EnviroMax® Bifenthrin 100EC Termiticide & Insecticide

High Quality Packs.

APVMA Approval Number: 63648

Powerful, outdoor, minimal odour 100g/L Bifenthrin Emulsion Concentrate formulation!

UNIQUE FEATURES

- Long term pre- and post- construction management of subterranean termites.
- Binds strongly to treated soil. Australia's most persistent termiticide! (Please see label).
- Superior Bifenthrin Emulsion Concentrate formulation particularly suited to soil.
- Applications including rodding, trenching and charging of reticulation systems.
- EnviroMax® Bifenthrin 100EC Termiticide & Insecticide uses solvents that do not affect pump equipment or reticulation pipes.
- Treatment of commercial, industrial, domestic, and public structures and buildings.
- Suited to spraying applications, termite nest eradication, and protection of poles and fence posts.
- Broad spectrum synthetic pyrethroid activity – effective external treatments against a large range of common pests including Ants, Cockroaches, Fleas, Flies, Mosquitoes, Spiders, Ticks, and Wasps.
- Non staining, low odour, non sensitizing and non allergenic.
- Now proven Bifenthrin performance matched with a quality assured formulation at a competitive price!

Powerful outdoor knockdown and residual action!

Summary of Application Situations and Rates

PEST	SITUATION	STATE	RATE	CRITICAL COMMENTS
Spiders	External areas & surrounds of domestic, commercial, public & industrial buildings and structures.	All States	25-50mL/10L	Use the higher rate in situation 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^2 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	External areas & surrounds of domestic, commercial, public & industrial buildings and structures.	All States	50mL/10L	Apply prepared emulsion to the point of run-off 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.
Ants, cockroaches, mosquitoes, fleas, flies, ticks (excluding the paralysis tick *Ixodes holocyclus*) (Adults & Nymphs)	External area & surrounds of domestic, commercial, public & industrial buildings and structures.	All States	50-100 mL/10 L	On non-porous surfaces apply as a coarse spray at the rate of 1 L emulsion per 20 m^2. When treating non-porous surfaces do not exceed the point of run-off. On porous surfaces or use through power equipment, spray at the rate of 1 L of emulsion per 10 m^2. When treating porous surfaces do not exceed the point of run-off. Use the higher 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. To control ants apply to trails and nests. Repeat as necessary. To control fleas and ticks apply prepared emulsion to outside surfaces of buildings and surrounds including but not limited to foundations, verandas, window frames, eaves, patios, garages, pet housing, soil, turf, trunks or woody ornamentals or other areas where pests congregate or have been seen. To control flies and mosquitoes apply prepared emulsion to surfaces where insects rest or harbour. Reapply as necessary. For perimeter treatments apply the prepared emulsion to a band of soil or vegetation two to three metres 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^2. Higher volumes of water may be needed if organic matter is present or foliage is dense.
Subterranean Termites	Domestic, public, commercial & industrial areas.	All States, except Tas	Refer to Table A.	Refer to Table B.

Note: This table is for reference only. When using EnviroMax® Bifenthrin 100EC Termiticide & Insecticide please refer to the registered label.

Table A: EnviroMax® Bifenthrin 100EC Termiticide & Insecticide use rates for management of SUBTERRANEAN TERMITES

SITUATION	ALL AREAS SOUTH OF THE TROPIC OF CAPRICORN (EXCEPT TAS)		ALL AREAS NORTH OF THE TROPIC OF CAPRICORN	
	RATE	EXPECTED PROTECTION PERIOD	RATE	EXPECTED PROTECTION PERIOD
Pre-Construction Barriers Under slabs and under suspended floors with less than 400 mm crawl space.	1 L/100L	At least 10 years	1.5 L/100 L	5 years
	500 mL/100 L	10 years	750 mL/100 L (Note 1)	3 years
			500 mL/100 L (Note 1)	2 years
Perimeter Barriers For new and existing buildings.	1 L/100L	At least 10 years	1.5 L/100 L	5 years
	500 mL/100 L	10 years	1 L/100 L	4 years
	250 mL/100 L	3 years	750 mL/100 L	3 years
			500 mL/100 L	2 years
Post-Construction Barriers Under slabs and under suspended floors with less than 400 mm crawl space.	1 L/100L	At least 10 years	1.5 L/100 L	5 years
			1 L/100 L	4 years
	500 mL/100 L	10 years	750 mL/100 L	3 years
			500 mL/100 L	2 years
Reticulation Systems Perimeter and/or service penetration treatment only.	1 L/100 L	At least 10 years	1.5 L/100 L	5 years
	500 mL/100 L	10 years	1 L/100 L	4 years
	250 mL/100 L	3 years	750 mL/100 L	3 years
			500 mL/100 L	2 years
Reticulation Systems Cavity infill & footing barriers.	500 mL/100 L	5 years	1 L/100 L	2 years
Protection of Poles & Fence Posts.	500 mL/100 L	10 years	1.5 L/100 L	5 years
			1 L/100 L	4 years
			750 mL/100 L	3 years
Nest Eradication.	500 mL/100 L	Not applicable	500 mL/100 L	Not applicable

Note 1: This rate must be used in conjunction with a certified reticulation system that is capable of distributing the Termiticide & Insecticide emulsion according to the product label and the Australian Standard AS 3660 Series.

* The need for treatment is to be determined as a result of at least an annual inspection, or more frequently in high risk area, by a qualified Pest Control Operator.

The actual protection period will depend on the termite hazard, climate, soil conditions and rate of termiticide use.

Table B: CRITICAL COMMENTS for use against SUBTERRANEAN TERMITES

SITUATION	CRITICAL COMMENTS
Pre-Construction Barriers Under slabs for protection of new buildings.	• 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. 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. Chemical barriers that have been disturbed by construction, excavation and/or landscaping activities will need to be reapplied to restore continuity of the barrier.
Pre-Construction Barriers Under suspended floors.	• For area 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. • 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 wall. • 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.

Table B: CRITICAL COMMENTS for use against SUBTERRANEAN TERMITES

SITUATION	CRITICAL COMMENTS
Perimeter Barriers For new and existing buildings.	• Perimeter barriers (both horizontal and vertical, external and where required, internal and 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 penetrations points. • Apply with suitable application equipment to form a continuous chemical barrier (both vertical and horizontal) around the structure and to a depth reaching 80mm 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. • Chemical barriers that have been disturbed by construction, excavation and/or landscaping activities will need to be reapplied to restore continuity of the barrier.
Post-Construction Barrier Treatments For the protection of existing buildings.	• EnviroMax® Bifenthrin 100EC Termiticide & Insecticide must be used through a certified reticulation system to form and replenish perimeter barriers around building 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. • Perimeter barriers consist of a horizontal barrier abutting a vertical barrier, which must reach down to the top of the footings. • 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. • 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^3 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. • Pre-Construction – For use in conjunction with full soil treatment horizontal barriers only: Apply the diluted emulsion through the perimeter reticulation system as specified above. Follow instructions for Pre-Construction horizontal barrier formation.
Reticulation Systems Perimeter and/or service penetration treatment only.	• EnviroMax® Bifenthrin 100EC Termiticide & 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. • Perimeter barriers consist of a horizontal barrier abutting a vertical barrier, which must reach down to the top of the footing. • 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. • 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^3 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. • Pre-Construction – For use in conjunction with full soil treatment horizontal barriers only: Apply the diluted emulsion through the perimeter reticulation system as specified above. Follow instructions for Pre-Construction horizontal barrier formation.
Reticulation Systems Cavity infill & footing barriers.	• EnviroMax® Bifenthrin 100EC Termiticide & 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. • 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. • Apply the prepared termiticide emulsion by pumping through the system according to the manufacturer's specifications with delivery volume of 2 L of emulsion per linear metre of delivery pipe. • 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. • The recommended rate of application is 2 L of emulsion per linear metre which equates to 2 L of emulsion per 0.0068 m^3 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^3) per linear metre of wall cavity, then the amount of EnviroMax® Bifenthrin 100EC Termiticide & Insecticide 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. • To facilitate more even distribution of EnviroMax® Bifenthrin 100EC Termiticide & Insecticide 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.
Protection of Service Poles & Fence Posts.	• 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^3 of soil. • Regular inspections should be undertaken to determine when and if treatment is necessary. If disturbance of the barrier has occurred, retreatment of the area affected will be required. • Posts and poles may also be drilled and injected with spray solution. • 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.
Eradication of Termite Nest.	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.

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Table C: EnviroMax® Bifenthrin 100EC Termiticide & Insecticide use rates for TIMBER

PEST	SITUATION	STATE	RATE	CRITICAL COMMENTS
Powder Post Beetle (*Lyctus* spp.)	Lyctid susceptible sawn and round timbers for treatment by vacuum or vacuum pressure impregnation use in Hazard Class H1.	All States	15 mL/100kg of timber	1. Calculate uptake of suitable diluent (e.g. organic solvents or water) per 100kg of timber. 2. Add the appropriate amount of EnviroMax® Bifenthrin 100EC Termiticide & Insecticide to the diluent to achieve recommended loadings. 3. Apply to timber through vacuum or vacuum pressure treatment equipment to ensure compliance with AS1604. 4. The minimum individual piece retention as specified in AS1604 is 0.0012% mass/mass.
All Termites (including *(Mastotermes darwiniensis) & Coptotermes acinaciformis)*	Sawn and round timbers for treatment by vacuum or vacuum pressure impregnation use in Hazard Class H2.	All States	50 mL/100kg of timber	1. Calculate uptake of suitable diluent (e.g. organic solvents or water) per 100kg of timber. 2. Add the appropriate amount of EnviroMax® Bifenthrin 100EC Termiticide & Insecticide to the diluent to achieve recommended loadings. 3. Apply to timber through vacuum or vacuum pressure treatment equipment to ensure compliance with AS1604. 4. The minimum individual piece retention as specified in AS1604 is 0.0047% mass/mass.
Softwoods only: As above plus Furniture Beetle *(Anobium punctatum)*, European House Borer				
All Termites excluding *(Mastotermes darwiniensis)*	Framing timbers for surface spray application or dipping Hazard Class H2 with no exposure to sunlight.	All areas South of the Tropic of Capricorn	1.87 mL/m^2 of surface area	1. Calculate uptake of suitable diluent (e.g. organic solvents or water) per 100kg of timber. 2. Calculate the surface area of 1m^3 or product to treat. 3. Add the appropriate amount of EnviroMax® Bifenthrin 100EC Termiticide & Insecticide to the diluent to achieve recommended loadings. 4. Apply to timber through a spray system or by dripping to ensure compliance with the recommended rates. 5. The minimum individual piece retention is 18µg/cm^2.
Softwoods only: As above plus Furniture Beetle *(Anobium punctatum)*, European House Borer *(Hylotrupes bajulus)*				

TABLE C: EnviroMax® Bifenthrin 100EC Termiticide & Insecticide use rates for TIMBER PRODUCTS

PEST	SITUATION	STATE	RATE	CRITICAL COMMENTS
All Termites (including *Mastotermes darwiniensis & Coptotermes acinaciformis)* & Timber Beetles	Softwood particle & Strand based boards in Hazard Class H2.	All States	0.56 mL/kg of dry fibre	Add sufficient EnviroMax® Bifenthrin 100EC Termiticide & Insecticide into the glue to achieve a retention of 0.0047% mass/mass in the finished board. Alternatively particles on strands can be treated prior to manufacture. When EnviroMax® Bifenthrin 100EC Termiticide & Insecticide is added to the glue mix, the pH of the finished mix must not exceed 9.5.
	Processing & Manufacture of softwood plywood in Hazard Class H2.		250 mL/m^3 dry veneer	1. Calculate uptake of solution by veneers. 2. Dilute EnviroMax® Bifenthrin 100EC Termiticide & Insecticide as required to ensure loading of 0.005% mass/mass in the veneers. 3. Following the manufacture of the plywood panel the loading of bifenthrin in the panel should be a minimum of 0.004% mass/mass.
All Termites excluding *(Mastotermes darwiniensis)*	Framing timbers for surface spray application or dipping Hazard Class H2 with no exposure to sunlight.	All areas South of the Tropic of Capricorn	1.87 mL/m^2 of surface area	1. Calculate uptake of suitable diluent (e.g. organic solvents or water) per 100kg of timber. 2. Calculate the surface area of 1m^3 or product to treat. 3. Add the appropriate amount of EnviroMax® Bifenthrin 100EC Termiticide & Insecticide to the diluent to achieve recommended loadings. 4. Apply to timber through a spray system or by dripping to ensure compliance with the recommended rates. 5. The minimum individual piece retention is 18µg/cm^2
Softwoods only: As above plus Furniture Beetle *(Anobium punctatum)*, European House Borer *(Hylotrupes bajulus)*				
All Termites including *(Mastotermes darwiniensis & Coptotermes acinaciformis)* & Timber Beetles	Softwood particle & Strand based boards in Hazard Class H2.	All States	0.56 mL/kg of dry fibre	Add sufficient EnviroMax® Bifenthrin 100EC Termiticide & Insecticide into the glue to achieve a retention of 0.0047% mass/mass in the finished board. Alternatively particles on strands can be treated prior to manufacture. When EnviroMax® Bifenthrin 100EC Termiticide & Insecticide is added to the glue mix, the pH of the finished mix must not exceed 9.5.
	Processing & Manufacture of softwood plywood in Hazard Class H2.		250 mL/m^3 dry veneer	1. Calculate uptake of solution by veneers. 2. Dilute EnviroMax® Bifenthrin 100EC Termiticide & Insecticide as required to ensure loading of 0.005% mass/mass in the veneers. 3. Following the manufacture of the plywood panel the loading of bifenthrin in the panel should be a minimum of 0.004% mass/mass.
All Termites excluding *(Mastotermes darwiniensis)*	Glueline treatment of softwood plywood and LVL (2.5mm thick veneer) for use in Hazard Class H2.	All areas South of the Tropic of Capricorn	250 mL/m^3 in the glueline	Glue Line Treatment: 1. Calculate the usage of glue per cubic metre of panel. 2. Add EnviroMax® Bifenthrin 100EC Termiticide & Insecticide to the glue during preparation of the mix. 3. Following the manufacture of the plywood panel the loading of bifenthrin in the panel should be a minimum of; 0.0021% mass/mass for the 250 mL/m^3 rate. 0.0083 mass/mass for the 1000 mL/m^3 rate.
All Termites including *(Mastotermes darwiniensis & Coptotermes acinaciformis)*		All States	1000 mL/m^3 in the glueline	Glue Line Treatment: 1. Calculate the usage of glue per cubic metre of panel. 2. Add EnviroMax® Bifenthrin 100EC Termiticide & Insecticide to the glue during preparation of the mix. 3. Following the manufacture of the plywood panel the loading of bifenthrin in the panel should be a minimum of 0.004% mass/mass. Face Treatment: 1. Calculate the uptake of solution by faces. 2. Add EnviroMax® Bifenthrin 100EC Termiticide & Insecticide to the working solution. 3. Following the manufacture of the plywood panel the loading of bifenthrin in the panel should be a minimum of 0.0042% mass/mass.
			500 mL/m^3 in the glueline and 200 mL in the faces	
All Termites excluding *(Mastotermes darwiniensis)*	Glueline treatment of softwood plywood and LVL (3.2mm thick veneer) for use in Hazard Class H2.	All areas South of the Tropic of Capricorn	250 mL/m^3 in the glueline and 50 mL in the faces	Glue Line Treatment: Calculate the usage of glue per cubic metre of panel. Add EnviroMax® Bifenthrin 100EC Termiticide & Insecticide to the glue during preparation of the mix. Following the manufacture of the plywood panel the loading of bifenthrin in the panel should be a minimum of 0.0021% mass/mass. Face Treatment: Calculate the uptake of solution by faces. Add EnviroMax® Bifenthrin 100EC Termiticide & Insecticide to the working solution. Following the manufacture of the plywood panel the loading of bifenthrin in the panel should be a minimum of 0.001% mass/mass.

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