

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

# **Biflex<sup>®</sup> Duo 200**

## **Termiticide & Insecticide**

**ACTIVE CONSTITUENT: 200 g/L BIFENTHRIN**  
**SOLVENTS: 492 g/L LIQUID HYDROCARBONS**

**For the Internal and External protection of structures from subterranean termite damage and for the control of termites and a range of other urban pests, as specified in the Directions for Use Table.**

**IMPORTANT: RESTRICTED CHEMICAL PRODUCT ONLY TO BE SUPPLIED TO, OR USED BY AN AUTHORISED PERSON**

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

**Contents: 1000 / 200 / 20 / 10 / 5 / 2.5 / 1 Litres**



FMC Australasia Pty Ltd,  
Unit 26, 8 Metroplex Ave.  
Murarrie Qld 4172  
Contact Number 1800 066 355

<sup>®</sup> Biflex is a Registered Trademark of FMC Corporation, Philadelphia, USA

# Biflex<sup>®</sup> Duo 200 Termiticide & Insecticide

## CONDITIONS OF USE BY AUTHORISED PERSONS

The pest control operator must be licensed under state legislation.

The pest control operator must notify site supervisor, if any, and workers who come into contact with uncovered treated soil prior to laying the moisture membrane, to wear appropriate personal protective equipment and to observe re-entry requirements. (For personal protective equipment, refer to "SAFETY DIRECTIONS", and for re-entry, refer to "PRECAUTIONS AND RE-ENTRY PERIOD", below.)

## PRECAUTIONS AND RE-ENTRY PERIOD

DO NOT spray into the air or directly on humans, pets or animals. Avoid contact with food, food utensils or preparation surfaces.

### Re-entry Period

Do not allow entry into treated areas until the spray has dried, unless wearing cotton overalls buttoned to the neck, wrist (or equivalent) and elbow-length chemical resistant gloves. Clothing must be laundered after each day's use.

## STORAGE, SPILLAGE AND DISPOSAL

Store in closed original containers, in a cool, well ventilated area away from children, animals, food and feedstuffs. Do not store for prolonged periods in direct sunlight.

In case of spillage, confine and absorb spilled product with absorbent material such as sand, clay or cat litter. Dispose of waste as indicated below or according to Australian Standard AS 2507 - Storage and Handling of Pesticides. Do NOT allow spilled product to enter sewers, drains, creeks or any other waterways.

### 200, 20, 10, 5, 2.5 & 1 Litre containers only

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. Empty containers and product should not be burnt.

Do not bury waste or surplus product. Dispose of undiluted waste by either dilution and use according to the Directions for Use or returning to the point of purchase in the original container for controlled disposal. Dispose of diluted surplus product by using according to the Directions for Use. Do not re-use empty container.

### 1000 Litre Container only

Empty contents fully into application equipment. Close all valves and return to point of supply for refill or storage.

Do not bury waste or surplus product. Dispose of undiluted waste by either dilution and use according to the Directions for Use or returning to the point of purchase in the original container for controlled disposal. Dispose of diluted surplus product by using according to the Directions for Use.

## **SAFETY DIRECTIONS**

Poisonous if swallowed. Will irritate the eyes and the skin. Repeated exposure may cause allergic disorders. Avoid contact with eyes and skin. When opening container, mixing and loading and preparing the spray, wear cotton overalls buttoned to the neck and wrist, a washable hat, elbow-length chemical resistant gloves, and face shield or goggles. When using prepared spray, wear cotton overalls buttoned to the neck and wrist, a washable hat and elbow-length chemical resistant gloves. When using in enclosed areas, wear cotton overalls buttoned to the neck and wrist, a washable hat, elbow-length chemical resistant gloves and half-face respirator with the combined dust and gas cartridge. If product in eyes, wash it out immediately with water. 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 or goggles, respirator (if rubber wash with detergent and warm water) and contaminated clothing.

## **FIRST AID**

If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 13 11 26. If swallowed do NOT induce vomiting. Give a glass of water. If skin contact occurs, remove contaminated clothing and wash skin thoroughly.

## **MATERIAL SAFETY DATA SHEET**

Additional information is listed in the Material Safety Data Sheet.

## **WARRANTY**

FMC 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.

### **Batch No:**

### **Date of Manufacture:**

*[1 Litre]*

APVMA Approval No. 63037/1L/0510

*[2.5-5 Litre]*

APVMA Approval No. 63037/2.5-5L/0510

*[10- 200 Litre]*

APVMA Approval No. 63037/10-200L/0510

*[1000 Litre]*

APVMA Approval No. 63037/1000L/0510

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**IMPORTANT: READ THIS LEAFLET BEFORE USE**

**FMC** FMC Australasia Pty Ltd,  
Unit 26, 8 Metroplex Ave.  
Murarrie Qld 4172  
Contact Number 1800 066 355

## Biflex® Duo 200 Termiticide & Insecticide:

### DIRECTIONS FOR USE

#### Restrains:

Do NOT use this product at less than indicated label rates.

Do NOT apply to soils if excessively wet or immediately after heavy rain to avoid run-off of the chemical.

Do NOT use in cavity walls (except via certified cavity infill reticulation systems or direct treatment of nest).

DO NOT apply to mud, sand, mangrove or aquatic habitat.

DO NOT apply as an Ultra Low Volume (ULV) or via thermal fogging treatment.

DO NOT use in situations where predatory mites are established and providing effective mite control.

DO NOT apply if rainfall is expected before spray deposits dry on leaf surfaces.

Pest	Situations	State	Rate	Critical Comments
Spiders	Internal & external Areas & Surrounds of Domestic, Commercial, Public & Industrial buildings and structures	All states	12 - 25 mL/10L	Use the higher rate in situations where pest pressure is high, when rapid knockdown and/or maximum residual protection is desired. Pay particular attention to protected dark areas such as cracks and crevices, under floors, eaves and other known hiding or resting places. For overall band surface spray, apply as a coarse, low pressure surface spray to areas where spiders hide, frequent and rest. Spray to the point of run-off using around 5 L of spray mixture per 100 m <sup>2</sup> and ensuring thorough coverage of the treated surfaces.  For crack and crevice treatment use an appropriate solid stream nozzle. For maximum spider control use a two part treatment. 1. Crack and crevice. 2. Overall band spray of surfaces.
Papernest Wasps	Internal & external Areas & Surrounds of Domestic, Commercial, Public & Industrial buildings and structures	All states	25 mL/10L	Apply prepared emulsion to the point of runoff directly to the papernest ensuring thorough and even coverage. When all adult wasps have been knocked-down the nest may be safely removed from the structure.

Pest	Situations	State	Rate	Critical Comments
Ants, Cockroaches, Mosquitoes, Fleas, Flies, Ticks (Adults & Nymphs)	Internal & external Areas & Surrounds of Domestic, Commercial, Public & Industrial buildings and structures	All states	25 – 50 mL/10L	<p>Common surfaces encountered around structures vary in their ability to soak up liquid. When treating any surfaces do not exceed the point of run-off.</p> <p>As a guide, apply as a coarse spray to non-absorbent surfaces at the rate of 1 L of emulsion per 20 m<sup>2</sup> and to absorbent surfaces at the rate of 1 L of emulsion per 10 m<sup>2</sup>.</p> <p>Use the higher mixing rate in situations where pest pressure is high, when rapid knockdown and/or maximum residual protection is desired. The lower rate may be used for follow-up treatments.</p> <p>To control ants apply to trails and nests. Repeat as necessary.</p> <p>To control fleas and ticks apply prepared emulsion to outside surfaces of buildings and surrounds including but not limited to foundations, verandahs, window frames, eaves, patios, garages, pet housing, soil, turf, trunks of woody ornamentals or other areas where pests congregate or have been seen.</p> <p>To control flies and mosquitoes apply prepared emulsion to surfaces where insects rest or harbour. Reapply as necessary.</p> <p>For perimeter treatments apply the prepared emulsion to a band of soil or vegetation two to three meters wide around and adjacent to the structure. Also treat the foundation of the structure to a height of approximately one metre. Use a spray volume of 5 to 10 L per 100 m<sup>2</sup>. Higher volumes of water may be needed if organic matter is present or foliage is dense.</p>
Subterranean Termites	Domestic, Public, Commercial & Industrial areas	All states, except Tas	Refer to Table A	Refer to Table B.

**TABLE A: Biflex Duo 200 Termiticide & Insecticide use rates for control of SUBTERRANEAN TERMITES**

Situations	All areas <b>SOUTH</b> of the Tropic of Capricorn (except Tas.)		All areas <b>NORTH</b> of the Tropic of Capricorn	
	Rate	Expected Protection Period *	Rate	Expected Protection Period *
<b>Pre-Construction Barriers</b> Under slabs and under suspended floors with less than 400 mm crawl space	500 mL/100L	At least 10 years	750 mL/100L	5 years
	250 mL/100L	10 years	500 mL/100L (Note 1)	4 years
			375 mL/100L (Note 1)	3 years
			250 mL/100L (Note 1)	2 years
<b>Perimeter Barriers</b> For new and existing buildings	500 mL/100L	At least 10 years	750 mL/100L	5 years
	250 mL/100L	10 years	500 L/100L	4 years
	125 mL/100L	3 years	375 mL/100L	3 years
			250 mL/100L	2 years
<b>Post-Construction Barriers</b> Under slabs and under suspended floors with less than 400 mm crawl space	500 mL/100L	At least 10 years	750 mL/100L	5 years
	250 mL/100L	10 years	500 L/100L	4 years
			375 mL/100L	3 years
			250 mL/100L	2 years
<b>Reticulation systems</b> Perimeter and/or service penetration treatment only	500 mL/100L	At least 10 years	750 mL/100L	5 years
	250 mL/100L	10 years	500 L/100L	4 years
	125 mL/100L	3 years	375 mL/100L	3 years
			250 mL/100L	2 years
<b>Reticulation Systems</b> Cavity infill & footing barriers	250 mL/100L	5 years	500 mL/100L	2 years
<b>Protection of Poles, Fence Posts, and establishing trees including fruit trees (non fruit bearing).</b>	250 mL/100L	10 years	750 mL/100L	5 years
			500 mL/100L	4 years
			375 mL/100L	3 years
<b>Nest Eradication</b>	250 mL/100L	Not applicable	250 mL/100L	Not applicable
<b>Note 1: This rate must be used in conjunction with a certified reticulation system that is capable of distributing the Termiticide &amp; Insecticide emulsion according to the product label and the Australian Standard AS 3660 Series.</b>				
<b>* The need for retreatment is to be determined as a result of at least an annual inspection, or more frequently in high risk areas, by a qualified Pest Control Operator.</b>				
<b>The actual protection period will depend on the termite hazard, climate, soil conditions and rate of termiticide used.</b>				

**TABLE B: CRITICAL COMMENTS for use against SUBTERRANEAN TERMITES**

<b>Situations</b>	<b>Critical Comments</b>
<p><b>Pre-Construction Barriers</b> Under Slabs for protection of new buildings</p>	<ul style="list-style-type: none"> <li>◆ Apply with suitable application equipment to form a complete and continuous chemical barrier (both vertical and horizontal) under the slab. The formation of the barrier may require a combination of conventional open wand application and soil trenching and/or rodding applications. Recommended rod spacing should be between 150 and 300 mm, as per soil type. For additional information refer to “CRITICAL APPLICATION DETAILS” on this label and the Australian Standard AS 3660 Series.</li> <li>◆ An external perimeter barrier (both horizontal and vertical) is an essential part of termite protection and must be installed at the completion of the building. Refer to “Perimeter Barriers” below, for further details.</li> <li>◆ Chemical barriers that have been disturbed by construction, excavation and/or landscaping activities will need to be reapplied to restore continuity of the barrier.</li> </ul>
<p><b>Pre-Construction Barriers</b> Under suspended floors</p>	<ul style="list-style-type: none"> <li>◆ For areas beneath suspended floors that have inadequate access (eg. less than 400 mm clearance), the entire sub-floor area should be treated as a continuous horizontal barrier, which completely abuts an internal vertical barrier around any substructure walls. Ideally, this operation should be done during construction of the building while access is more readily available.</li> <li>◆ For areas beneath suspended floors which have adequate access (eg. more than 400 mm clearance), install perimeter barriers around each individual pier, stump, service penetration and substructure walls.</li> <li>◆ An external perimeter barrier (both horizontal and vertical) is an essential part of termite protection and must be installed at the completion of the building. Refer to “Perimeter Barriers” in this leaflet, for further details.</li> </ul>
<p><b>Perimeter Barriers</b> for new and existing buildings</p>	<ul style="list-style-type: none"> <li>◆ Perimeter barriers (both horizontal and vertical, external and where required, internal or sub-floor) are an essential part of termite protection and must be installed at the completion of the building. Perimeter barriers should be installed around slabs, piers, substructure walls and external penetration points.</li> <li>◆ Apply with suitable application equipment to form a continuous chemical barrier (both vertical and horizontal) around the structure and to a depth reaching to 80 mm below the top of the footings, where appropriate. The formation of the barrier may require a combination of several application techniques, including soil trenching and/or rodding and open wand applications.</li> <li>◆ Chemical barriers that have been disturbed by construction, excavation and/or landscaping activities will need to be reapplied to restore continuity of the barrier.</li> </ul>

**Table B Continued**

Situations	Critical Comments
<p><b>Post-Construction Barrier Treatments</b> for the protection of existing buildings</p>	<ul style="list-style-type: none"> <li>◆ Apply with suitable application equipment to form a continuous chemical barrier (both vertical and horizontal) around and under the structure with particular emphasis on known infestation areas. The formation of the barrier may require a combination of several application techniques, including soil rodding, trenching, open wand applications and sub-slab injections.</li> <li>◆ Chemical barriers beneath concrete slabs and paths will require concrete drilling. Recommended drill hole spacings are between 150 and 300 mm. To enhance soil distribution use a lateral dispersion tip on the injector and up to 10 L of emulsion per linear metre. To ensure formation of a continuous barrier, holes should be drilled no more than 150 mm from walls or expansion joints.</li> <li>◆ For areas beneath suspended floors that have inadequate access (eg. less than 400 mm clearance), the entire sub-floor area should be treated as a continuous horizontal barrier, which completely abuts an internal vertical barrier around any substructure walls. Otherwise, install perimeter barriers around each individual pier, stump, penetration point and substructure walls.</li> <li>◆ Chemical barriers that have been disturbed by construction, excavation and/or landscaping activities will need to be reapplied to restore continuity of the barrier.</li> </ul>
<p><b>Reticulation Systems</b> Perimeter and/or service penetration treatment only</p>	<ul style="list-style-type: none"> <li>◆ Biflex Duo 200 Termiticide &amp; Insecticide must be used through a certified reticulation system to form and replenish perimeter barriers around buildings and service penetrations. The system must be installed according to the manufacturer's specifications and be capable of distributing the termiticide emulsion according to the product label and the Australian Standard AS 3660 Series.</li> <li>◆ Perimeter barriers consist of a horizontal barrier abutting a vertical barrier, which must reach down to the top of the footings.</li> <li>◆ Delivery pipes must be placed in such a position to ensure that the requirements for both horizontal and vertical barriers as specified in the Australian Standard AS 3660 Series are met. Special attention must also be afforded to the positioning of the delivery pipes to ensure that the resultant termiticidal barriers are continuous and complete.</li> <li>◆ Apply the prepared termiticide emulsion by pumping through the system according to the manufacturer's specifications. Use a minimum delivery volume of 100 L of emulsion per m<sup>3</sup> of soil. This equates to a delivery volume of 5 L of emulsion per linear metre for a vertical barrier 300 mm x 150 mm in dimension.</li> <li>◆ <b>Pre-Construction – For use in conjunction with full soil treatment horizontal barriers only:</b> apply the diluted emulsion through the perimeter reticulation system as specified above. Follow instructions for Pre-Construction horizontal barrier formation.</li> </ul>

**Table B Continued**

<p><b>Reticulation Systems</b> Cavity infill &amp; footing barriers</p>	<ul style="list-style-type: none"> <li>◆ Biflex Duo 200 Termiticide &amp; Insecticide must be used through a certified reticulation system to form and replenish cavity infill and footing barriers. The system must be installed according to the manufacturer's specifications and be capable of distributing the termiticide emulsion according to the product label and the Australian Standard AS 3660 Series.</li> <li>◆ Delivery pipes must be placed in such a position to ensure that the requirements for both horizontal and vertical barriers as specified in the Australian Standard AS 3660 Series are met. Special attention must also be afforded to the positioning of the delivery pipes to ensure that the resultant termiticidal barriers are continuous and complete.</li> <li>◆ Apply the prepared termiticide emulsion by pumping through the system according to the manufacturer's specifications with a delivery volume of 2 L of emulsion per linear meter of delivery pipe.</li> <li>◆ <b>Note: Where this system is to be installed at the pre-construction stage, a full under slab pre-construction barrier, applied by either open wand application or suitably certified reticulation system, is also recommended.</b></li> <li>◆ The recommended rate of application is 2 L of emulsion per linear metre which equates to 2 L of emulsion per 0.0068 m<sup>3</sup> or approximately 7 L of sand. Should the volume of fill in the wall cavity deviate from 7 L (0.17 m x 0.04 m x 1 m = 0.0068 m<sup>3</sup>) per linear metre of wall cavity, then the amount of Biflex emulsion applied per linear metre of wall cavity should be adjusted accordingly. As a guide, the target bifenthrin loading of treated sand/soil in a cavity infill situation is 110 mg/kg South of the Tropic of Capricorn and 220 mg/kg North of the Tropic of Capricorn.</li> <li>◆ To facilitate more even distribution of the Biflex emulsion in the wall cavity, ensure that the fill is evenly compacted at the time of installation. To further enhance distribution saturation of the sand/soil in the infill is recommended at the time of treatment.</li> </ul>
<p><b>Protection of Service Poles, Fence Posts, and establishing trees including fruit trees (not to be used on fruit bearing trees)</b></p>	<ul style="list-style-type: none"> <li>◆ Create a continuous termiticide barrier 450 mm deep and 150 mm wide around the pole or post by soil injection or rodding. For new poles and posts, treat backfill and the bottom of the hole. Use 100 L of emulsion per m<sup>3</sup> of soil.</li> <li>◆ Regular inspections should be undertaken to determine when and if retreatment is necessary. If disturbance of the barrier has occurred, retreatment of the area affected will be required.</li> <li>◆ Posts and poles may also be drilled and injected with spray solution.</li> <li>◆ <b>Note: For existing poles and posts, it is impractical to treat the full depth and underneath of such poles and posts and therefore the possibility of future termite attack from below the treated area cannot be ruled out.</b></li> <li>◆ For <u>establishing trees</u> create a continuous barrier totally encompassing the root ball of the establishing tree. Application may be made prior to planting by applying emulsion to pre-dug hole or after planting via soil rodding. Roots projecting out of the treated zone may be susceptible to termite attack and may provide entry into the tree without termites contacting treated soil.</li> <li>◆ Biflex is non-systemic insecticide. Do not treat mature trees as it is impossible to provide a complete and continuous barrier under and around all tree roots.</li> </ul>
<p><b>Eradication of Termite Nest</b></p>	<ul style="list-style-type: none"> <li>◆ Locate nest and flood with insecticide emulsion. Trees, poles, posts and stumps containing nests may require drilling prior to treatment with termiticide emulsion. The purpose of drilling is to ensure the termiticide emulsion is distributed throughout the entire nest. Drill holes in live trees should be sealed with an appropriate caulking compound after injection.</li> </ul>

**Note: The termiticide barrier provided by this product has a finite life. This together with the recommendation to undertake annual inspections must be stated on the durable notice required by the BCA, B1.3(j)(ii).**

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

# Biflex<sup>®</sup> Duo 200 Termiticide & Insecticide

## CONDITIONS OF USE BY AUTHORISED PERSONS

The Pest Control Operator must be licensed under state legislation.

The Pest Control Operator must notify site supervisor, if any, and workers who come into contact with uncovered treated soil prior to laying the moisture membrane, to wear appropriate personal protective equipment and to observe re-entry requirements. (For personal protective equipment, refer to "SAFETY DIRECTIONS", and for re-entry, refer to "PRECAUTION: RE-ENTRY PERIODS", below.)

### GENERAL INSTRUCTIONS

**Urban Pest Control** - Biflex Duo 200 Termiticide & Insecticide is a powerful knockdown and residual pesticide. Ants, cockroaches, fleas, flies, mosquitoes, spiders, ticks and wasps are controlled by direct contact with spray and also by residual action as they come into contact with treated surfaces.

While Biflex is generally non-staining, water marking can occur. If applying to an unfamiliar surface, e.g. new building product, read technical specifications of new product for general substance compatibility, and / or check surface reaction of a small area, prior to full-scale application.

**Termites** - The use of Biflex Duo 200 Termiticide & Insecticide will help prevent and control subterranean termite infestations in and around buildings and structures when used in accordance with the Australian Standard AS 3660 Series, Termite Management. A dilute termiticidal emulsion must be adequately dispersed into the soil to establish a barrier between the building and subterranean termites in the soil. The purpose of a termite barrier is to prevent concealed termite entry into the building.

The biology and behaviour of the termite species involved, should be considered by the Pest Control Operator in determining which control measures are most appropriate to control and prevent termite infestation.

Where active subterranean termites are present inside the structure they must be eradicated by one or more of the methods described in AS3660.2 Section 5, prior to installing a Biflex barrier.

### MIXING

Add the required quantity of Biflex Duo 200 Termiticide & Insecticide to water in the spray tank and mix thoroughly. Maintain agitation during both mixing and application.

To facilitate even application of the termiticide emulsion over the area to be treated, the addition of a marker dye at label rates is recommended. On hard to wet soils, the penetration of the termiticide emulsion may be improved by the addition of a soil surfactant at label rates.

### CRITICAL APPLICATION DETAILS

The application of Biflex Duo 200 Termiticide & Insecticide to form both horizontal and vertical chemical barriers must be in accordance with the Australian Standard AS 3660 Series.

For treatment of new and existing buildings, both horizontal and vertical barriers may be required around and under the building. External perimeter barriers and where required, internal perimeter barriers, are an essential part of this treatment. The purpose of a chemical termite soil barrier is to provide a continuous, no gap barrier between the building and the termite colony. It is therefore essential that the Pest Control Operator is familiar with the construction details of the building. For further details, refer to the "Horizontal Barrier Treatments" and "Vertical Barrier Treatments" statements in this leaflet and to the Australian Standard AS 3660 Series.

**Horizontal Barrier Treatments:**

Use 5 L of emulsion per m<sup>2</sup> of soil. Apply the termiticide emulsion evenly to the soil surface area to ensure the provision of a continuous barrier with no gaps. To minimise drift, use low pressure, high volume spray equipment delivering large coarse droplets. On impervious soils where the application of 5 L/m<sup>2</sup> would cause excessive run-off, the application volume may be reduced provided the concentration of the emulsion is increased by a corresponding amount. For example, the volume of applied concentrate must remain constant at 25, 50 or 75 mL/m<sup>2</sup> depending on the location and the situation. Do not apply emulsion volumes below 2 L/m<sup>2</sup>.

In situations where the soil surface is very dry and conditions are conducive to rapid drying, the area to be treated should be moistened prior to the termiticide application.

It is important to note that when applying a horizontal barrier to the perimeter of a building or structure the chemical barrier is deemed to have a depth of 80 mm. In situations where the emulsion will not readily wet the soil to the required depth, loosen soil to a depth of 80 mm by 150 mm wide and apply 1.5 L of emulsion per lineal metre.

**Vertical Barrier Treatments:** To install a vertical barrier use a minimum of 100 L of emulsion per m<sup>3</sup> of soil. Vertical barriers must be a minimum of 150 mm wide, extend down to 80 mm below the top of the footing and be complete and continuous. Vertical barriers can be installed by trenching and treating the soil as it is backfilled, by soil rodding or by the use of certified reticulation systems, as described in the Australian Standard AS 3660 Series. The preferred method of installing a vertical barrier treatment is either by trenching and treating the soil as it is backfilled or by delivery via a certified reticulation system. When using the soil rodding method to establish a vertical barrier the distance between rod spacings should be as per the following table. To improve soil penetration, the soil should be loosened to a depth of 150 mm.

Soil Type	Rod spacing (mm)
Heavy clay	150
Clay loams	200
Loams	250
Sands	300

**Perimeter Barrier Treatments:**

Perimeter barriers consist of horizontal barriers at least 150 mm wide adjoining a vertical barrier of at least 150 mm in width. A perimeter barrier must completely surround all buildings, pipes, piers and service penetrations. In buildings with suspended floors with greater than 400 mm crawl space, perimeter barriers should be installed to surround piers, stumps and service penetrations and completely about all substructure walls.

To ensure provision of a continuous barrier use a minimum of 100 L of emulsion per m<sup>3</sup> of soil. This equates to a delivery volume of 5 L of emulsion per linear metre for a 300 mm vertical barrier, or 10 L of emulsion per linear metre for a 600 mm vertical barrier.

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.

**Post-Construction Under Slab Treatments:**

For concrete slabs, the emulsion needs to be injected through pre-drilled holes through the slab, at intervals between 150 mm and 300 mm. The following table shows the recommended hole spacing and recommended volume of spray solution required per hole, depending on the soil type.

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

Application equipment used to inject Biflex Duo 200 Termiticide & Insecticide through pre-drilled holes in an interior situation must be in good working order, free of any leaks and the injector must have tip shut-off to prevent nozzle dripping. Lateral dispersion tips are recommended. Drill holes must be resealed following injection of the Biflex emulsion. The decision and/or need for drilling concrete floor slabs should only be made after a thorough inspection of the building. The degree of termite activity should also be taken into consideration.

**Treatment in Conjunction with Physical Barriers:** In situations where the termite protection system is to consist of a combination of both physical and chemical barriers, each certified system must be installed according to the relevant and appropriate product specification and the Australian Standard AS 3660 Series.

**Reticulation Systems:** Biflex Duo 200 Termiticide & Insecticide can be used through reticulation systems to form horizontal and vertical barriers under and around structures and all service penetrations. The reticulation system must be certified and be capable of distributing the termiticide emulsion according to the product label and the Australian Standard AS 3660 Series.

In situations using reticulation systems to form barriers around the perimeter and/or service penetrations only, a full pre-construction soil applied Biflex Duo 200 Termiticide & Insecticide horizontal barrier is recommended. 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.

**Service Requirements:** Service requirements are to be determined as a result of at least an annual inspection by a licensed Pest Control Operator. More frequent inspections may be required in high risk termite areas.

In determining the need for service, factors such as local termite pressure, breaches of the barrier and termiticide longevity should be considered.

**Subterranean termites are on occasions capable of bridging termite barriers and therefore regular inspections, as detailed in the Australian Standard AS 4349.3, will significantly increase the probability of detection of termite activity before any damage or costly repairs are required.**

Several factors contribute to longevity of the termite treatment and must be considered when evaluating the need for retreatment. The actual protection period will depend on the termite hazard, climate, soil conditions and rate of termiticide used. Refer to Table A for the expected protection periods provided.

## **PRECAUTIONS AND RE-ENTRY PERIOD**

DO NOT spray into the air or directly on humans, pets or animals. Avoid contact with food, food utensils or preparation surfaces.

### **Re-entry Period**

Do not allow entry into treated areas until the spray has dried, unless wearing cotton overalls buttoned to the neck, wrist (or equivalent) and elbow-length chemical resistant gloves. Clothing must be laundered after each day's use.

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

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

## **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 fish ponds, aquariums etc before spraying.

## **STORAGE, SPILLAGE AND DISPOSAL**

Store in closed original containers, in a cool, well ventilated area away from children, animals, food and feedstuffs. Do not store for prolonged periods in direct sunlight.

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

The method of disposal of the container depends on the container type. Read the "Storage and Disposal" instructions on the label that is attached to the container.

## **SAFETY DIRECTIONS**

Poisonous if swallowed. Will irritate the eyes and the skin. Repeated exposure may cause allergic disorders. Avoid contact with eyes and skin. When opening container, mixing and loading and preparing the spray, wear cotton overalls buttoned to the neck and wrist, a washable hat, elbow-length chemical resistant gloves, and face shield or goggles. When using prepared spray, wear cotton overalls buttoned to the neck and wrist, a washable hat and elbow-length chemical resistant gloves. When using in enclosed areas, wear cotton overalls buttoned to the neck and wrist, a washable hat, elbow-length chemical resistant gloves and half-face respirator with the combined dust and gas cartridge. If product in eyes, wash it out immediately with water. 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 or goggles, respirator (if rubber wash with detergent and warm water) and contaminated clothing.

## **FIRST AID**

If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 13 11 26. If swallowed do NOT induce vomiting. Give a glass of water. If skin contact occurs, remove contaminated clothing and wash skin thoroughly.

## **MATERIAL SAFETY DATA SHEET**

Additional information is listed in the Material Safety Data Sheet.

## **WARRANTY**

FMC 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.

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