RESENE TURPS

Resene Paints Ltd

Version No: **1.1**Safety Data Sheet according to HSNO Regulations

Issue Date: **19/03/2019** Print Date: **19/03/2019** L.GHS.NZL.EN

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

Product Identifier

| Product name | RESENE TURPS |
|-------------------------------|-----------------------|
| Synonyms | 8270 |
| Proper shipping name | TURPENTINE SUBSTITUTE |
| Other means of identification | Not Available |

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

Details of the supplier of the safety data sheet

| Registered company name | Resene Paints Ltd |
|-------------------------|---|
| Address | 32-50 Vogel Street Wellington New Zealand |
| Telephone | +64 4 577 0500 |
| Fax | +64 4 5773327 |
| Website | www.resene.co.nz |
| Email | advice@resene.co.nz |

Emergency telephone number

| Association / Organisation | NZ POISONS (24hr 7 days) | CHEMWATCH EMERGENCY RESPONSE | |
|-----------------------------------|--------------------------|------------------------------|--|
| Emergency telephone numbers | 0800 764766 | +64 800 700 112 | |
| Other emergency telephone numbers | Not Available | +61 2 9186 1132 | |

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

| Classification [1] | Flammable Liquid Category 3, Skin Corrosion/Irritation Category 3, Carcinogenicity Category 2, Reproductive Toxicity Category 2, Specific target organ toxicity - single exposure Category 3 (respiratory tract irritation), Specific target organ toxicity - repeated exposure Category 2, Aspiration Hazard Category 1, Chronic Aquatic Hazard Category 2 | |
|---|---|--|
| Legend: | Classified by Chemwatch; 2. Classification drawn from CCID EPA NZ; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI | |
| Determined by Chemwatch using GHS/HSNO criteria | 3.1C, 6.1E (aspiration), 6.1E (respiratory), 6.3B, 6.7B, 6.8B, 6.9B, 9.1B | |

Label elements

Hazard pictogram(s)









SIGNAL WORD

DANGER

Hazard statement(s)

| H226 | Flammable liquid and vapour. |
|------|--|
| H316 | Causes mild skin irritation. |
| H351 | Suspected of causing cancer. |
| H361 | Suspected of damaging fertility or the unborn child. |
| H335 | May cause respiratory irritation. |
| H373 | May cause damage to organs through prolonged or repeated exposure. |
| H304 | May be fatal if swallowed and enters airways. |
| H411 | Toxic to aquatic life with long lasting effects. |

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P201 Obtain special instructions before use. Precautionary statement(s) Response P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor/physician/first aider. Precautionary statement(s) Storage P403+P235 Store in a well-ventilated place. Keep cool.

Precautionary statement(s) Disposal

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 |
|-------------|-----------|---|
| 64742-82-1. | 40-60 | naphtha petroleum, heavy, hydrodesulfurised |
| 64742-95-6. | 40-60 | naphtha petroleum, light aromatic solvent |
| 100-41-4 | 0.1-0.3 | ethylbenzene |

SECTION 4 FIRST AID MEASURES

Description of first aid measures

| - | | |
|--------------|--|--|
| Eye Contact | If this product comes in contact with the eyes: • 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 seek medical attention. • Removal of contact lenses after an eye injury should only be undertaken by skilled personnel. | |
| Skin Contact | If skin contact occurs: 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 | If aerosols, fumes or combustion products are inhaled, remove affected person from contaminated area. Keep at rest until recovered. If symptoms developed seek medical attention. | |
| Ingestion | If spontaneous vomiting appears imminent or occurs, hold patient's head down, lower than their hips to help avoid possible aspiration of vomitus. 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

May emit clouds of acrid smoke

Treat symptomatically.

SECTION 5 FIREFIGHTING MEASURES

Extinguishing media

► Foam.

Special hazards arising from the substrate or mixture

| Fire Incompatibility | ► Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result | |
|-------------------------|--|--|
| Advice for firefighters | | |
| Advice for filelighters | | |
| Fire Fighting | Alert Fire Brigade and tell them location and nature of hazard. | |
| Fire/Explosion Hazard | ▶ Liquid and vapour are flammable. Combustion products include: carbon monoxide (CO) carbon dioxide (CO2) other pyrolysis products typical of burning organic material. | |

SECTION 6 ACCIDENTAL RELEASE MEASURES

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Personal precautions, protective equipment and emergency procedures

See section 8

Environmental precautions

See section 12

Methods and material for containment and cleaning up

Minor Spills

Remove all ignition sources

Contain spill with inert non- combustible absorbent then place in suitable container for disposal. Clean area with large quantity of water to complete clean-up.

Major Spills

Remove all ignition sources. Clear area of personnel and move upwind. Wear appropriate personnel protective equipment and clothing to prevent exposure. Avoid breathing in mists or vapours and skin or eyes contact. Extinguish or remove all sources of ignition and stop leak if safe to do so. Increase ventilation. Evacuate all unprotected personnel. If possible contain the spill. Place inert absorbent, non-combustible material onto spillage. Use clean non-sparking tools to collect the material and place into suitable labelled containers for subsequent recycling or disposal. Dispose of waste according to the applicable local and national regulations. If contamination of sewers or waterways occurs inform the local water and waste management authority.

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

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Safe handling

Even with proper grounding and bonding, this material can still accumulate an electrostatic charge.

- ► Containers, even those that have been emptied, may contain explosive vapours.
- ▶ Electrostatic discharge may be generated during pumping this may result in fire.
- ► Avoid all personal contact, including inhalation.
- Other information
- ▶ Store in original containers in approved flammable liquid storage area.

Conditions for safe storage, including any incompatibilities

| Suitable container | ▶ Packing as supplied by manufacturer. |
|-------------------------|--|
| Storage incompatibility | strong oxidisers |

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

| Source | Ingredient | Material name | TWA | STEL | Peak | Notes |
|---|--|----------------------------------|------------------------|------------------------|------------------|------------------|
| New Zealand Workplace Exposure Standards (WES) | naphtha petroleum, heavy, hydrodesulfurised | White spirits (Stoddard solvent) | 100 ppm / 525 mg/m3 | Not Available | Not Available | Not Available |
| New Zealand Workplace Exposure Standards (WES) | ethylbenzene | Ethyl benzene | 100 ppm / 434 mg/m3 | 543 mg/m3 / 125 ppm | Not Available | Not Available |

EMERGENCY LIMITS

| Ingredient | Material name | TEEL-1 | TEEL-2 | TEEL-3 |
|--|---|---------------|---------------|---------------|
| naphtha petroleum, heavy, hydrodesulfurised | Stoddard solvent; (Mineral spirits, 85% nonane and 15% trimethyl benzene) | 300 mg/m3 | 1,800 mg/m3 | 29500 mg/m3 |
| ethylbenzene | Ethyl benzene | Not Available | Not Available | Not Available |

| Ingredient | Original IDLH | Revised IDLH |
|--|---------------|---------------|
| naphtha petroleum, heavy, hydrodesulfurised | 20,000 mg/m3 | Not Available |
| naphtha petroleum, light aromatic solvent | Not Available | Not Available |
| ethylbenzene | 800 ppm | Not Available |

MATERIAL DATA

For white spirit:

Low and high odour thresholds of 5.25 and 157.5 mg/m3, respectively, were considered to provide a rather useful index of odour as a warning property.

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.

for ethyl benzene

Odour Threshold Value: 0.46-0.60 ppm

NOTE: Detector tubes for ethylbenzene, measuring in excess of 30 ppm, are commercially available.

Exposure controls

| Appropriate engineering | |
|-------------------------|--|
| controls | |

Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard.

Overalls

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Personal protection

Eye and face protection

Skin protection

Hands/feet protection

Personal protection

Particle

Safety glasses with side shields.

See Hand protection below

Personal protection

Personal protecti

Respiratory protection

Body protection

Respiratory protection required in insufficiently ventilated working areas and during spraying. An approved respirator with a replaceable vapour/ mist filter should be used. Refer to relevant regulations for further information concerning respiratory protective requirements. Reference should be made to AS/NZS 1715 Standard, Selection, Use and Maintenance of Respiratory Protective Devices; and AS/NZS 1716 Standard, Respiratory Protective Devices, in order to make any necessary changes for individual circumstances.

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

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

| Appearance | Clear liquid with petroleum odour | | |
|--|-----------------------------------|---|---------------|
| Physical state | Liquid | Relative density (Water = 1) | 0.81-0.82 |
| Odour | Not Available | Partition coefficient n-octanol / water | Not Available |
| Odour threshold | Not Available | Auto-ignition temperature (°C) | >200 |
| 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) | 154-192 | Molecular weight (g/mol) | Not Available |
| Flash point (°C) | 41 | Taste | Not Available |
| Evaporation rate | Not Available | Explosive properties | Not Available |
| Flammability | Flammable. | Oxidising properties | Not Available |
| Upper Explosive Limit (%) | 7.0 | Surface Tension (dyn/cm or mN/m) | Not Available |
| Lower Explosive Limit (%) | 0.6 | Volatile Component (%vol) | 100 |
| 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 | 813 |

SECTION 10 STABILITY AND REACTIVITY

| | - |
|------------------------------------|---------------|
| Reactivity | See section 7 |
| Chemical stability | ▶ stable. |
| Possibility of hazardous reactions | See section 7 |
| Conditions to avoid | See section 7 |
| Incompatible materials | See section 7 |
| Hazardous decomposition products | See section 5 |

SECTION 11 TOXICOLOGICAL INFORMATION

Information on toxicological effects

Evidence shows, or practical experience predicts, that the material produces irritation of the respiratory system, in a substantial number of individuals, following inhalation.

Inhalation of vapours may cause drowsiness and dizziness.

Inhalation hazard is increased at higher temperatures.

Inhaled

High inhaled concentrations of mixed hydrocarbons may produce narcosis characterised by nausea, vomiting and lightheadedness.

A significant number of individuals exposed to mixed trimethylbenzenes complained of nervousness, tension, anxiety and asthmatic bronchitis.

Acute effects from inhalation of high concentrations of vapour are pulmonary irritation, including coughing, with nausea; central nervous system depression - characterised by headache and dizziness, increased reaction time, fatigue and loss of co-ordination

Ingestion

Swallowing of the liquid may cause aspiration of vomit into the lungs with the risk of haemorrhaging, pulmonary oedema, progressing to chemical pneumonitis; serious consequences may result.

Ingestion of petroleum hydrocarbons may produce irritation of the pharynx, oesophagus, stomach and small intestine with oedema and mucosal ulceration resulting; symptoms include a burning sensation in the mouth and throat.

Accidental ingestion of the material may be damaging to the health of the individual.

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Repeated exposure may cause skin cracking, flaking or drying following normal handling and use. 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. The liquid may be miscible with fats or oils and may degrease the skin, producing a skin reaction described as non-allergic contact dermatitis. The material may accentuate any pre-existing dermatitis condition Skin Contact Skin contact with the material may be harmful; systemic effects may result following absorption. The material produces moderate skin irritation; evidence exists, or practical experience predicts, that the material either produces moderate inflammation of the skin in a substantial number of individuals following direct contact, and/or produces significant, but moderate, 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. Aromatic hydrocarbons may produce skin irritation, vasodilation with erythema and changes in endothelial cell permeability. Petroleum hydrocarbons may produce pain after direct contact with the eyes. Evidence exists, or practical experience predicts, that the material may cause severe eye irritation in a substantial number of individuals and/or may produce Eye significant ocular lesions which are present twenty-four hours or more after instillation into the eye(s) of experimental animals. The liquid produces a high level of eye discomfort and is capable of causing pain and severe conjunctivitis. 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 Repeated or long-term occupational exposure is likely to produce cumulative health effects involving organs or biochemical systems. Long-term exposure to respiratory irritants may result in disease of the airways involving difficult breathing and related systemic problems. Harmful: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed. Serious damage (clear functional disturbance or morphological change which may have toxicological significance) is likely to be caused by repeated or prolonged exposure. 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 Chronic effects, but which are not a secondary non-specific consequence of other toxic effects. Exposure to the material may cause concerns for humans owing to possible developmental toxic effects, generally on the basis that results in appropriate animal studies provide strong suspicion of developmental toxicity in the absence of signs of marked maternal toxicity, or at around the same dose levels as other toxic effects but which are not a secondary non-specific consequence of other toxic effects. Prolonged or repeated skin contact may cause drying with cracking, irritation and possible dermatitis following. Repeated or prolonged exposure to mixed hydrocarbons may produce narcosis with dizziness, weakness, irritability, concentration and/or memory loss, tremor in the fingers and tongue, vertigo, olfactory disorders, constriction of visual field, paraesthesias of the extremities, weight loss and anaemia and degenerative changes in the liver and kidney. Follicular dermatitis may develop rapidly on repeated immersion of the hands and forearms in white spirits. TOXICITY IRRITATION **RESENE TURPS** Not Available Not Available TOXICITY IRRITATION naphtha petroleum, heavy, Not Available Dermal (rabbit) LD50: >1900 mg/kg^[1] hydrodesulfurised Oral (rat) LD50: >4500 mg/kg^[1] TOXICITY IRRITATION Dermal (rabbit) LD50: >1900 mg/kg^[1] Not Available naphtha petroleum, light aromatic solvent Inhalation (rat) LC50: >7331.62506 mg/l/8h* $^{[2]}$ Oral (rat) LD50: >4500 mg/kg^[1] TOXICITY IRRITATION Eye (rabbit): 500 mg - SEVERE Dermal (rabbit) LD50: >5000 mg/kg^[2] ethylbenzene Inhalation (mouse) LC50: 17.75 mg/l/2H^[2] Skin (rabbit): 15 mg/24h mild Oral (rat) LD50: 3500 mg/kg^[2] 1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2.* Value obtained from manufacturer's SDS. Unless otherwise specified Legend: data extracted from RTECS - Register of Toxic Effect of chemical Substances RESENE TURPS Asthma-like symptoms may continue for months or even years after exposure to the material ceases. NAPHTHA PETROLEUM, HEAVY. No significant acute toxicological data identified in literature search. HYDRODESULFURISED For Low Boiling Point Naphthas (LBPNs): Acute toxicity: $LBPNs \ generally \ have \ low \ acute \ toxicity \ by \ the \ oral \ (median \ lethal \ dose \ [LD50] \ in \ rats > 2000 \ mg/kg-bw), \ inhalation \ (LD50 \ in \ rats > 5000 \ mg/m3) \ and \ and \ according to the \ rate \$ NAPHTHA PETROLEUM, dermal (LD50 in rabbits > 2000 mg/kg-bw) routes of exposure

Most LBPNs are mild to moderate eye and skin irritants in rabbits, with the exception of heavy catalytic cracked and heavy catalytic reformed naphthas, which

LIGHT AROMATIC SOLVENT

have higher primary skin irritation indices Inhalation (rat) TCLo: 1320 ppm/6h/90D-I * [Devoe] Chemwatch: 9-642064 Page 6 of 10

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The material may produce severe irritation to the eye causing pronounced inflammation. The material may cause skin irritation after prolonged or repeated exposure and may produce a contact dermatitis (nonallergic). Ethylbenzene is readily absorbed following inhalation, oral, and dermal exposures, distributed throughout the body, and excreted primarily through urine. NOTE: Substance has been shown to be mutagenic in at least one assay, or belongs to a family of chemicals producing damage or change to cellular **ETHYLBENZENE** DNA. WARNING: This substance has been classified by the IARC as Group 2B: Possibly Carcinogenic to Humans. Liver changes, utheral tract, effects on fertility foetotoxicity, specific developmental abnormalities (musculoskeletal system) recorded. Studies indicate that normal, branched and cyclic paraffins are absorbed from the mammalian gastrointestinal tract and that the absorption of n-paraffins is inversely proportional to the carbon chain length, with little absorption above C30. **RESENE TURPS & NAPHTHA** For trimethylbenzenes: PETROLEUM, HEAVY, Absorption of 1,2,4-trimethylbenzene occurs after oral, inhalation, or dermal exposure. HYDRODESULFURISED & for petroleum: NAPHTHA PETROLEUM. Altered mental state, drowsiness, peripheral motor neuropathy, irreversible brain damage (so-called Petrol Sniffer's Encephalopathy), delirium, seizures, LIGHT AROMATIC SOLVENT and sudden death have been reported from repeated overexposure to some hydrocarbon solvents, naphthas, and gasoline This product may contain benzene which is known to cause acute myeloid leukaemia and n-hexane which has been shown to metabolize to compounds which are neuropathic NAPHTHA PETROLEUM, For C9 aromatics (typically trimethylbenzenes - TMBs) HEAVY, Acute Toxicity HYDRODESULFURISED & Acute toxicity studies (oral, dermal and inhalation routes of exposure) have been conducted in rats using various solvent products containing predominantly NAPHTHA PETROLEUM, mixed C9 aromatic hydrocarbons (CAS RN 64742-95-6). LIGHT AROMATIC SOLVENT **Acute Toxicity** Carcinogenicity Skin Irritation/Corrosion Reproductivity Serious Eye Damage/Irritation STOT - Single Exposure

Legend:

STOT - Repeated Exposure

Aspiration Hazard

— Data either not available or does not fill the criteria for classification
 — Data available to make classification

SECTION 12 ECOLOGICAL INFORMATION

Respiratory or Skin

sensitisation Mutagenicity ×

Toxicity

| RESENE TURPS | ENDPOINT | TEST DURATION (HR) | | SPECIES | VALUE | | SOURCE |
|---|---------------|--------------------|---------|-------------------------|---------------|-------------------|--------|
| RESENE TURPS | Not Available | Not Available | | Not Available | Not Available | Not Available Not | |
| | ENDPOINT | TEST DURATION (HR) | SPEC | IES | | VALUE | SOURCE |
| | LC50 | 96 | Fish | | | 4.1mg/L | 2 |
| | EC50 | 48 | Crusta | icea | | 4.5mg/L | 2 |
| aphtha petroleum, heavy, hydrodesulfurised | EC50 | 72 | Algae | or other aquatic plant | S | >1-mg/L | 2 |
| nyurouesununseu | LC50 | 96 | Fish | | | 0.14mg/L | 2 |
| | EC50 | 96 | Algae | or other aquatic plant | S | 0.277mg/L | 2 |
| | NOEC | 720 | Crusta | ıcea | | 0.024mg/L | 2 |
| | | | | | | | |
| | ENDPOINT | TEST DURATION (HR) | SPEC | SPECIES | | VALUE | SOURCE |
| | LC50 | 96 | Fish | | | 4.1mg/L | 2 |
| naphtha petroleum, light aromatic solvent | EC50 | 48 | Crus | tacea | | 3.2mg/L | 2 |
| | EC50 | 72 | Algae | e or other aquatic plan | its | >1-mg/L | 2 |
| | NOEC | 72 | Algae | e or other aquatic plan | its | =1mg/L | 1 |
| | | | | | | | |
| | ENDPOINT | TEST DURATION (HR) | SPECI | ES | | VALUE | SOURCE |
| ethylbenzene | LC50 | 96 | Fish | Fish | | 0.0043mg/L | 4 |
| | EC50 | 48 | Crusta | Crustacea 1. | | 1.184mg/L | 4 |
| | EC50 | 96 | Algae o | or other aquatic plants | | 3.6mg/L | 4 |
| | NOEC | 168 | Crusta | cea | | 0.96mg/L | 5 |

Legend:

Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 3. EPIWIN Suite V3.12 (QSAR) - Aquatic Toxicity Data (Estimated) 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Do NOT allow product to come in contact with surface waters or to intertidal areas below the mean high water mark.

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

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

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

For C9 aromatics (typically trimethylbenzene - TMBs)

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

For xylenes : log Koc : 2.05-3.08 Koc : 25.4-204 Half-life (hr) air : 0.24-42

Half-life (hr) H2O surface water : 24-672 Half-life (hr) H2O ground : 336-8640 Half-life (hr) soil: 52-672 Henry's Pa m3 /mol: 637-879 Henry's atm m3 /mol: 7.68E-03 BOD 5 if unstated: 1.4.1% COD: 2.56,13%

ThOD: 3.125 BCF:23 log BCF: 1.17-2.41 **Environmental Fate**

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

DO NOT discharge into sewer or waterways

Persistence and degradability

| Ingredient | Persistence: Water/Soil | Persistence: Air |
|--------------|-----------------------------|-----------------------------|
| ethylbenzene | HIGH (Half-life = 228 days) | LOW (Half-life = 3.57 days) |

Bioaccumulative potential

| Ingredient | Bioaccumulation |
|--------------|-------------------|
| ethylbenzene | LOW (BCF = 79.43) |

Mobility in soil

| Ingredient | Mobility |
|--------------|-------------------|
| ethylbenzene | LOW (KOC = 517.8) |

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods

Product / Packaging disposal

- ► Containers may still present a chemical hazard/ danger when empty.
- ▶ DO NOT allow wash water from cleaning or process equipment to enter drains.
- Recycle wherever possible.

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



3Y

HAZCHEM

Land transport (UN)

| UN number | 1300 |
|-------------------------|-----------------------|
| UN proper shipping name | TURPENTINE SUBSTITUTE |

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| Transport hazard class(es) | Class 3 Subrisk 9 |
|------------------------------|--|
| Packing group | III |
| Environmental hazard | Environmentally hazardous |
| Special precautions for user | Special provisions 223 Limited quantity 5L |

Air transport (ICAO-IATA / DGR)

| | - | | |
|--|---------------------------|---------------------------------------|-------|
| UN number | 1300 | | |
| UN proper shipping name | Turpentine substitute | | |
| | ICAO/IATA Class | 3 | |
| Transport hazard class(es) | ICAO / IATA Subrisk | 9 | |
| ······································ | ERG Code | 3L | |
| | ENG Code | 3L | |
| Packing group | Ш | | |
| Environmental hazard | Environmentally hazardous | | |
| | Special provisions | | A3 |
| | Special provisions | | AS |
| | Cargo Only Packing In | nstructions | 366 |
| | Cargo Only Maximum | Qty / Pack | 220 L |
| Special precautions for user | 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)

| UN number | 1300 | | |
|------------------------------|-----------------------------|---------------------|--|
| | | | |
| UN proper shipping name | TURPENTINE SUBSTI | HOTE | |
| Transport hazard class(es) | IMDG Class 3 IMDG Subrisk 9 | | |
| Packing group | III | | |
| Environmental hazard | Marine Pollutant | | |
| Special precautions for user | Special provisions | F-E , S-E 223 5 L | |

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

Not Applicable

SECTION 15 REGULATORY INFORMATION

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

This substance is to be managed using the conditions specified in an applicable Group Standard

| HSR Number | Group Standard |
|------------|---|
| HSR002652 | Solvents (Flammable, Toxic [6.7]) Group Standard 2017 |

NAPHTHA PETROLEUM, HEAVY, HYDRODESULFURISED(64742-82-1.) IS FOUND ON THE FOLLOWING REGULATORY LISTS

IMO IBC Code Chapter 17: Summary of minimum requirements
IMO MARPOL (Annex II) - List of Noxious Liquid Substances Carried in Bulk
IMO Provisional Categorization of Liquid Substances - List 2: Pollutant only mixtures
containing at least 99% by weight of components already assessed by IMO
International Agency for Research on Cancer (IARC) - Agents Classified by the IARC
Monographs
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 Land Transport Rule; Dangerous Goods 2005 - Schedule 2 Dangerous Goods in Limited Quantities and Consumer Commodities

New Zealand Workplace Exposure Standards (WES)

United Nations Recommendations on the Transport of Dangerous Goods Model Regulations (Chinese)

United Nations Recommendations on the Transport of Dangerous Goods Model Regulations (English)

United Nations Recommendations on the Transport of Dangerous Goods Model Regulations (Spanish)

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GESAMP/EHS Composite List - GESAMP Hazard Profiles

IMO IBC Code Chapter 17: Summary of minimum requirements

IMO MARPOL (Annex II) - List of Noxious Liquid Substances Carried in Bulk

IMO Provisional Categorization of Liquid Substances - List 2: Pollutant only mixtures
containing at least 99% by weight of components already assessed by IMO

International Air Transport Association (IATA) Dangerous Goods Regulations

International Maritime Dangerous Goods Requirements (IMDG Code)

New Zealand Inventory of Chemicals (NZIoC)

New Zealand Land Transport Rule; Dangerous Goods 2005 - Schedule 2 Dangerous Goods in Limited Quantities and Consumer Commodities

United Nations Recommendations on the Transport of Dangerous Goods Model Regulations (Chinese)

United Nations Recommendations on the Transport of Dangerous Goods Model Regulations (English)

United Nations Recommendations on the Transport of Dangerous Goods Model Regulations (Spanish)

ETHYLBENZENE(100-41-4) 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

IMO Provisional Categorization of Liquid Substances - List 2: Pollutant only mixtures

containing at least 99% by weight of components already assessed by IMO

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC

Monographs

International Air Transport Association (IATA) Dangerous Goods Regulations

International Maritime Dangerous Goods Requirements (IMDG Code)

New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals

New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals - Classification Data

New Zealand Inventory of Chemicals (NZIoC)

New Zealand Workplace Exposure Standards (WES)

United Nations Recommendations on the Transport of Dangerous Goods Model Regulations (Chinese)

United Nations Recommendations on the Transport of Dangerous Goods Model Regulations (English)

United Nations Recommendations on the Transport of Dangerous Goods Model Regulations (Spanish)

Hazardous Substance Location

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

| Hazard Class | Quantity beyond which controls apply for closed containers | Quantity beyond which controls apply when use occurring in open containers |
|--------------|--|--|
| 3.1C | 500 L in containers greater than 5 L 1500 L in containers up to and including 5 L | 250 L 250 L |

Certified Handler

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

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

Refer Group Standards for further information

Tracking Requirements

Not Applicable

National Inventory Status

| National Inventory | Status |
|-------------------------------|--|
| Australia - AICS | Yes |
| Canada - DSL | Yes |
| Canada - NDSL | No (naphtha petroleum, heavy, hydrodesulfurised; naphtha petroleum, light aromatic solvent; ethylbenzene) |
| China - IECSC | Yes |
| Europe - EINEC / ELINCS / NLP | Yes |
| Japan - ENCS | Yes |
| Korea - KECI | Yes |
| New Zealand - NZIoC | Yes |
| Philippines - PICCS | Yes |
| USA - TSCA | Yes |
| Legend: | Yes = All 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 | 19/03/2019 |
|---------------|------------|
| Initial Date | 23/01/2014 |

Other information

Ingredients with multiple cas numbers

| Name | CAS No |
|---|---------------------------------------|
| naphtha petroleum, heavy, hydrodesulfurised | 64742-82-1., 8052-41-3., 1174921-79-9 |
| naphtha petroleum, light aromatic solvent | 64742-95-6., 25550-14-5. |

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RESENE TURPS

Issue Date: 19/03/2019 Print Date: 19/03/2019

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment.

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