CLEANING SOLVENT

According to the criteria of WorkSafe Australia, this product is classified hazardous.

PRODUCT IDENTIFICATION

PRODUCT NAME: CLEANING SOLVENT

UN NO.: 1263 D.G. CLASS: 3
HAZCHEM: 3[Y]E PACK. GRP.: II
POISONS SCHEDULE: S6
MANUF. MANCODE: URECOAT
PRODUCT USE: Product is used as a cleaning solvent.

INGREDIENTS

<table>
<thead>
<tr>
<th>CHEMICAL ENTITY</th>
<th>CAS No.</th>
<th>PROPORTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toluene</td>
<td>108-88-3</td>
<td>&gt;60%</td>
</tr>
<tr>
<td>Methyl Isobutyl Ketone</td>
<td>108-10-1</td>
<td>&lt;20%</td>
</tr>
<tr>
<td>Methylated Spirits</td>
<td>064-17-5</td>
<td>&lt;20%</td>
</tr>
</tbody>
</table>

PHYSICAL DESCRIPTION / PROPERTIES

- MELTING POINT (°C): Not Available
- BOILING POINT (°C): 110
- VAPOUR PRESSURE (@ 20°C): 3.0 kPa
- SPECIFIC GRAVITY (kg/m³ @ 20°C): 0.850
- FLASH POINT (°C ABEL): 4
- FLAMMABILITY LIMITS (%): 1.3 – 7.0
- REL. VAPOR DENSITY (Air = 1): 3.1

OTHER PROPERTIES:
- Autoignition Temp. (°C): 536
- Formula: Mixture
- Evaporation Rate: 2.2
- Solubility: Soluble in most organic solvents. Practically insoluble in water.
**HEALTH EFFECTS**

**Acute – Ingestion**  
Swallowing can cause nausea, vomiting and central nervous system depression. If the victim is uncoordinated there is a greater likelihood of vomit entering the lungs and causing subsequent complications.

**Acute – Eye**  
May cause eye irritation.

**Acute – Skin**  
Contact with skin may result in irritation. Will have a degreasing action on the skin. Repeated or prolonged skin contact may lead to irritant contact dermatitis.

**Acute – Inhalation**  
Vapour may be irritant to mucous membranes and respiratory tract. Inhalation of vapour can result in headaches, dizziness and possible nausea. Inhalation of high concentrations can produce central nervous system depression, which can lead to loss of co-ordination, impaired judgement and if exposure is prolonged, unconsciousness. Harmful if inhaled.

**Chronic**  
Repeated or prolonged exposure to this chemical could result in central nervous system disorders.

**FIRST AID**

**Ingestion**  
Rinse mouth with water. Give water to drink. Do NOT induce vomiting. If vomiting occurs, place person’s face downwards, head lower than hips to prevent vomit entering lungs. Seek immediate medical advice and/or call poisons information centre, Australia 131126.

**Eye**  
Irrigate with copious quantities of water, ensure eyelids are held open. Seek medical advice if any pain or redness develops or persists.

**Skin**  
Wash skin thoroughly with soap and water as soon as reasonably practicable. Remove contaminated clothing and wash underlying skin. Launder clothing before re-use.

**Inhalation**  
If inhalation of mists, fumes or vapour causes irritation to the nose or throat, or coughing, remove to fresh air. If symptoms persist obtain medical assistance.

**Other Information**  
Eye wash fountains and safety showers should be easily accessible.

**ADVICE TO DOCTOR**

**Advice to Doctor**  
Treat symptomatically.
OTHER HEALTH HAZARD INFORMATION

PRECAUTIONS FOR USE

Exposure Limits

<table>
<thead>
<tr>
<th>Name</th>
<th>Mg/m³ TWA</th>
<th>ppm TWA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toluene</td>
<td>191</td>
<td>50</td>
</tr>
<tr>
<td>Methyl Isobutyl Ketone</td>
<td>205</td>
<td>50</td>
</tr>
<tr>
<td>Methylated Spirits</td>
<td></td>
<td>1000</td>
</tr>
</tbody>
</table>

Other Exposure Info. Exposure Standard means the average concentration of a particular substance in the worker’s breathing zone, exposure to which, according to current knowledge, should not cause adverse health effects nor cause undue discomfort to nearly all workers. It can be of three forms: Time Weighted Average (TWA), means the average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day working week; peak limitation; or short term exposure limit (STEL).

Engineering Controls Ensure ventilation is adequate to maintain air concentrations below exposure standards. Keep containers closed when not in use. Vapour heavier than air – prevent concentration in hollows or sumps. DO NOT enter confined spaces where vapour may have collected.

PERSONAL PROTECTION

Protective Equipment Avoid eye and skin contact. Avoid inhaling the vapour or mist. Follow normal industrial safety practices. The use of protective clothing and equipment depends on the degree of exposure. The following personal protective equipment should be used:

Respiratory Protection Where concentrations in air exceed recommended exposure limits, or work practice or other means of exposure reduction are not adequate, use respirator fitted with filters that conform with AS 1716.

Eye Protection Use safety glasses, chemical goggles or face shield as appropriate, refer AS 1337.

Hand Protection Use chemical resistant rubber gloves, refer AS 2161.

Protective Clothing Use long sleeved chemical resistant overalls, fastened at neck and wrists, refer AS 3765.

Footwear Wear chemically impervious safety shoes/boots, refer AS 2210.

Work/Hygienic Practices Ensure high level of personal hygiene is maintained when using this product. Always wash hands before eating, drinking etc.
FLAMMABILITY

Fire Hazards
Highly flammable liquid. May form flammable mixtures with air. All potential sources of ignition (open flames, pilot lights, furnaces, spark producing switches and electrical equipment etc.) must be eliminated both in and near the work area. Do NOT smoke.

SAFE HANDLING INFORMATION

Storage and Transport

Storage Precautions
Store and transport in accordance with AS 1940-1993 and local and state regulations. Store in a cool well ventilated area. Store away from sources of heat or ignition. Store away from oxidising agents and foodstuffs. Keep containers closed when not in use. Check regularly for leaks. Not to be loaded with explosives (Class 1), flammable gasses (Class 2.1) in bulk, poisonous gasses (Class 2.3), spontaneously combustible substances (Class 4.2), oxidising agents (Class 5), and radioactive substances (Class 7). However, exemptions may apply. This material is a Scheduled Poison (S6) and must be stored, maintained and used in accordance with the relevant regulations.

Spills and Disposals

Spills and Leaks

SMALL SPILLS: Extinguish or remove all potential sources of ignition. Increase ventilation. Avoid contact with liquid. Absorb with an inert non-combustible material such as vermiculite or sand. Wear full protective clothing and goggles. Prevent run off into drains or waterways. Collect and place into drums with non-sparking tools for recovery or disposal.

LARGE SPILLS: Inform Authorities if a major spillage occurs. Evacuate all non-emergency personnel from area. Keep public away. Warn occupants downwind. Dike area far ahead of liquid and recover. Extinguish all ignition sources. Prevent entry into drainage systems, rivers etc. Collect with absorbent material such as sand, earth or vermiculate. Ensure waste disposal conforms Local, State and Federal regulations.
**Fire/Explosion Hazard**

**Fire/Explos. Hazards**
Highly flammable liquid. Keep containers cool with water spray. Fire fighters to wear self-contained breathing apparatus if risk of exposure to vapour or products of combustion.

**EXTINGUISHING MEDIA:** Foam, carbon dioxide, or dry chemical powder.

**Hazardous Reaction**

**STABILITY:** Stable.

**CONDITIONS TO AVOID:** Sparks, heat, sources of ignition.

**INCOMPATABILITIES (MATERIALS TO AVOID):** Oxidising agents, HAZARDOUS.

**DECOMPOSITION OR BYPRODUCTS:** Oxides of carbon. (CO₂, CO) HAZARDOUS

**POLYMERIZATION:** Will not occur.

**Hazchem Code** 3[Y]E

**OTHER INFORMATION**

**Toxicology**
For Toluene Oral LD₅₀ (rat): 636 mg/kg Ref: NRTXDN 2.567.81 Animal studies have shown this compound to cause CNS effects and behavioural changes. CNS disorders and tubular renal damage have been reported in humans involved in addictive sniffing of toluene at extremely high concentrations. Negative in NV VITRO mutagenicity assays. Experimental data suggests that toluene does not exhibit genetic or carcinogenic effects. Sufficient data on teratogenic effects is not available, however current animal studies do not suggest a teratogenic effect.

**Environmental Protection**
For Toluene: Aquatic toxicity: Tₐ₉₆: 100 – 10 pm. Tₐ₉₆: Median Tolerance Limit – the concentration of toxicant or substance at which 50% of the test organisms survive over a 96 hour test period.

**Packing & Labelling**
HAZARD CATEGORY: HARMFUL, HIGHLY FLAMMABLE

**RISK PHRASES:** R11 – Highly flammable. R20 – Harmful by inhalation. SAFETY PHRASES: S16 Keep away from sources of ignition – No smoking. S25 Avoid contact with eyes. S29 Do not empty into drains. S33 Take precautionary measures against static discharges.

20 Litre drums containing 17.0 kg,
10 Litre drums containing 8.5kg,
4 litre drums containing 3.4kg.

**Shelf Life**
This product is best if used within 24 months from manufacture (refer to batch number), when stored in unopened containers under normal conditions of temperature and humidity.
CONTACT POINT

Contact Urethane Coatings Pty Ltd
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G. M. Webb

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End of MSDS