

# RESENE QRISTAL CLEAR POLYURETHANE

## Resene Paints (Australia) Limited

Version No: 1.1

Safety Data Sheet according to WHS Regulations (Hazardous Chemicals) Amendment 2020 and ADG requirements

Issue Date: 31/01/2023

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

#### Product Identifier

|                               |  |
|-------------------------------|--|
| Product name                  | RESENE QRISTAL CLEAR POLYURETHANE  |
| Synonyms                      | Incl. Gloss, Satin, Flat   |
| Proper shipping name          | PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning or reducing compound) |
| Other means of identification | Not Available  |

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

|                          |                     |
|--------------------------|---------------------|
| Relevant identified uses | 10183, 10184, 10185 |
|--------------------------|---------------------|

#### Details of the manufacturer or supplier of the safety data sheet

|                         |   |  |
|-------------------------|---|--|
| Registered company name | Resene Paints (Australia) Limited                         | Resene Paints Ltd                                      |
| Address                 | 7 Production Avenue, Molendinar Queensland 4214 Australia | 32-50 Vogel Street Wellington New Zealand              |
| Telephone               | +61 7 55126600  | +64 4 577 0500   |
| 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 7 days) | CHEMWATCH EMERGENCY RESPONSE |
| Emergency telephone numbers       | 131126                    | 0800 764766              | +61 1800 951 288             |
| Other emergency telephone numbers | Not Available             | Not Available            | +61 3 9573 3188              |

Once connected and if the message is not in your preferred language then please dial 01

### SECTION 2 Hazards identification

#### Classification of the substance or mixture

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

|                    |   |
|--------------------|---|
| Poisons Schedule   | Not Applicable  |
| Classification [1] | Flammable Liquids Category 3, Serious Eye Damage/Eye Irritation Category 2A, Specific Target Organ Toxicity - Single Exposure (Narcotic Effects) Category 3, Skin Corrosion/Irritation Category 2, Reproductive Toxicity Category 2, 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)

|      |  |
|------|--|
| H226 | Flammable liquid and vapour.                         |
| H319 | Causes serious eye irritation.                       |
| H336 | May cause drowsiness or dizziness.                   |
| H315 | Causes skin irritation.                              |
| H361 | Suspected of damaging fertility or the unborn child. |
| H412 | Harmful to aquatic life with long lasting effects.   |

## RESENE QRISTAL CLEAR POLYURETHANE

## Supplementary statement(s)

Not Applicable

## 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 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.  |
| P261 | Avoid breathing mist/vapours/spray.  |
| P273 | Avoid release to the environment.  |
| P264 | Wash all exposed external body areas thoroughly after handling.                                |

## Precautionary statement(s) Response

|                |  |
|----------------|--|
| P308+P313      | IF exposed or concerned: Get medical advice/ attention.  |
| P370+P378      | In case of fire: Use alcohol resistant foam or normal protein foam to extinguish.  |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P312           | Call a POISON CENTER/doctor/physician/first aider/if you feel unwell.  |
| P337+P313      | If eye irritation persists: Get medical advice/attention.  |
| P302+P352      | IF ON SKIN: Wash with plenty of water and soap.  |
| P303+P361+P353 | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].                         |
| P304+P340      | IF INHALED: Remove person to fresh air and keep comfortable for breathing.   |
| P332+P313      | If skin irritation occurs: Get medical advice/attention.   |
| P362+P364      | Take off contaminated clothing and wash it before reuse.   |

## 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. |
|------|--|

## SECTION 3 Composition / information on ingredients

## Substances

See section below for composition of Mixtures

## Mixtures

| CAS No      | %[weight] | Name   |
|-------------|-----------|--|
| 96-29-7     | 0.1-1     | <u>methyl ethyl ketoxime</u>                     |
| 136-52-7    | 0.1-1     | <u>cobalt 2-ethylhexanoate</u>                   |
| 64742-82-1. | 1-5       | <u>naphtha petroleum heavy hydrodesulfurised</u> |
| 64742-48-9. | 20-60     | <u>naphtha petroleum heavy hydrotreated</u>      |

**Legend:** 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

|              |   |
|--------------|---|
| Eye Contact  | <p>If this product comes in contact with the eyes:</p> <ul style="list-style-type: none"> <li>▶ Wash out immediately with fresh running water.</li> <li>▶ Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.</li> <li>▶ Seek medical attention without delay; if pain persists or recurs seek medical attention.</li> <li>▶ Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.</li> </ul> |
| Skin Contact | <p>If skin contact occurs:</p> <ul style="list-style-type: none"> <li>▶ Immediately remove all contaminated clothing, including footwear.</li> <li>▶ Flush skin and hair with running water (and soap if available).</li> <li>▶ Seek medical attention in event of irritation.</li> </ul>   |
| Inhalation   | <ul style="list-style-type: none"> <li>▶ If fumes, aerosols or combustion products are inhaled remove from contaminated area.</li> <li>▶ Other measures are usually unnecessary.</li> </ul>   |

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## RESENE QRISTAL CLEAR POLYURETHANE

|                  |   |
|------------------|---|
| <b>Ingestion</b> | <ul style="list-style-type: none"> <li>▶ If spontaneous vomiting appears imminent or occurs, hold patient's head down, lower than their hips to help avoid possible aspiration of vomitus.</li> <li>▶ <b>If swallowed do NOT induce vomiting.</b></li> <li>▶ If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.</li> <li>▶ Observe the patient carefully.</li> <li>▶ Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious.</li> <li>▶ Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink.</li> <li>▶ Seek medical advice.</li> </ul> |
|------------------|---|

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

Treat symptomatically

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

- ▶ Foam.

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

|                             |  |
|-----------------------------|--|
| <b>Fire Incompatibility</b> | ▶ Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result |
|-----------------------------|--|

**Advice for firefighters**

|                              |   |
|------------------------------|---|
| <b>Fire Fighting</b>         | ▶ Alert Fire Brigade and tell them location and nature of hazard.   |
| <b>Fire/Explosion Hazard</b> | <ul style="list-style-type: none"> <li>▶ Liquid and vapour are flammable.</li> </ul> Combustion products include:<br>carbon monoxide (CO)<br>carbon dioxide (CO <sub>2</sub> )<br>other pyrolysis products typical of burning organic material. |
| <b>HAZCHEM</b>               | •3Y   |

**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**

|                     |   |
|---------------------|---|
| <b>Minor Spills</b> | ▶ Remove all ignition sources.  |
| <b>Major Spills</b> | Chemical Class: aliphatic hydrocarbons<br>For release onto land: recommended sorbents listed in order of priority. <ul style="list-style-type: none"> <li>▶ Clear area of personnel and move upwind.</li> </ul> |

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>▶ Containers, even those that have been emptied, may contain explosive vapours.</li> <li>• Electrostatic discharge may be generated during pumping - this may result in fire.</li> <li>▶ Avoid unnecessary personal contact, including inhalation.</li> <li>▶ <b>DO NOT allow clothing wet with material to stay in contact with skin</b></li> </ul> |
| <b>Other information</b> | ▶ Store in original containers in approved flammable liquid storage area.   |

**Conditions for safe storage, including any incompatibilities**

|                                |  |
|--------------------------------|--|
| <b>Suitable container</b>      | ▶ Packing as supplied by manufacturer.                 |
| <b>Storage incompatibility</b> | ▶ May react violently with strong oxidisers, chlorine. |

**SECTION 8 Exposure controls / personal protection****Control parameters**

Occupational Exposure Limits (OEL)

**INGREDIENT DATA**

| Source | Ingredient | Material name | TWA | STEL | Peak | Notes |
|--------|------------|---------------|-----|------|------|-------|
|--------|------------|---------------|-----|------|------|-------|

Continued...

## RESENE QRISTAL CLEAR POLYURETHANE

| Source                       | Ingredient                                  | Material name             | TWA       | STEL          | Peak          | Notes         |
|------------------------------|---|---------------------------|-----------|---------------|---------------|---------------|
| Australia Exposure Standards | naphtha petroleum, heavy, hydrodesulfurised | White spirits             | 790 mg/m3 | Not Available | Not Available | Not Available |
| Australia Exposure Standards | naphtha petroleum, heavy, hydrotreated      | Oil mist, refined mineral | 5 mg/m3   | Not Available | Not Available | Not Available |

## Emergency Limits

| Ingredient                                  | TEEL-1    | TEEL-2      | TEEL-3        |
|---|-----------|-------------|---------------|
| methyl ethyl ketoxime                       | 30 ppm    | 56 ppm      | 250 ppm       |
| naphtha petroleum, heavy, hydrodesulfurised | 300 mg/m3 | 1,800 mg/m3 | 29500** mg/m3 |
| naphtha petroleum, heavy, hydrotreated      | 350 mg/m3 | 1,800 mg/m3 | 40,000 mg/m3  |

| Ingredient                                  | Original IDLH | Revised IDLH  |
|---|---------------|---------------|
| methyl ethyl ketoxime                       | Not Available | Not Available |
| cobalt 2-ethylhexanoate                     | Not Available | Not Available |
| naphtha petroleum, heavy, hydrodesulfurised | 20,000 mg/m3  | Not Available |
| naphtha petroleum, heavy, hydrotreated      | 2,500 mg/m3   | Not Available |

## Occupational Exposure Banding

| Ingredient              | Occupational Exposure Band Rating | Occupational Exposure Band Limit |
|-------------------------|-----------------------------------|----------------------------------|
| methyl ethyl ketoxime   | D                                 | > 0.1 to ≤ 1 ppm                 |
| cobalt 2-ethylhexanoate | E                                 | ≤ 0.01 mg/m <sup>3</sup>         |

**Notes:** Occupational exposure banding is a process of assigning chemicals into specific categories or bands based on a chemical's potency and the adverse health outcomes associated with exposure. The output of this process is an occupational exposure band (OEB), which corresponds to a range of exposure concentrations that are expected to protect worker health.

## MATERIAL DATA

**CAUTION:** This substance is classified by the NOHSC as Category 3 Suspected of having carcinogenic potential

For methyl ethyl ketoxime (MEKO)

CEL TWA: 10 ppm, 36 mg/m3 (compare WEEL-TWA)

(CEL = Chemwatch Exposure Limit)

OEL-TWA: 0.28 ppm, 1 mg/m3 ORICA Australia quoting DSM Chemicals

Saturated vapour concentration: 1395 ppm at 20 deg.

Odour threshold: 0.25 ppm.

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.

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

## Exposure controls

|   |  |
|---|--|
| <b>Appropriate engineering controls</b> | Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard.   |
| <b>Personal protection</b>              |   |
| <b>Eye and face protection</b>          | ▶ Safety glasses with side shields.  |
| <b>Skin protection</b>                  | See Hand protection below  |
| <b>Hands/feet protection</b>            | ▶ Wear chemical protective gloves, e.g. PVC.<br><b>NOTE:</b><br>▶ The material may produce skin sensitisation in predisposed individuals.<br>The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer.   |
| <b>Body protection</b>                  | See Other protection below   |
| <b>Other protection</b>                 | ▶ Employees working with confirmed human carcinogens should be provided with, and be required to wear, clean, full body protective clothing (smocks, coveralls, or long-sleeved shirt and pants), shoe covers and gloves prior to entering the regulated area.<br>▶ Prior to each exit from an area containing confirmed human carcinogens, employees should be required to remove and leave protective clothing and equipment at the point of exit and at the last exit of the day, to place used clothing and equipment in impervious containers at the point of exit for purposes of decontamination or disposal.<br>▶ Overalls.<br>▶ Some plastic personal protective equipment (PPE) (e.g. gloves, aprons, overshoes) are not recommended as they may produce static electricity. |

## 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.

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## RESENE QRISTAL CLEAR POLYURETHANE

Recommended filter type: Type A filter (organic vapour).

## SECTION 9 Physical and chemical properties

## Information on basic physical and chemical properties

|   |   |  |               |
|---|---|--|---------------|
| <b>Appearance</b>                                   | Clear colourless liquid with strong solvent odour |  |               |
| <b>Physical state</b>                               | Liquid  | <b>Relative density (Water = 1)</b>            | 0.8- 1.0      |
| <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>          | 280-300       |
| <b>pH (as supplied)</b>                             | Not Available                                     | <b>Decomposition temperature (°C)</b>          | Not Available |
| <b>Melting point / freezing point (°C)</b>          | Not Available                                     | <b>Viscosity (cSt)</b>                         | Not Available |
| <b>Initial boiling point and boiling range (°C)</b> | 120-160   | <b>Molecular weight (g/mol)</b>                | Not Available |
| <b>Flash point (°C)</b>                             | 34-38   | <b>Taste</b>                                   | Not Available |
| <b>Evaporation rate</b>                             | Not Available BuAC = 1                            | <b>Explosive properties</b>                    | Not Available |
| <b>Flammability</b>                                 | Flammable.  | <b>Oxidising properties</b>                    | Not Available |
| <b>Upper Explosive Limit (%)</b>                    | 6.9   | <b>Surface Tension (dyn/cm or mN/m)</b>        | Not Available |
| <b>Lower Explosive Limit (%)</b>                    | 0.5   | <b>Volatile Component (%vol)</b>               | Not Available |
| <b>Vapour pressure (kPa)</b>                        | Not Available                                     | <b>Gas group</b>                               | Not Available |
| <b>Solubility in water</b>                          | Immiscible  | <b>pH as a solution (1%)</b>                   | Not Available |
| <b>Vapour density (Air = 1)</b>                     | Not Available                                     | <b>VOC g/L</b>                                 | 390-490       |

## SECTION 10 Stability and reactivity

|   |   |
|---|---|
| <b>Reactivity</b>                         | See section 7   |
| <b>Chemical stability</b>                 | Product is considered stable and hazardous polymerisation will not occur. |
| <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>Inhaled</b>      | <p>Inhalation of vapours may cause drowsiness and dizziness. Inhalation hazard is increased at higher temperatures.</p> <p>High inhaled concentrations of mixed hydrocarbons may produce narcosis characterised by nausea, vomiting and lightheadedness. 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. The acute toxicity of inhaled alkylbenzene is best described by central nervous system depression.</p>  |
| <b>Ingestion</b>    | <p>Many aliphatic hydrocarbons create a burning sensation because they are irritating to the GI mucosa. Ingestion of petroleum hydrocarbons may produce irritation of the pharynx, oesophagus, stomach and small intestine with oedema and mucosal ulceration resulting; symptoms include a burning sensation in the mouth and throat.</p>  |
| <b>Skin Contact</b> | <p>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.</p> <p>The material may accentuate any pre-existing dermatitis condition</p> <p>Dermally, isoparaffins have produced slight to moderate irritation in animals and humans under occluded patch conditions where evaporation cannot freely occur.</p> <p>Open cuts, abraded or irritated skin should not be exposed to this material</p> |

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## RESENE QRISTAL CLEAR POLYURETHANE

|                |  |
|----------------|--|
|                | <p>Entry into the blood-stream through, for example, cuts, abrasions, puncture wounds or lesions, may produce systemic injury with harmful effects.</p> <p>The liquid may be miscible with fats or oils and may degrease the skin, producing a skin reaction described as non-allergic contact dermatitis.</p>   |
| <b>Eye</b>     | <p>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. Instillation of isoparaffins into rabbit eyes produces only slight irritation.</p> <p>Petroleum hydrocarbons may produce pain after direct contact with the eyes.</p>  |
| <b>Chronic</b> | <p>Practical evidence shows that inhalation of the material is capable of inducing a sensitisation reaction in a substantial number of individuals at a greater frequency than would be expected from the response of a normal population.</p> <p>Practical experience shows that skin contact with the material is capable of inducing a sensitisation reaction in a substantial number of individuals, and/or of producing a positive response in experimental animals.</p> <p>On the basis, primarily, of animal experiments, the material may be regarded as carcinogenic to humans.</p> <p>Repeated or prolonged exposure to mixed hydrocarbons may produce narcosis with dizziness, weakness, irritability, concentration and/or memory loss, tremor in the fingers and tongue, vertigo, olfactory disorders, constriction of visual field, paraesthesias of the extremities, weight loss and anaemia and degenerative changes in the liver and kidney.</p> <p>Repeated application of mildly hydrotreated oils (principally paraffinic), to mouse skin, induced skin tumours; no tumours were induced with severely hydrotreated oils.</p> <p>Steam-cracked residues produced an increased incidence of skin tumours after repeated applications to the skin of mice.</p> |

|  |   |  |
|--|---|--|
| <b>RESENE QRISTAL CLEAR POLYURETHANE</b>           | <b>TOXICITY</b>   | <b>IRRITATION</b>  |
|  | Not Available   | Not Available  |
| <b>methyl ethyl ketoxime</b>                       | <b>TOXICITY</b>   | <b>IRRITATION</b>  |
|  | Dermal (rabbit) LD50: >184<1840 mg/kg <sup>[1]</sup>  | Eye (rabbit): 0.1 ml - SEVERE                                    |
|  | Inhalation(Rat) LC50: >4.83 mg/L4h <sup>[1]</sup>   |  |
|  | Oral (Rat) LD50: >900 mg/kg <sup>[1]</sup>  |  |
| <b>cobalt 2-ethylhexanoate</b>                     | <b>TOXICITY</b>   | <b>IRRITATION</b>  |
|  | dermal (rat) LD50: >2000 mg/kg <sup>[1]</sup>   | Eye: adverse effect observed (irritating) <sup>[1]</sup>         |
|  | Inhalation(Rat) LC50: >2.5 mg/L4h <sup>[2]</sup>  | Skin: no adverse effect observed (not irritating) <sup>[1]</sup> |
|  | Oral (Rat) LD50: 3129 mg/kg <sup>[1]</sup>  |  |
| <b>naphtha petroleum, heavy, hydrodesulfurised</b> | <b>TOXICITY</b>   | <b>IRRITATION</b>  |
|  | Dermal (rabbit) LD50: >1900 mg/kg <sup>[1]</sup>  | Eye: no adverse effect observed (not irritating) <sup>[1]</sup>  |
|  | Inhalation(Rat) LC50: >1.58 mg/L4h <sup>[1]</sup>   | Skin: adverse effect observed (irritating) <sup>[1]</sup>        |
|  | Oral (Rat) LD50: >4500 mg/kg <sup>[1]</sup>   | Skin: no adverse effect observed (not irritating) <sup>[1]</sup> |
| <b>naphtha petroleum, heavy, hydrotreated</b>      | <b>TOXICITY</b>   | <b>IRRITATION</b>  |
|  | Dermal (rabbit) LD50: >1900 mg/kg <sup>[1]</sup>  | Eye: no adverse effect observed (not irritating) <sup>[1]</sup>  |
|  | Inhalation(Rat) LC50: >4.42 mg/L4h <sup>[1]</sup>   | Skin: adverse effect observed (irritating) <sup>[1]</sup>        |
|  | Oral (Rat) LD50: >4500 mg/kg <sup>[1]</sup>   |  |
| <b>Legend:</b>                                     | 1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2. Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances |  |

|  |   |
|--|---|
| <b>RESENE QRISTAL CLEAR POLYURETHANE</b>   | <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.</p> <p>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.</p> <p>Exogenous allergic alveolitis is induced essentially by allergen specific immune-complexes of the IgG type; cell-mediated reactions (T lymphocytes) may be involved.</p> <p>Data demonstrate that during inhalation exposure,aromatic hydrocarbons undergo substantial partitioning into adipose tissues.</p> |
| <b>METHYL ETHYL KETOXIME</b>   | <p>Mammalian lymphocyte mutagen *Huls Canada ** Merck</p> <p>For methyl ethyl ketoxime (MEKO)</p> <p><b>Carcinogenicity:</b> Increased incidences of liver tumours were observed in rat and mouse lifetime studies and there was also an increased incidence of mammary gland tumours in female rats, however, this was only seen at mid- and/or high concentrations of MEKO.</p>   |
| <b>NAPHTHA PETROLEUM, HEAVY, HYDRODESULFURISED</b>   | <p>For C9 aromatics (typically trimethylbenzenes - TMBs)</p> <p>Acute Toxicity</p> <p>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).</p>   |
| <b>RESENE QRISTAL CLEAR POLYURETHANE &amp; METHYL ETHYL KETOXIME &amp; COBALT 2-ETHYLHEXANOATE</b> | <p>The following information refers to contact allergens as a group and may not be specific to this product.</p>  |

## RESENE QRISTAL CLEAR POLYURETHANE

|  |  |
|--|--|
| RESENE QRISTAL CLEAR POLYURETHANE & NAPHTHA PETROLEUM, HEAVY, HYDRODESULFURISED & NAPHTHA PETROLEUM, HEAVY, HYDROTREATED | Studies indicate that normal, branched and cyclic paraffins are absorbed from the mammalian gastrointestinal tract and that the absorption of n-paraffins is inversely proportional to the carbon chain length, with little absorption above C30.<br>For petroleum: This product contains benzene, which can cause acute myeloid leukaemia, and n-hexane, which can be metabolized to compounds which are toxic to the nervous system. |
| RESENE QRISTAL CLEAR POLYURETHANE & NAPHTHA PETROLEUM, HEAVY, HYDRODESULFURISED  | For trimethylbenzenes:<br>Absorption of 1,2,4-trimethylbenzene occurs after oral, inhalation, or dermal exposure.  |
| COBALT 2-ETHYLHEXANOATE & NAPHTHA PETROLEUM, HEAVY, HYDRODESULFURISED  | No significant acute toxicological data identified in literature search.   |

|                                   |   |                          |   |
|-----------------------------------|---|--------------------------|---|
| 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 QRISTAL CLEAR POLYURETHANE | Endpoint      | Test Duration (hr) | Species       | Value         | Source        |
|-----------------------------------|---------------|--------------------|---------------|---------------|---------------|
|                                   | Not Available | Not Available      | Not Available | Not Available | Not Available |

| methyl ethyl ketoxime | Endpoint  | Test Duration (hr) | Species                       | Value     | Source |
|-----------------------|-----------|--------------------|-------------------------------|-----------|--------|
|                       | BCF       | 1008h              | Fish                          | 0.5-0.6   | 7      |
|                       | NOEC(ECx) | 72h                | Algae or other aquatic plants | ~1.02mg/l | 2      |
|                       | EC50      | 72h                | Algae or other aquatic plants | ~6.09mg/l | 2      |
|                       | EC50      | 48h                | Crustacea                     | ~201mg/l  | 2      |
|                       | LC50      | 96h                | Fish                          | >100mg/l  | 2      |

| cobalt 2-ethylhexanoate | Endpoint | Test Duration (hr)            | Species                       | Value      | Source |
|-------------------------|----------|-------------------------------|-------------------------------|------------|--------|
|                         | ErC50    | 72h                           | Algae or other aquatic plants | 0.6542mg/l | 2      |
|                         | LC50     | 96h                           | Fish                          | 0.8mg/l    | 2      |
|                         | EC50     | 72h                           | Algae or other aquatic plants | 0.0288mg/l | 2      |
|                         | EC50     | 48h                           | Crustacea                     | 0.241mg/l  | 2      |
|                         | EC50     | 96h                           | Algae or other aquatic plants | 10.8mg/l   | 2      |
| EC10(ECx)               | 168h     | Algae or other aquatic plants | 0.00123mg/l                   | 2          |        |

| naphtha petroleum, heavy, hydrodesulfurised | Endpoint  | Test Duration (hr) | Species                       | Value     | Source |
|---|-----------|--------------------|-------------------------------|-----------|--------|
|   | EC50      | 72h                | Algae or other aquatic plants | 391mg/l   | 2      |
|   | EC50(ECx) | 72h                | Algae or other aquatic plants | 391mg/l   | 2      |
|   | NOEC(ECx) | 504h               | Crustacea                     | 0.097mg/l | 2      |
|   | EC50      | 72h                | Algae or other aquatic plants | 0.53mg/l  | 2      |
|   | EC50      | 96h                | Algae or other aquatic plants | 0.58mg/l  | 2      |
|   | NOEC(ECx) | 720h               | Fish                          | 0.02mg/l  | 2      |
|   | EC50      | 96h                | Algae or other aquatic plants | 0.277mg/l | 2      |
| LC50  | 96h       | Fish               | 0.14mg/l                      | 2         |        |

| naphtha petroleum, heavy, hydrotreated | Endpoint  | Test Duration (hr) | Species                       | Value      | Source |
|--|-----------|--------------------|-------------------------------|------------|--------|
|  | EC50(ECx) | 48h                | Crustacea                     | >0.002mg/l | 2      |
|  | EC50      | 96h                | Algae or other aquatic plants | 64mg/l     | 2      |
| EC50                                   | 48h       | Crustacea          | >0.002mg/l                    | 2          |        |

**Legend:** 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

## RESENE QRISTAL CLEAR POLYURETHANE

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.

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.

When released in the environment, alkanes don't undergo rapid biodegradation, because they have no functional groups (like hydroxyl or carbonyl) that are needed by most organisms in order to metabolize the compound.

For petroleum distillates:

Environmental fate:

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

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

## Persistence and degradability

| Ingredient            | Persistence: Water/Soil | Persistence: Air |
|-----------------------|-------------------------|------------------|
| methyl ethyl ketoxime | LOW                     | LOW              |

## Bioaccumulative potential

| Ingredient            | Bioaccumulation |
|-----------------------|-----------------|
| methyl ethyl ketoxime | LOW (BCF = 5.8) |

## Mobility in soil

| Ingredient            | Mobility          |
|-----------------------|-------------------|
| methyl ethyl ketoxime | LOW (KOC = 130.8) |

## 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> |
|------------------------------|---|

## SECTION 14 Transport information

## Labels Required

|                  |   |
|------------------|---|
|                  |  |
| Marine Pollutant | NO  |
| HAZCHEM          | *3Y   |

## Land transport (ADG)

|                              |  |                    |             |                  |                |
|------------------------------|--|--------------------|-------------|------------------|----------------|
| UN number                    | 1263   |                    |             |                  |                |
| UN proper shipping name      | PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning or reducing compound) |                    |             |                  |                |
| Transport hazard class(es)   | <table border="1"> <tr> <td>Class</td> <td>3</td> </tr> <tr> <td>Subrisk</td> <td>Not Applicable</td> </tr> </table>   | Class              | 3           | Subrisk          | Not Applicable |
| Class                        | 3  |                    |             |                  |                |
| Subrisk                      | Not Applicable   |                    |             |                  |                |
| Packing group                | III  |                    |             |                  |                |
| Environmental hazard         | Not Applicable   |                    |             |                  |                |
| Special precautions for user | <table border="1"> <tr> <td>Special provisions</td> <td>163 223 367</td> </tr> <tr> <td>Limited quantity</td> <td>5 L</td> </tr> </table>  | Special provisions | 163 223 367 | Limited quantity | 5 L            |
| Special provisions           | 163 223 367  |                    |             |                  |                |
| Limited quantity             | 5 L  |                    |             |                  |                |

## Air transport (ICAO-IATA / DGR)

|                         |   |
|-------------------------|---|
| UN number               | 1263  |
| UN proper shipping name | Paint related material (including paint thinning or reducing compounds); Paint (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) |



## RESENE QRISTAL CLEAR POLYURETHANE

|  |   |                |
|--|---|----------------|
| <b>Transport hazard class(es)</b>              | ICAO/IATA Class   | 3              |
|  | ICAO / IATA Subrisk                                       | Not Applicable |
|  | ERG Code  | 3L             |
| <b>Packing group</b>                           | III   |                |
| <b>Environmental hazard</b>                    | Not Applicable  |                |
| <b>Special precautions for user</b>            | Special provisions  | A3 A72 A192    |
|  | Cargo Only Packing Instructions                           | 366            |
|  | Cargo Only Maximum Qty / Pack                             | 220 L          |
|  | Passenger and Cargo Packing Instructions                  | 355            |
|  | Passenger and Cargo Maximum Qty / Pack                    | 60 L           |
|  | Passenger and Cargo Limited Quantity Packing Instructions | Y344           |
| Passenger and Cargo Limited Maximum Qty / Pack | 10 L  |                |

**Sea transport (IMDG-Code / GGVSee)**

|                                     |  |                 |
|-------------------------------------|--|-----------------|
| <b>UN number</b>                    | 1263   |                 |
| <b>UN proper shipping name</b>      | PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning or reducing compound) |                 |
| <b>Transport hazard class(es)</b>   | IMDG Class   | 3               |
|                                     | IMDG Subrisk   | Not Applicable  |
| <b>Packing group</b>                | III  |                 |
| <b>Environmental hazard</b>         | Not Applicable   |                 |
| <b>Special precautions for user</b> | EMS Number   | F-E, S-E        |
|                                     | Special provisions   | 163 223 367 955 |
|                                     | Limited Quantities   | 5 L             |

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

Not Applicable

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

| Product name                                | Group         |
|---|---------------|
| methyl ethyl ketoxime                       | Not Available |
| cobalt 2-ethylhexanoate                     | Not Available |
| naphtha petroleum, heavy, hydrodesulfurised | Not Available |
| naphtha petroleum, heavy, hydrotreated      | Not Available |

**Transport in bulk in accordance with the ICG Code**

| Product name                                | Ship Type     |
|---|---------------|
| methyl ethyl ketoxime                       | Not Available |
| cobalt 2-ethylhexanoate                     | Not Available |
| naphtha petroleum, heavy, hydrodesulfurised | Not Available |
| naphtha petroleum, heavy, hydrotreated      | Not Available |

**SECTION 15 Regulatory information****Safety, health and environmental regulations / legislation specific for the substance or mixture****methyl ethyl ketoxime 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)  
 Chemical Footprint Project - Chemicals of High Concern List

**cobalt 2-ethylhexanoate is found on the following regulatory lists**

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals  
 Australian Inventory of Industrial Chemicals (AIIC)  
 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  
 International WHO List of Proposed Occupational Exposure Limit (OEL) Values for Manufactured Nanomaterials (MNMS)

**naphtha petroleum, heavy, hydrodesulfurised is found on the following regulatory lists**

## RESENE QRISTAL CLEAR POLYURETHANE

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

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

**naphtha petroleum, heavy, hydrotreated is found on the following regulatory lists**

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

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

**National Inventory Status**

| National Inventory                                 | Status  |
|--|---|
| Australia - AIIC / Australia<br>Non-Industrial Use | Yes   |
| New Zealand - NZIoC                                | Yes   |
| <b>Legend:</b>                                     | Yes = All CAS declared ingredients are on the inventory<br>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**

|                      |            |
|----------------------|------------|
| <b>Revision Date</b> | 31/01/2023 |
| <b>Initial Date</b>  | 08/02/2018 |

**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.

**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  
 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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