



ENSYSTEX AUSTRALASIA PTY LTD

www.ensystex.com.au

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

PROTHOR* 200 SC TERMITICIDE



ACTIVE CONSTITUENT: 200 g/L IMIDACLOPRID

For use in the management of Subterranean Termites as Specified in the Directions for Use Table.

IMPORTANT:
READ THIS BOOKLET BEFORE USE

ENSYSTEX AUSTRALASIA PTY LTD

ABN 53 102 221 965
Unit 3, The Junction Estate,
4-6 Junction Street,
AUBURN NSW 2144
www.ensystex.com.au

APVMA Approval No: 60558/1107
*Trademark of Ensystex

CUSTOMER SERVICE **13 35 36**
EMERGENCY RESPONSE (ALL HOURS) **13 35 36**

DIRECTIONS FOR USE (all States except Tasmania)

RESTRAINTS

DO NOT apply to soils if excessively wet or immediately after heavy rain to avoid run-off of chemical.
DO NOT disturb the treated soil barrier.
DO NOT use this product at less than indicated label rates.
DO NOT use in cavity walls (except for direct treatment of a nest).

Spray Application

SITUATION	PEST	RATE	CRITICAL COMMENTS
Existing buildings: Barrier treatments for existing buildings including domestic, industrial, government and commercial premises. Also applicable to external barriers (only) around new buildings.	Subterranean termites (except <i>Mastotermes darwiniensis</i>)	Spray solution mixing rate 250 mL per 100 litres of water	(See also General Instructions) Mix the required quantity of Prothor in water and apply using suitable application equipment to form a complete and continuous barrier around and under the structure. The barrier may be created using a combination of conventional spraying and trenching along with soil rodding. Concrete foundation slabs and paths around the structure should be drilled and injected with Prothor solution including along the expansion joints, edges and cracks. In some cases the use of wetting agents or foaming agents may be useful in overcoming non-wetting soils or getting a more even application in areas of difficult access or soil subsidence.
Service poles and fence posts	<i>Mastotermes darwiniensis</i>	500 mL per 100 litres of water	If the barrier is disturbed by earthworks, construction or severe drainage problems it will have to be restored by reapplication. New posts: treat the bottom of the hole and the backfill using a minimum of 10 L of solution per hole. Existing posts: create a continuous barrier 150 mm wide by soil rodding or spraying the backfilled soil to a depth of 450 mm. Infested posts may also be drilled and injected with spray solution. Note that it is impossible to treat the soil at the bottom of a sound post so future termite attack from below the treated area cannot be ruled out.
Nests in wall cavities, poles and trees			Locate the nest by drilling holes into the wall, pole or tree. Ensure that the full size of the nest is identified especially the highest point. Apply at least 20 litres of diluted Prothor into the nest through the drill holes. Drill holes should be sealed after application. Note application to wall cavities behind plasterboard may result in water/mud staining of the plasterboard. Use of a dry foam applicator can reduce this risk and improve distribution within the wall cavity.

Reticulation Application

SITUATION	PEST	RATE	CRITICAL COMMENTS
Reticulation systems:	Subterranean termites (except <i>Mastotermes darwiniensis</i>)	Spray solution mixing rate 250 mL per 100 litres of water	The reticulation system (refer to the General Instructions) must be installed according to the manufacturer's specifications. Incorrectly installed reticulation systems will not establish a complete and continuous barrier and will not provide protection of structures from concealed entry by termites. Prothor must only be applied via a reticulation system that has been installed with a prepared sand/soil bed of a minimum depth of 100 mm and even compaction. If this is not possible, alternative termite protection should be arranged for these areas (see General Instructions for further system requirements).
Perimeter and/or service penetration treatment	<i>Mastotermes darwiniensis</i>	500 mL per 100 litres of water	The reticulation system installer must ensure that the installation will result in the application of not less than 250 mL (500 mL for <i>Mastotermes darwiniensis</i>) of product per m ² of soil, applied in a continuous treated zone not less than 100 mm thick. The volume of soil treated and diluted solution applied by a reticulation system is dependent on both the parameters of the particular system and the type of soil present. Guidelines should be sought from the reticulation system manufacturer. For a barrier with dimensions of 300 mm deep x 150 mm wide, 5 L per linear metre is suitable for perimeter and/or service penetration only systems. This rate should be adjusted for systems treating a different volume of soil.
Complete under slab installations			For the horizontal barrier under the slab, not less than 50 mL (100 mL for <i>Mastotermes darwiniensis</i>) product should be applied per m ² . In addition the reticulation system installer must ensure that a prepared sand/soil bed of 100 mm depth is provided across the whole of the underslab installation to ensure complete horizontal coverage with the diluted product.

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

GENERAL INSTRUCTIONS

Prothor should be considered as part of a program involving the following steps:

1. Locate nest and treat where possible.
2. Repair or recommend repairs to leaks and drainage as a condition of warranty.
3. Improve or recommend improvements to ventilation underneath structures.
4. Ensure or recommend subfloor areas be kept free of stored or waste timber.
5. Application of soil barrier treatment.
6. Advise property owner or manager, that disturbing the treated soil barrier eg with subsequent additions, alterations or landscaping, may render the treatment ineffective unless reapplied or other actions undertaken.
7. Maintain efforts to locate and treat the colony or nest if not previously eradicated.
8. Post-treatment inspection to confirm successful treatment.
9. Ongoing inspections, at least annually, as recommended by AS-3600 Series.

The purpose of chemical soil treatment for termite control is to establish a continuous chemical barrier (horizontal and/or vertical as required) between the structure and termite colonies in the soil. The barrier impedes and discourages concealed termite entry for the service period of the barrier. A great deal of care needs to be taken to understand the construction of the building and to apply the spray solution in a manner which ensures a complete chemical barrier. If a barrier is not complete or is breached, then concealed termite entry may occur. It is sometimes not possible to form a complete barrier around an existing structure. In these cases other termite management options and/or more frequent inspections will be required.

Alterations to buildings to increase effectiveness of treatments

Alterations include improvements to drainage and sub-floor ventilation, the removal of soil-timber contact eg railway sleeper retaining walls, and the provision of access to areas for regular inspection. Poor drainage including rainwater flowing around structure perimeter may compromise the chemical barrier. **Drainage, ventilation and timber/soil contact problems should be addressed before treatment.**

MIXING

Shake the container vigorously prior to pouring. Premix the required quantity of Prothor with water in a clean bucket before adding to the half filled spray tank. Top up to the required volume and recirculate the contents of the tank.

SOIL PREPARATION

On hard to wet soils, loosen the soil prior to treatment to a depth of at least 80 mm for horizontal barriers and to below the top of the footing for vertical barriers. This creates a trench to contain the spray solution in the area to be treated and help prevent run-off before it can soak into the soil. The penetration of the termiticide solution may be improved by the addition of a soil surfactant at label rates.

When soil conditions will not allow the use of a 100 L/m³ application volume, the concentration of Prothor in the solution should be doubled to either 500 mL or 1000 mL per 100 L and the application rate should be reduced to 50 L/m³ spray solution. When applying by injection through concrete to hard to wet soils, drill hole spacings should be reduced to 150 mm (1.5 litres per hole) before resorting to the application of higher concentrations in lower volumes.

TREATMENT OF EXISTING BUILDINGS

Authorised persons applying Prothor 200 SC Termiticide should be familiar with the Australian Standard AS 3660 Series, especially the section which specifies the procedures used to provide a chemical soil barrier and/or the appendix which shows the areas where barrier treatments should be applied to avoid gaps in the treatment.

TREATMENT OF NEW BUILDINGS

Prothor 200 SC Termiticide cannot be used for the application of horizontal barriers prior to pouring a slab unless used in a reticulation system certified for that purpose. The initial underslab treatment shall be applied through the reticulation system as soon as possible after the 28-day period following the placement of the slab, but not more than 60 days after placement.

RETICULATION SYSTEMS

The reticulation system must be certified and be capable of establishing and maintaining complete and continuous treated zones around building perimeters, service penetrations and other possible termite entry points between the structure and the termite colonies in the soil according to the product label and the Australian Standard AS 3660 Series. The system must allow the application of a minimum 100 mm thick treated zone.

It is the responsibility of the builder and all relevant sub-contractors to ensure that all termite barrier systems are installed in accordance with the relevant product installation directions and the Australian Standard AS 3660 Series.

THICKNESS OF BARRIER

It is recommended that the minimum thickness of any treated soil barrier is 100 mm.

HORIZONTAL BARRIERS

At the perimeter, loosen soil to a depth of at least 80 mm and a width of 150 mm then apply at least 1.5 L of spray solution per linear metre. Treatment volumes of up to 5 litres per linear metre are recommended so that the spray solution will penetrate deeper into the soil. Greater volumes are also required where deeper barriers are needed as part of the termite management system. The use of a marker dye may assist in identifying soils that have been treated. Note that the use of horizontal barriers is limited to the faces of solid building elements through which termites cannot gain concealed access (eg concrete slab or solid concrete piers). In all other cases vertical barriers should be employed.

Where access to sub floor areas is restricted by a clearance of less than 400 mm, the whole sub-floor surface should be treated at a rate of at least 5 litres of spray solution per m². Care must be taken to avoid spray shadows eg behind piers.

TREATMENT BENEATH CONCRETE SLABS AND PATHS

Horizontal barriers can also be applied by drilling through existing slabs. As uneven distribution is possible under the slab, increase the application rate to at least 10 litres of spray solution per m². Use a drill hole spacing between 150 and 300 mm. Use a slab injector fitted with a multidirectional tip that is rotated during application to ensure even distribution. If soil subsidence has occurred beneath the concrete, the use of a foam carrier may assist in treating critical areas.

Foam carriers may be useful in ensuring that an even distribution is achieved, however it is important that the foam application is calibrated to ensure that the minimum application rate of Prothor 200 SC is 12.5 mL product per m². Mix the appropriate quantity of Prothor 200 SC in water and add the manufacturer's recommended quantity of foam agent (see Table). Apply sufficient volume of

Prothor foam alone or in conjunction with liquid solution to provide a continuous zone that has been treated at the recommended rate.

Prothor 200 SC (mL)*	Water (litres)	Foam expansion ratio	Volume of finished foam / m ²	Foam consistency
12.5	5	1:1 (not foamed)	5 L	Standard solution
	2.5	5:1	12.5 L	↑ ↓
	5		25 L	
	2.5	10:1	25 L	
	5		50 L	
	2.5	20:1	50 L	Very dry foam
	5		100 L	

* Add the manufacturer's recommended quantity of foam agent to the Prothor 200 SC solution

Drilling along cracks in slabs, expansion joints, walls and around service penetrations (eg plumbing/electrical): Holes should be drilled no further than 150 mm from the crack, wall, expansion joint or service penetration and should be 150 to 300 mm apart.

The following table shows the recommended hole spacing and recommended volume of spray solution required per injection hole, depending on the soil type. Drill holes must be resealed after application of Prothor 200 SC solution.

Soil type	Hole Spacing (mm)	Litres per hole
Heavy Clay	150 mm	1.5
Clay loams	200 mm	2
Loams	250 mm	2.5
Sands	300 mm	3

VERTICAL BARRIERS: To install a vertical barrier use a minimum of 100 L of spray solution per m³ of soil. Vertical barriers can be installed either by trenching and treating the soil as it is backfilled, or by a combination of trenching and soil rodding at the bottom of the trench. Vertical barriers must extend down to 100 mm below the top of the solid footings and be complete and continuous. Note that termites may gain access behind engaged piers against single brick walls unless the soil is treated on both sides of the wall down to the footing.

Vertical barriers should be at least 150 mm wide. Apply 1.5 litres of spray solution per linear metre per 100 mm depth of barrier. In most cases the spray solution will soak into the soil below this depth so a minimum application rate of 5 litres per linear metre is recommended. When using soil rodding equipment, the distance between each rod insertion should be no greater than 150 mm.

COLONIES NOT IN CONTACT WITH THE GROUND

Occasionally subterranean termites establish a colony in a building without having contact with the soil because they have access to a continuous supply of moisture (eg. from a faulty plumbing fixture or leaking roof). Such colonies may not be affected by a soil treatment alone and should be treated by direct nest application or by other procedures such as a baiting system.

RE-INSPECTION

Re-inspection within 3 months of treatment is recommended.

SERVICE PERIOD

Service requirements are to be determined as a result of at least an annual inspection by a licensed Pest Manager. More frequent inspections are strongly recommended. More frequent inspections may be required in high-risk termite areas and efforts should be made to eradicate termite colonies in the area.

A correctly applied Prothor treatment will prevent concealed termite entry by subterranean termites (except *Mastotermes*) for at least two years and *Mastotermes* for at least one year.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND THE ENVIRONMENT

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 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

Harmful if swallowed. May irritate the eyes and skin. Repeated exposure may cause allergic disorders. Avoid contact with eyes and skin. When using the product, wear cotton overalls buttoned to the neck and wrist, a washable hat, and elbow-length PVC gloves. If clothing becomes contaminated with product or wet with spray, remove clothing immediately. If product or spray on skin, immediately wash area with soap and water. Wash hands after use. After each day's use, wash gloves and contaminated clothing.

FIRST AID

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

MATERIAL SAFETY DATA SHEET

Additional information is listed on the Material Safety Data Sheet for Prothor 200 SC Termiticide which is available from Ensysyex on request. Call Customer Service on 13 35 36 or visit our web site at www.ensysyex.com.au

NOTICE

Ensysyex warrants that this product conforms to its chemical description and is reasonably fit for the purposes stated on the label when used in accordance with Directions for Use under normal conditions of use. No warranty of merchantability or fitness for a particular purpose, express or implied, extends to the use of the product contrary to label instructions or under off-label permits not endorsed by Ensysyex, or under abnormal conditions.