjunctivitis, are mostly the result of reactions of the allergen with specific antibodies of the IgE class and belong in their reaction rates to the manifestation of the immediate type. Particular attention is drawn to so-called atopic diathesis which is characterised by an increased susceptibility to allergic rhinitis, allergic bronchial asthma and atopic eczema (neurodermatitis) which is associated with increased IgE synthesis. Exogenous allergic alveolitis is induced essentially by allergen specific immune-complexes of the IgG type; cell-mediated reactions (T lymphocytes) may be involved. Handling ethyleneamine products is complicated by their tendency to react with other chemicals, such as carbon dioxide in the air, which results in the formation of solid carbamates.</p> <p>For alkyl polyamines: The alkyl polyamines cluster consists of organic compounds containing two terminal primary amine groups and at least one secondary amine group. Typically these substances are derivatives of ethylenediamine, propylenediamine or hexanediamine.</p> |
| RESENE ARMOURBOND HARDENER & 2,4,6-TRIS[(DIMETHYLAMINO)METHYL]PHENOL & DIETHYLENETRIAMINE | Asthma-like symptoms may continue for months or even years after exposure to the material ceases. |
| RESENE ARMOURBOND HARDENER & BENZYL ALCOHOL & DIETHYLENETRIAMINE | The following information refers to contact allergens as a group and may not be specific to this product. |
| RESENE ARMOURBOND HARDENER & BENZYL ALCOHOL | Adverse reactions to fragrances in perfumes and in fragranced cosmetic products include allergic contact dermatitis, irritant contact dermatitis, photosensitivity, immediate contact reactions (contact urticaria), and pigmented contact dermatitis. Fragrance allergens act as haptens, i.e. low molecular weight chemicals that are immunogenic only when attached to a carrier protein. |
| 2,4,6-TRIS[(DIMETHYLAMINO)METHYL]PHENOL & DIETHYLENETRIAMINE | The material may produce severe irritation to the eye causing pronounced inflammation. The material may produce severe skin irritation after prolonged or repeated exposure, and may produce a contact dermatitis (nonallergic). |

| | | | |
|-----------------------------------|---|--------------------------|---|
| 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 ARMOURBOND HARDENER | ENDPOINT | TEST DURATION (HR) | SPECIES | VALUE | SOURCE |
|----------------------------|---------------|--------------------|---------------|---------------|---------------|
| | Not Available | Not Available | Not Available | Not Available | Not Available |

| 2,4,6-tris[(dimethylamino)methyl]phenol | ENDPOINT | TEST DURATION (HR) | SPECIES | VALUE | SOURCE |
|---|----------|--------------------|-------------------------------|---------|--------|
| | LC50 | 96 | Fish | 175mg/L | 2 |
| | EC50 | 72 | Algae or other aquatic plants | 2.8mg/L | 2 |

| benzyl alcohol | ENDPOINT | TEST DURATION (HR) | SPECIES | VALUE | SOURCE |
|----------------|----------|--------------------|-------------------------------|------------|--------|
| | LC50 | 96 | Fish | 10mg/L | 2 |
| | EC50 | 48 | Crustacea | 230mg/L | 2 |
| | EC50 | 96 | Algae or other aquatic plants | 76.828mg/L | 2 |
| | NOEC | 336 | Fish | 5.1mg/L | 2 |

| diethylenetriamine | ENDPOINT | TEST DURATION (HR) | SPECIES | VALUE | SOURCE |
|--------------------|----------|--------------------|-------------------------------|-----------|--------|
| | LC50 | 96 | Fish | 1-14mg/L | 2 |
| | EC50 | 48 | Crustacea | =16mg/L | 1 |
| | EC50 | 72 | Algae or other aquatic plants | 1-164mg/L | 2 |
| NOEC | 504 | Crustacea | =5.6mg/L | 1 | |

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

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.
DO NOT discharge into sewer or waterways.

Persistence and degradability

| Ingredient | Persistence: Water/Soil | Persistence: Air |
|---|-------------------------|------------------|
| 2,4,6-tris[(dimethylamino)methyl]phenol | HIGH | HIGH |
| benzyl alcohol | LOW | LOW |
| diethylenetriamine | LOW | LOW |

Bioaccumulative potential

| Ingredient | Bioaccumulation |
|---|----------------------|
| 2,4,6-tris[(dimethylamino)methyl]phenol | LOW (LogKOW = 0.773) |
| benzyl alcohol | LOW (LogKOW = 1.1) |
| diethylenetriamine | LOW (BCF = 1.7) |

Mobility in soil

| Ingredient | Mobility |
|---|-------------------|
| 2,4,6-tris[(dimethylamino)methyl]phenol | LOW (KOC = 15130) |
| benzyl alcohol | LOW (KOC = 15.66) |
| diethylenetriamine | LOW (KOC = 87.53) |

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods

| | |
|-------------------------------------|---|
| Product / Packaging disposal | <ul style="list-style-type: none"> ▶ 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 or consult manufacturer for recycling options. Consult manufacturer for recycling option. <p>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.</p> |
|-------------------------------------|---|

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 | NO |
| HAZCHEM | Not Applicable |

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

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

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

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

Not Applicable

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 |
|------------|--|
| HSR002680 | Surface Coatings and Colourants (Combustible, Toxic [6.7]) Group Standard 2017 |

2,4,6-TRIS[(DIMETHYLAMINO)METHYL]PHENOL(90-72-2) IS FOUND ON THE FOLLOWING REGULATORY LISTS

| | |
|---|---|
| International Air Transport Association (IATA) Dangerous Goods Regulations | New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals - Classification Data |
| International Maritime Dangerous Goods Requirements (IMDG Code) | New Zealand Inventory of Chemicals (NZIoC) |
| New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals | United Nations Recommendations on the Transport of Dangerous Goods Model Regulations |

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BENZYL ALCOHOL(100-51-6) IS FOUND ON THE FOLLOWING REGULATORY LISTS

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
 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 Land Transport Rule: Dangerous Goods 2005 - Schedule 3 Segregation requirements for dangerous goods
 New Zealand Land Transport Rule: Dangerous Goods 2005 - Schedule 4 Quantity Limits for Dangerous Goods in Excepted Quantities
 New Zealand Land Transport Rule; Dangerous Goods 2005 - Schedule 2 Dangerous Goods in Limited Quantities and Consumer Commodities
 United Nations Recommendations on the Transport of Dangerous Goods Model Regulations

DIETHYLENTRIAMINE(111-40-0) IS FOUND ON THE FOLLOWING REGULATORY LISTS

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
 International Air Transport Association (IATA) Dangerous Goods Regulations
 International FOSFA List of Banned Immediate Previous Cargoes
 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

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 |
|----------------|--|--|
| Not Applicable | Not Applicable | Not Applicable |

Certified Handler

Subject to Part 4 of the Health and Safety at Work (Hazardous Substances) Regulations 2017.

| Class of substance | Quantities |
|--------------------|----------------|
| Not Applicable | Not Applicable |

Refer Group Standards for further information

Tracking Requirements

Not Applicable

National Inventory Status

| National Inventory | Status |
|-------------------------------|--|
| Australia - AICS | Yes |
| Canada - DSL | Yes |
| Canada - NDSL | No (benzyl alcohol; 2,4,6-tris[(dimethylamino)methyl]phenol; diethylenetriamine) |
| China - IECSC | Yes |
| Europe - EINEC / ELINCS / NLP | Yes |
| Japan - ENCS | Yes |
| Korea - KECI | Yes |
| New Zealand - NZIoC | Yes |
| Philippines - PICCS | Yes |
| USA - TSCA | Yes |
| Taiwan - TCSI | Yes |
| Mexico - INSQ | Yes |
| Vietnam - NCI | Yes |
| Russia - ARIPS | Yes |
| Thailand - TECI | Yes |
| Legend: | Yes = All declared ingredients are on the inventory No = Not determined or one or more ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets) |

SECTION 16 OTHER INFORMATION

| Revision Date | 13/06/2019 |
|---------------|------------|
| Initial Date | 13/06/2019 |

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.

RESENE ARMOURBOND HARDENER

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