Product:

Pack Size:

PCT Holdings Pty Ltd Aquastar 100SC Termiticide & Insecticide 1 L, 5 L, 10 L, 20 L, 200 L

Date:

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## PRIMARY CONTAINER LABEL

Text above this line is not part of the label

## **POISON**

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

# Aquastar 100SC **Termiticide & Insecticide**



ACTIVE CONSTITUENT: 100g/L BIFENTHRIN

3A INSECTICIDE



For the control of a range of urban interior and exterior pests, for protection of structures from subterranean termite damage and for the control of termites 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 OPENING OR USING

Contents: 1 L, 5 L, 10 L, 20 L, 200 L

APVMA Approval No. 65151/50286 \*AQUASTAR is a registered trademark of PCT INTERNATIONAL PTY LTD (PCT Holdings Pty Ltd ABN 11 099 023 962) 1/74 Murdoch Circuit, Acacia Ridge QLD 4110 • http://pct.au.com CUSTOMER SERVICE FREECALL 1800 630 877 EMERGENCY RESPONSE (ALL HOURS) FREECALL 1800 630 877

Company: Product: Pack Size:

PCT Holdings Pty Ltd

1 L, 5 L, 10 L, 20 L, 200 L

Aquastar 100SC Termiticide & Insecticide

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## PRIMARY CONTAINER LABEL

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## **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 RE-ENTRY PERIODS" below).

## PRECAUTIONS AND RE-ENTRY PERIODS

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

Pre-construction: Re-entry - DO NOT allow entry into uncovered treated areas until the spray has dried. When prior entry is necessary, wear cotton overalls buttoned to the neck, wrist and elbow-length PVC, neoprene or nitrile gloves and chemical resistant footwear. Clothing must be laundered after each day's use.

Post-Construction and urban pest control: Re-entry - to the DO NOT allow people and pets to enter treated areas until the spray has dried (normally 3-4 hours) and ventilate buildings before reoccupying. When prior entry is necessary, wear cotton overalls buttoned to the neck, wrist and elbow-length PVC, neoprene or nitrile gloves and chemical resistant footwear. 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.

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. 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.

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#### SAFETY DIRECTIONS

Poisonous if swallowed. May irritate eyes and skin. Repeated exposure may cause allergic disorders. Avoid contact with eyes and skin. For termite control in buildings and structures: When opening the container, preparing spray and using prepared spray, wear cotton overalls buttoned to the neck and wrist, a washable hat and elbow length PVC, or nitrile gloves. After each day's use, wash gloves and contaminated clothing. For handheld application: When opening the container and preparing spray, wear cotton overalls buttoned to the neck and wrist, washable hat and elbow length PVC or nitrile gloves. When using prepared spray wear protective waterproof clothing, elbow length PVC or nitrile gloves and water resistant footwear. After each day's use, wash gloves and contaminated clothing. Wash hands after use.

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## FIRST AID

If poisoning occurs, contact a doctor or Poisons Information Centre on 13 11 26.

## MATERIAL SAFETY DATA SHEET.

Additional information is listed in the Material Safety Data Sheet (MSDS). A Material Safety Data Sheet for AQUASTAR BIFENTHRIN 100SC is available from PCT Holdings Pty Ltd on request.

#### WARRANTY

PCT Holdings Pty Ltd 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:

PCT Holdings Pty Ltd Company:

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## **POISON**

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

# **Aquastar 100SC Termiticide & Insecticide**

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

3A INSECTICIDE

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

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#### **Directions for Use**

Restraints

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 (e-xcept 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 equipment.

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

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

	1		ched before deposits dry on leaf surfaces.		
PEST	SITUATION	RATE	CRITICAL COMMENTS		
Spiders	Internal & external areas & surrounds of domestic,	25-50mL /10L	Use the higher rate in situations where pest pressure is high, when rapid knockdown and/or maximum residual protection is desired. 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		
	commercial, public & industrial buildings and structures		100 m2 and ensuring thorough coverage of the treated surfaces. In an outdoor situation, pay particular attention to protected dark areas such as cracks and crevices, under floors, eaves and other known hiding or resting places.		
TO TO THE TANK OF			For indoor use, pay particular attention to dark protected areas such as cracks and crevices, behind and under sinks, stoves, refrigerators, furniture, pipes, cornices, skirting boards and other known hiding or resting places. Do not use as a space spray. 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	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 (excluding Red imported Fire Ants),	Internal & external area & surrounds of domestic,	50-100 mL/10 L	<b>On non-porous surfaces</b> apply as a coarse spray at the rate of 1 L emulsion per 20 m <sup>2</sup> . When treating non-porous surfaces do not exceed the point of run-off.		
biting midges, cockroaches, mosquitoes, fleas, flles,	commercial, public & industrial buildings and structures		On porous surfaces or use through power equipment, spray at the rate of 1 L of emulsion per $10 \text{ m}^2$ . When treating porous surfaces do not exceed the point of runoff.		
ticks (excluding the paralysis tick <i>Ixodes</i> holocyclus)			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.		

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(Adults & Nymphs)		For indoor use, pay particular attention to protected dark areas such as cranks & crevasses, behind or under sinks, stoves and refrigerators, furniture, pipes, cornices, skirting boards and other known hiding or resting places. DO NOT use a surface spray.
		Ants: To control ants apply to trails and nests. Repeat as necessary.
		Fleas and Ticks: 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.
		Flies and Mosquitoes: To control flies and mosquitoes apply prepared emulsion to surfaces where insects rest or harbour. Reapply as necessary.
		Residual Surface Treatments: Apply prepared emulsion to indoor and outdoor surfaces where insects rest or harbour. Internal harbourage sites include (but are not restricted to) areas such as walls, fly screens, behind and under sinks, under furniture and indoor plants. External harbourage sites include (but are not restricted to) areas such as building exteriors, eaves, walls, fences, also garages, sheds, gazebos, ornamental plants, bushes, shrubs, hedges, shady or damp areas around buildings. Reapply as necessary. When applying to vegetation, ensure that spray penetrates entire plant or hedge and covers both leaf surfaces.
		<b>Perimeter treatments:</b> 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 <sup>2</sup> . Higher volumes of water may be needed if organic matter is present or foliage is dense.

PEST	SITUATIO N	STATE	RATE	CRITICAL COMMENTS	
Subterranean Termites	Domestic, public, commercial & industrial areas	All States, except Tas	Refer to Table A	Refer to Table B	

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## TABLE A: AQUASTAR BIFENTHRIN 100SC use rates for management of **SUBTERRANEAN TERMITES**

		UTH of the Tropic of rn (except Tas)	All areas NORTH of the Tropic Capricorn	
SITUATION	RATE	Expected Protection Period*	RATE	Expected Protection Period*
Pre-Construction	. 1L/100L	At least 10 years	1.5L/100 L	5 years
Barriers			1L/100 L **	4 years
Under slabs and	500mL/100 L	10 years	750mL/100 L **	3 years
under suspended	· -	: .	500mL/100 L **	2 years
floors with less than		<u>.</u>		
400 mm crawl space				<u> </u>
Perimeter Barriers	1L/100L	At least 10 years	1.5L/100 L	5 years
For new and existing	500mL/100 L	10 years	1L/100 L	4 years
buildings	250mL/100 L.	3 years	750mL/100 L	3 years
			500mL/100 L	2 years
Post-Construction	1L/100L	At least 10 years	1.5L/100 L	5 years
Barriers			1L/100 L	4 years
Under slabs and	500mL/100 L	10 years	750mL/100 L	3 years
under suspended			500mL/100 L	2 years
floors with less than				
400 mm crawl space				
Reticulation	1L/100 L	At least 10 years	1.5L/100 L	5 years
Systems	500mL/100 L	10 years	1L/100 L	4 years
Perimeter and/or	250mL/100 L	· 3 years	750mL/100 L	3 years
service penetration		.	500mL/100 L	2 years
treatment only				
Reticulation	500mL/100 L	5 years	1L/100 L	2 years
Systems				
Cavity infill &				;
footing barriers		10	· + EL/100 L	E vonc
Protection of	500mL/100 L	10 years	1.5L/100 L	5 years
Poles & Fence			1L/100 L	4 years
Posts			750mL/100 L	3 years
Nest Eradication	500mL/100 L	Not applicable	500mL/100 L	Not
,	200,,,,200		testion provided f	applicable

<sup>\*</sup> Several factors contribute to the estimated length of protection provided for each termite treatment. The actual protection period will depend on the termite hazard, climate, soil conditions and rate of termiticide used. The need for retreatment is to be determined as a result of at least an annual inspection, or more frequently in high risk area, by a qualified licensed Pest Control Operator.

\*\* 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.

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TABLE B CRITICAL COMMENTS for use against SUBTERRANEAN TERMITES

	E B CRITICAL COMMENTS for use against SUBTERRANEAN TERMITIES
SITUATION	CRITICAL COMMENTS
Pre-	Apply with suitable application equipment to form a complete and continuous chemical
Construction	
Barriers	require a combination of conventional open wand application and soil trenching and/or
Under slabs	rodding applications. Recommended rod spacing should be between 150 and 300 mm,
for protection	as per soil type. For additional information refer to "CRITICAL APPLICATION DETAILS"
of new	on this label and the Australian Standard AS 3660 Series.
buildings +,++	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-	For areas under suspended floors with restricted access (typically with less than
Construction	400mm clearance), the entire subfloor area should be treated as a continuous
Barriers	horizontal barrier, which completely abuts an internal vertical barrier (if necessary)
Under	around any substructure wall. Ideally, this operation should be done during
suspended	construction of the building while access is more readily available.
floors +,++	For areas beneath suspended floors which have adequate access (eg. more than 400
1	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
Perimeter	Perimeter barriers (both horizontal and vertical, external and where required, internal
Barriers	and sub-floor) are an essential part of termite protection and must be installed at the
For new and	completion of the building. Perimeter barriers should be installed around slabs, piers,
existing	substructure walls and external penetrations points.
buildings ++	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-	Apply with suitable application equipment to form a complete and continuous barrier
Construction	(both horizontal & vertical) around and under the buildings and structures as in
Barrier	accordance with AS3660 with particular emphasis on any known infestations areas. To
Treatments	form the chemical barrier a number of application techniques may be needed including
For the	soil rodding; trenching; open wand and sub-slab injections.
protection of	Chemical barriers beneath concrete will require drilling. Recommended drill hole spacing
existing	is between 150mm and 300mm. To enhance chemical distribution, use a lateral
buildings ++	dispersion tip on the injector and deliver up to 10L of emulsion per linear meter. Drill
	holes should be no more than 150mm from foundation walls or expansion joints to
	ensure complete formation of a chemical barrier.
	For areas under suspended floors with restricted access (typically with less than
'	400mm clearance), the entire subfloor area should be treated as a continuous
	horizontal barrier, which completely abuts an internal vertical barrier (if necessary)
	around any substructure wall. Otherwise, install perimeter barriers around each
	individual pier, stump, penetration point and structure wall.
	Chemical barriers that have been disturbed by construction, excavation and/or
	landscaping activities will need to be reapplied to restore continuity of the barrier.
Reticulation	AQUASTAR BIFENTHRIN 100SC must be used through a certified reticulation system to
Systems	form and replenish perimeter barriers around buildings and service penetrations. The
Perimeter	system must be installed according to the manufacturer's specifications and be capable
and/or	of distributing the termiticide emulsion according to the product label and the
service	Australian Standard AS 3660 Series.
penetration	Perimeter barriers consist of a horizontal barrier abutting a vertical barrier, which must
treatment	reach down to the top of the footing.
only	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
	<del></del>

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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.

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- 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 m³ 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

- AQUASTAR BIFENTHRIN 100SC 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
- Apply the prepared termiticide emulsion by pumping through the system according to the manufacturer's specifications with delivery volume of 2L 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 m3 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 m3) per linear metre of wall cavity, then the amount of AQUASTAR BIFENTHRIN 100SC 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 AQUASTAR BIFENTHRIN 100SC 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 m3 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.

## **Notes to Critical Comments**

<sup>+</sup> 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

++ Chemical barriers that have been disturbed by construction, excavation and/or landscaping activities will need to be reapplied to restore continuity of the barrier.

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

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

## CONDITION OF USE BY AUTHORISED PERSONS

The pest control operator must be licensed under state legislation. The pest 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 protective equipment, refer to requirements (For personal DIRECTIONS", and for re-entry, refer to "PRECAUTION: RE-ENTRY PERIODS", below).

## **GENERAL INSTRUCTIONS**

Urban pest control - AQUASTAR BIFENTHRIN 100SC is a powerful knockdown and residual pesticide. Ants, cockroaches, fleas, files, mosquitoes, spiders, ticks and wasps are controlled by direct contact with spray and also by residual action as they come in to contact with treated surfaces.

Termites - The use of AQUASTAR BIFENTHRIN 100SC will help prevent and control subterranean termite infestations in and around building 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 infestations.

## INSECTICIDE RESISTANCE WARNING

GROUP 3A INSECTICIDE management insecticide resistance For AQUASTAR BIFENTHRIN 100SC is a Group 3A insecticide. Some naturally occurring insect biotypes resistant to AQUASTAR BIFENTHRIN 100SC and other group 3A insecticide may exist through normal genetic variability in any insect population. The resistant individuals can eventually dominate the insect population if AQUASTAR BIFENTHRIN 100SC or other group 3A insecticides are used repeatedly. The effectiveness of AQUASTAR BIFENTHRIN 100SC on resistant individuals could be significantly reduced. Since occurrence of resistant individuals is difficult to detect prior to use, PCT Holdings Pty Ltd accepts no liability for any losses that may result from the failure of AQUASTAR BIFENTHRIN 100SC to control resistant insects. AQUASTAR BIFENTHRIN 100SC may be subject to specific resistance management strategies. For further information, contact your local supplier, PCT Holdings Pty Ltd representatives or local agricultural department agronomist.

#### MIXING

Add the required quantity AQUASTAR BIFENTHRIN 100SC 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 rate is recommended. On hard to wet soil the penetration of the termiticide emulsion may be improved by the addition of a soil surfactant at label rate.

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## CRITICAL APPLICATION DETAILS

The application of AQUASTAR BIFENTHRIN 100SC 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 m² 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/m² 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/m² depending on the location and the situation. DO NOT apply emulsion volumes below 2 L/m². In situations where the soil surface is very dry and conditions are conducive to rapid drying, the areas 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 vertical barrier use a minimum of 100 L of emulsion per m³ of soil. Vertical barriers must be a minimum of 150 mm wide, extend down to 80mm 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 spacing should be as per the following table. To improve soil penetration, the soil should be loosened to depth of 150mm.

Soil type	Rod Spacing (mm)	
Heavy clay	150	
Clay loams	200	
Loams	250	
Sands	300	

## **Perimeter Barrier Treatments:**

Perimeter barrier consists of horizontal barrier at least 150mm wide adjoining a vertical barrier of at least 150mm 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

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should be installed to surround piers, stumps and service penetrations and completely abut all substructure walls. To ensure provision of a continuous barrier use a minimum of 100 L of emulsion per  $\text{m}^3$  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 meter 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 the soil type.

Soil type	Rod 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 AQUASTAR BIFENTHRIN 100SC through predrilled 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 AQUASTAR BIFENTHRIN 100SC emulsion. The decision and/or need for drilling concrete floor slabs should only be made after 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:

AQUASTAR BIFENTHRIN 100SC 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 Australian Standard AS 3660 Series. In situations using reticulations system to form barriers around perimeter and /or service penetrations only, a full pre-construction soil applied AQUASTAR BIFENTHRIN 100SC 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 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.

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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 re-treatment. 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

*Pre-construction:* Re-entry - **DO NOT** allow entry into uncovered treated areas until the spray has dried. When prior entry is necessary, wear cotton overalls buttoned to the neck, wrist and elbow–length PVC, neoprene or nitrile gloves and chemical resistant footwear. Clothing must be laundered after each day's use.

Post-Construction and urban pest control: Re-entry **DO NOT** allow people and pets to enter treated areas until the spray has dried (normally 3-4 hours) and ventilated buildings before reoccupying. When prior entry is necessary, wear cotton overalls buttoned to the neck, wrist and elbow-length PVC, neoprene or nitrile gloves and chemical resistant footwear. Clothing must be laundered after each day's use.

# PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND THE ENVIRONMENT

**Dangerous** to fish and aquatic organisms. DO NOT contaminate dams, rivers, streams or waterways or drains with product 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 Australian Standard AS 2507 - Storage and Handling of Pesticides. Do NOT allow spilled product to enter sewers, drains, creeks or any other waterways.

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

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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. 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.

#### SAFETY DIRECTIONS

Poisonous if swallowed. May irritate eyes and skin. Repeated exposure may cause allergic disorders. Avoid contact with eyes and skin. For termite control in buildings and structures: When opening the container, preparing spray and using prepared spray, wear cotton overalls buttoned to the neck and wrist, a washable hat and elbow length PVC, or nitrile gloves. After each day's use, wash gloves and contaminated clothing. For handheld application: When opening the container and preparing spray, wear cotton overalls buttoned to the neck and wrist, washable hat and elbow length PVC or nitrile gloves. When using prepared spray wear protective waterproof clothing, elbow length PVC or nitrile gloves and water resistant footwear. After each day's use, wash gloves and contaminated clothing. Wash hands after use.

#### **FIRST AID**

If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 13 11 26.

#### **MATERIAL SAFETY DATA SHEET**

Additional information is listed in the Material Safety Data Sheet (MSDS). A MSDS for AQUASTAR BIFENTHRIN 100SC is available from PCT Holdings Pty Ltd on request.

## WARRANTY

PCT Holdings Pty Ltd 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.