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

# Perigen® 500

#### TIMBER AND RESIDUAL INSECTICIDE

Active Constituent: 500 g/L PERMETHRIN 25:75 Solvent: 324 g/L HYDROCARBON LIQUID

GROUP 3A INSECTICIDE

For control of a range of insect pests in various situations.

## **GENERAL INSTRUCTIONS**

## **Insecticide Resistance Warning**

For insecticide resistance management, Perigen 500 Timber and Residual Insecticide is a Group 3A insecticide. Some naturally occurring insect biotypes resistant to Perigen 500 and other Group 3A insecticides may exist through normal genetic variability in any insect population. The resistant individuals can eventually dominate the insect population if Perigen 500 or other Group 3A insecticides are used repeatedly. The effectiveness of Perigen 500 on resistant individuals could be significantly reduced. Since occurrence of resistant individuals is difficult to detect prior to use, Bayer CropScience Pty Ltd accepts no liability for any losses that may result from the failure of Perigen 500 to control resistant insects. Perigen 500 may be subject to specific resistance management strategies. For further information contact your local supplier or Bayer representative.

#### Large Scale or Commercial Operations for Dip/Spray Treatment of felled logs, poles, posts and sawn timber

Perigen 500 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 applications should be protected, to achieve maximum effectiveness of up to 3 months.

Agitate frequently and replenish dip as required.

Local Water Authorities should be advised of the proposed use of Perigen 500.

#### **Remedial Treatment of Timber**

For protection, <u>in situ</u> timbers may be treated by spraying or brushing with Perigen 500 according to the DIRECTIONS FOR USE. Do not use diesel distillate. If the opposite surface is covered, stained or varnished, it should be fully cured before Perigen 500 is applied, especially if the timbers to be treated are old and cracks, holes or gaps are present. Test a small area to ensure that solvent penetration through timbers will not adversely affect the timber finish or floor coverings.

#### **Plywood Manufacture**

Use with water. Production and handling of green veneers will vary from site to site. 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 Disinsection**

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

#### **PRECAUTIONS**

Treated timber must not come into contact with foodstuffs, e.g., in packing cases or places where food is prepared or stored. Avoid contact with food, food utensils, or places where food is prepared or stored. Before use, remove or cover all exposed foodstuffs. Cover all dishes and utensils, and places where food is prepared or stored.

# PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

Dangerous to fish and other aquatic organisms. DO NOT contaminate streams, rivers or waterways with the chemical or used containers.

#### STORAGE AND DISPOSAL

Store in the closed, original container in a cool, well-ventilated area. Do not store for prolonged periods in direct sunlight. Triple rinse or preferably pressure rinse containers before disposal. Add rinsings to spray tank. 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 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt.

#### **SAFETY DIRECTIONS**

Product is harmful if swallowed. Will irritate the eyes, nose, throat and skin. Avoid contact with eyes and skin and do not inhale spray mist. When opening the container and preparing treatment mixture 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 day's use, wash gloves, face-shield and contaminated clothing.

#### **FIRST AID**

If poisoning occurs, contact a doctor or Poisons Information Centre (phone 13 11 26).

#### **MATERIAL SAFETY DATA SHEET**

NRA Approval No.: 32840/0301

Additional information is listed in the Material Safety Data Sheet available from Bayer CropScience Pty Ltd.

#### **EXCLUSION OF LIABILITY**

This product as supplied is of a high grade and suitable for the purpose for which it is expressly intended and must be used in accordance with the directions. The user must monitor the performance of any product as climatic, geographical or biological variables and/or developed resistance may affect the results obtained. No responsibility is accepted in respect of this product, save for those non-excludable conditions implied by the Trade Practices Act or any State or Federal legislation.

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#### **DIRECTIONS FOR USE:**

SITUATION	PEST	RATE	CRITICAL COMMENTS
Felled logs, poles, posts and sawn timber	Auger beetle (family Bostrychidae), powder post beetles (family Lyctidae), pinhole borers (family Platypodidae), furniture beetles (family Anobiidae)	20 mL in 10 L diesel, light oil or water	<ul> <li>(i) Logs, posts and poles (especially when newly fallen or freshly peeled) - use Knapsack or Power Sprayer at 700 mL per m³.</li> <li>(ii) Sawn timber - apply at 1 L per 20 m² of surface area.</li> </ul>
Remedial treatment of timber in buildings	Drywood termites Cryptotermes primus, C. brevis, C. domesticus - in QLD, NSW, NT and WA only	40 mL in 10 L of non-staining oil or kerosene	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. Apply at 1 L per 20 m² of surface area or to 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.  Do not use diesel in or under living areas as odours and staining may occur. See GENERAL INSTRUCTIONS.
	Auger beetle (family Bostrychidae), powder post beetles (family Lyctidae), pinhole borers (family Platypodidae), furniture beetles (family Anobiidae)	20 mL in 10 L non-staining light oil or deodorised kerosene or water	
Sawn and round timbers for treatment by vacuum impregnation	Powder post beetle, furniture beetle	12 mL per 100 kg timber	<ol> <li>Calculate uptake of suitable diluent (e.g. white spirit) per 100 kg of timber.</li> <li>Dilute Perigen 500 in white spirit as calculated above.</li> <li>Apply to timber through vacuum treatment equipment in accordance with manufacturer's direction.</li> <li>Ensure amount of white spirit uptake equals that calculated in 1).</li> </ol>
, 0	Termites including Coptotermes acinaciformis - Not in Tas	40 mL per 100 kg timber	
Groundline treatment of power poles	Subterranean termites including Coptotermes spp - in all States south of Tropic of Capricorn except Tasmania	40 mL in 10 L creosote or 100 mL in 10 L process oil	Excavate 30 cm around pole to a depth of 30 - 40 cm. Apply 5 L of mixture to the pole at ground level and puddle the backfill with remaining 5 L.

SITUATION	PEST	RATE	CRITICAL COMMENTS
Softwood particleboard manufacture	Subterranean termites (incl. <i>Mastotermes</i> <i>darwiniensis</i> ), timber beetles - <u>Not in Tas</u>	0.56 mL per kg dry fibre (gives 0.3 g permethrin 25:75 per kg)	Dilute as required for metered addition into the glue. Add sufficient Perigen 500 to achieve weight of the fibre component only of the boards.
Processing and manufacture of softwood plywood  Processing and	Termites, including Coptotermes acinaciformis, subterranean termite; Mastotermes darwiniensis, giant termite – Not in Tas Quarantine timber insects	360 mL per m <sup>3</sup> dry veneer (gives 180 g permethrin 25:75 per m <sup>3</sup> )	<ol> <li>Calculate the uptake of solution by veneers traversing a shallow dip bath.</li> <li>Dilute as required to ensure the mean target application of Perigen 500 per m³ dry veneer. Dip uptake of individual veneers will vary. Hence the average uptake should be assessed rather than that of individual veneers on the basis of shift or daily throughput.</li> <li>Use in accordance with AQIS Cargo Containers, Quarantine Aspects and Procedures.</li> </ol>
manufacture of softwood and hardwood plywood for export	Quarantine uniber insects	dry veneer (gives 120 g permethrin 25:75 per m³)	
Household and industrial situations	Ants, cockroaches, fleas, flies, mosquitoes, spiders, silverfish	50 mL in 10 L of light oil or water	All dilutions should be applied to the point of run off, using 5 L of prepared spray per 100 to 150 m <sup>2</sup> , 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 harbourages.
Carpets, rugs and fabrics	Carpet beetle (Anthrenus flavipes), Variegated carpet beetle (Anthrenus verbasci), Webbing clothes moth (Tineola bisselliella), Case-making clothes moths (Tinea pellionella).	50 mL in 10 L of water	Apply sufficient diluted spray to penetrate carpet pile or fabric (50 mL spray mix per m²).  Apply as a surface treatment only.  It is recommended that application to a small, non-conspicuous, test area of the carpet, rug or fabric be made first to determine that staining and damage will not occur.
Aircraft	Cockroaches, moths, beetles, mosquitoes	Initial: 200 mL in 5 L of water Routine (monthly):100 mL in 5 L of water	Apply to carpets and other fabrics at 25 mL spray mix per m <sup>2</sup> and to other surfaces at 10 mL spray mix per m <sup>2</sup> .
Repellent treatment of fabric (excluding clothing) and mosquito nets	Mosquitoes, biting flies		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 not be hung up to drain.
(i) Nylon		(i) 15 mL in 500 mL of water	
(ii) Cotton and cotton blends		(ii) 15 mL in 2 L of water	
Repellent treatment of clothing of ADF personnel		12 mL per 1 L water	Dip treat for two minutes. Pre-dry on a horizontal non-absorbent surface before hanging up to dry, to prevent excessive dripping.  Use in accordance with the Australian Defence Force Publication ADFP 705 Pesticides Manual.

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