MATERIAL SAFETY DATA SHEET
LOSP Treated Timber

STATEMENT OF HAZARDOUS NATURE

Not hazardous according to criteria of Worksafe Australia.

COMPANY DETAILS

Company: Plywood Services Pty Ltd
Address: 182 Beatty Road Archerfield
Telephone Number: 07 3277 2733
Fax: 07 3274 2859
Emergency Telephone Number: 07 3277 2212

IDENTIFICATION

Product Name: LOSP TREATED TIMBER
UN Number: Not applicable
Dangerous Goods Class: Not applicable
Hazchem Code: Not applicable
Poisons Schedule: Not applicable
Uses: LOSP treatment is used to protect timber from attack by termites, insects and fungal decay. The treated timber is used for exterior building and structural applications in above ground situations. LOSP treatment is not suitable for timber that will be used in ground contact hazard situations.

Physical Description /Properties

Appearance & Odour: Sawn timber appearance with a slight pale yellow colouration. May have an oily organic odour fresh after treatment. May have an orange to gold coloured dye impregnated during treatment
Specific Gravity: Typically 450 - 650 kg/m³ depending on timber species and grade.
Flashpoint: Not applicable
Flammability Limits: Not applicable (for solvent - LEL 0.8%, UEL 6.0%)
Solubility in water: Insoluble
Auto-ignition Temperature: 265 °C
Volatile content: Not determined

Ingredients

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS Number</th>
<th>Proportion % w/w</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active ingredient/s</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial timbers such as radiata pine, slash pine, hoop pine etc. treated by vacuum/pressure impregnation method.</td>
<td>Not applicable</td>
<td>&lt;98</td>
</tr>
<tr>
<td>*Permethrin 25:75</td>
<td>52645-53-1</td>
<td>&lt;1</td>
</tr>
<tr>
<td>*Tri-n-butyl Tin Naphthenate</td>
<td>85409-17-2</td>
<td>&lt;10</td>
</tr>
<tr>
<td>*Petroleum Resin</td>
<td>64742-16-1</td>
<td>&lt;5</td>
</tr>
<tr>
<td>*Paraffin Wax</td>
<td>8002-7-42</td>
<td>&lt;5</td>
</tr>
<tr>
<td>#Residual solvent (aliphatic hydrocarbons)</td>
<td>64742-82-1</td>
<td>&lt;10</td>
</tr>
</tbody>
</table>

* Actual levels from piece to piece may vary depending on the application intended and differences in the timber itself.
# The level of residual solvent in the timber will vary considerably depending on the length of time after the treatment and the drying conditions. Levels of up to 10% by weight may be expected immediately after treatment however this falls to negligible levels within a few days at ambient conditions once the solvent is allowed to dry.

The information contained herein is given in good faith, but no warranty, expressed or implied is made. Consult Koppers Arch Wood Protection Pty Ltd for further information.
HEALTH HAZARD INFORMATION

Health Effects

Acute
Swallowed
Wood fibres may cause abdominal pain, nausea or diarrhoea. Unlikely to be a significant route of over-exposure.

Eye
May be an irritant. May cause conjunctivitis and dryness.

Skin
May cause skin irritation. Contact with skin may result in allergic dermatitis.

Inhaled
Wood dust may cause breathing difficulties. May irritate the mucous membranes of the upper respiratory tract. Inhalation of solvent vapours may cause headache, dizziness, nausea and confusion.

Chronic
Wood dust may cause skin irritation and breathing difficulties. May aggravate asthma, eye infections or affect wearing of contact lenses. Exposure to airborne wood dust over long periods of time has been associated with the development of nasal cancer.

Once the treatment is dry, wood working and wood dust are not expected to be routes of overexposure to the active constituent or the solvent. In general, studies of wood workers using treated timbers have not shown increased risks of cancer or other health problems over wood workers using untreated timbers.

First Aid

Swallowed
Do not induce vomiting. Seek medical attention.

Eye
Hold eyes open and flush with plenty of water. If irritation or pain persists, seek medical attention.

Skin
Wash affected area with soap and water.

Inhaled
Remove affected person to fresh air.

First Aid Facilities
Eye wash, hand wash, bandages and antiseptic.

Advice to Doctor
Treat symptomatically. Regular medical surveillance for skin and systemic effects is necessary for persons handling wet treated timber or who work in the treatment plant. Note: Health effects of exposure to untreated timber (dust/shavings) may be the same for dry treated timber.

PRECAUTIONS FOR USE

Exposure Standards
Exposure limit standards for some of the constituents of this preparation are as follows:

<table>
<thead>
<tr>
<th>Constituent</th>
<th>mg/m³ TWA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aliphatic hydrocarbons</td>
<td>480 (for turpentine)</td>
</tr>
<tr>
<td>Permethrin 25:75</td>
<td>See below</td>
</tr>
<tr>
<td>Tin organic compounds</td>
<td>0.1</td>
</tr>
<tr>
<td>Wood dust (hardwoods)</td>
<td>1.0</td>
</tr>
<tr>
<td>Wood dust (softwoods)</td>
<td>5.0</td>
</tr>
</tbody>
</table>

Note: An exposure standard for permethrin has not been set. However, an exposure standard (TWA) of 5mg/m³ has been allocated for pyrethrum (or pyrethrins).

Engineering Controls
Mechanical (general) ventilation is recommended if working in enclosed spaces or where wood dust is generated.

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PRECAUTIONS FOR USE continued

Personal Protection
For normal work on dry treated wood a dust mask and goggles should be worn as protection from wood dust when machining or sawing. Soft leather or cotton gloves should be worn to protect against splinters and cuts. Use good hygiene practices such as washing hands after handling timber and before eating, drinking and smoking. When working with timber wet immediately after treatment (before fixation), wear PVC or rubber gloves, an impervious work apron and work shoes. Wash hands and arms before eating, drinking, smoking or using the toilet and at the end of the day. Launder work clothes separately from the household laundry. Some individuals may experience some sensitisation or skin irritation from contact with the treated wood. The treatment solution itself may be irritating to the eyes and skin.

SAFE HANDLING INFORMATION

Storage and Transport
Non-hazardous once timber is dried and chemical elements “fixed”. treated timber should be held on the treatment plant premises for a sufficient period (at least two days) to ensure surface dryness and fixation of the preservative. Storage areas should be well ventilated while the timber is drying after treatment. Tests have shown that LOSP treated timber is not significantly more flammable than untreated timber after the solvent has evaporated. Avoid handling or sawing freshly treated wet timber.

Spills and Disposal
No special clean up procedure required. LOSP treated wood waste is not a hazardous material. Dispose of treated wood waste in a normal landfill tip in accordance with local and state regulations. Do not use as cooking, BBQ or home heating fuel. Burning the wood waste may be done in industrial incinerators, open fires and other situations away from occupied areas, foodstuffs or animals. Avoid breathing the combustion fumes and bury any ash in approved landfill in accordance with local and state regulations. Ash may contain residues of tin oxides.

Fire/Explosion Hazard
LOSP treatment does not contribute to increased flammability or energy release from the wood once dry after treatment. During combustion treated wood may emit toxic vapours (carbon dioxide, carbon monoxide, tin oxides, smoke). Wood dusts may form explosive mixtures with air. Full protective clothing and self-contained breathing apparatus should be worn for fire fighting. Extinguish fire with water, fog, foam, carbon dioxide or dry chemical. Disposed of ash and burnt waste in approved landfill in accordance with local and state regulations.

OTHER INFORMATION

Environmental Protection
The preservative is toxic to fish and wildlife but treated timber is not considered a hazard as the preservative becomes fixed onto the timber. However timber treated with the preservative should not be used in situations where leaching is enhanced.

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Animal Toxicity Data

Animal toxicity data is not available for the product. Toxicity data for some of the constituents are as follows:

**Permethrin**
- LD50 oral, male rat 1479 mg/kg
- LD50 dermal, male rabbit > 5000 mg/kg
- LC50 (4 day) by inhalation (aerosol), rat > 20 mg/m³
- Chromosome aberration test in vivo negative
- Ames test negative

**Tri-n-butyl tin naphtenate**
- LD50 oral, rat 224 mg/kg
- LD50 dermal, rat 4600 mg/kg
- LC50 (4 hour) by inhalation (aerosol), rat 152 mg/m³
- Skin compatibility, rabbit: Irritating
- Eye compatibility, rabbit: May cause irritation
- Skin sensitisisation, guinea pig: Non Sensitive
- Chromosome aberration test in vivo negative
- Ames test negative

**Solvent (based on testing of similar products)**
- Oral Toxicity, rat = slightly toxic
- Dermal Toxicity, rabbit = slightly toxic
- Genetic Toxicity, negative
- Reproductive Toxicity, rat = negative (up to 400 ppm).

Ecotoxicity Data

Ecotoxicity data for permethrin 25:75:
- LC50 (96 hour), rainbow trout - 9 g/L
- LC50 (96 hour), catfish - 1 g/L
- LC50 (96 hour), mosquito fish - 15 g/L
- LC50, largemouth bass - 8.5 g/L

Ecotoxicity data for Tri-n-butyl tin naphtenate:
- LC50 TBTN (96 hours), zebra fish 17.2 - 30.9 x 10⁻³ g/L
- EC50 TBTN (48 hours), daphnia 14 x 10⁻³ g/L

**CONTACT POINT**

Technical Manager,
Koppers Arch Wood Protection (Aust) Pty Limited, Station St, Trentham, 3458, Vic.
Tel (03) 5424 1350, Fax (03) 5424 1288.