
POISON
KEEP OUT OF REACH OF CHILDREN
READ SAFETY DIRECTIONS BEFORE OPENING OR USING

Permeshield 500

Residual Insecticide

Active Constituent: 500g/L Permethrin 25:75
Solvent: 443g/L Hydrocarbon Liquid

GROUP	3A	INSECTICIDE
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For control of a range of insect pests in various situations as per the Directions for Use Table.

Contents: 1 Litre
2.5 Litre
5 Litre
10 Litre
20 Litre
110 Litre
200 Litre

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DIRECTIONS FOR USE

Situation	Pest	State	Rate	Critical Comments
Felled logs, poles, posts and sawn timber.	Auger beetles (<i>Family Bostrychidae</i>), Powder post beetles (<i>Family Lyctidae</i>), Pinhole borers (<i>Family Platypodidae</i>), Furniture beetles (<i>Family Anobiidae</i>)	All States & NT	20 mL/10 L diesel, light oil or water	<ol style="list-style-type: none"> Logs, posts and poles (especially when newly fallen or freshly peeled) use knapsack or power sprayer at 700 mL per m³. Sawn timbers apply at 1 Litre per 20m² of surface area.
Remedial treatment of timber in buildings	Drywood termites, <i>Cryptotermes primus</i> , <i>c.brevis</i> , <i>c.domesticus</i>	QLD, NSW & NT only	40mL/10 litre non-staining oil or kerosene.	<p>Applicable only to surfaces, which will absorb the solution, hence varnished, painted or polished surfaces need to be sanded down to ensure penetration of the solution.</p> <p>Apply at 1 litre/20m² of surface area or to be the point of run-off. Drill damaged areas and inject solution until timber is unable to absorb more liquid. Treat all infested areas (as indicated by expulsion of frass) for maximum effect. A single application may be sufficient. Continued expulsion of frass may be due to movement of timber.</p>
Sawn and round timbers for treatment by vacuum impregnation.	Powder post beetles, furniture beetles.	All states & NT	12mL/100kg timber	<ol style="list-style-type: none"> Calculate uptake of suitable diluent eg white spirit/100 kg of timber. Dilute Permeshield Residual Insecticide in white spirit as calculated above. Apply to timber through vacuum treatment equipment in accordance with manufacturer's directions. Ensure amount of white spirit uptake equals that calculated in I.
	Termites including <i>Coptotermes acinaciformis</i>	NSW, QLD, SA, VIC, WA & NT	40mL/100kg timber	
Groundline treatment of power poles.	Subterranean termites including <i>Coptotermes spp.</i>	All states south of Tropic of Capricorn except Tas	40mL in 10 litre creosate or 100mL in 10 litre process oil.	Evacuate 30cm around pole to a depth of 30-40cm. Apply 5 litres of mixture to the pole at ground level and puddle the backfill with remaining 5 litres.
Softwood particleboard manufacture.	Subterranean termites (<i>including Mastotermes darwiniensis</i>) Timber beetles.	NSW, QLD, SA, VIC, WA & NT	0.56mL/kg dry fibre (gives 0.3g permethrin 25:75kg)	Dilute as required for metered addition into the glue. Add sufficient Permeshield Residual Insecticide to treat weight of the fibre component only of the boards.

Situation	Pest	State	Rate	Critical Comments
Processing and manufacture of softwood plywood.	Termites, including <i>Coptotermes acinaciformis</i> , subterranean termites, <i>Mastotermes darwiniensis</i> , giant termite.	NSW, QLD, SA, VIC, WA & NT	360mL/M ³ dry veneer (gives 180g permethrin 25:75/m)	1. Calculate the uptake of solution by veneers traversing a shallow dip bath. 2. Dilute as required to ensure the mean target application of Permeshield Residual Insecticide/m ³ dry veneer. Dip uptake of individual veneers will vary hence the average uptake should be assessed rather than of individual veneers on the basis of shift or daily throughput.
Processing and manufacture of softwood and hardwood plywood for export in compliance with DPIE Quarantine regulations for cargo containers.	Quarantine timber insects	All states & NT	240mL/m ³ dry veneer (gives 120g permethrin 25:75/m ³)	
Household and industrial situations	Ants, cockroaches, fleas, spiders, silverfish		50mL/10L of light oil or water	All dilutions should be applied to the point of run-off. That is, at the rate of 5L of prepared spray per 100 to 150m ² depending on the porosity of the sprayed material. Porous surfaces such as brick, cement, ceramic (unglazed), etc, absorb the spray and hence more spray is needed to deliver the required surface deposit. Spray in cracks, crevices and other insect harborage.
Aircraft	Cockroaches, moths, beetles.		Initial: 200 mL in 5L water Routine: (Monthly) 100mL in 5L water	Apply to carpets and other fabrics at 25mL spray mix per m ² and to other surfaces at 10mL spray mix per m ² .
Repellent treatment of fabric (excluding clothing) and mosquito nets 1. Nylon 2. Cotton/Cotton blends	Mosquitoes, biting flies		1. 15mL in 500mL of water 2. 15mL in 2L of water	The dilution rate depends on the water uptake rate of the material. Dip thoroughly for two minutes, drain then dry, preferably laid flat on a non-absorbent surface. Nets should be hung up to drain.
Repellent treatment of clothing of ADF personnel in accordance with the Australian Defence Force Publication ADFP 705 Pesticides Manual.			12mL/1L of water	Dip treat for two minutes, pre dry on a horizontal non-absorbent surface before hanging up to dry to prevent excessive dripping.
Lawns, ovals, amenity areas.	Lawn armyworm (<i>Spodoptera mauritis</i>)	QLD & NSW only	100-200mL/500L water/ha plus 10mL/100L Agral 600	Apply at first sign of damage and as when required.

NOT TO BE USED FOR ANY PURPOSE, OR IN ANY MANNER CONTRARY TO THIS LABEL UNLESS AUTHORISED UNDER APPROPRIATE LEGISLATION.

GENERAL INSTRUCTIONS

Large scale or Commercial Operation for Dip/Spray Treatment of felled logs, poles, posts and sawn timber

Permeshield Residual Insecticide can be mixed with either diesel, light oil or water. Choice of carrier depends on anticipated exposure to water. Total exposure requires diesel. For timber under shelter, use light oil or water.

Application in diesel will survive up to 3 months exposure in open. Water and light oil application should be protected, to achieve maximum effectiveness of up to 3 months. Agitate frequently and replenish dip as required.

For remedial protection, in situ timber may be treated by spraying. Local Water Authorities should be advised of the proposed use of Permeshield Residual Insecticide.

Plywood Manufacture

Use with water. Production and handling of green veneers will vary site to site; hence a shallow dip bath for treating veneers must be constructed. Throughput rate and liquid uptake of veneers has to be established. Replacement of appropriately diluted product can be constant or periodic.

Aircraft Desinfection

Use with water only. Treatment should be carried out in accordance with relevant Department of Primary Industries and Energy quarantine requirements.

RESISTANCE WARNING

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For insecticide resistance management Permeshield Residual Insecticide is a group 3A insecticide. Some naturally occurring insect biotypes resistant to Permeshield Residual Insecticide and other Group 3A insecticides may exist through normal genetic variability in any insect population if Permeshield Residual Insecticide or other Group 3A insecticides are used repeatedly. The effectiveness of Permeshield Residual Insecticide on resistant individuals could be significantly reduced. Since occurrence of resistant individuals is difficult to detect prior to use, ChemAg Pty Ltd. accepts no liability for any losses that may result from failure of Permeshield Residual Insecticide to control resistant insects. Permeshield Residual Insecticide may be subject to specific resistance management strategies. For further information contact your local supplier, ChemAg Pty Ltd representative or local agricultural department agronomist.

CAUTION

Treated timber must not come into contact with foodstuffs, eg. use in packing cases or places where food is prepared or stored. Do not spray directly on exposed food utensils or food preparation surfaces.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND THE ENVIRONMENT

Harmful to fish. Do not contaminate streams, rivers or waterways with the chemical or used container. Do not discharge waste liquid into waterways. Never repack from this container.

STORAGE, SPILLAGE AND DISPOSAL

Store in the closed, original container in a cool, well ventilated area out of direct sunlight. Triple or preferably pressure rinse containers before disposal. Do not dispose of undiluted chemicals on site. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush or puncture and bury empty containers in a local authority landfill. If no landfill is available, bury the containers below 500mm in a disposal pit specifically marked and setup for this purpose of clearways, desirable vegetation and tree roots. Empty containers and product should not be burnt.

SPILLAGE

In case of spillage, confine and absorb spilled product with absorbent material such as sand, clay or cat litter and dispose of waste according to the Australian Standard 2507 – Storage and Handling Pesticides. DO NOT allow spilled product to enter sewers, drains, creeks or any other waterways.

SAFETY DIRECTIONS

Product is harmful if swallowed. Will irritate the eyes, nose, throat and skin. Avoid contact with eyes and skin. Do not inhale spray mist. When opening the container and preparing spray or dip, wear elbow-length PVC gloves and face shield. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each days use, wash gloves, face shield and contaminated clothing.

FIRST AID

If poisoning occurs, contact a doctor or Poisons Information Centre. Phone 13 11 26. If swallowed, and if more than 15 minutes from a hospital, induce vomiting, preferably using Ipecac Syrup APF.

For further information, see the Material Safety Data Sheet (MSDS).

WARRANTY

ChemAg Pty Ltd makes no warranty expressed or implied, concerning the use of this product other than that indicated on the label. Except as so warranted the product is sold as is. Buyer and user assume all risk of use and/or handling and/or storage of this material when such use/or handling and/or storage are contrary to label instructions.

Batch No:

Date of Manufacture:

NRA Approval Number: 53170/