

LABEL

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

IMIFORCE 200SC

TERMITICIDE

ACTIVE CONSTITUENT: 200 g/L IMIDACLOPRID

**For use in the management of subterranean and drywood termites
as specified in the Directions for Use**

IMPORTANT: READ THE ATTACHED BOOKLET BEFORE USE

APVMA Approval Number 67302/xxxxx

Contents: 5 L
(1 L-20 L)

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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 rinsing to spray tank. DO NOT dispose of undiluted chemicals on site. If recycling, replace cap and return clean containers to recycler of designated collection point. If not recycling, break, crush or puncture and deliver empty packaging for appropriate disposal 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.

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 and 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 13 11 26.

MATERIAL SAFETY DATA SHEET

For further information, refer to the Material Safety Data Sheet (MSDS), which is available from the supplier or from our web site, www.sherwoodchemicals.com.au

NOTICE TO BUYER

Sherwood Chemicals 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 and/or handling and/or storage is contrary to label instructions.

APVMA Approval No. 67302/xxxxx

In a Transport Emergency Dial 000 Police or Fire Brigade

Batch No:

Date of Manufacture:

LEAFLET

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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 with subsequent construction of additions or alterations, paths, steps, flower beds, etc.

DO NOT use at less than indicated label rates.

DO NOT use in cavity walls except for direct treatment of a nest or when applied with a foaming agent, as a dry foam, direct to any other termite activity.

SITUATION	PEST	RATE	CRITICAL COMMENTS
<p><u>Existing buildings</u> Protective treatments for existing buildings including domestic, industrial, government and commercial premises</p> <p><u>New buildings*</u> External protective treatments (only) around new buildings</p>	<p>Subterranean termites (except <i>Mastotermes darwiniensis</i>)</p> <p><i>Mastotermes darwiniensis</i></p>	<p><u>Spray solution:</u> 250 mL per 100 litres of water</p> <p>500 mL per 100 litres of water</p>	<p>(See also General Instructions) Mix the required quantity of IMIFORCE in water and apply using suitable application equipment to form a complete and continuous treated zone 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 as well as soil rodding. Soil injection equipment (rodding) should only be used where trenching and treating the backfill is not possible. Refer also to notes on recommended best practice in General Instructions.</p> <p>Perimeter Treatments: If the building construction is slab-on-ground and the slab is regarded as an intact termite barrier then an IMIFORCE perimeter treatment around the outside of the structure may be employed. IMIFORCE perimeter treatments should be complete vertical barrier-type treatments applied in accordance with AS3660.2 to the external perimeter of the structure. Concrete paths around the structure should be drilled and injected with IMIFORCE solution in order to establish the IMIFORCE perimeter vertical barrier-type treated zone at the rates prescribed in the general instructions.</p> <p>If there is any doubt that the slab is not or cannot be determined to be an intact barrier or if the building has a suspended floor then additional horizontal barrier-type treatments should be employed where termites have vertical access to the structure. As such, expansion joints, cracks in concrete foundation slabs and pilings should be protected with horizontal barrier rates. In some cases the use of wetting agents or foaming agents may be useful in overcoming non-wetting soils getting a more even application in areas of difficult access or soil subsidence.</p> <p>If the treated zone is disturbed by earthworks, construction or severe drainage problems it will have to be restored by reapplication.</p> <p>*CONDITIONS APPLY IN QUEENSLAND FOR APPLICATION OF BARRIER TREATMENTS TO NEW BUILDINGS</p>

<p>Service poles and fence posts</p>			<p>For new posts treat the bottom of the hole and the backfill using a minimum of 1 L of solution per hole. For 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 attack via this route cannot be ruled out.</p>
<p>Termite nests (trees, stumps, posts, power or utility poles, mounds, wall cavities)</p>			<p>Locate the nest by drilling holes into the wall, pole or tree. Make sure that the size of the nest is identified especially the highest point. Apply at least 20 litres of IMIFORCE dilution 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 (see below). Ensure that any electrical wiring is located prior to making any application in wall cavities. Do NOT apply in the vicinity of live electrical wires. When using foam to inject into nests in trees and other situations it is important to ensure that the approximate centre of the nest is located and that every effort is taken to ensure that termiticide reaches this area. In many situations cavities may form around a nest within a tree and foam may therefore expand to only fill this cavity if not injected to the correct depth within the tree which corresponds to the nest itself.</p>
<p>Termites when nest location not known (eg active workings in timber in-service, infested wall cavities and external infested timber situations)</p>	<p>Termites: including subterranean termites (eg <i>Coptotermes</i> spp.) and drywood termites</p>	<p><u>Spray solution:</u> 12.5 mL per 5 litres of water</p>	<p>Apply only in conjunction with a suitable foaming agent which is capable of delivering a dry foam. (A dry foam is considered to be a foam with an expansion ratio of 1:20 or greater). Foaming agents which have been demonstrated to be non-repellent to termites (eg ProFoam) are recommended. Drill holes into infested timber and inject foam. Progressively drill and inject. Care should be taken not to drill holes too close together or foam will emerge from other holes. It is recommended that drill holes be taped over when not in use. When applied into a termite gallery system or into a termite infested void the foam expands to thoroughly cover hidden or difficult to reach areas and contacts insects deep within these galleries and voids. Care should be taken to minimise expansion run-off of foam out of application equipment after use. DO NOT use this type of application as the sole source of control for active, structural infestations by subterranean termites. It is not a substitute for mechanical alteration or soil treatments designed to provide protection of the structure. For active, structural infestations by subterranean termites, this application method should only be used to supplement an application of IMIFORCE to the soil, a termite bait system or other product registered as a source for termite management. This application technique is intended as a supplemental tool to kill subterranean termites that are found in above-ground and other locations.</p>

Reticulation Systems:	Subterranean termites (except <i>Mastotermes darwiniensis</i>)	<u>Spray solution:</u> 250 mL per 100 litres of water	The system (refer to the General Instructions) must be installed according to the manufacturer's specifications. IMIFORCE 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 not possible, alternative termite protection needs to be arranged for the areas omitted (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 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 system is dependent on the parameters of the particular system and the type of soil type being present respectively. Guidelines should be sought from the manufacturer. For a treated zone 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 will be different for systems treating a different volume of soil.
Complete under slab installations			For the horizontal barrier-type treated zone under slab, not less than 20 mL (40 mL for <i>Mastotermes darwiniensis</i>) of product is required per m ² . In addition, the system installer must also ensure that a prepared sand/soil bed of 100 mm depth is provided across the whole of the under slab installation to ensure complete horizontal coverage of the product.

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

GENERAL INSTRUCTIONS

IMIFORCE 200SC Termiticide 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 treated zone;
6. advice to property owner or manager that disturbing the treated soil barrier e.g. with subsequent additions, alterations or repairs is ineffective unless re-applied or other actions undertaken.
7. continuing efforts to locate and treat the colony in the nest if not eradicated before application of soil treated zone.
8. post-treatment inspection to confirm success.
9. ongoing inspections, at least annually, as recommended by AS 3660 Series.

The purpose of a non-repellent chemical soil treatment for termite management is to establish a continuous chemical treated zone (barrier) between the structure and termite colonies in the soil. The treated zone impedes termite activity and discourages concealed termite activity. 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 zone not complete or breached, then concealed termite entry may occur. It is sometimes not possible to form a complete treated zone around a structure. Other termite management options and/or more frequent inspections will also need to be undertaken.

Alterations to building to increase effectiveness of treatment

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

Mixing

To ensure good mixing:

1. Thoroughly clean the spray equipment to remove residues of other formulations from the equipment before using IMIFORCE for termite treatment.
2. Prior to pouring, shake container vigorously. Then premix the required quantity of IMIFORCE with water in a clean bucket before top up to full volume. Allow the contents of the tank to be recirculated.

Note that at the recommended dilution rate IMIFORCE will usually dissolve to a clear solution with only a faint odour.

Soil preparation

Some soils will be difficult to wet (eg heavy clay soils) and there will be a greater chance of run-off of liquid from the surface; in these situations, the soil should be scarified to a depth of at least 80 mm for horizontal applications and to a depth of at least 100 mm for vertical applications. In situations where the surface of the soil is very dry or with sandy or porous soils it may be necessary to moisten the soil prior to application through excessive piping or excessive percolation.

In situations with very heavy soils the complete removal and replacement of the soil with a loam type is recommended in order to improve penetration. based on decomposed granite (ie soils with very low organic matter) should not be used as the replacement material since it is unlikely to be moistened. In situations where the surface of the soil is very dry or with sandy or porous soils it may be necessary to moisten the soil prior to application through excessive piping or excessive percolation. Sol rodding in heavy clay soil can result in uneven distribution of chemical; the preferred method of installing a treated zone under a concrete slab is by using a soil rod (and consider the replacement of soil if necessary).

It is recommended that application volumes given in the directions for use table be used wherever possible. However where soil is very heavy (eg heavy clay soils) and there is a greater chance of run-off of liquid from the surface; in these situations, the concentration of IMIFORCE in the solution should be doubled to 500-1000 mL per 100 L and then apply 50 L/m³ spray solution to concrete to such soils, drill hole spacings should be reduced to 150 mm (1.5 litres per hole) before resorting to the application of high

Treatment of existing buildings

Authorised persons applying IMIFORCE 200SC Termiticide should be familiar with Australian Standard AS 3660 Series especially the parts that provide a chemical soil barrier, and/or the appendix which shows the areas where barrier treatments should be applied to ensure no

Treatment of new buildings

IMIFORCE 200SC Termiticide cannot be used for the application of horizontal barrier-type treated zones prior to pouring a slab unless for that purpose. The initial under-slab treatment shall be applied through the reticulation system as soon as possible after a 28-day period and not more than 60 days after placement.

Reticulation systems

The reticulation system used must be capable of establishing and maintaining complete and continuous treated zones around buildings and other possible termite entry points between the structure and the termite colonies in the soil (in accordance with the Australian Standard AS 3660). Reticulation systems suitable for this purpose are certified as meeting AS3660 by suitable persons or organisations with the relevant engineering management and engineering construction. The system must allow the application of a minimum 100 mm thick treated zone. It is strongly recommended that the product user communicates with the builder and sub-contractor to ensure that the reticulation system meets the systems manufacturer's specifications and Australian Standard AS3660 series. Reticulation systems, which have been incorrectly installed, have the chances of a breach of the treated zone being compromised by termites.

Thickness of treated zone

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

HORIZONTAL BARRIER-TYPE TREATMENTS

This section describes the application of a treated zone intended to fulfil the treatment requirements of a horizontal barrier as per the 'Service period' information).

Horizontal treated zones are to be applied to deter termites from gaining concealed vertical access to the building sub-structure. The building construction is slab on ground and the slab can be determined to be an intact termite barrier. Vertical treated zones applied to walls should be employed (see below).

Full horizontal treated zones should cover all areas of sub-floor soil where there is inadequate access or where there is less than 400 mm. Avoid spray shadows, eg behind piers.

It may be necessary to loosen the soil to allow the solution to percolate to form the treated zone. The treated zone should surround the soil. The use of a marker dye may assist in identifying soils that have been treated.

Full horizontal treated zones beneath concrete slabs: If termiticide needs to be injected through concrete slabs to create a horizontal barrier, equipment should be used to inject termiticide through pre-drilled holes. Use a drill hole spacing between 150 and 300 mm and volume of spray solution per square metre.

Partial horizontal treated zones along weaknesses or gaps in the physical barrier/slab: When drilling along cracks in slabs, expansion joints, penetrations, holes should ideally be drilled no further than 150 mm from the crack, wall, expansion joint or service penetration and seal. Where this not possible because of the building construction, these areas cannot be considered to be fully protected and this should be discussed with the building owner and subsequently these areas monitored more regularly than other treated areas.

As uneven distribution is likely when applying by this injection method through concrete (ie under a slab), increase the application rate to 900 g/m². Use a slab injector fitted with a multi-directional tip. When applying through such structures the rod should be held vertically at 90 degrees to the slab during application to ensure even distribution. Ensure a strong seal with the top of the drill hole to minimise leakage and that drill holes are sealed. If soil subsidence has occurred beneath the concrete, the use of a foam carrier may assist in treating critical areas.

The following table shows the recommended volume of spray solution required per hole at various drill hole spacings for full horizontal

Soil type	Hole spacing	Number of holes/m ²	Volume per hole to
Heavy clay	150 mm	36	0.15 L (150 mL) 36x0.
Clay loams	200 mm	25	0.20 L (200 mL) 25x0.
Loams	250 mm	20	0.25 L (250 mL) 20x0.
Sands	300 mm	17	0.30 L (300 mL) 17x0.

Drill holes should be filled with a moisture proof compound after application to prevent sub-slab moisture rising.

VERTICAL BARRIER-TYPE TREATMENTS

This section describes the application of a treated zone intended to fulfil the treatment requirements of a vertical barrier as per the A period” information).

Vertical treated zones are to be applied to deter termites from gaining concealed horizontal access to a building or structure. The application rate of spray solution per cubic metre of soil is required. They can be created by either trenching and treating soil as it is backfilled (the preferred method) or a combination of trenching and soil rodding at the bottom of the trench. Vertical treated zones must extend down to 100 mm below the base of the structure to be complete. When a horizontal treated zone is also used, the vertical treated zone must be continuous with it.

Not that termites may gain access behind engaged piers against single brick walls unless the soil is treated on both sides of the wall. Vertical treated zones should be at least 150 mm wide with 1.5 litres of spray solution applied per linear metre per 100 mm depth of soil. The solution should soak into the soil below this depth so a minimum rate of 5 litres per linear metre is recommended (ie to achieve a treated depth of approximately 100 mm). Application rates need to be re-calculated on the basis of applying 100 litres of prepared spray per cubic metre of soil. When using soil rodding equipment in a trench, the distance between each rod insertion should be no greater than 150 mm.

Creating a vertical treated zone via drilling and injecting through concrete

Where trenching and treating soil is not possible (eg concrete paths and driveways), drilling and injection of termiticide may be required. Drills should be spaced 300 mm apart and application volumes varied in order to achieve application rates of 100 L of termiticide per cubic metre of soil.

The following table shows the recommended volume of spray solution required per hole at various drill spacings.

Hole spacing	Litres per hole	Soil type
150 mm	1.5	Heavy clay
200 mm	2.0	Clay loams
250 mm	2.5	Loams
300 mm	3.0	Sands

Drill holes must be resealed after application.

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 construction below grade could allow concealed termite ingress (or not less than 50 mm below the top of the footing where the building is above ground level). Application considerations should reflect the installation of vertical barrier-type treatments.

Foam carriers may be useful in ensuring that a more even distribution is achieved. However it is important that the foam application amounts of IMIFORCE formulation are applied, depending on the type of foaming application.

Where wet foam is used as a means of assisting delivery of a horizontal or vertical treated zone under concrete, the horizontal or vertical volume of IMIFORCE dilution must be met.

Mix the appropriate concentration of IMIFORCE in water and add the manufacturer's recommended quantity of foam agent (see table below). Apply sufficient volume of IMIFORCE foam alone or in combination with liquid solution to provide a continuous treated zone at the required

Overview of mixing rates to create foam from enough IMIFORCE 200SC to treat 1 ³				
IMIFORCE 200SC (mL)*	Litres of water	Foam expansion ratio	Nominal expanded volume of foam	Concentration of liquid component
12.5 (2.5 g ai)	5	1:1 (ie not foamed)	5 L	0.05%
12.5	2.5	5:1	12.5 L	0.05%
12.5	5	5:1	25 L	0.05%
12.5	2.5	10:1	25 L	0.05%
12.5	5	10:1	50L	0.05%
12.5	2.5	20:1	50 L	0.05%
12.5	5	20:1	100 L	0.05%

* Add the manufacturer's recommended quantity of foam agent to the IMIFORCE solution

It is important to note that the expanded volume of foam contains more air than liquid and that the concentration of imidacloprid is 0.05% in the foam.

Use as a dry foam for direct application to areas of termite activity

For treatment of termite nests, application to wall voids or other areas of termite activity remote from the nest, only the 0.05% treatment is recommended. It is recommended that the volume of space to be treated be estimated first prior to mixing quantities of foam. If the volume to be treated is known, then the amount of IMIFORCE concentrate and water used needs to be adjusted to maintain the concentration of 0.05% in the target area, as shown below:

Volume of IMIFORCE concentrate (mL)	Amount of active ingredient (g)	Volume of water (L)	Expansion ratio of foam
12.5	2.5	5	20:1
10	2	4	20:1
7.5	1.5	3	20:1
5	1	2	20:1

Colonies not in contact with ground

Occasionally, subterranean termites establish a colony in a building without having contact with the soil because they have access to the building through plumbing or leaky roof). Such colonies may not be affected by a soil treatment alone and should be treated by direct nest application (see recommendations referred to above; with the ready-to-use TERMATRIX Termite Foam Insecticide) or by other indirect procedures (see section 4.2.1.1 (Termite baiting system)).

Re-inspection

Re-inspection within 3 months of treatment is recommended.

Service Period

Correctly applied IMIFORCE 200SC Termiticide treatment can prevent concealed termite entry by subterranean termites (except *Ma* the Tropic of Capricorn. A minimum period of two years applies in all other areas and one year for *Mastotermes* in all areas. Regular part of an ongoing termite management program. Inspections should be carried out at least annually and concurrently efforts are ma

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

DO NOT contaminate streams, rivers, waterways and drains the chemical or used containers.

STORAGE AND DISPOSAL

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