

### PRECAUTIONS

Residents and pets should not be allowed in a room being treated. Any spills should be cleaned up before leaving the room (refer to the MSDS).

Ensure all heating/air conditioning ducts, air vents, plumbing pipes, sewer lines, floor drains, heating pipes and electrical lines/conduits are known and identified before commencing any application of termiticide. Do NOT puncture or contaminate any of these. Avoid application around edible plants.

### RE-ENTRY PERIOD

DO NOT re-enter treated areas until spray has dried.

### SAFETY DIRECTIONS

Will irritate the eyes and skin. Repeated exposure may cause allergic disorders. Avoid contact with eyes and skin. Wash hands after use. When opening the container, preparing spray and using the prepared spray wear chemical resistant clothing buttoned to the neck and wrist, washable hat, half-facepiece respirator with combined dust and gas cartridge and elbow-length PVC or nitrile gloves. After each day's use, wash gloves, contaminated clothing and respirator and if rubber wash with detergent and warm water.

### FIRST AID

If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 131126.

### MSDS

Additional information is listed in the Material Safety Data Sheet which is available from PCT Holdings 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 legislation.

**CAUTION**

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

**terminade\***

**RESIDUAL TERMITICIDE**

**ACTIVE CONSTITUENT: 100 g/L FIPRONIL**

*For the protection of structures from subterranean termite damage and for the control of subterranean termites around domestic and commercial structures as specified in the Directions for Use Table.*

**TO BE USED BY LICENSED PEST CONTROL OPERATORS ONLY**

**IMPORTANT: READ THE ATTACHED BOOKLET BEFORE USE**



**APVMA Approval No: 63502/45817**

**\*TERMINADE is a registered trademark of PCT INTERNATIONAL PTY LTD  
(PCT Holdings Pty Ltd ABN 11 099 023 962)**

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**CUSTOMER SERVICE FREECALL 1800 630 877 EMERGENCY RESPONSE (ALL HOURS) FREECALL 1800 630 877**

**DIRECTIONS FOR USE: All States except Tasmania**

**Restraints:**

DO NOT apply to excessively wet soils, immediately after or during heavy rain; to avoid runoff of the chemical.

DO NOT apply at less than label rates.

SITUATION	PEST	RATE	CRITICAL COMMENTS
Chemical soil treated zones around existing buildings and structures	Subterranean termites including (but not limited to) <i>Coptotermes acinaciformis</i> , <i>Mastotermes darwiniensis</i> , <i>Schedorhinotermes</i> spp.	600 mL in 100 L water (0.06% a.i. mix)	Application by LICENSED PEST CONTROL OPERATORS: Mix the required quantity of Terminade with the specified volume of water and apply to form a continuous chemical soil treated zone (horizontal and vertical or as an external perimeter) around and under the structure to be protected as per AS3660.2.  The treated zone may be created using a combination of conventional spraying and trenching. Soil injection equipment (rodding) must only be used where trenching and treating the backfill is not possible or practical. Application of chemical treated zones beneath concrete slabs and paths will require drilling and injection of termiticide using rodding equipment.  Chemical treated zones that have been disturbed will need to be reapplied to restore the complete treated zone.  For more details refer to General Instructions.

**AUSTRALIAN STANDARDS**

Licensed Pest Control Operators installing a chemical soil treated zone around an existing building should be familiar with the Australian Standard 3660.2, which provides information relating to installation of chemical soil termite treatment zones.

**PERIOD OF PROTECTION**

Data currently available indicates that this product, when applied as a soil treatment in accordance with this label, will be effective at deterring concealed entry into a building or structure by subterranean termites (except *Mastotermes darwiniensis*) for a minimum period of five years. A minimum period of two years applies to *Mastotermes darwiniensis*. Following these periods of protection, delayed mortality effects will still be observed. The relationship between delayed mortality and cessation of feeding damage has not been entirely quantified and if in doubt, more regular monitoring is recommended as appropriate for the level of activity identified. To re-establish the conventional barrier, re-application at full rates is required.

The actual protection period will also be affected by factors such as termite pressure, climatic and soil conditions and subsequent soil disturbance.

**REINSPECTION**

As with all chemical termiticides, regular inspections (at least annually) by a competent Licensed Pest Control Operator are recommended as bridging and breaching of treated zones can occur. The need for retreatment should be determined as a result of these inspections.

**PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT**

Highly toxic to fish and aquatic organisms. Do NOT apply to areas where surface water is present. Rinse waters and runoff from treated areas MUST be prevented from entering drains or waterways. Do NOT apply if heavy rains are expected to occur within 48 hours of application. Do NOT contaminate streams, rivers or waterways with the chemical or used containers. Dangerous to bees.

**PROTECTION OF PETS AND LIVESTOCK**

Before spraying remove animals and pets from the areas to be treated. Cover or remove any open food and water containers. Cover or remove (as applicable) fish ponds, aquariums etc before spraying.

**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 containers before disposal. Add rinsings to the spray tank. Do NOT dispose of undiluted chemicals onsite. If recycling replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush or puncture and deliver empty packaging to an approved waste management facility. If an approved waste management facility is not available bury the empty packaging 500 mm below the surface in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots in compliance with relevant Local, State or Territory government regulations. Do not burn empty containers or product.

**Vertical Treated Zones**

Vertical treated zones are designed to deter termites from gaining concealed horizontal access to a building or structure. Apply at least 100 L of prepared spray per cubic metre of soil. Vertical treated zones should be a minimum of 150 mm wide and applied to a depth 50 mm below the top of the footing. Where a horizontal treated zone is installed, the vertical treated zone should be installed to be continuous with it. The most effective method of creating an even and continuous treated zone is by trenching and treating the soil as it is backfilled. Soil injection equipment (rodding) must only be used where trenching and treating the backfill is not possible or practical.

Trenching

Excavating a trench, treating the exposed trench, back filling and treating the backfill is the preferred method of installing a vertical treated zone. The trench needs to be a minimum of 150 mm wide and continue to at least 50 mm below the top of the footing. Assuming a 150 mm wide trench with a 300 mm distance to the top of the footing, this would equate to a 150 mm x 350 mm trench in which 5.25 L of prepared spray would be applied per lineal metre of trench. Any variation of dimensions needs to be recalculated on the basis of applying 100 L of prepared spray per cubic metre of soil.

Rodding through concrete

When applying a vertical treated zone underneath a concrete obstruction (eg. a path), a soil rod with a 3 or 4 way multi-directional tip should be used. The rod should be rotated during application (90° for a 4-way tip and 120° for a 3-way tip). The tip should be inserted down as close to the footing as possible to ensure a complete vertical treated zone. Ensure that chemical is applied during insertion and withdrawal of the rod. As uneven distribution of termiticide is likely when applying by this method under concrete, the application volume should be increased to 200 L spray solution per cubic metre of soil. Rod spacing should not exceed 200 mm and application volume should be adjusted depending on soil type (as indicated in the table below) and the depth of the footing. Assuming a 300 mm depth to the top of the footing and 200 mm spaced holes, 2 L of prepared spray is to be applied per hole. Any variation of dimensions needs to be recalculated on the basis of applying 200 L of prepared spray per cubic metre of soil.

**Under concrete rodding**

Soil type	Hole Spacing (mm)	Volume per hole
Heavy Clays	150 mm	1.5 L
Other soils	200 mm	2.0 L

**External Perimeter Treated zones**

An external perimeter treated zone should be a minimum of 150 mm wide, a minimum of 80 mm deep and extend not less than 50 mm below the lowest point where the construction below ground could allow concealed termite ingress (or not less than 50 mm below the top of the footing where the building fabric could allow concealed termite ingress). Application considerations should reflect the installation of vertical treated zones.

SITUATION	PEST	RATE	CRITICAL COMMENTS
Protection of poles and fence posts	Subterranean termites including (but not limited to) <i>Coptotermes acinaciformis</i> , <i>Mastotermes darwiniensis</i> , <i>Schedorhinotermes</i> spp.	600 mL in 100 L water (0.06% a.i. mix)	Application by LICENSED PEST CONTROL OPERATORS: Only posts and poles in contact with soil need to be treated. For existing posts and poles create a continuous Terminade treated zone 450 mm deep and 150 mm wide around the post or pole by trenching and puddle treating the backfill. Soil injection equipment (rodding) must only be used where trenching and treating the backfill is not possible or practical. Use 100 L of prepared spray per cubic metre of soil around the pole or post. Note that it is impossible to treat the soil at the bottom of a sound post or pole so future attack via this route cannot be ruled out. If new posts or poles are being installed then the bottom of the hole and the backfill should be treated at installation.

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

**GENERAL INSTRUCTIONS**

Chemical treatment for termite control around existing buildings should be considered to be part of an integrated approach to reduce the risk of termite attack and should be conducted by LICENSED PEST CONTROL OPERATORS. The steps below best describe the procedure for optimum termite management:

- The building owner should try to minimise water entering under and around the building and improve drainage to reduce moisture accumulating in these areas.
- Ventilation of subfloor areas should also be optimised to reduce moisture accumulation.
- The area under the floor should be kept free from any debris-timber such as off-cuts of wood or firewood.
- Treat with a residual chemical zone treatment such as Terminade in compliance with AS3660.2.
- Regular inspections should be carried out (at least annually as recommended by AS3660 Series).
- If any additional subsequent building or landscaping work causes disruption to the chemical soil treated zone it must be restored to maintain protection.

**MIXING**

Half fill the spray tank with water and then add the required quantity of Terminade. Stir and then top up the spray tank to the required volume. The use of this product in a tank mix with other insecticides is not recommended as the behaviour and efficacy of the product may be affected. Ensure equipment is free of leaks and clean from residues of other chemicals before mixing Terminade.

**SOIL PREPARATION**

Some soils will be difficult to wet (eg. heavy clay soils) and there will be a greater chance of runoff of liquid from the surface; in these situations it will be necessary to loosen the soil to allow spray solution to percolate to form the treated zone; the soil should be scarified to a depth between 50 – 80 mm. In situations with very heavy soils the complete removal and replacement of the soil with a sandy loam type is recommended in order to form the treated zone. The replacement soil can be treated with Terminade before placing into the trench via the use of appropriate soil mixing vessels. If soil replacement is not possible then the water volume should be reduced to ensure that runoff is minimised. A reduction in the water volume used should not be associated with a reduction in the mix rate of Terminade – the same amount of active ingredient should be applied per given area or volume of soil; an increase in concentration of termiticide will therefore be required. The tables below indicate mix rates if application volumes need to be reduced. It is not recommended that water volumes below 3 L/m<sup>2</sup> are used.

**Horizontal Treated zones**

Water Rate /m <sup>2</sup>	Dilution rate	Concentration	Application rate
5 L/ m <sup>2</sup>	600 mL /100 L water	0.6 g/L	3.0 g a.i./ m <sup>2</sup>
4 L/ m <sup>2</sup>	600 mL /80 L water	0.75 g/L	3.0 g a.i./ m <sup>2</sup>
3 L/ m <sup>2</sup>	600 mL /60 L water	1 g/L	3.0 g a.i./ m <sup>2</sup>

**Vertical Treated zones**

Water Rate /m <sup>2</sup>	Dilution rate	Concentration	Application rate
100 L/ m <sup>2</sup>	600 mL /100 L water	0.6 g/L	60 g a.i./ m <sup>3</sup>
90 L/ m <sup>2</sup>	600 mL /90 L water	0.666 g/L	60 g a.i./ m <sup>3</sup>
80 L/ m <sup>2</sup>	600 mL /80 L water	0.75 g/L	60 g a.i./ m <sup>3</sup>
70 L/ m <sup>2</sup>	600 mL /70 L water	0.85 g/L	60 g a.i./ m <sup>3</sup>

If the treated zone is being applied to a building on a slope a furrow should also be formed of a similar depth along the contour of the slope to prevent runoff of the termiticide.

In situations where the surface is very dry or with sandy or porous soils the area will require moistening prior to application of chemical to prevent loss of chemical through piping or excessive percolation.

The use of rodding equipment in heavy clay soil can result in an uneven distribution of chemical; in such situations the preferred method of installing a treated zone is to trench and backfill.

**APPLICATION**

Treated zones to protect both new and existing buildings may be installed using a combination of conventional spraying and trenching. Spray equipment should be calibrated to deliver a low pressure high volume coarse spray.

It is recommended that the minimum thickness of any treated soil treated zone is 80 mm. Treated zones that have been disturbed by construction, excavation and other soil disturbing activities will need reapplication to restore site to original condition.

**Horizontal Treated Zones**

Horizontal treated zones are to be applied to deter termites from gaining concealed vertical access to the building substructure.

Horizontal treated zones should cover all areas of soil beneath suspended floors where there is inadequate access or where there is less than 400 mm clearance. The treated zone should also be continuous beneath a concrete slab-on-ground or on fill. The treated zone should surround any connection between the building and the soil and completely abut any internal vertical treated zone around any substructure. Otherwise install perimeter treated zones around each individual pier, stump, penetration point and substructure wall.

Horizontal treated zones must be a minimum depth of 80 mm. It may be necessary to loosen the soil to allow spray solution to percolate to form the treated zone; the soil should be scarified to a depth between 50 – 80 mm. Apply 5 L of prepared Terminade spray per square metre of soil.

When termiticide needs to be injected through a concrete slab to create a horizontal treated zone, suitable equipment should be used to inject termiticide through predrilled holes. As uneven distribution of termiticide is likely when applying by this method under the slab, the application volume should be increased per square metre up to 10 L of spray solution. To ensure an even treated zone is created, it is also recommended that maximum drill spacings and minimum application volumes consistent with the following table be adopted. Use a slab injector fitted with a multi-directional tip. When applying through such structures, the rod should be held vertically at 90° to the slab and rotated during application. Ensure a strong seal with the top of the drill hole to minimise leakage and that drill holes are plugged after treatment.

Soil type	Hole Spacing (mm)	Number of holes per square metre	Volume per hole to achieve 10 L/ m <sup>2</sup>
Heavy Clays	150 mm	36	0.3 L (300 mL) (36 x 0.3 = approx 10 L/m <sup>2</sup> )
Other soils	200 mm	25	0.4 L (400 mL) (25 x 0.4 = approx 10 L/m <sup>2</sup> )