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

Product Identifier

<table>
<thead>
<tr>
<th>Product name</th>
<th>601SE SUPER ENAMEL COLOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Synonyms</td>
<td>Product code: 601SEC</td>
</tr>
<tr>
<td>Proper shipping name</td>
<td>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)</td>
</tr>
<tr>
<td>Other means of identification</td>
<td>Not Available</td>
</tr>
</tbody>
</table>

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

Relevant identified uses: Use according to manufacturer’s directions.

Details of the supplier of the safety data sheet

<table>
<thead>
<tr>
<th>Registered company name</th>
<th>HiChem Paint Technologies Pty Ltd</th>
<th>Rust-Oleum Australia</th>
<th>Chemcare</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address</td>
<td>73 Hallam South Road Hallam Victoria 3803 Australia</td>
<td>Unit 12, 4 Southridge St, Eastern Creek NSW 2766 Australia</td>
<td>New Zealand</td>
</tr>
<tr>
<td>Telephone</td>
<td>+61 3 9796 3400</td>
<td>+61 2 8608 0600</td>
<td>Not Available</td>
</tr>
<tr>
<td>Fax</td>
<td>+61 3 9796 4500</td>
<td>+61 2 9860 0111</td>
<td>Not Available</td>
</tr>
<tr>
<td>Email</td>
<td><a href="mailto:info@hichem.com.au">info@hichem.com.au</a></td>
<td><a href="mailto:sales@rustoleum.com.au">sales@rustoleum.com.au</a></td>
<td>Not Available</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Registered company name</th>
<th>(Distributor) Haydn Brush Company Ltd</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address</td>
<td>2 Link Drive, Rolleston Christchurch 7675 New Zealand</td>
</tr>
<tr>
<td>Telephone</td>
<td>+64 347 7770</td>
</tr>
<tr>
<td>Fax</td>
<td>+64 347 7789</td>
</tr>
<tr>
<td>Website</td>
<td><a href="http://www.haydn.co.nz">www.haydn.co.nz</a></td>
</tr>
<tr>
<td>Email</td>
<td><a href="mailto:mail@haydn.co.nz">mail@haydn.co.nz</a></td>
</tr>
</tbody>
</table>

Emergency telephone number

<table>
<thead>
<tr>
<th>Association / Organisation</th>
<th>HiChem Paint Technologies</th>
<th>Not Available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency telephone numbers</td>
<td>Not Available</td>
<td>1800 039 008</td>
</tr>
<tr>
<td>Other emergency telephone numbers</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Association / Organisation</th>
<th>Not Available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency telephone numbers</td>
<td>Not Available</td>
</tr>
<tr>
<td>Other emergency telephone numbers</td>
<td>Not Available</td>
</tr>
</tbody>
</table>

CHEMWATCH EMERGENCY RESPONSE

<table>
<thead>
<tr>
<th>Primary Number</th>
<th>Alternative Number 1</th>
<th>Alternative Number 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1800 039 008</td>
<td>1800 039 008</td>
<td>+612 9186 1132</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>HAZARDOUS CHEMICAL, DANGEROUS GOODS. According to the WHS Regulations and the ADG Code.</th>
</tr>
</thead>
</table>

| CHEMWATCH HAZARD RATINGS |
### Flammability

<table>
<thead>
<tr>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>3</td>
</tr>
</tbody>
</table>

### Toxicity

<table>
<thead>
<tr>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>2</td>
</tr>
</tbody>
</table>

### Body Contact

<table>
<thead>
<tr>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>2</td>
</tr>
</tbody>
</table>

### Reactivity

<table>
<thead>
<tr>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

### Chronic

<table>
<thead>
<tr>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>2</td>
</tr>
</tbody>
</table>

**Legend:**

#### Poisons Schedule

- Flammable Liquid Category 2
- Reproductive Toxicity Category 2
- Specific target organ toxicity - single exposure Category 3 (narcotic effects)
- Specific target organ toxicity - repeated exposure Category 2
- Aspiration Hazard Category 1

#### Label elements

**GHS label elements**

**SIGNAL WORD**

**DANGER**

**Hazard statement(s)**

- **H225** Highly flammable liquid and vapour.
- **H351** Suspected of causing cancer.
- **H361** Suspected of damaging fertility or the unborn child.
- **H366** May cause drowsiness or dizziness.
- **H373** May cause damage to organs through prolonged or repeated exposure.
- **H304** May be fatal if swallowed and enters airways.

**Precautionary statement(s)**

**Prevention**

- **P201** Obtain special instructions before use.
- **P210** Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
- **P260** Do not breathe dust/fume/gas/mist/vapours/spray.
- **P271** Use in a well-ventilated area.
- **P281** Use personal protective equipment as required.
- **P240** Ground/bond container and receiving equipment.
- **P241** Use explosion-proof electrical/ventilating/lighting/intrinsically safe equipment.
- **P242** Use only non-sparking tools.
- **P243** Take precautionary measures against static discharge.
- **P280** Wear protective gloves/protective clothing/eye protection/face protection.

**Response**

- **P301+P310** IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
- **P306+P313** IF exposed or contaminated: Get medical advice/attention.
- **P331** Do NOT induce vomiting.
- **P370+P378** In case of fire: Use alcohol resistant foam or normal protein foam for extinction.
- **P312** Call a POISON CENTER or doctor/physician if you feel unwell.
- **P301+P330+P353** IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
- **P304+P340** IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

**Storage**

- **P403+P235** Store in a well-ventilated place. Keep cool.
- **P405** Store locked up.

**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

#### Mixtures

<table>
<thead>
<tr>
<th>CAS No</th>
<th>% [weight]</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>64742-88-7</td>
<td>10-20</td>
<td>solvent naphtha petroleum, medium aliphatic</td>
</tr>
</tbody>
</table>

Continued...
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 fumes or combustion products are inhaled remove from contaminated area.
- Lay patient down. Keep warm and rested.
- Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.
- Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag valve mask device, or pocket mask as trained. Perform CPR if necessary.
- Transport to hospital, or doctor.

Ingestion
- 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 casually can comfortably drink.
- Seek medical advice.
- Avoid giving milk or oils.
- Avoid giving alcohol.
- If spontaneous vomiting appears imminent or occurs, hold patient’s head down, lower than their hips to help avoid possible aspiration of vomitus.

Indication of any immediate medical attention and special treatment needed

Any material aspirated during vomiting may produce lung injury. Therefore emesis should not be induced mechanically or pharmaceutically. Mechanical means should be used if it is considered necessary to evacuate the stomach contents; these include gastric lavage after endotracheal intubation. If spontaneous vomiting has occurred after ingestion, the patient should be monitored for difficult breathing, as adverse effects of aspiration into the lungs may be delayed up to 48 hours.

For acute or short term repeated exposures to xylene:
- Gastro-intestinal absorption is significant with ingestions. For ingestions exceeding 1-2 ml (xylene)/kg, intubation and lavage with cuffed endotracheal tube is recommended. The use of charcoal and cathartics is inequivalent.
- Pulmonary absorption is rapid with about 60-65% retained at rest.
- Primary threat to life from ingestion and/or inhalation, is respiratory failure.
- Patients should be quickly evaluated for signs of respiratory distress (e.g. cyanosis, tachypnoea, intercostal retraction, obtundation) and given oxygen. Patients with inadequate tidal volumes or poor arterial blood gases (pO2 < 50 mm Hg or pCO2 > 50 mm Hg) should be intubated.
- Arrhythmias complicate some hydrocarbon ingestion and/or inhalation and electrocardiographic evidence of myocardial injury has been reported; intravenous lines and cardiac monitors should be established in obviously symptomatic patients. The lungs excrete inhaled solvents, so that hyperventilation improves clearance.
- A chest x-ray should be taken immediately after stabilisation of breathing and circulation to document aspiration and detect the presence of pneumothorax.
- Epinephrine (adrenalin) is not recommended for treatment of bronchospasm because of potential myocardial sensitisation to catecholamines. Inhaled cardioselective bronchodilators (e.g. Alupent, Salbutamol) are the preferred agents, with aminophylline a second choice.

BIOLOGICAL EXPOSURE INDEX - BEI

These represent the determinants observed in specimens collected from a healthy worker exposed at the Exposure Standard (ES or TLV):

<table>
<thead>
<tr>
<th>Determinant</th>
<th>Index</th>
<th>Sampling Time</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methylhippuric acids in urine</td>
<td>1.5 gm/gm creatinine</td>
<td>End of shift</td>
<td>Last 4 hrs of shift</td>
</tr>
</tbody>
</table>

SECTION 5 FIREFIGHTING MEASURES

Extinguishing media
- Foam.
- Dry chemical powder.
- BCF (where regulations permit).
- Carbon dioxide.
- Water spray or fog - Large fires only.

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
- Fire Fighting
  - Alert Fire Brigade and tell them location and nature of hazard.
  - May be violently or explosively reactive.
  - Wear breathing apparatus plus protective gloves in the event of a fire.
  - Prevent, by any means available, spillage from entering drains or water course.
  - Consider evacuation (or protect in place).
  - Fight fire from a safe distance, with adequate cover.
  - If safe, switch off electrical equipment until vapour fire hazard removed.
Use water delivered as a fine spray to control the fire and cool adjacent area. Avoid spraying water onto liquid pools. Do not approach containers suspected to be hot. Cool fire exposed containers with water spray from a protected location. If safe to do so, remove containers from path of fire.

Fire/Explosion Hazard

- Liquid and vapour are highly flammable.
- Severe fire hazard when exposed to heat, flame and/or oxidisers.
- Vapour may travel a considerable distance to source of ignition.
- Heating may cause expansion or decomposition leading to violent rupture of containers.
- On combustion, may emit toxic fumes of carbon monoxide (CO).

Combustion products include:
- carbon dioxide (CO2)
- other pyrolysis products typical of burning organic material.
- May emit clouds of acrid smoke.

HAZCHEM: 3YE

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

See section 8

Environmental precautions

See section 12

Methods and material for containment and cleaning up

Minor Spills

- Remove all ignition sources.
- Clean up all spills immediately.
- Avoid breathing vapours and contact with skin and eyes.
- Control personal contact with the substance, by using protective equipment.
- Contain and absorb small quantities with vermiculite or other absorbent material.
- Wipe up.
- Collect residues in a flammable waste container.

Major Spills

- Clear area of personnel and move upwind.
- Alert Fire Brigade and tell them location and nature of hazard.
- May be violently or explosively reactive.
- Wear breathing apparatus plus protective gloves.
- Prevent, by any means available, spillage from entering drains or water course.
- Consider evacuation (or protect in place).
- No smoking, naked lights or ignition sources.
- Increase ventilation.
- Stop leak if safe to do so.
- Water spray or fog may be used to disperse /absorb vapour.
- Contain spill with sand, earth or vermiculite.
- Use only spark-free shovels and explosion proof equipment.
- Collect recoverable product into labelled containers for recycling.
- Collect solid residues and seal in labelled drums for disposal.
- Wash area and prevent runoff into drains.
- If contamination of drains or waterways occurs, advise emergency services.

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

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

The conductivity of this material may make it a static accumulator. A liquid is typically considered nonconductive if its conductivity is below 100 pS/m and is considered semi-conductive if its conductivity is below 10,000 pS/m. Whether a liquid is nonconductive or semi-conductive, the precautions are the same. A number of factors, for example liquid temperature, presence of contaminants, and anti-static additives can greatly influence the conductivity of a liquid.

- Containers, even those that have been emptied, may contain explosive vapours.
- Do NOT cut, drill, grind, weld or perform similar operations on or near containers.
- DO NOT allow clothing wet with material to stay in contact with skin.
- Electrostatic discharge may be generated during pumping - this may result in fire.
- Ensure electrical continuity by bonding and grounding (earthing) all equipment.
- Restrict line velocity during pumping in order to avoid generation of electrostatic discharge (<=1 m/sec until fill pipe submerged to twice its diameter, then <=7 m/sec).
- Avoid splash filling.
- Do NOT use compressed air for filling discharging or handling operations.
- Avoid all personal contact, including inhalation.
- Wear protective clothing when risk of exposure occurs.
- Use in a well-ventilated area.
- Prevent concentration in hollows and sumps.
- DO NOT enter confined spaces until atmosphere has been checked.
- Avoid smoking, naked lights, heat or ignition sources.
- When handling, DO NOT eat, drink or smoke.
- Vapour may ignite on pumping or pouring due to static electricity.
- DO NOT use plastic buckets.
- Earth and secure metal containers when dispensing or pouring product.
- Use spark-free tools when handling.
- Avoid contact with incompatible materials.
- Keep containers securely sealed.

Continued...
### Conditions for safe storage, including any incompatibilities

#### Suitable container
- Avoid physical damage to containers.
- Always wash hands with soap and water after handling.
- Work clothes should be laundered separately.
- Use good occupational work practice.
- Observe manufacturer's storage and handling recommendations contained within this SDS.
- Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions.

#### Storage incompatibility
- Store in original containers in approved flame-proof area.
- No smoking, naked lights, heat or ignition sources.
- DO NOT store in pits, depressions, basements or areas where vapours may be trapped.
- Keep containers securely sealed.
- Store away from incompatible materials in a cool, dry well ventilated area.
- Protect containers against physical damage and check regularly for leaks.
- Observe manufacturer's storage and handling recommendations contained within this SDS.

### Control parameters

#### OCCUPATIONAL EXPOSURE LIMITS (OEL)

<table>
<thead>
<tr>
<th>Source</th>
<th>Ingredient</th>
<th>Material name</th>
<th>TWA</th>
<th>STEL</th>
<th>Peak</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia Exposure Standards</td>
<td>solvent naphtha petroleum, medium aliphatic</td>
<td>Oil mist, refined mineral</td>
<td>5 mg/m³</td>
<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>Australia Exposure Standards</td>
<td>solvent naphtha petroleum, light aliphatic</td>
<td>Oil mist, refined mineral</td>
<td>5 mg/m³</td>
<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>Australia Exposure Standards</td>
<td>xylene</td>
<td>Xylene (o-, m-, p- isomers)</td>
<td>350 mg/m³ / 80 ppm</td>
<td>655 mg/m³ / 150 ppm</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>Australia Exposure Standards</td>
<td>titanium dioxide</td>
<td>Titanium dioxide</td>
<td>10 mg/m³</td>
<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>Australia Exposure Standards</td>
<td>white spirit</td>
<td>White spirits</td>
<td>790 mg/m³</td>
<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>Australia Exposure Standards</td>
<td>ethylbenzene</td>
<td>Ethyl benzene</td>
<td>434 mg/m³ / 100 ppm</td>
<td>543 mg/m³ / 125 ppm</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
</tbody>
</table>

#### EMERGENCY LIMITS

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Material name</th>
<th>TEEL-1</th>
<th>TEEL-2</th>
<th>TEEL-3</th>
</tr>
</thead>
<tbody>
<tr>
<td>solvent naphtha petroleum, medium aliphatic</td>
<td>Solvent naphtha, petroleum, medium aliphatic; (Mineral spirits, naphtha)</td>
<td>0.32 mg/m³</td>
<td>3.5 mg/m³</td>
<td>21 mg/m³</td>
</tr>
<tr>
<td>solvent naphtha petroleum, light aliphatic</td>
<td>Rubber solvent; (Naphtha (petroleum) light aliphatic)</td>
<td>264 ppm</td>
<td>1700 ppm</td>
<td>10000 ppm</td>
</tr>
<tr>
<td>xylene</td>
<td>Xylenes</td>
<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>titanium dioxide</td>
<td>Titanium oxide; (Titanium dioxide)</td>
<td>10 mg/m³</td>
<td>10 mg/m³</td>
<td>10 mg/m³</td>
</tr>
<tr>
<td>white spirit</td>
<td>Stoddard solvent; (Mineral spirits, 85% nonane and 15% trimethyl benzene)</td>
<td>100 ppm</td>
<td>350 ppm</td>
<td>29500 ppm</td>
</tr>
<tr>
<td>ethylbenzene</td>
<td>Ethyl benzene</td>
<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
</tbody>
</table>
### Exposure controls

Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.

The basic types of engineering controls are:

- Process controls which involve changing the way a job activity or process is done to reduce the risk.
- Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment. Ventilation can remove or dilute an air contaminant if designed properly. The design of a ventilation system must match the particular process and chemical or contaminant in use.
- Employers may need to use multiple types of controls to prevent employee overexposure.

For flammable liquids and flammable gases, local exhaust ventilation or a process enclosure ventilation system may be required. Ventilation equipment should be explosion-resistant.

Air contaminants generated in the workplace possess varying "escape" velocities which, in turn, determine the "capture velocities" of fresh circulating air required to effectively remove the contaminant.

<table>
<thead>
<tr>
<th>Type of Contaminant</th>
<th>Air Speed:</th>
</tr>
</thead>
<tbody>
<tr>
<td>solvent, vapours, degreasing etc., evaporating from tank (in still air).</td>
<td>0.25-0.5 m/s (50-100 f/min.)</td>
</tr>
<tr>
<td>aerosols, fumes from pouring operations, intermittent container filling, low speed conveyor transfers, welding, spray drift, plating acid fumes, pickling (released at low velocity into zone of active generation)</td>
<td>0.5-1 m/s (100-200 f/min.)</td>
</tr>
<tr>
<td>direct spray, spray painting in shallow booths, drum filling, conveyor loading, crusher dusts, gas discharge (active generation into zone of rapid air motion)</td>
<td>1-2.5 m/s (200-500 f/min.)</td>
</tr>
</tbody>
</table>

Within each range the appropriate value depends on:

- Lower end of the range
- Upper end of the range

1: Room air currents minimal or favourable to capture
2: Contaminants of low toxicity or of nuisance value only.
3: Intermittent, low production.
4: Large hood or large air mass in motion

Simple theory shows that air velocity falls rapidly with distance away from the opening of a simple extraction pipe. Velocity generally decreases with the square of distance from the extraction point (in simple cases). Therefore the air speed at the extraction point should be adjusted, accordingly, after reference to distance from the contaminating source. The air velocity at the extraction fan, for example, should be a minimum of 1-2 m/s (200-400 f/min.) for extraction of solvents generated in a tank 2 meters distant from the extraction point. Other mechanical considerations, producing performance deficits within the extraction apparatus, make it essential that theoretical air velocities are multiplied by factors of 10 or more when extraction systems are installed or used.

### Personal protection

- Safety glasses with side shields.
- Chemical goggles.
- Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59]. [AS/NZS 1336 or national equivalent]
- Safety glasses with side shields.
- Chemical goggles.

### Eye and face protection

- Safety glasses with side shields.
- Chemical goggles.
- Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59]. [AS/NZS 1336 or national equivalent]

### Skin protection

See Hand protection below

### Hands/feet protection

- Wear chemical protective gloves, e.g. PVC.
- Wear safety footwear or safety gumboots, e.g. Rubber.
- Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturizer is recommended.

Suitability and durability of glove type is dependent on usage. Important factors in the selection of gloves include:

- Frequency and duration of contact
- Chemical resistance of glove material
- Glove thickness and dexterity

### Ingredient Table

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Original IDLH</th>
<th>Revised IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>solvent naphtha, medium aliphatic</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>solvent naphtha, light aliphatic</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>xylene</td>
<td>1,000 ppm</td>
<td>900 ppm</td>
</tr>
<tr>
<td>titanium dioxide</td>
<td>N.E. mg/m³</td>
<td>5,000 mg/m³</td>
</tr>
<tr>
<td>white spirit</td>
<td>29,500 mg/m³</td>
<td>20,000 mg/m³</td>
</tr>
<tr>
<td>ethylbenzene</td>
<td>2,000 ppm</td>
<td>800 [LEL] ppm</td>
</tr>
</tbody>
</table>
Select gloves tested to a relevant standard (e.g. Europe EN 374, US F739, AS/NZS 2161.1 or national equivalent).

- When prolonged or frequently repeated contact may occur, a glove with a protection class of 5 or higher (breakthrough time greater than 240 minutes according to EN 374, AS/NZS 21610.1 or national equivalent) is recommended.
- When only brief contact is expected, a glove with a protection class of 3 or higher (breakthrough time greater than 60 minutes according to EN 374, AS/NZS 21610.1 or national equivalent) is recommended.
- Some glove polymer types are less affected by movement and this should be taken into account when considering gloves for long-term use.
- Contaminated gloves should be replaced.

For general applications, gloves with a thickness typically greater than 0.35 mm, are recommended. It should be emphasised that glove thickness is not necessarily a good predictor of glove resistance to a specific chemical, as the permeation efficiency of the glove will be dependent on the exact composition of the glove material. Therefore, glove selection should also be based on consideration of the task requirements and knowledge of breakthrough times.

Glove thickness may also vary depending on the glove manufacturer, the glove type and the glove model. Therefore, the manufacturers’ technical data should always be taken into account to ensure selection of the most appropriate glove for the task.

Note: Depending on the activity being conducted, gloves of varying thickness may be required for specific tasks. For example:

- Thinner gloves (down to 0.1 mm or less) may be required where a high degree of manual dexterity is needed. However, these gloves are only likely to give short duration protection and would normally be just for single use applications, then disposed of.
- Thicker gloves (up to 3 mm or more) may be required where there is a mechanical (as well as a chemical) risk i.e. where there is abrasion or puncture potential.

Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturiser is recommended.

**Body protection**

- Overalls.
- PVC Apron.
- PVC protective suit may be required if exposure severe.
- Eyewash unit.
- Ensure there is ready access to a safety shower.
- Some plastic personal protective equipment (PPE) (e.g. gloves, aprons, overshoes) are not recommended as they may produce static electricity.
- For large scale or continuous use wear tight weave non-static clothing (no metallic fasteners, cuffs or pockets).
- Non sparking safety or conductive footwear should be considered. Conductive footwear describes a boot or shoe with a sole made from a conductive compound chemically bound to the bottom components, for permanent control to electrically ground the foot and shall dissipate static electricity from the body to reduce the possibility of ignition of volatile compounds. Electrical resistance must range between 0 to 500,000 ohms. Conductive shoes should be stored in lockers close to the room in which they are worn. Personnel who have been issued conductive footwear should not wear them from their place of work to their homes and return.

**Other protection**

- Conductive shoes should be stored in lockers close to the room in which they are worn. Personnel who have been issued conductive footwear should not wear them from their place of work to their homes and return.

**Thermal hazards**

Not Available

---

**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:

601SE SUPER ENAMEL COLOURS

<table>
<thead>
<tr>
<th>Material</th>
<th>CPI</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUTYL</td>
<td>C</td>
</tr>
<tr>
<td>BUTYL/NEOPRENE</td>
<td>C</td>
</tr>
<tr>
<td>HYPALON</td>
<td>C</td>
</tr>
<tr>
<td>NAT+NEOPRE+NITRILE</td>
<td>C</td>
</tr>
<tr>
<td>NATURAL+NEOPRENE</td>
<td>C</td>
</tr>
<tr>
<td>NEOPRENE</td>
<td>C</td>
</tr>
<tr>
<td>NEOPRENE/NATURAL</td>
<td>C</td>
</tr>
<tr>
<td>NITRILE</td>
<td>C</td>
</tr>
<tr>
<td>NITRILE+PVC</td>
<td>C</td>
</tr>
<tr>
<td>PE/EVALPE</td>
<td>C</td>
</tr>
<tr>
<td>PVA</td>
<td>C</td>
</tr>
<tr>
<td>PVC</td>
<td>C</td>
</tr>
<tr>
<td>PVC/DE/PVDC</td>
<td>C</td>
</tr>
<tr>
<td>TEFLON</td>
<td>C</td>
</tr>
<tr>
<td>VITON</td>
<td>C</td>
</tr>
</tbody>
</table>

- 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 (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)**

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.

<table>
<thead>
<tr>
<th>Required Minimum Protection Factor</th>
<th>Half-Face Respirator</th>
<th>Full-Face Respirator</th>
<th>Powered Air Respirator</th>
</tr>
</thead>
<tbody>
<tr>
<td>up to 5 x ES</td>
<td>A-AUS / Class 1</td>
<td>-</td>
<td>A-PAPR-AUS / Class 1</td>
</tr>
<tr>
<td>up to 25 x ES</td>
<td>Air-line*</td>
<td>A-2</td>
<td>A-PAPR-2</td>
</tr>
<tr>
<td>up to 50 x ES</td>
<td>-</td>
<td>A-3</td>
<td>-</td>
</tr>
<tr>
<td>50+ x ES</td>
<td>-</td>
<td>Air-line**</td>
<td>-</td>
</tr>
</tbody>
</table>

* - Continuous-flow; ** - Continuous-flow or positive pressure demand
^ - 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)

Cartridge respirators should never be used for emergency ingress or in areas of unknown vapour concentrations or oxygen content. The wearer must be warned to leave the contaminated area immediately on detecting any odours through the respirator. The odour may indicate that the mask is not functioning properly, that the vapour concentration is too high, or that the mask is not properly fitted. Because of these limitations, only restricted use of cartridge respirators is considered appropriate.

---

**SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES**

| Information on basic physical and chemical properties | Appearance | Highly flammable liquid; not miscible with water. |

---

*Continued...*
**SECTION 10 STABILITY AND REACTIVITY**

**Reactivity**
See section 7

**Chemical stability**
- Unstable in the presence of incompatible materials.
- Product is considered stable.
- Hazardous polymerisation will not occur.

**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**
Inhalation of vapours or aerosols (mists, fumes), generated by the material during the course of normal handling, may be damaging to the health of the individual. There is some evidence to suggest that the material can cause respiratory irritation in some persons. The body’s response to such irritation can cause further lung damage. Inhalation of high concentrations of gas/vapour causes lung irritation with coughing and nausea, central nervous depression with headache and dizziness, slowing of reflexes, fatigue and inco-ordination. Inhalation hazard is increased at higher temperatures. Central nervous system (CNS) depression may include general discomfort, symptoms of giddiness, headache, dizziness, nausea, anaesthetic effects, slowed reaction time, slurred speech and may progress to unconsciousness. Serious poisonings may result in respiratory depression and may be fatal.

**Ingestion**
Swallowing of the liquid may cause aspiration into the lungs with the risk of chemical pneumonitis; serious consequences may result. (ICSC13733) Accidental ingestion of the material may be damaging to the health of the individual. Ingestion of petroleum hydrocarbons can irritate the pharynx, oesophagus, stomach and small intestine, and cause swellings and ulcers of the mucous. Symptoms include a burning mouth and throat; larger amounts can cause nausea and vomiting, narcosis, weakness, dizziness, slow and shallow breathing, abdominal swelling, unconsciousness and convulsions.

**Skin Contact**
Skin contact with the material may damage the health of the individual; systemic effects may result following absorption. There is some evidence to suggest that this material can cause inflammation of the skin on contact in some persons. Open cuts, abraded or irritated skin should not be exposed to this material Entry into the bloodstream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.

**Eye**
There is some evidence to suggest that this material can cause eye irritation and damage in some persons.

**Chronic**
There has been concern that this material can cause cancer or mutations, but there is not enough data to make an assessment. Harmful: danger of serious damage to health by prolonged exposure through inhalation.
This material can cause serious damage if one is exposed to it for long periods. It can be assumed that it contains a substance which can produce severe defects. Ample evidence from experiments exists that there is a suspicion this material directly reduces fertility.
Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure. Chronic or exposure over long periods to mixed hydrocarbons may produce stupor with dizziness, weakness and visual disturbance, weight loss and anaemia, and reduced liver and kidney function. Skin exposure may result in drying and cracking and redness of the skin. Chronic solvent inhalation exposures may result in nervous system impairment and liver and blood changes. (PATTYS)
### Eye (rabbit)
- **5 mg/24h SEVERE**
- **87 mg mild**

### Skin (human)
- **0.3 mg /3D (int)-mild**

### Solvent Naphtha Petroleum, Light Aliphatic

<table>
<thead>
<tr>
<th>TOXICITY</th>
<th>IRRITATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dermal (rabbit) LD50: &gt;1900 mg/kg</td>
<td>Not Available</td>
</tr>
<tr>
<td>Oral (rat) LD50: &gt;19650 mg/kg</td>
<td>Nil reported</td>
</tr>
</tbody>
</table>

### Xylene

<table>
<thead>
<tr>
<th>TOXICITY</th>
<th>IRRITATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dermal (rabbit) LD50: &gt;1700 mg/kg</td>
<td>Eye (human): 200 ppm irritant</td>
</tr>
<tr>
<td>Inhalation (rat) LC50: 5000 ppm/4hr</td>
<td>Eye (rabbit): 5 mg/24h SEVERE</td>
</tr>
<tr>
<td>Oral (rat) LD50: 4300 mg/kg</td>
<td>Eye (rabbit): 87 mg mild</td>
</tr>
</tbody>
</table>

### Titanium Dioxide

<table>
<thead>
<tr>
<th>TOXICITY</th>
<th>IRRITATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalation (rat) LC50: &gt;2.28 mg/l/4hr</td>
<td>Skin (human): 0.3 mg /3D (int)-mild</td>
</tr>
<tr>
<td>Inhalation (rat) LC50: &gt;3.56 mg/l/4hr</td>
<td></td>
</tr>
<tr>
<td>Inhalation (rat) LC50: &gt;6.82 mg/l/4hr</td>
<td></td>
</tr>
<tr>
<td>Inhalation (rat) LC50: 3.43 mg/l/4hr</td>
<td></td>
</tr>
<tr>
<td>Inhalation (rat) LC50: 5.09 mg/l/4hr</td>
<td></td>
</tr>
<tr>
<td>Oral (rat) LD50: &gt;2000 mg/kg</td>
<td></td>
</tr>
</tbody>
</table>

### White Spirit

<table>
<thead>
<tr>
<th>TOXICITY</th>
<th>IRRITATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalation (rat) LC50: &gt;1400 ppm/8hr</td>
<td>Eye (human): 470 ppm/15m</td>
</tr>
<tr>
<td>Eye (rabbit): 500 mg/24h moderate</td>
<td></td>
</tr>
<tr>
<td>Nil reported</td>
<td></td>
</tr>
</tbody>
</table>

### Ethylbenzene

<table>
<thead>
<tr>
<th>TOXICITY</th>
<th>IRRITATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dermal (rabbit) LD50: ca.15432.6 mg/kg</td>
<td>Eye (rabbit): 500 mg - SEVERE</td>
</tr>
<tr>
<td>Inhalation (mouse) LC50: 35.5 mg/L/2hr</td>
<td>Skin (rabbit): 15 mg/24h mild</td>
</tr>
<tr>
<td>Inhalation (rat) LC50: 55 mg/L/2hr</td>
<td></td>
</tr>
<tr>
<td>Oral (rat) LD50: 3500 mg/kg</td>
<td></td>
</tr>
</tbody>
</table>

**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

**SOLVENT NAPHTHA PETROLEUM, MEDIUM ALIPHATIC**

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. With respect to the carbon chain lengths likely to be present in mineral oil, n-paraffins may be absorbed to a greater extent than iso- or cyclo-paraffins. The major classes of hydrocarbons have been shown to be well absorbed by the gastrointestinal tract in various species. In many cases, the hydrophobic hydrocarbons are ingested in association with dietary lipids. The dependence of hydrocarbon absorption on concomitant triglyceride digestion and absorption is known as the "hydrocarbon continuum hypothesis", and asserts that a series of solubilising phases in the intestinal lumen, created by dietary triglycerides and their digested products, afford hydrocarbons a route to the lipid phase of the intestinal absorptive cell (enterocyte) membrane. While some hydrocarbons may traverse the mucosal epithelium unmetabolised and appear as solutes in lipoprotein particles in intestinal lymph, there is evidence that most hydrocarbons partially separate from nutrient lipids and undergo metabolic transformation in the enterocyte. The enterocyte may play a major role in determining the proportion of an absorbed hydrocarbon that, by escaping initial biotransformation, becomes available for deposition in its unchanged form in peripheral tissues such as adipose tissue, or in the liver, for full range naphthas.

**XYLENE**

Reproductive effector in rats

**TITANIUM DIOXIDE**

The material may produce moderate eye irritation leading to inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis. Exposure to titanium dioxide is via inhalation, swallowing or skin contact. When inhaled, it may deposit in lung tissue and lymph nodes causing dysfunction of the lungs and immune system. Absorption by the stomach and intestines depends on the size of the particle. It penetrated only the outermost layer of the skin, suggesting that healthy skin may be an effective barrier. There is no substantive data on genetic damage, though cases have been reported in experimental animals. Studies have differing conclusions on its cancer-causing potential.

* IUCNID

**WHITE SPIRIT**

white spirit, as CAS RN 8052-41-3

**ETHYLBENZENE**

Ethylbenzene is readily absorbed when inhaled, swallowed or in contact with the skin. It is distributed throughout the body, and passed out through urine. It may irritate the skin, eyes and may cause hearing loss if exposed to high doses. Long Term exposure may cause damage to the kidney, liver and lungs, including a tendency to cancer formation, according to animal testing. There is no research on its effect on sex organs and unborn babies.

**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 DNA. Liver changes, uterine tract, effects on fertility, foetotoxicity, specific developmental abnormalities (musculoskeletal system) recorded.

* IUCNID

**SOLVENT NAPHTHA PETROLEUM, MEDIUM ALIPHATIC & SOLVENT NAPHTHA PETROLEUM, LIGHT ALIPHATIC & WHITE SPIRIT**

for petroleum:

This product contains benzene which is known to cause acute myeloid leukaemia and n-hexane which has been shown to metabolize to compounds which are neurotoxic.

This product contains toluene. There are indications from animal studies that prolonged exposure to high concentrations of toluene may lead to hearing loss.

**Carcinogenicity:** Inhalation exposure to mice causes liver tumours, which are not considered relevant to humans. Inhalation exposure to rats causes kidney
1.1.1

**Mutagenicity:** There is a large database of mutagenicity studies on gasoline and gasoline blending streams, which use a wide variety of endpoints and give predominantly negative results. All in vivo studies in animals and recent studies in exposed humans (e.g. petrol service station attendants) have shown negative results in mutagenicity assays.

**Reproductive Toxicity:** Repeated exposure of pregnant rats to high concentrations of toluene (around or exceeding 1000 ppm) can cause developmental effects, such as lower birth weight and developmental neurotoxicity, on the foetus. However, in a two-generation reproductive study in rats exposed to gasoline vapour condensate, no adverse effects on the foetus were observed.

**Human Effects:** Prolonged/ repeated contact may cause defatting of the skin which can lead to dermatitis and make the skin more susceptible to irritation and penetration by other materials. Lifetime exposure of rodents to gasoline produces carcinogenicity although the relevance to humans has been questioned. Gasoline induces kidney cancer in male rats as a consequence of accumulation of the alpha2-microglobulin protein in hyaline droplets in the male (but not female) rat kidney. Such abnormal accumulation represents lysosomal overload and leads to chronic renal tubular cell degeneration, accumulation of cell debris, mineralisation of renal medullary tubules and necrosis. A sustained regenerative proliferation occurs in epithelial cells with subsequent neoplastic transformation with continued exposure. The alpha2-microglobulin is produced under the influence of hormonal controls in male rats but not in females and, more importantly, not in humans.

**SOLVENT NAPHTHA PETROLEUM, MEDIUM ALIPHATIC & XYLENE**

The substance is classified by IARC as Group 2B: Possibly Carcinogenic to Humans.

**Summary:**

- **Skin Irritation/Corrosion:**
  - Data available but does not fill the criteria for classification
- **Acute Toxicity:**
  - Data available but does not fill the criteria for classification
- **Reproducibility:**
  - Data available but does not fill the criteria for classification
- **STOT - Single Exposure:**
  - Data available but does not fill the criteria for classification
- **Mutagenicity:**
  - Data required to make classification available
- **Respiratory or Skin sensitisation:**
  - Data required to make classification available
- **STOT - Repeated Exposure:**
  - Data required to make classification available
- **Carcinogenicity:**
  - Data required to make classification available
- **Aspiration Hazard:**
  - Data available but does not fill the criteria for classification

---

**SECTION 12 ECOLOGICAL INFORMATION**

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Endpoint</th>
<th>Test Duration (hr)</th>
<th>Species</th>
<th>Value</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>solvent naphtha petroleum, medium aliphatic</td>
<td>EC50</td>
<td>48</td>
<td>Crustacea</td>
<td>&gt;100mg/L</td>
<td>1</td>
</tr>
<tr>
<td>solvent naphtha petroleum, medium aliphatic</td>
<td>EC50</td>
<td>96</td>
<td>Algae or other aquatic plants</td>
<td>&gt;450mg/L</td>
<td>1</td>
</tr>
<tr>
<td>solvent naphtha petroleum, light aliphatic</td>
<td>EC50</td>
<td>72</td>
<td>Algae or other aquatic plants</td>
<td>&gt;6.5mg/L</td>
<td>1</td>
</tr>
<tr>
<td>solvent naphtha petroleum, light aliphatic</td>
<td>EC50</td>
<td>72</td>
<td>Algae or other aquatic plants</td>
<td>&gt;6.5mg/L</td>
<td>1</td>
</tr>
<tr>
<td>solvent naphtha petroleum, light aliphatic</td>
<td>NOEC</td>
<td>72</td>
<td>Algae or other aquatic plants</td>
<td>&lt;0.1mg/L</td>
<td>1</td>
</tr>
<tr>
<td>xylene</td>
<td>LC50</td>
<td>96</td>
<td>Fish</td>
<td>2.6mg/L</td>
<td>2</td>
</tr>
<tr>
<td>xylene</td>
<td>EC50</td>
<td>48</td>
<td>Crustacea</td>
<td>&gt;3.4mg/L</td>
<td>2</td>
</tr>
<tr>
<td>xylene</td>
<td>EC50</td>
<td>72</td>
<td>Algae or other aquatic plants</td>
<td>4.6mg/L</td>
<td>2</td>
</tr>
<tr>
<td>xylene</td>
<td>EC50</td>
<td>24</td>
<td>Crustacea</td>
<td>0.71mg/L</td>
<td>4</td>
</tr>
<tr>
<td>xylene</td>
<td>NOEC</td>
<td>73</td>
<td>Algae or other aquatic plants</td>
<td>0.44mg/L</td>
<td>2</td>
</tr>
<tr>
<td>titanium dioxide</td>
<td>LC50</td>
<td>96</td>
<td>Fish</td>
<td>9.214mg/L</td>
<td>3</td>
</tr>
<tr>
<td>titanium dioxide</td>
<td>EC50</td>
<td>48</td>
<td>Crustacea</td>
<td>&gt;10mg/L</td>
<td>2</td>
</tr>
<tr>
<td>titanium dioxide</td>
<td>EC50</td>
<td>72</td>
<td>Algae or other aquatic plants</td>
<td>5.63mg/L</td>
<td>4</td>
</tr>
<tr>
<td>titanium dioxide</td>
<td>EC20</td>
<td>72</td>
<td>Algae or other aquatic plants</td>
<td>1.81mg/L</td>
<td>4</td>
</tr>
<tr>
<td>titanium dioxide</td>
<td>NOEC</td>
<td>306</td>
<td>Fish</td>
<td>0.069mg/L</td>
<td>4</td>
</tr>
<tr>
<td>ethylbenzene</td>
<td>LC50</td>
<td>96</td>
<td>Fish</td>
<td>0.004mg/L</td>
<td>4</td>
</tr>
<tr>
<td>ethylbenzene</td>
<td>EC50</td>
<td>48</td>
<td>Crustacea</td>
<td>1.184mg/L</td>
<td>4</td>
</tr>
<tr>
<td>ethylbenzene</td>
<td>EC50</td>
<td>96</td>
<td>Algae or other aquatic plants</td>
<td>3.6mg/L</td>
<td>2</td>
</tr>
<tr>
<td>ethylbenzene</td>
<td>EC50</td>
<td>96</td>
<td>Crustacea</td>
<td>&gt;0.4mg/L</td>
<td>1</td>
</tr>
<tr>
<td>ethylbenzene</td>
<td>NOEC</td>
<td>168</td>
<td>Algae or other aquatic plants</td>
<td>0.96mg/L</td>
<td>5</td>
</tr>
</tbody>
</table>

**Legend:**

- **– Data available but does not fill the criteria for classification**
- **– Data required to make classification available**
- **– Data Not Available to make classification**
Persistence and degradability

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Persistence: Water/Soil</th>
<th>Persistence: Air</th>
</tr>
</thead>
<tbody>
<tr>
<td>xylene</td>
<td>HIGH (Half-life = 360 days)</td>
<td>LOW (Half-life = 1.83 days)</td>
</tr>
<tr>
<td>titanium dioxide</td>
<td>HIGH</td>
<td>HIGH</td>
</tr>
<tr>
<td>ethylbenzene</td>
<td>HIGH (Half-life = 228 days)</td>
<td>LOW (Half-life = 3.57 days)</td>
</tr>
</tbody>
</table>

Bioaccumulative potential

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Bioaccumulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>xylene</td>
<td>MEDIUM (BCF = 740)</td>
</tr>
<tr>
<td>titanium dioxide</td>
<td>LOW (BCF = 10)</td>
</tr>
<tr>
<td>ethylbenzene</td>
<td>LOW (BCF = 79.43)</td>
</tr>
</tbody>
</table>

Mobility in soil

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Mobility</th>
</tr>
</thead>
<tbody>
<tr>
<td>titanium dioxide</td>
<td>LOW (KOC = 23.74)</td>
</tr>
<tr>
<td>ethylbenzene</td>
<td>LOW (KOC = 517.8)</td>
</tr>
</tbody>
</table>

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods

- Containers may still present a chemical hazard/danger when empty.
- Return to supplier for reuse/recycling if possible.
- Otherwise:
  - If container can not be cleaned sufficiently well to ensure that residuals do not remain or if the container cannot be used to store the same product, then puncture containers, to prevent re-use, and bury at an authorised landfill.
  - Where possible retain label warnings and SDS and observe all notices pertaining to the product.
  - DO NOT allow wash water from cleaning or process equipment to enter drains.
  - It may be necessary to collect all wash water for treatment before disposal.
  - In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.
  - Where in doubt contact the responsible authority.
  - Recycle wherever possible.
  - Consult manufacturer for recycling options or consult local or regional waste management authority for disposal if no suitable treatment or disposal facility can be identified.
  - Dispose of by: burial in a land-fill specifically licenced to accept chemical and/or pharmaceutical wastes or incineration in a licenced apparatus (after admixture with suitable combustible material).
  - Decontaminate empty containers. Observe all label safeguards until containers are cleaned and destroyed.

SECTION 14 TRANSPORT INFORMATION

Labels Required

- Marine Pollutant: NO
- HAZCHEM: <3YE

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): Class 3, Subrisk: Not Applicable
- Packing group: II
- Environmental hazard: Not Applicable
- Special precautions for user: Special provisions: 163/367, Limited quantity: 5 L

Air transport (ICAO-IATA / DGR)

- UN number: 1263
- UN proper shipping name: Paint (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base); Paint related material (including paint thinning or reducing compounds)
### Section 15 Regulatory Information

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

<table>
<thead>
<tr>
<th>Substance Description</th>
<th>Regulatory Lists</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOLVENT NAPHTHA PETROLEUM, MEDIUM ALIPHATIC (64742-88-7) IS FOUND ON THE FOLLOWING REGULATORY LISTS</td>
<td>Australia Exposure Standards, Australia Hazardous Substances Information System - Consolidated Lists, Australia Inventory of Chemical Substances (AICS)</td>
</tr>
<tr>
<td>SOLVENT NAPHTHA PETROLEUM, LIGHT ALIPHATIC (64742-89-8) IS FOUND ON THE FOLLOWING REGULATORY LISTS</td>
<td>Australia Exposure Standards, Australia Hazardous Substances Information System - Consolidated Lists, Australia Inventory of Chemical Substances (AICS)</td>
</tr>
<tr>
<td>XYLENE (1330-20-7) IS FOUND ON THE FOLLOWING REGULATORY LISTS</td>
<td>Australia Exposure Standards, Australia Hazardous Substances Information System - Consolidated Lists, Australia Inventory of Chemical Substances (AICS)</td>
</tr>
<tr>
<td>TITANIUM DIOXIDE (13463-67-7) IS FOUND ON THE FOLLOWING REGULATORY LISTS</td>
<td>Australia Exposure Standards, Australia Inventory of Chemical Substances (AICS)</td>
</tr>
<tr>
<td>WHITE SPIRIT (8052-41-3) IS FOUND ON THE FOLLOWING REGULATORY LISTS</td>
<td>Australia Exposure Standards, Australia Hazardous Substances Information System - Consolidated Lists, Australia Inventory of Chemical Substances (AICS)</td>
</tr>
<tr>
<td>ETHYLBENZENE (100-41-4) IS FOUND ON THE FOLLOWING REGULATORY LISTS</td>
<td>Australia Exposure Standards, Australia Hazardous Substances Information System - Consolidated Lists, Australia Inventory of Chemical Substances (AICS)</td>
</tr>
</tbody>
</table>

#### National Inventory Status

<table>
<thead>
<tr>
<th>Country</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>AICS</td>
</tr>
<tr>
<td>Canada</td>
<td>DSL</td>
</tr>
<tr>
<td></td>
<td>N (white spirit; xylene; ethylbenzene; solvent naphtha petroleum, medium aliphatic; solvent naphtha petroleum, light aliphatic)</td>
</tr>
</tbody>
</table>
SECTION 16 OTHER INFORMATION

Other information

Ingredients with multiple cas numbers

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS No</th>
</tr>
</thead>
</table>

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.

A list of reference resources used to assist the committee may be found at:

www.chemwatch.net

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

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
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

This document is copyright. Apart from any fair dealing for the purposes of private study, research, review or criticism, as permitted under the Copyright Act, no part may be reproduced by any process without written permission from CHEMWATCH.
TEL (+61 3) 9572 4700.