1.0 Description
Active constituent: 500g/L permethrin 25:75
Other ingredients: Liquid hydrocarbons and proprietary surfactants
Formulation: Emulsifiable concentrate
Appearance: Clear amber liquid
Odour: Mild aromatic odour
Solubility: Forms a stable emulsion in water Soluble in kerosene and light oils.
Density: 0.975 g/ml @ 20°C
Flash Point: 68°C (Closed Cup)

2.0 Function
Vacso® T 500 SK is a wood preservative concentrate for control of insect pests such as borers and termites that can damage timber and wood products. It may be used in pre-treatment applications or as a remedial treatment in timber structures.

The active constituent permethrin 25:75 has a high level of activity against undesirable insect pests that can attack wood but has low toxicity to humans. Vacso® 500 SK is compatible with many fungicides and timber treatments. Permethrin binds to wood, resists leaching and is suitable for use with a wide range of wood protection situations.

3.0 Directions for Use
Vacso® 500 SK is a concentrate that must be diluted for use. It disperses readily in water to form stable emulsions. It can also be diluted in petroleum distillate or kerosene (high flash point > 60°C solvents should be used).

Dilutions can be applied by dipping, spraying, pressure treatment or direct injection into affected (remedial treatments for existing structures). Treatment in distillate and kerosene oils will be more durable. Non-staining, low odour solvent such as Exxsol D80 is recommended for in-situ remedial treatments.

Temporary protection of logs and sawn timber from insect borers: During seasoning, storage or transport, freshly felled logs and sawn timber may be vulnerable to insect borer infestation (such as pine bark beetle). Insect borers can damage wood directly and also spread other infections such as staining or decay fungi as well as being a phytosanitary risk for imported or exported wood products. Apply a 0.2% v/v dilution (0.2 litres of concentrate per 100 litres of solution) as soon as possible after peeling or sawing. Vacso® 500 K may be combined with other chemicals such as Antiblu® anti-sapstain treatments – consult Lonza for details. In tropical regions a 0.4% v/v (0.4 Litre per 100 litres) concentration is recommended. Ensure that all surfaces including the endgrains are treated.

Pressure treatment of timber and wood veneer: Timber products and veneer can be pressure or dip treated for permanent insect protection including against termites. Treatment solutions can be prepared in water or solvent. Recommended retentions in the finished wood products are as follows:

Borer immunization – 0.006% w/w (minimum) permethrin in all sapwood

Termite control – 0.02% w/w (minimum) permethrin. Check relevant standards for penetration and analytical zone requirements (such as H2 level under AS1604 series). This treatment class is not applicable in New Zealand.

Set treatment conditions (solution strength and solution uptake) to achieve required penetration and retentions as above. Contact Lonza for further details.

Remedial treatments in buildings: It is strongly recommended to get expert advice from a qualified pest controller before attempting remedial treatment applications. Use a 0.4% v/v solution in non-staining, low odour distillate or kerosene. Drill into damaged areas and inject solution, or with borers inject solution directly into emergence holes. Treat all infected areas (as indicated by expulsion of frass). Re-inspect areas regularly for continued activity. In the case of termites, the nest may be some distance from the damaged areas and
treatment may not prevent termites attacking or re-emerging in other areas.

4.0 Safety and Handling

Precautionary statements
Read the product label before use. Ensure that MSDS is available. Avoid contact with the eyes and skin. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Do not breathe vapours. Wear protective gloves / protective clothing and eye / face protection when handling the concentrate. In case of inadequate ventilation wear respiratory protection. Contaminated work clothing should not be allowed out of the workplace. If exposed or concerned seek medical advice / attention.

The product is very toxic to fish and terrestrial and aquatic invertebrates. Avoid release to the environment. Do not use wood treated with this product for bee keeping or related uses.

First Aid
Call the National Poisons Centre if you feel that you may have been harmed or irritated by this product. FIRST AID FACILITIES: Ready access to running water is required. Accessible eyewash is recommended.

IF SWALLOWED: Do NOT induce vomiting. Rinse mouth. If vomiting occurs, place victim face downwards, with the head turned to the side and lower than the hips to prevent vomit entering the lungs.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Apply continuous irrigation with water for at least 15 minutes holding eyelids apart. If eye irritation persists: Get medical advice.

IF ON SKIN (or hair): Remove all contaminated clothing. Rinse skin with plenty of soap and water / shower. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice.

IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Immediately call the NATIONAL POISON CENTRE or a doctor.

5.0 Transport and Storage

UN No. 3082 Environmentally hazardous substance, liquid n.o.s. (permethrin)
DG CLASS 9
PG III
HAZCHEM 2X.

Store the concentrate in secure areas in the original containers and away from strong heat sources. Keep out of reach of children. Prevent any contact with acids or oxidizing materials.

Spills and Disposal
Contain spillage with sand, sawdust, vermiculite or other suitable absorbent. Prevent the spill entering drains or waterways. Pump any recoverable liquid into suitable containers for re-use or disposal. Absorb residue with sawdust or other absorbent and collect for disposal by way of an approved landfill.

Triple rinse empty containers with water and dispose or recycle through Agrecovery if available

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