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

Product Identifier

<table>
<thead>
<tr>
<th>Product name</th>
<th>2K129 WHITE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Synonyms</td>
<td>2K129</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>
</tr>
</thead>
<tbody>
<tr>
<td>Address</td>
<td>73 Hallam South Road Hallam VIC 3803 Australia</td>
</tr>
<tr>
<td>Telephone</td>
<td>+61 3 9796 3400</td>
</tr>
<tr>
<td>Fax</td>
<td>+61 3 9796 4500</td>
</tr>
<tr>
<td>Website</td>
<td><a href="http://www.hichem.com.au">www.hichem.com.au</a></td>
</tr>
<tr>
<td>Email</td>
<td><a href="mailto:info@hichem.com.au">info@hichem.com.au</a></td>
</tr>
</tbody>
</table>

Emergency telephone number

<table>
<thead>
<tr>
<th>Association / Organisation</th>
<th>HiChem Paint Technologies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency telephone numbers</td>
<td>In Australia: HiChem: +61 3 9796 3400</td>
</tr>
<tr>
<td>Other emergency telephone numbers</td>
<td>+800 2436 225</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 039 006</td>
<td>1800 039 006</td>
<td>+612 9196 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

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

<table>
<thead>
<tr>
<th>CHEMWATCH HAZARD RATINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammability</td>
</tr>
<tr>
<td>Toxicity</td>
</tr>
<tr>
<td>Body Contact</td>
</tr>
<tr>
<td>Reactivity</td>
</tr>
<tr>
<td>Chronic</td>
</tr>
</tbody>
</table>

Poisons Schedule | Not Applicable |

Classification [1]

| Flammable Liquid Category 2, Acute Toxicity (Dermal) Category 4, Acute Toxicity (Inhalation) Category 4, Specific target organ toxicity - single exposure Category 3 (narcotic effects) |

Legend:

Label elements

GHS label elements

| SIGNAL WORD | DANGER |

Hazard statement(s)

- H225 Highly flammable liquid and vapour.
- H312 Harmful in contact with skin.
- H332 Harmful if inhaled.
- H336 May cause drowsiness or dizziness.
- AUH066 Repeated exposure may cause skin dryness and cracking

Precautionary statement(s) Prevention

- P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
- P271 Use only outdoors or in a well-ventilated area.
- 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.
- P261 Avoid breathing mist/vapours/spray.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statement(s) Response

- P363 Wash contaminated clothing before reuse.
- 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.
- P302+P352 IF ON SKIN: Wash with plenty of soap and water.
- P303+P361+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.

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 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>123-86-4</td>
<td>10-30</td>
<td>n-butyl acetate</td>
</tr>
<tr>
<td>Not avai.</td>
<td>10-30</td>
<td>acrylic polymer</td>
</tr>
<tr>
<td>1330-20-7</td>
<td>10-30</td>
<td>xylene</td>
</tr>
<tr>
<td>108-65-6</td>
<td>1-5</td>
<td>propylene glycol monomethyl ether acetate, alpha-isomer</td>
</tr>
</tbody>
</table>

balance Ingredients determined not to be hazardous

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).
### 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 pharmacologically. 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.

Treat symptomatically for simple esters:

#### BASIC TREATMENT

- Establish a patent airway with suction where necessary.
- Watch for signs of respiratory insufficiency and assist ventilation as necessary.
- Administer oxygen by non-rebreather mask at 10 to 15 l/min.
- Monitor and treat, where necessary, for pulmonary oedema.
- Monitor and treat, where necessary, for shock.
- **DO NOT** use emetics. Where ingestion is suspected rinse mouth and give up to 200 ml water (5 ml/kg recommended) for dilution where patient is able to swallow, has a strong gag reflex and does not drool.
- Give activated charcoal.

#### ADVANCED TREATMENT

- Consider orotracheal or nasotracheal intubation for airway control in unconscious patient or where respiratory arrest has occurred.
- Positive pressure ventilation using a bag-valve mask might be of use.
- Monitor and treat, where necessary, for arrhythmias.
- Start an IV D5W TKO. If signs of hypovolaemia are present use lactated Ringers solution. Fluid overload might create complications.
- Drug therapy should be considered for pulmonary oedema.
- Hypotension with signs of hypovolaemia requires the cautious administration of fluids. Fluid overload might create complications.
- Treat seizures with diazepam.
- Proparacaine hydrochloride should be used to assist eye irrigation.

#### EMERGENCY DEPARTMENT

- Laboratory analysis of complete blood count, serum electrolytes, BUN, creatinine, glucose, urinalysis, baseline for serum aminotransferases (ALT and AST), calcium, phosphorus and magnesium, may assist in establishing a treatment regime. Other useful analyses include arion and osmolar gaps, arterial blood gases (ABGs), chest radiographs and electrocardiograph.
- Positive end-expiratory pressure (PEEP)-assisted ventilation may be required for acute parenchymal injury or adult respiratory distress syndrome.
- Consult a toxicologist as necessary.

#### BRONSTEIN, A.C. and CURRANCE, P.L. EMERGENCY CARE FOR HAZARDOUS MATERIALS EXPOSURE: 2nd Ed. 1994

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 withuffed endotracheal tube is recommended. The use of charcoal and cathartics is equivocal.
- 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.
- 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 (adrenaline) 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 amrinonphylline 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>Methylhippu-ric acids in urine</td>
<td>1.5 gm/gm creatinine</td>
<td>End of shift</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2 mg/min</td>
<td>Last 4 hrs of shift</td>
<td></td>
</tr>
</tbody>
</table>

### SECTION 5 FIREFIGHTING MEASURES

#### Extinguishing media

- Alcohol stable 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

- Continued...
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.
- Prevent, by any means available, spillage from entering drains or water course.
- If safe, switch off electrical equipment until vapour fire hazard removed.
- Use water delivered as a fine spray to control 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 flammable.
- Moderate fire hazard when exposed to heat or flame.
- Vapour forms an explosive mixture with air.
- Moderate explosion hazard when exposed to heat or flame.
- 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.

HAZCHEM ▼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

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.
- Absorb remaining product with sand, earth or vermiculite.
- 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

- Containers, even those that have been emptied, may contain explosive vapours.
- Do NOT cut, grind, weld or perform similar operations on or near containers.
- DO NOT allow clothing wet with material to stay in contact with skin.
- Avoid all personal contact, including inhalation.
- Wear protective clothing when risk of overexposure 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 or ignition sources.
- Avoid generation of static electricity.
- DO NOT use plastic buckets.
- Earth all lines and equipment.
- Use spark-free tools when handling.
- Avoid contact with incompatible materials.
- When handling, DO NOT eat, drink or smoke.
Conditions for safe storage, including any incompatibilities

- Packing as supplied by manufacturer.
- Plastic containers may only be used if approved for flammable liquid.
- Check that containers are clearly labelled and free from leaks.
- For low viscosity materials: (i) Drums and jerry cans must be of the non-removable head type. (ii) Where a can is to be used as an inner package, the can must have a screwed enclosure.
- For materials with a viscosity of at least 2680 cSt (23 deg. C): (i) Removable head packaging; (ii) Cans with friction closures and (iii) low pressure tubes and cartridges may be used.
- For manufactured product having a viscosity of at least 250 cSt (23 deg. C) must have a screwed enclosure.
- Storage tanks should be above ground and diked to hold entire contents.
- Avoid strong acids, bases.
- Avoid reaction with oxidising agents.

Suitable container

- Store in original containers in approved flammable liquid storage area.
- Store away from incompatible materials in a cool, dry, well-ventilated area.
- DO NOT store in pits, depressions, basements or areas where vapours may be trapped.
- No smoking, naked lights, heat or ignition sources.
- Storage areas should be clearly identified, well illuminated, clear of obstruction and accessible only to trained and authorised personnel - adequate security must be provided so that unauthorised personnel do not have access.
- Store according to applicable regulations for flammable materials for storage tanks, containers, piping, buildings, rooms, cabinets, allowable quantities and minimum storage distances.
- Use non-sparking ventilation systems, approved explosion proof equipment and intrinsically safe electrical systems.
- Have appropriate extinguishing capability in storage area (e.g. portable fire extinguishers - dry chemical, foam or carbon dioxide) and flammable gas detectors.
- Keep adsorbents for leaks and spills readily available.
- Protect containers against physical damage and check regularly for leaks.
- Observe manufacturer's storage and handling recommendations contained within this SDS.
- In addition, for tank storages (where appropriate):
  - Store in grounded, properly designed and approved vessels and away from incompatible materials.
  - For bulk storages, consider use of floating roof or nitrogen blanketed vessels; where venting to atmosphere is possible, equip storage tank vents with flame arrestors; inspect tank vents during winter conditions for vapour/ ice build-up.

Storage incompatibility

- Avoid strong acids, bases.
- Avoid reaction with oxidising agents.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

<table>
<thead>
<tr>
<th>OCCUPATIONAL EXPOSURE LIMITS (OEL)</th>
</tr>
</thead>
</table>

**INGREDIENT DATA**

<table>
<thead>
<tr>
<th>Source/Standard</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>n-butyl acetate</td>
<td>n-Butyl acetate</td>
<td>713 mg/m³/150 ppm</td>
<td>950 mg/m³/200 ppm</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>Australia Exposure Standards</td>
<td>xylene</td>
<td>Xylene (α-, β-, γ-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>propylene glycol monomethyl ether acetate, alpha-isomer</td>
<td>1-Methoxy-2-propanol acetate</td>
<td>274 mg/m³/50 ppm</td>
<td>546 mg/m³/100 ppm</td>
<td>Not Available</td>
<td>Sk</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>n-butyl acetate</td>
<td>Butyl acetate, n-</td>
<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>xylene</td>
<td>Xylenes</td>
<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>propylene glycol monomethyl ether acetate, alpha-isomer</td>
<td>Propylene glycol monomethyl ether acetate, alpha-isomer; (1-Methoxypropyl-2-acetate)</td>
<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>propylene glycol monomethyl ether acetate, beta-isomer</td>
<td>Propylene glycol monomethyl ether acetate, beta-isomer; (2-Methoxypropyl-1-acetate)</td>
<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Original IDLH</th>
<th>Revised IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>n-butyl acetate</td>
<td>10,000 ppm</td>
<td>1,700 [LEL]ppm</td>
</tr>
<tr>
<td>acrylic polymer</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>propylene glycol monomethyl ether acetate, alpha-isomer</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
</tbody>
</table>

**Exposure controls**

**Appropriate engineering 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.
- 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.

### Air Speed

<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 filing, low speed conveyor transfers, welding, spray drift, plating acid fumes, picking (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:

<table>
<thead>
<tr>
<th>Lower end of the range</th>
<th>Upper end of the range</th>
</tr>
</thead>
<tbody>
<tr>
<td>1: Room air currents minimal or favourable to capture</td>
<td>1: Disturbing room air currents</td>
</tr>
<tr>
<td>2: Contaminants of low toxicity or of nuisance value only.</td>
<td>2: Contaminants of high toxicity</td>
</tr>
<tr>
<td>3: Intermittent, low production.</td>
<td>3: High production, heavy use</td>
</tr>
<tr>
<td>4: Large hood or large air mass in motion</td>
<td>4: Small hood-local control only</td>
</tr>
</tbody>
</table>

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]

### Eye and face protection

- Wear safety footwear or Safety Gumboots, e.g. rubber.
- Wear chemical protective gloves, e.g. PVC.
- Wear non-perfumed moisturizer is recommended.
- 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.

### Skin protection

- The material may produce skin sensitisation in predisposed individuals. Care must be taken, when removing gloves and other protective equipment, to avoid all possible skin contact.
- Contaminated leather items, such as shoes, belts and watch-bands should be removed and destroyed.

**NOTE:**

- 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. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- The exact break through time for substances has to be obtained from the manufacturer of the protective gloves and has to be observed when making a final choice.
- 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

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 2161.10.1 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 2161.10.1 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.

- Gloves should be replaced.

For general applications, gloves with a thickness typically greater than 0.35 mm, are recommended.

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, overshoe) 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 as 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.
- 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 as 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.

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:
2K129 WHITE

<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+NEOPR+NITRILE</td>
<td>C</td>
</tr>
<tr>
<td>NATURAL RUBBER</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</td>
<td>C</td>
</tr>
<tr>
<td>PE/EVAL/PE</td>
<td>C</td>
</tr>
<tr>
<td>PVA</td>
<td>C</td>
</tr>
<tr>
<td>PVC</td>
<td>C</td>
</tr>
<tr>
<td>PVDC/PE/PVDC</td>
<td>C</td>
</tr>
<tr>
<td>TEFLOW</td>
<td>C</td>
</tr>
<tr>
<td>VITON</td>
<td>C</td>
</tr>
<tr>
<td>VITON/BUTYL</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.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Flammable liquid with a characteristic odour; does not mix with water.</td>
</tr>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Odour</td>
<td>Not Available</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>Not Available</td>
</tr>
<tr>
<td>Relative density</td>
<td>Water = 1</td>
</tr>
<tr>
<td>Partition coefficient</td>
<td>n-octanol / water                     Not Available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>(°C)                           Not Available</td>
</tr>
</tbody>
</table>

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 10 x ES</td>
<td>A-AUS / Class 1</td>
<td>-</td>
<td>A-PAPR-AUS / Class 1</td>
</tr>
<tr>
<td>up to 50 x ES</td>
<td>Air-line*</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>up to 100 x ES</td>
<td>-</td>
<td>A-3</td>
<td>-</td>
</tr>
<tr>
<td>100+ x ES</td>
<td>-</td>
<td>Air-line**</td>
<td>-</td>
</tr>
</tbody>
</table>

* Continuous-flow; ** Continuous-flow or positive pressure demand
A(All classes) = Organic vapours, B AUS or B1 = Acid gases, 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 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 harmful.
Inhalation of vapours may cause drowsiness and dizziness. This may be accompanied by sleepiness, reduced alertness, loss of reflexes, lack of co-ordination, and vertigo.
On exposure to mixed trimethylbenzenes, some people may become nervous, tense, anxious and have difficulty breathing. There may be a reduction red blood cells and bleeding abnormalities. There may also be drowsiness.
At sufficiently high doses the material may be neurotoxic (i.e. poisonous to the nervous system).
High or repeated doses of 2,4-pentanedione produced difficulty in breathing, brain disease and central nervous system depression with damage to the thymus in experimental animals. Inhalation of its vapours may cause unconsciousness.
Headache, fatigue, tiredness, irritability and digestive disturbances (nausea, loss of appetite and bloating) are the most common symptoms of xylene overexposure. Injury to the heart, liver, kidneys and nervous system has also been noted amongst workers.
Xylene is a central nervous system depressant.
Acute effects from inhalation of high vapour concentrations may be chest and nasal irritation with coughing, sneezing, headache and even nausea.
The main effects of simple esters are irritation, stupor and insensibility. Headache, drowsiness, dizziness, coma and behavioural changes may occur.
Prolonged exposure may cause headache, nausea and ultimately loss of consciousness.

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 2,4-pentanedione (acetylacetone) may cause irritation of the mouth, gullet and stomach, abdominal discomfort, nausea, vomiting, diarrhoea, dizziness, malaise and fainting.
At sufficiently high doses the material may be neurotoxic (i.e. poisonous to the nervous system).

Skin Contact
Skin contact with the material may be harmful; systemic effects may result following absorption.
Repeated exposure may cause skin cracking, flaking or drying following normal handling and use.
There is some evidence to suggest that the material may cause moderate inflammation of the skin either following direct contact or after a delay of some time.
Repeated exposure can cause contact dermatitis which is characterised by redness, swelling and blistering.
Open cuts, abraded or irritated skin should not be exposed to this material
2,4-Pentadione may produce acute itching rash, skin inflammation, reddening, pain and allergic rashes. Prolonged contact may cause burns, ulceration and bleeding.
Enter into the blood-stream, 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 that material may produce eye irritation in some persons and produce eye damage 24 hours or more after instillation. Severe inflammation may be expected with redness.
Exposure to 2, 4-pentadione may produce excessive redness of the eyes and swelling of the conjunctiva, blinking and tearing. However, corneal damage is unlikely.

Chronic
Prolonged or repeated skin contact may cause drying with cracking, irritation and possible dermatitis following.
Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure.
There is limited evidence that, skin contact with this product is more likely to cause a sensitisation reaction in some persons compared to the general population.
On the basis of limited epidemiological or animal data, it has been concluded that prolonged inhalation of the material, in an occupational setting, may increase the risk of cancer in humans.
There is some evidence from animal testing that exposure to this material may result in toxic effects to the unborn baby.
There has been some concern that this material can cause cancer or mutations but there is not enough data to make an assessment.
Repeated overexposure to 200 ppm 2,4-pentanedione vapour may result in inflammation of the nasal mucosa. Higher concentrations may produce central nervous system effects, and immune system and bone marrow deficits.
Women exposed to xylene in the first 3 months of pregnancy showed a slightly increased risk of miscarriage and birth defects. Evaluation of workers chronically exposed to xylene has demonstrated lack of genetic toxicity.

Continued...
Exposure to the material for prolonged periods may cause physical defects in the developing embryo (teratogenesis).

<table>
<thead>
<tr>
<th>Compound</th>
<th>Toxicity</th>
<th>Irritation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2K129 WHITE</strong></td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Compound</th>
<th>Toxicity</th>
<th>Irritation</th>
</tr>
</thead>
<tbody>
<tr>
<td>n-butyl acetate</td>
<td>Dermal (rabbit) LD50: &gt;14080 mg/kg[^1]</td>
<td>Not Available</td>
</tr>
<tr>
<td></td>
<td>Inhalation (rat) LC50: 390 ppm/4hr[^2]</td>
<td>Eye (rabbit): 20 mg (open) - SEVERE</td>
</tr>
<tr>
<td></td>
<td>Oral (rat) LD50: 10736 mg/kg[^1]</td>
<td>Skin (rabbit): 500 mg/24h-moderate</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Compound</th>
<th>Toxicity</th>
<th>Irritation</th>
</tr>
</thead>
<tbody>
<tr>
<td>acrylic polymer</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Compound</th>
<th>Toxicity</th>
<th>Irritation</th>
</tr>
</thead>
<tbody>
<tr>
<td>xylene</td>
<td>Dermal (rabbit) LD50: &gt;1700 mg/kg[^2]</td>
<td>Not Available</td>
</tr>
<tr>
<td></td>
<td>Inhalation (rat) LC50: 5000 ppm/4hr[^2]</td>
<td>Eye (rabbit): 5 mg/24h - SEVERE</td>
</tr>
<tr>
<td></td>
<td>Oral (rat) LD50: 4300 mg/kg[^2]</td>
<td>Eye (rabbit): 87 mg mild</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Skin (rabbit): 500 mg/24h moderate</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

**ACRYLIC POLYMER**

No significant acute toxicological data identified in literature search.

**XYLENE**

The substance is classified by IARC as Group 3: NOT classifiable as to its carcinogenicity to humans. Evidence of carcinogenicity may be inadequate or limited in animal testing. Reproductive effectors in rats

for propylene glycol ethers (PGEs):

Typical propylene glycol ethers include propylene glycol n-butyl ether (PnB); dipropylene glycol n-butyl ether (DPnB); dipropylene glycol methyl ether acetate (DPMMA); tripropylene glycol methyl ether (TPM).

Testing of a wide variety of propylene glycol ethers (PGEs) has shown that propylene glycol-based ethers are less toxic than some ethers of the ethylene series. The common toxicities associated with the lower molecular weight homologues of the ethylene series, such as adverse effects on reproductive organs, the developing embryo and fetus, blood, haemolytic effects, or thymus, are not seen with the commercial-grade propylene glycol ethers. In the ethylene series, metabolism of the terminal hydroxyl group produces an alkoxycarboxylic acid. The reproductive and developmental toxicities of the lower molecular weight homologues in the ethylene series are due specifically to the formation of methoxyacetic and ethoxyacetic acids. Longer chain length homologues in the ethylene series are not associated with the reproductive toxicity but can cause haemolysis in sensitive species, also through formation of an alkoxycarboxylic acid. The predominant alpha isomer of all the PGEs (thermodynamically favored during manufacture of PGEs) is a secondary alcohol incapable of forming an alkoxycarboxylic acid. In contrast beta-isomers are able to form the alkoxycarboxylic acids and these are linked to teratogenic effects (and possibly haemolytic effects).

This alpha isomer comprises greater than 95% of the isomeric mixture in the commercial product. Because the alpha isomer cannot form an alkoxycarboxylic acid, this is the most likely reason for the lack of toxicity shown by the PGEs as distinct from the lower molecular weight ethylene glycol ethers. More importantly, however, very extensive empirical test data show that this class of commercial-grade ethylene glycol ether presents a low toxicity hazard. PGEs, whether mono-, di- or tripropylene glycol-based (and no matter what the alcohol group), show a very similar pattern of low to non-detectable toxicity of any type at doses or exposure levels greatly exceeding those showing pronounced effects from the ethylene series. One of the primary metabolites of the propylene glycol ethers is propylene glycol, which is of low toxicity and completely metabolised in the body.

As a class, the propylene glycol ethers are rapidly absorbed and distributed throughout the body when introduced by inhalation or oral exposure. Dermal absorption is somewhat slower but subsequent distribution is rapid. Most excretion for PGEs is via the urine and expired air. A small portion is excreted in the faeces.

As a group PGEs exhibit low acute toxicity by the oral, dermal, and inhalation routes. Rat oral LD50s range from >3,000 mg/kg (PnB) to >5,000 mg/kg (DPMMA). Dermal LD50s are all > 2,000 mg/kg (PnB, & DPnB; where no deaths occurred), and ranging up to >15,000 mg/kg (TPM). Inhalation LC50 values were higher than 5,000 mg/m3 for DPnB (4-hour exposure), and TPM (1-hour exposure). For PnB, the 4-hour LC50 is >2,040 mg/m3. For PnB, the 4-hour LC50 was >651 ppm (3,412 mg/m3), representing the highest practically attainable vapor level. No deaths occurred at these concentrations. PnB and TPM are moderately irritating to eyes while the remaining category members are only slightly irritating to non-irritating. PnB is moderately irritating to skin while the remaining category members are slightly to non-irritating.

None are skin sensitisers.

In repeated dose studies ranging in duration from 2 to 13 weeks, few adverse effects were found even at high exposure levels and effects that did occur were mild in nature. By the oral route of administration, NOAELs of 350 mg/kg-d (PnB – 13 wk) and 450 mg/kg-d (DPnB – 13 wk) were observed for liver and kidney weight increases (without accompanying histopathology). LOAELs for these two chemicals were 1000 mg/kg-d (highest dose tested).

Dermal repeated-dose toxicity tests have been performed for many PGEs. For PnB, no effects were seen in a 13 wk study at doses as high as 1,000 mg/kg-d. A dose of 273 mg/kg-d constituted a LOAEL (increased organ weights without histopathology) in a 13-week dermal study for DPnB. For TPM, increased kidney weights (no histopathology) and transiently decreased body weights were found at a dose of 2,895 mg/kg-d in a 90-day study in rabbits. By inhalation, no effects were observed in 2-week studies in rats at the highest tested concentrations of 5244 mg/m3 (600 ppm) for PnB and 2,010 mg/m3 (260 ppm) for DPnB. TPM caused increased liver weights without histopathology by inhalation in a 2-week study at a LOAEL of 360 mg/m3 (43 ppm). In this study, the highest tested TPM concentration, 1010 mg/m3 (120 ppm), also caused increased liver weights without accompanying histopathology. Although no repeated-dose studies are available for the oral route for TPM, or for any route for DPnMA, it is anticipated that these chemicals would behave similarly to other category members.

One and two-generation reproductive toxicity testing has been conducted in mice, rats, and rabbits via the oral or inhalation routes of exposure on PnM and PMA. In an inhalation rat study using PM, the NOAEL for parental toxicity is 300 ppm (1106 mg/m3) with decreases in body and organ weights occurring at the
<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>n-butyl acetate</td>
<td>LC50</td>
<td>96</td>
<td>Fish</td>
<td>18mg/L</td>
<td>2</td>
</tr>
<tr>
<td>n-butyl acetate</td>
<td>EC50</td>
<td>48</td>
<td>Crustacea</td>
<td>&lt;30mg/L</td>
<td>1</td>
</tr>
<tr>
<td>n-butyl acetate</td>
<td>EC50</td>
<td>96</td>
<td>Algae or other aquatic plants</td>
<td>1.675mg/L</td>
<td>3</td>
</tr>
<tr>
<td>n-butyl acetate</td>
<td>EC50</td>
<td>96</td>
<td>Fish</td>
<td>18mg/L</td>
<td>2</td>
</tr>
<tr>
<td>xyylene</td>
<td>LC50</td>
<td>96</td>
<td>Fish</td>
<td>2.0mg/L</td>
<td>2</td>
</tr>
<tr>
<td>xyylene</td>
<td>EC50</td>
<td>48</td>
<td>Crustacea</td>
<td>&gt;3.4mg/L</td>
<td>2</td>
</tr>
<tr>
<td>xyylene</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>xyylene</td>
<td>EC50</td>
<td>24</td>
<td>Crustacea</td>
<td>0.71mg/L</td>
<td>4</td>
</tr>
<tr>
<td>xyylene</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>propylene glycol monomethyl ether acetate, alpha-isomer</td>
<td>LC50</td>
<td>96</td>
<td>Fish</td>
<td>100mg/L</td>
<td>1</td>
</tr>
<tr>
<td>propylene glycol monomethyl ether acetate, alpha-isomer</td>
<td>EC50</td>
<td>48</td>
<td>Crustacea</td>
<td>&gt;408mg/L</td>
<td>1</td>
</tr>
<tr>
<td>propylene glycol monomethyl ether acetate, alpha-isomer</td>
<td>EC50</td>
<td>96</td>
<td>Algae or other aquatic plants</td>
<td>9.337mg/L</td>
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<td>propylene glycol monomethyl ether acetate, alpha-isomer</td>
<td>EC0</td>
<td>24</td>
<td>Crustacea</td>
<td>=500mg/L</td>
<td>1</td>
</tr>
<tr>
<td>propylene glycol monomethyl ether acetate, alpha-isomer</td>
<td>NOEC</td>
<td>336</td>
<td>Fish</td>
<td>47.5mg/L</td>
<td>2</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

SECTION 12 ECOLOGICAL INFORMATION

For 1,2,4-Trimethylbenzene:
Half-life (hr) air: 0.48-46; 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.
### Persistence and degradability

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Persistence: Water/Soil</th>
<th>Persistence: Air</th>
</tr>
</thead>
<tbody>
<tr>
<td>n-butyl acetate</td>
<td>LOW</td>
<td></td>
</tr>
<tr>
<td>xylene</td>
<td>HIGH (Half-life = 360 days)</td>
<td>LOW (Half-life = 1.83 days)</td>
</tr>
<tr>
<td>propylene glycol monomethyl ether acetate, alpha-isomer</td>
<td>LOW</td>
<td>LOW</td>
</tr>
</tbody>
</table>

### Bioaccumulative potential

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Bioaccumulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>n-butyl acetate</td>
<td>LOW (BCF = 14)</td>
</tr>
<tr>
<td>xylene</td>
<td>MEDIUM (BCF = 740)</td>
</tr>
<tr>
<td>propylene glycol monomethyl ether acetate, alpha-isomer</td>
<td>LOW (LogKOW = 0.56)</td>
</tr>
</tbody>
</table>

### Mobility in soil

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Mobility</th>
</tr>
</thead>
<tbody>
<tr>
<td>n-butyl acetate</td>
<td>LOW (KOC = 20.86)</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 cannot 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.

Legislation addressing waste disposal requirements may differ by country, state and/or territory. Each user must refer to laws operating in their area. In some areas, certain wastes must be tracked. A Hierarchy of Controls seems to be common - the user should investigate:

- Reduction
- Reuse
- Recycling
- Disposal (if all else fails)

This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use. If it has been contaminated, it may be possible to reclaim the product by filtration, distillation or some other means. Shelf life considerations should also be applied in making decisions of this type.

Note that properties of a material may change in use, and recycling or reuse may not always be appropriate.

- 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 landfill specifically licensed 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: <Y

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: III
- Environmental hazard: Not Applicable

Special precautions for user:
- Special provisions: 163 223 367
- 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)
- Transport hazard class(es):
  - ICAO/IATA Class: 3
  - ICAO / IATA Subrisk: Not Applicable
  - ERG Code: 3L
- Packing group: III
- Environmental hazard: Not Applicable

Special precautions for user:
- Special provisions: A3 A72 A192
- Cargo Only Packing Instructions: 366
- Cargo Only Maximum Qty / Pack: 220 L
## Passenger and Cargo Packing Instructions

<table>
<thead>
<tr>
<th>Instructions</th>
<th>Max Qty / Pack</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passenger and Cargo Packing Instructions</td>
<td>355 L</td>
</tr>
<tr>
<td>Passenger and Cargo Maximum Qty / Pack</td>
<td>60 L</td>
</tr>
<tr>
<td>Passenger and Cargo Limited Quantity Packing Instructions</td>
<td>Y344 L</td>
</tr>
<tr>
<td>Passenger and Cargo Limited Maximum Qty / Pack</td>
<td>10 L</td>
</tr>
</tbody>
</table>

## Sea transport (IMDG-Code / GGVSee)

<table>
<thead>
<tr>
<th>UN number</th>
<th>UN proper shipping name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1263</td>
<td>PAINT (including paint, lacquer, enamel, stain, shellac solutions, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning or reducing compound)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Transport hazard class(es)</th>
<th>IMDG Class</th>
<th>IMDG Subrisk</th>
</tr>
</thead>
<tbody>
<tr>
<td>IMDG Class 3</td>
<td></td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Packing group</th>
<th>III</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Environmental hazard</th>
<th>Not Applicable</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Special precautions for user</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMS Number</td>
</tr>
<tr>
<td>Special provisions</td>
</tr>
<tr>
<td>Limited Quantities</td>
</tr>
</tbody>
</table>

## 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

**N-BUTYL ACETATE (123-86-4)** is found on the following regulatory lists

- **Australia Exposure Standards**
- **Australia Hazardous Substances Information System - Consolidated Lists**
- **Australia Inventory of Chemical Substances (AICS)**

**ACRYLIC POLYMER (NOT AVAIL.)** is found on the following regulatory lists

- Not Applicable

**XYLENE (1330-20-7)** is found on the following regulatory lists

- **Australia Exposure Standards**
- **Australia Hazardous Substances Information System - Consolidated Lists**
- **International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs**

**PROPYLENE GLYCOL MONOMETHYL ETHER ACETATE, ALPHA-ISOMER (108-65-6)** is found on the following regulatory lists

- **Australia Exposure Standards**
- **Australia Hazardous Substances Information System - Consolidated Lists**
- **Australia Inventory of Chemical Substances (AICS)**

#### National Inventory Status

<table>
<thead>
<tr>
<th>National Inventory</th>
<th>AICS</th>
<th>DSL</th>
<th>NDSL</th>
<th>INER / EINEC / ELINCS / NLP</th>
<th>KECI</th>
<th>PICCS</th>
<th>TSCA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N (acryl polymer)</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Canada</td>
<td>N (acryl polymer)</td>
<td>N</td>
<td>N (propylene glycol monomethyl ether acetate, alpha-isomer; acrylic polymer; xylene; n-butyl acetate)</td>
<td>N (acryl polymer)</td>
<td>N (acryl polymer)</td>
<td>N (acryl polymer)</td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N (acryl polymer)</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Europe</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N (acryl polymer)</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Japan</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N (acryl polymer)</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Korea</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N (acryl polymer)</td>
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<td>N</td>
<td>N</td>
</tr>
<tr>
<td>New Zealand</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N (acryl polymer)</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Philippines</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N (acryl polymer)</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>USA</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N (acryl polymer)</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
</tbody>
</table>

**Legend:**

- Y = All ingredients are on the inventory
- N = 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

#### Other information

**Ingredients with multiple cas numbers**

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS No</th>
</tr>
</thead>
<tbody>
<tr>
<td>propylene glycol monomethyl ether acetate, alpha-isomer</td>
<td>108-65-6, 84540-57-8, 142300-82-1</td>
</tr>
</tbody>
</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](http://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

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