Brush on Sound Deadener- Black

HiChem Industries (HiChem Paint Technologies)

Chemwatch: 58-0090
Version No: 2.1.1.1
Safety Data Sheet according to WHS and ADG requirements

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

Product Identifier

<table>
<thead>
<tr>
<th>Product name</th>
<th>Brush on Sound Deadener- Black</th>
</tr>
</thead>
<tbody>
<tr>
<td>Synonyms</td>
<td>BO</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 | Pigmented, synthetic resin, flexible and quick dry coating applied by brush onto underbody automotive surfaces. |

Details of the supplier of the safety data sheet

| Registered company name | HiChem Industries (HiChem Paint Technologies) |
| Address                 | 73 Hallam South Road Hallam 3803 VIC Australia |
| Telephone               | +61 3 9796 3400 |
| Fax                     | +61 3 9796 4500 |
| Website                 | www.hichem.com.au |
| Email                   | info@hichem.com.au |

Emergency telephone number

| Association / Organisation | Not Available |
| Emergency telephone numbers | Not Available |
| Other emergency telephone numbers | Not Available |

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

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

CHEMWATCH HAZARD RATINGS

<table>
<thead>
<tr>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Low</td>
<td>Moderate</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>High</td>
<td>Extreme</td>
</tr>
</tbody>
</table>

Flammability 2
Toxicity 2
Body Contact 2
Reactivity 1
Chronic 2

Poisons Schedule S5
GHS Classification [1] Flammable Liquid Category 3, Acute Toxicity (Dermal) Category 4, Acute Toxicity (Inhalation) Category 4, Skin Corrosion/Irritation Category 2, Eye Irritation Category 2A, STOT - SE (Resp. Inr.) Category 3, STOT - RE Category 2, Aspiration Hazard Category 1, Chronic Aquatic Hazard Category 4


Label elements

GHS label elements

Continued...
Signal Word: DANGER

Hazard statement(s)

- H226 Flammable liquid and vapour
- H312 Harmful in contact with skin
- H332 Harmful if inhaled
- H315 Causes skin irritation
- H319 Causes serious eye irritation
- H335 May cause respiratory irritation
- H373 May cause damage to organs through prolonged or repeated exposure
- H304 May be fatal if swallowed and enters airways
- H413 May cause long lasting harmful effects to aquatic life

Precautionary statement(s) Prevention

- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P260 Do not breathe dust/fume/gas/mist/vapours/spray.
- 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.
- P273 Avoid release to the environment.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statement(s) Response

- P301+P310 If swallowed: Immediately call a poison center/doctor/physician/first aider.
- P331 Do not induce vomiting.
- P362 Take off contaminated clothing.
- P363 Wash contaminated clothing before reuse.
- P370+P378 In case of fire: Use alcohol-resistant foam or normal protein foam for extinction.
- P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P312 Call a poison center/doctor/physician/first aider if you feel unwell.
- P337+P313 If eye irritation persists: Get medical advice/attention.
- P305+P352 If on skin: Wash with plenty of water and soap.
- P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
- P304+P340 If inhaled: Remove person to fresh air and keep comfortable for breathing.
- P332+P313 If skin irritation occurs: Get medical advice/attention.

Precautionary statement(s) Storage

- P403+P235 Store in a well-ventilated place. Keep cool.
- P405 Store locked up.
- P403+P233 Store in a well-ventilated place. Keep container tightly closed.

Precautionary statement(s) Disposal

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

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

<table>
<thead>
<tr>
<th>CAS No</th>
<th>% [weight]</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Available</td>
<td>30-35</td>
<td>Polymeric Synthetic Resins</td>
</tr>
<tr>
<td>14807-96-6</td>
<td>30-35</td>
<td>talc</td>
</tr>
<tr>
<td>1330-20-7</td>
<td>15-25</td>
<td>xylene</td>
</tr>
<tr>
<td>100-41-4</td>
<td>5-10</td>
<td>ethylbenzene</td>
</tr>
<tr>
<td>Not Available</td>
<td>5-10</td>
<td>Other Liquid Hydrocarbons</td>
</tr>
<tr>
<td>Not Available</td>
<td>1-5</td>
<td>Non – Hazardous Additives</td>
</tr>
</tbody>
</table>
SECTION 4 FIRST AID MEASURES

Description of first aid measures

<table>
<thead>
<tr>
<th>Eye Contact</th>
<th>If this product comes in contact with the eyes:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>▶ Wash out immediately with fresh running water.</td>
</tr>
<tr>
<td></td>
<td>▶ 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.</td>
</tr>
<tr>
<td></td>
<td>▶ Seek medical attention without delay; if pain persists or recurs seek medical attention.</td>
</tr>
<tr>
<td></td>
<td>▶ Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.</td>
</tr>
<tr>
<td>Skin Contact</td>
<td>If skin contact occurs:</td>
</tr>
<tr>
<td></td>
<td>▶ Immediately remove all contaminated clothing, including footwear.</td>
</tr>
<tr>
<td></td>
<td>▶ Flush skin and hair with running water (and soap if available).</td>
</tr>
<tr>
<td></td>
<td>▶ Seek medical attention in event of irritation.</td>
</tr>
<tr>
<td>Inhalation</td>
<td>If fumes or combustion products are inhaled from contaminated area.</td>
</tr>
<tr>
<td></td>
<td>▶ Lay patient down. Keep warm and rested.</td>
</tr>
<tr>
<td></td>
<td>▶ Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.</td>
</tr>
<tr>
<td></td>
<td>▶ 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.</td>
</tr>
<tr>
<td></td>
<td>▶ Transport to hospital, or doctor, without delay.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>If swallowed do NOT induce vomiting.</td>
</tr>
<tr>
<td></td>
<td>▶ If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.</td>
</tr>
<tr>
<td></td>
<td>▶ Observe the patient carefully.</td>
</tr>
<tr>
<td></td>
<td>▶ Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious.</td>
</tr>
<tr>
<td></td>
<td>▶ Give water to rinse out mouth, then provide liquid slowly and as much as casually can comfortably drink.</td>
</tr>
<tr>
<td></td>
<td>▶ Seek medical advice.</td>
</tr>
<tr>
<td></td>
<td>▶ Avoid giving milk or oils.</td>
</tr>
<tr>
<td></td>
<td>▶ Avoid giving alcohol.</td>
</tr>
<tr>
<td></td>
<td>▶ If spontaneous vomiting appears imminent or occurs, hold patient's head down, lower than their hips to help avoid possible aspiration of vomitus.</td>
</tr>
</tbody>
</table>

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 pharmaco logically. 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 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 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.
▶ A chest x-ray should be taken immediately after stabilization 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 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>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
▶ 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
▶ Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result

Advice for firefighters
▶ 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.

Continued...
**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 monoxide (CO), carbon dioxide (CO2), silicon dioxide (SiO2), other pyrolysis products typical of burning organic material.

**SECTION 6 ACCIDENTAL RELEASE MEASURES**

**Personal precautions, protective equipment and emergency procedures**

**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.

**Chemical Class:** aromatic hydrocarbons

For release onto land: recommended sorbents listed in order of priority.

<table>
<thead>
<tr>
<th>SORBENT TYPE</th>
<th>RANK</th>
<th>APPLICATION</th>
<th>COLLECTION</th>
<th>LIMITATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feathers - pillow</td>
<td>1</td>
<td>throw</td>
<td>pitchfork</td>
<td>DGC, RT</td>
</tr>
<tr>
<td>cross-linked polymer - particulate</td>
<td>2</td>
<td>shovel</td>
<td>shovel</td>
<td>R, W, SS</td>
</tr>
<tr>
<td>cross-linked polymer- pillow</td>
<td>2</td>
<td>throw</td>
<td>pitchfork</td>
<td>R, DGC, RT</td>
</tr>
<tr>
<td>sorbent clay - particulate</td>
<td>3</td>
<td>shovel</td>
<td>shovel</td>
<td>R, I, P</td>
</tr>
<tr>
<td>treated clay/ treated natural organic- particulate</td>
<td>3</td>
<td>shovel</td>
<td>shovel</td>
<td>R, I</td>
</tr>
<tr>
<td>wood fibre - pillow</td>
<td>4</td>
<td>throw</td>
<td>pitchfork</td>
<td>R, P, DGC, RT</td>
</tr>
</tbody>
</table>

**Major Spills**

<table>
<thead>
<tr>
<th>SORBENT TYPE</th>
<th>RANK</th>
<th>APPLICATION</th>
<th>COLLECTION</th>
<th>LIMITATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>cross-linked polymer - particulate</td>
<td>1</td>
<td>blower</td>
<td>skiploader</td>
<td>R, W, SS</td>
</tr>
<tr>
<td>treated clay/ treated natural organic- particulate</td>
<td>2</td>
<td>blower</td>
<td>skiploader</td>
<td>R, I</td>
</tr>
<tr>
<td>sorbent clay - particulate</td>
<td>3</td>
<td>blower</td>
<td>skiploader</td>
<td>R, I, P</td>
</tr>
<tr>
<td>polypropylene - particulate</td>
<td>3</td>
<td>blower</td>
<td>skiploader</td>
<td>W, SS, DGC</td>
</tr>
<tr>
<td>feathers - pillow</td>
<td>3</td>
<td>throw</td>
<td>skiploader</td>
<td>DGC, RT</td>
</tr>
<tr>
<td>expanded mineral - particulate</td>
<td>4</td>
<td>blower</td>
<td>skiploader</td>
<td>R, I, W, P, DGC</td>
</tr>
</tbody>
</table>

**Legend**
- DGC: Not effective where ground cover is dense
- R: Not reusable
- I: Not incinerable
- P: Effectiveness reduced when rainy
- RT: Not effective where terrain is rugged
- SS: Not for use within environmentally sensitive sites
- W: Effectiveness reduced when windy

**Reference:** Sorbents for Liquid Hazardous Substance Cleanup and Control; R.W Melvold et al: Pollution Technology Review No. 150: Noyes Data Corporation 1988

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.

**SECTION 7 HANDLING AND STORAGE**

**Precautions for safe handling**
- 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 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.

Keep containers securely sealed when not in use.

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 MSDS.

Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions.

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 MSDS.

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 tanks should be above ground and diked to hold entire contents.

Conditions for safe storage, including any incompatibilities

Suitable container

Packaging 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 260 cSt (23 deg. C)

For manufactured product having a viscosity of 40 cSt (23 deg. C).

Manufactured product that requires stirring before use and having a viscosity of at least 260 cSt (23 deg. C).

Material must be used in a well-ventilated area.

Manufactured product with a viscosity of 400 cSt (23 deg. C).

Materials with a viscosity of up to 3000 cSt (23 deg. C).

Store away from incompatible materials.

For materials with a viscosity of at least 2600 cSt (23 deg. C).

Manufactured product that requires stirring before use and having a viscosity of at least 40 cSt (23 deg. C).

Material must be used in a well-ventilated area.

Vigorous reactions, sometimes amounting to explosions, can result from the contact between aromatic rings and strong oxidising agents.

Aromatics can react exothermically with bases and with diazo compounds.

For alkyl aromatics: The alkyl side chain of aromatic rings can undergo oxidation by several mechanisms. The most common and dominant one is the attack by oxidation at benzylic carbon as the intermediate formed is stabilised by resonance structure of the ring.

Following reaction with oxygen and under the influence of sunlight, a hydroperoxide at the alpha-position to the aromatic ring, is the primary oxidation product formed (provided a hydrogen atom is initially available at this position) - this product is often short-lived but may be stable dependent on the nature of the aromatic substitution; a secondary C-H bond is more easily attacked than a primary C-H bond whilst a tertiary C-H bond is even more susceptible to attack by oxygen.

Monoalkylbenzenes may subsequently form monocarboxylic acids; alkyl naphthalenes mainly produce the corresponding naphthalene carboxylic acids.

Oxidation in the presence of transition metal salts not only accelerates but also selectively decomposes the hydroperoxides.

Hock-rearrangement by the influence of strong acids converts the hydroperoxides to hemiacetals. Peroesters formed from the hydroperoxides undergo Criegee rearrangement easily.

Alkal metals accelerate the oxidation while CO2 as co-oxidant enhances the selectivity.

Microwave conditions give improved yields of the oxidation products.

Photo-oxidation products may occur following reaction with hydroxyl radicals and NOx - these may be components of photochemical smogs.


SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

Continued...
**Material Data**

**Exposure Controls**

**Appropriate engineering controls**

- **CARE:** Use of a quantity of this material in confined space or poorly ventilated area, where rapid build up of concentrated atmosphere may occur, could require increased ventilation and/or protective gear.

  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.

  **Type of Contaminant:**

  - solvent, vapours, degreasing etc., evaporating from tank (in still air).
  - aerosols, fumes from pouring operations, intermittent container filling, low speed conveyer transfers, welding, spray drift, plating acid fumes, pickling (released at low velocity into zone of active generation)
  - direct spray, spray painting in shallow booths, drum filling, conveyer loading, crusher dusts, gas discharge (active generation into zone of rapid air motion)

  **Within each range the appropriate value depends on:**

  - **Lower end of the range**
    - Room air currents minimal or favourable to capture
    - Contaminants of low toxicity or of nuisance value only.
    - Intermittent, low production.
    - Large hood or large air mass in motion
  - **Upper end of the range**
    - Disturbing room air currents
    - Contaminants of high toxicity
    - High production, heavy use
    - Small hood/local control only

  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 lens used.

**Eye and face protection**

- Equipment suitable for the material being used.
- adventure sports unless specifically trained and authorized for such conditions.
- Protective eyewear should be worn if there is a possibility of any eye irritants.
- Use protective eyewear, which is suitable for the expected conditions.
- Use protective eyewear, which is suitable for the expected conditions.
- Use protective eyewear, which is suitable for the expected conditions.

**Material Data (continued)**

<table>
<thead>
<tr>
<th>Source</th>
<th>Ingredient</th>
<th>Material name</th>
<th>TWA ppm</th>
<th>STEL ppm</th>
<th>Peak ppm</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia Exposure Standards</td>
<td>talc</td>
<td>Soapstone (respirable dust) / Talc, (containing no asbestos fibres)</td>
<td>3 mg/m³ / 2.5 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>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 ppm</th>
<th>TEEL-2 ppm</th>
<th>TEEL-3 ppm</th>
</tr>
</thead>
<tbody>
<tr>
<td>talc</td>
<td>Talc</td>
<td>2 mg/m³</td>
<td>2 mg/m³</td>
<td>2.6 mg/m³</td>
</tr>
<tr>
<td>xylene</td>
<td>Xylenes</td>
<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</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>

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Original IDLH ppm</th>
<th>Revised IDLH ppm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polymeric Synthetic Resins</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>talc</td>
<td>N.E. mg/m³ / N.E. ppm</td>
<td>1,000 mg/m³</td>
</tr>
<tr>
<td>xylene</td>
<td>2,000 ppm</td>
<td>800 (LEL) ppm</td>
</tr>
<tr>
<td>ethylbenzene</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>Other Liquid Hydrocarbons</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>Non – Hazardous Additives</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
</tbody>
</table>
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]

**Hands/feet protection**

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.
- Contaminated gloves should be replaced.

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**

Overallis.
- PVC Apron.
- PVC protective suit may be required if exposure severe.
- Eyewash unit.
- Ensure there is ready access to a safety shower.
- 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 so 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**

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).

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.

**Respiratory protection**


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>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+NEOP+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+PVDC</td>
<td>C</td>
</tr>
<tr>
<td>PVA</td>
<td>C</td>
</tr>
<tr>
<td>PVC</td>
<td>C</td>
</tr>
<tr>
<td>PVDC/PVDC</td>
<td>C</td>
</tr>
<tr>
<td>TEFLON</td>
<td>C</td>
</tr>
<tr>
<td>VITON</td>
<td>C</td>
</tr>
</tbody>
</table>

**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:

Brush on Sound Deadener- Black

- Methyl bromide, AX = Low boiling point organic compounds (below 65 degC)
- Agricultural chemicals, K = Ammonia(NH3), Hg = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds (below 65 degC)
- A(All classes) = Organic vapours, B AUS or B1 = Acid gas, B2 = Acid gas or hydrogen cyanide(HCN), E = Sulfur dioxide(SO2), G = General body protection

<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+NEOP+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+PVDC</td>
<td>C</td>
</tr>
<tr>
<td>PVA</td>
<td>C</td>
</tr>
<tr>
<td>PVC</td>
<td>C</td>
</tr>
<tr>
<td>PVDC/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.
SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Relative density (Water = 1)</td>
<td>1.45</td>
</tr>
<tr>
<td>Odour</td>
<td>Not Available</td>
</tr>
<tr>
<td>Partition coefficient n-octanol / water</td>
<td>Not Available</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>Not Available</td>
</tr>
<tr>
<td>Auto-ignition temperature (°C)</td>
<td>500</td>
</tr>
<tr>
<td>pH (as supplied)</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not Available</td>
</tr>
<tr>
<td>Melting point / freezing point (°C)</td>
<td>Not Available</td>
</tr>
<tr>
<td>Viscosity (cSt)</td>
<td>Not Available</td>
</tr>
<tr>
<td>Initial boiling point and boiling range (°C)</td>
<td>&gt;100-150</td>
</tr>
<tr>
<td>Molecular weight (g/mol)</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Vapour pressure (kPa)</td>
<td>Not Available</td>
</tr>
<tr>
<td>Flammability</td>
<td>Flammable</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Upper Explosive Limit (%)</td>
<td>10.8</td>
</tr>
<tr>
<td>Surface Tension (dyn/cm or mN/m)</td>
<td>Not Available</td>
</tr>
<tr>
<td>Lower Explosive Limit (%)</td>
<td>1</td>
</tr>
<tr>
<td>Gas group</td>
<td>Not Available</td>
</tr>
<tr>
<td>Vapour pressure (kPa)</td>
<td>Not Available</td>
</tr>
<tr>
<td>Solubility in water (g/L)</td>
<td>Immiscible</td>
</tr>
<tr>
<td>pH as a solution (%)</td>
<td>Not Available</td>
</tr>
<tr>
<td>VOC g/L</td>
<td>Not Available</td>
</tr>
<tr>
<td>Vapour density (Air = 1)</td>
<td>&gt;1</td>
</tr>
</tbody>
</table>

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. Evidence shows, or practical experience predicts, that the material produces irritation of the respiratory system, in a substantial number of individuals, following inhalation. In contrast to most organs, the lung is able to respond to a chemical insult by first removing or neutralising the irritant and then repairing the damage. The repair process, which initially evolved to protect mammalian lungs from foreign matter and antigens, may however, produce further lung damage resulting in the impairment of gas exchange, the primary function of the lungs. Respiratory tract irritation often results in an inflammatory response involving the recruitment and activation of many cell types, mainly derived from the vascular system.

Inhalation of vapours may cause drowsiness and dizziness. This may be accompanied by narcosis, reduced alertness, loss of reflexes, lack of coordination and vertigo.

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

Ingestion

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

Signs and symptoms of chemical (aspiration) pneumonitis may include coughing, gasping, choking, burning of the mouth, difficult breathing, and bluish coloured skin (cyanosis).

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

Skin Contact

Skin contact with the material may be harmful; systemic effects may result following absorption. The material may accentuate any pre-existing dermatitis condition.

Open cuts, abraded or irritated skin should not be exposed to this material.

Entry into the blood-stream through, for example, cuts, abrasions, puncture wounds or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.

The material produces moderate skin irritation; evidence exists, or practical experience predicts, that the material either

- produces moderate inflammation of the skin in a substantial number of individuals following direct contact, and/or
- produces significant, but moderate, inflammation when applied to the healthy intact skin of animals (for up to four hours), such inflammation being present twenty-four hours or more after the end of the exposure period.

Skin irritation may also be present after prolonged or repeated exposure; this may result in a form of contact dermatitis (nonallergic). The dermatitis is often characterised by skin redness (erythema) and swelling (oedema) which may progress to blistering (vesiculation), scaling and thickening of the epidermis. At the microscopic level there may be intercellular oedema of the spongy layer of the skin (spongiosis) and intracellular oedema of the epidermis.
Evidence exists, or practical experience predicts, that the material may cause severe eye irritation in a substantial number of individuals and/or may produce significant ocular lesions which are present for more than 24 hours or after instillation into the eye(s) of experimental animals. Eye contact may cause severe irritation with pain. Corneal injury may occur; permanent impairment of vision may result unless treatment is prompt and adequate. Repeated or prolonged exposure to irritants may cause irritation characterised by a temporary redness (similar to window-dust conjunctivitis); temporary impairment of vision and/or other transient eye damage may occur.

The liquid produces a high level of eye discomfort and is capable of causing pain and severe conjunctivitis. Corneal injury may develop, with possible permanent impairment of vision, if not promptly and adequately treated.

**Eye**

**TOXICITY**

**IRRITATION**

**TOXICITY**

**IRRITATION**

**TOXICITY**

**IRRITATION**

**TOXICITY**

**IRRITATION**

**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

**Brush on Sound Deadener- Black**

**TALC**

Asthma-like symptoms may continue for months or even years after exposure to the material ceases. This may be due to a non-allergic condition known as reactive airways dysfunction syndrome (RADS), which can occur following exposure to high levels of highly irritating compound. Key criteria for the diagnosis of RADS include the absence of preceding respiratory disease, in a non-serious individual, with abrupt onset of persistent asthma-like symptoms within minutes to hours of a documented exposure to the irritant. A reversible airflow pattern, on spirometry, with the presence of moderate to severe bronchial responsiveness on methacholine challenge testing and the lack of minimal lymphocytic inflammation, without eosinophilia, have also been included in the criteria for diagnosis of RADS. RADS (or asthma) following an irritating inhalation is an infrequent disorder with rates related to the concentration of and duration of exposure to the irritating substance. Industrial bronchitis, on the other hand, is a disorder that occurs as result of exposure due to high concentrations of irritating substance (often particulate in nature) and is completely reversible after exposure ceases. The disorder is characterised by dyspnea, cough and mucus production. No significant acute toxicological data identified in literature search.

For talc (a form of magnesium silicate) the overuse of talc in nursing infants has resulted in pulmonary oedema, pneumonia and death within hours of inhaling talcum powder. The powder dries the mucous membranes of the bronchicles, disrupts pulmonary clearance, clogs smaller airways, Victims display wheezing, rapid or difficult breathing, increased pulse, cyanosis, fever. Mild exposure may cause relatively minor inflammatory lung disease. Long term exposure may show wheezing, weakness, productive cough, limited chest expansion, scattered rales, cyanosis. 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.
**XYLENE**

The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.

The material may cause skin irritation after prolonged or repeated exposure and may produce a contact dermatitis (nonallergic). This form of dermatitis is often characterised by skin redness (erythema) and swelling of the epidermis. Histologically there may be intercellular oedema of the spongy layer (spongiosis) and intracellular oedema of the epidermis.

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 effect in rats

**ETHYLBENZENE**

The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.

The material may cause skin irritation after prolonged or repeated exposure and may produce a contact dermatitis (nonallergic). This form of dermatitis is often characterised by skin redness (erythema) and swelling of the epidermis. Histologically there may be intercellular oedema of the spongy layer (spongiosis) and intracellular oedema of the epidermis.

Ethylbenzene is readily absorbed following inhalation, oral, and dermal exposures, distributed throughout the body, and excreted primarily through urine.

There are two different metabolic pathways for ethylbenzene with the primary pathway being the alpha-oxidation of ethylbenzene to 1-phenylethanol, mostly as the R-enantiomer. The pattern of urinary metabolite excretion varies with different mammalian species. In humans, ethylbenzene is excreted in the urine as mandelic acid and phenylglyoxylic acids; whereas rats and rabbits excrete hippuric acid and phenaceturic acid as the main metabolites. Ethylbenzene can induce liver enzymes and hence its own metabolism as well as the metabolism of other substances.

Ethylbenzene has a low order of acute toxicity by the oral, dermal or inhalation routes of exposure. Studies in rabbits indicate that ethylbenzene is irritating to the skin and eyes. There are numerous repeat dose studies available in a variety of species, these include: rats, mice, rabbits, guinea pig and rhesus monkeys.

Hearing loss has been reported in rats (but not guinea pigs) exposed to relatively high exposures (400 ppm and greater) of ethylbenzene.

In chronic toxicity/carcinogenicity studies, both rats and mice were exposed via inhalation to 0, 75, 250 or 750 ppm for 104 weeks. In rats, the kidney was the target organ of toxicity, with renal tubular hyperplasia noted in both males and females at the 750 ppm level only. In mice, the liver and lung were the principal target organs of toxicity. In male mice at 750 ppm, lung toxicity was described as alveolar epithelial metaplasia, and liver toxicity was described as hepatocellular syncytial alteration, hypertrophy and mild necrosis; this was accompanied by increased follicular cell hyperplasia in the thyroid. As a result the NOAEL in male mice was determined to be 250 ppm. In female mice, the 750 ppm dose group had an increased incidence of eosinophilic foci in the liver (44% vs 10% in the controls) and an increased incidence in follicular cell hyperplasia in the thyroid gland.

In studies conducted by the U.S. National Toxicity Program, inhalation of ethylbenzene at 750 ppm resulted in increased lung tumors in male mice, liver tumors in female mice, and increased kidney tumors in male and female rats. No increase in tumors was reported at 75 or 250 ppm. Ethylbenzene is considered to be an animal carcinogen, however, the relevance of these findings to humans is currently unknown. Although no reproductive toxicity studies have been conducted on ethylbenzene, repeated-dose studies indicate that the reproductive organs are not a target for ethylbenzene toxicity.

Ethylbenzene was negative in bacterial gene mutation tests and in a yeast assay on mitotic recombination.

**WARNING:** This substance has been classified by the IARC as Group 2B: Possibly Carcinogenic to Humans.

Liver changes, urethral tract, effects on fertility, fetotoxicity, specific developmental abnormalities (musculoskeletal system) recorded.

**SECTION 12 ECOLOGICAL INFORMATION**

### Toxicity

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Endpoint</th>
<th>Test Duration</th>
<th>Effect</th>
<th>Value</th>
<th>Species</th>
<th>BCF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polymeric Synthetic Resins</td>
<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>talc</td>
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<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>xylene</td>
<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
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<td>Not Available</td>
</tr>
<tr>
<td>ethylbenzene</td>
<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>Other Liquid Hydrocarbons</td>
<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>Non – Hazardous Additives</td>
<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
</tbody>
</table>

May cause long-term adverse effects in the aquatic environment.

Do NOT allow product to come in contact with surface waters or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash waters.

Wastes resulting from the product must be disposed of on site or at approved waste sites.

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

### 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>
</tbody>
</table>
ethylbenzene HIGH (Half-life = 228 days) LOW (Half-life = 3.57 days)

### 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>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>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 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 MSDS 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 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: <3Y

#### Land transport (ADG)

- **UN number**: 1263
- **Packing group**: III
- **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)
- **Environmental hazard**: No relevant data
- **Transport hazard class(es)**: Class 3
- **Subrisk**: Not Applicable
- **Special precautions for user**: Special provisions 163 223 *
- **Limited quantity**: 5 L

#### Air transport (ICAO-IATA / DGR)

- **UN number**: 1263
- **Packing group**: III
- **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)
- **Environmental hazard**: No relevant data
- **Transport hazard class(es)**: ICAO/IATA Class 3
- **ICAO / IATA Subrisk**: Not Applicable
- **ERG Code**: 3L
- **Special precautions for user**: Special provisions A3 A72 A192
- **Cargo Only Packing Instructions**: 366
- **Cargo Only Maximum Qty / Pack**: 220 L
### Sea transport (IMDG-Code / GGVSee)

- **UN number**: 1263
- **Packing group**: III
- **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)
- **Environmental hazard**: Not Applicable
- **Transport hazard class(es)**:
  - IMDG Class: 3
  - IMDG Subrisk: Not Applicable
- **Special precautions for user**:
  - EMS Number: F-E, S-E
  - Special provisions: 163 223 955
- **Limited Quantities**: 5 L

### Transport in bulk according to Annex II of MARPOL 73 / 78 and the IBC code

<table>
<thead>
<tr>
<th>Source</th>
<th>Ingredient</th>
<th>Pollution Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk</td>
<td>xylene</td>
<td>Y</td>
</tr>
<tr>
<td>IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk</td>
<td>ethylbenzene</td>
<td>Y</td>
</tr>
</tbody>
</table>

### SECTION 15 REGULATORY INFORMATION

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

- **TALC (14807-96-6)** is found on the following regulatory lists:
  - Australia Exposure Standards
  - Australia Hazardous Substances Information System - Consolidated Lists
  - Australia Inventory of Chemical Substances (AICS)
  - International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

- **XYLENE (1330-20-7)** is found on the following regulatory lists:
  - Australia Exposure Standards
  - Australia Hazardous Substances Information System - Consolidated Lists
  - Australia Inventory of Chemical Substances (AICS)
  - International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

- **ETHYLBENZENE (100-41-4)** is found on the following regulatory lists:
  - Australia Exposure Standards
  - Australia Hazardous Substances Information System - Consolidated Lists
  - Australia Inventory of Chemical Substances (AICS)
  - International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

<table>
<thead>
<tr>
<th>National Inventory</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia - AICS</td>
<td>Y</td>
</tr>
<tr>
<td>Canada - DSL</td>
<td>Y</td>
</tr>
<tr>
<td>Canada - NDSL</td>
<td>N (talc; xylene; ethylbenzene)</td>
</tr>
<tr>
<td>China - IECSC</td>
<td>Y</td>
</tr>
<tr>
<td>Europe - EINEC / ELINCS / NLP</td>
<td>Y</td>
</tr>
<tr>
<td>Japan - ENCS</td>
<td>Y</td>
</tr>
<tr>
<td>Korea - KECI</td>
<td>Y</td>
</tr>
<tr>
<td>New Zealand - NZIoC</td>
<td>Y</td>
</tr>
<tr>
<td>Philippines - PICCS</td>
<td>Y</td>
</tr>
<tr>
<td>USA - TSCA</td>
<td>Y</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

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 (M)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.

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