

Label Version 03

POISON

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

CHAINDRITE PROFESSIONAL TIMBER PROTECTION

ACTIVE CONSTITUENT: 100g/L BIFENTHRIN
SOLVENTS: 649g/L LIQUID HYDROCARBONS
50g/L N-METHYL-2-PYRROLIDONE

GROUP 3A INSECTICIDE

For the protection of timber and timber based products from damage by borers and termites. For the pre- and post- construction management of subterranean termites in accord with AS 3660 and for the control of termites and a range of 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 OPENING OR USING

APVMA Approval No:

Contents: 1L, 5L, 20L, 60L, 110L, 200L, 1000L

Distributed by:



**Sherwood Chemicals
Australasia Pty Ltd**
Level 3, 1060 Hay Street
WEST PERTH 6005
AUSTRALIA
Tel: 08 9219 4683
Fax: 08 9219 4672

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", in the attached leaflet**).

STORAGE, SPILLAGE AND DISPOSAL

Store in closed original container, 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.

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

For 1L, 5L, 20L, 200L, 1000L Containers

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, 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.

Envirodrum Micro Matic Valve (60L, 110L)

Store the original sealed Envirodrum in a cool well-ventilated area. DO NOT store for prolonged periods in direct sunlight. DO NOT tamper with the Micro Matic valve or the security seal. DO NOT contaminate the Envirodrum with water or any foreign matter. After each use of the product, please ensure that the Micro Matic coupler delivery system and hoses are disconnected, triple rinsed with clean water and drained accordingly. When the contents of the Envirodrum have been used, please return the Envirodrum to the point of purchase. The Envirodrum remains the property of Sherwood Chemicals.

SAFETY DIRECTIONS

Poisonous if swallowed. Will damage the eyes and will irritate the skin. Avoid contact with eyes and skin. DO NOT inhale vapour or spray mist. When opening the container and preparing spray, wear cotton, overalls buttoned to the neck and wrist, a washable hat, elbow-length PVC, neoprene or nitrile gloves, face shield or goggles and chemical resistant footwear. When using prepared spray, wear cotton overalls buttoned to the neck and wrist, a washable hat, elbow-length PVC, neoprene or nitrile gloves and chemical resistant footwear. When using in enclosed areas wear cotton overalls buttoned to the neck and wrist, a washable hat, elbow-length PVC, neoprene or nitrile gloves, and chemical resistant footwear and half-face respirator with the combined dust and gas cartridge. If clothing becomes contaminated with product or wet with spray, remove clothing immediately. If product or spray on skin, immediately wash area with soap and water. If product in eyes wash it out immediately with water. Thoroughly ventilate treated areas before reoccupying. 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; New Zealand 0800 764 766. If swallowed, do NOT induce vomiting. Give a glass of water. If in eyes, hold eyes open, flood with water for at least 15 minutes and see a doctor.

MATERIAL SAFETY DATA SHEET

Additional information is listed in the Material Safety Data Sheet (MSDS). A Material Safety Data Sheet for CHAINDRITE PROFESSIONAL TIMBER PROTECTION is available from Sherwood on request. Call Customer Service on 08 9219 4683

CONDITIONS OF SALE:

The use of CHAINDRITE PROFESSIONAL TIMBER PROTECTION being beyond the control of the manufacturer, no warranty expressed or implied is given by Sherwood Chemicals., regarding its suitability, fitness or efficiency for any purpose for which it is used by the buyer, whether in accordance with the directions or not and Sherwood Chemicals Australasia Pty Ltd accepts no responsibility for any consequence whatsoever resulting from the use of this product.

Batch No:

Date of Manufacture:

APVMA Approval No.:	1L	61819/1L/0310
	5L	61819/5L/0310
	20L	61819/20L/0310
	60L	61819/60L/0310
	110L	61819/110L/0310
	200L	61819/200L/0310
	1000L	61819/1000L/0310

Booklet

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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 (except via certified cavity infill reticulation systems or direct treatment of nest).

PEST	SITUATION	STATE	RATE	CRITICAL COMMENTS
Spiders	External areas & surrounds of domestic, commercial, public & industrial buildings and structures	All States	25-50 mL/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 mixtures 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	50 mL/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 <i>Ixodes holocyclus</i>) (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, verandahs, 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.

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

TABLE A: CHAINDRITE PROFESSIONAL TIMBER PROTECTION use rates for management of SUBTERRANEAN TERMITES

SITUATION	All areas SOUTH of the Tropic of Capricorn (except Tas)		All areas NORTH of the Tropic 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
			1 L/100 L (Note 1)	4 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
<p>Pre-Construction Barriers Under slabs for protection of new buildings</p>	<ul style="list-style-type: none"> • 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” 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.
<p>Pre-Construction Barriers Under suspended floors</p>	<ul style="list-style-type: none"> • 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. • Chemical barriers that have been disturbed by construction, excavation and/or landscaping activities will need to be reapplied to restore continuity of the barrier.
<p>Perimeter Barriers For new and existing buildings</p>	<ul style="list-style-type: none"> • 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.
<p>Post-Construction Barrier Treatments For the protection of existing buildings</p>	<ul style="list-style-type: none"> • Apply with suitable application equipment to form a complete and continuous barrier (both horizontal & vertical) around and under the buildings and structures as in accordance with AS3660 with particular emphasis on any known infestations areas. To form the chemical barrier a number of application techniques may be needed including soil rodding; trenching; open wand and sub-slab injections. • Chemical barriers beneath concrete will require drilling. Recommended drill hole spacing is between 150mm and 300mm. To enhance chemical distribution, use a lateral 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.
<p>Reticulation Systems Perimeter and/or service penetration treatment only</p>	<ul style="list-style-type: none"> • CHAINDRITE PROFESSIONAL TIMBER PROTECTION 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.

Continued on next page.....

	<ul style="list-style-type: none"> • 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 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	<ul style="list-style-type: none"> • CHAINDRITE PROFESSIONAL TIMBER PROTECTION 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 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 CHAINDRITE PROFESSIONAL TIMBER PROTECTION 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 CHAINDRITE PROFESSIONAL TIMBER PROTECTION 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	<ul style="list-style-type: none"> • 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 emulsion. • 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	<ul style="list-style-type: none"> • 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.

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).

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

DIRECTIONS FOR USE – TIMBER

RESTRAINTS:

DO NOT use treated timber or boards in situations other than those deemed Hazard Class H1 or H2.

Situations	Pest	State	Rate	Critical Comments
Lyctid susceptible sawn and round timbers for treatment by vacuum or vacuum pressure impregnation use in Hazard Class H1	Powder Post Beetle (<i>Lyctus spp.</i>)	All States	15 mL/100kg of timber	<ol style="list-style-type: none"> 1. Calculate uptake of suitable diluent (e.g. organic solvents or water) per 100kg of timber. 2. Add the appropriate amount of CHAINDRITE PROFESSIONAL TIMBER PROTECTION 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.
Sawn and round timbers for treatment by vacuum or vacuum pressure impregnation use in Hazard Class H2	All Termites (including <i>Mastotermes darwiniensis</i> & <i>Coptotermes acinaciformis</i>)	All States	50 mL/100kg of timber	<ol style="list-style-type: none"> 1. Calculate uptake of suitable diluent (e.g. organic solvents or water) per 100kg of timber. 2. Add the appropriate amount of CHAINDRITE PROFESSIONAL TIMBER PROTECTION 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.
	<p>Softwoods only: As above plus Furniture Beetle (<i>Anobium punctatum</i>), European House Borer (<i>Hylotrupes bajulus</i>)</p>			

DIRECTIONS FOR USE – TIMBER (continued)

Situations	Pest	State	Rate	Critical Comments
Framing timbers for surface spray application or dipping Hazard Class H2 with no exposure to sunlight	All Termites EXCLUDING <i>Mastotermes darwiniensis</i>	All areas South of the Tropic of Capricorn	1.87 mL/m ² of surface area	<ol style="list-style-type: none"> 1. Calculate uptake of suitable diluent (e.g. organic solvents or water) per 100kg of timber. 2. Calculate the surface area of 1m³ or product to treat. 3. Add the appropriate amount of CHAINDRITE PROFESSIONAL TIMBER PROTECTION 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/cm²
	Softwoods only: As above plus Furniture Beetle (<i>Anobium punctatum</i>), European House Borer (<i>Hylotrupes bajulus</i>)			
Softwood particle & Strand based boards in Hazard Class H2	All Termites (including <i>Mastotermes darwiniensis</i> & <i>Coptotermes acinaciformis</i>)& Timber Beetles	All States	0.56 mL/kg of dry fibre	Add sufficient CHAINDRITE PROFESSIONAL TIMBER PROTECTION 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 CHAINDRITE PROFESSIONAL TIMBER PROTECTION 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	<ol style="list-style-type: none"> 1. Calculate uptake of solution by veneers. 2. Dilute CHAINDRITE PROFESSIONAL TIMBER PROTECTION 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.

DIRECTIONS FOR USE – TIMBER (continued)

Situations	Pest	State	Rate	Critical Comments
Glueline treatment of softwood plywood and LVL (2.5mm thick veneer) for use in Hazard Class H2	All Termites EXCLUDING <i>Mastoterms darwiniensis</i>	All areas South of the Tropic of Capricorn	250 mL/m ³ in the glueline	<p>Glue Line Treatment</p> <ol style="list-style-type: none"> 1. Calculate the usage of glue per cubic metre of panel. 2. Add CHAINDRITE PROFESSIONAL TIMBER PROTECTION 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 ; <p style="text-align: center;">0.0021% mass/mass for the 250 mL/m³ rate. 0.0083 mass/mass for the 1000 mL/m³ rate</p>
	All Termites (including <i>Mastoterms darwiniensis</i> & <i>Coptotermes acinaciformis</i>)	All States	1000 mL/m ³ in the glueline 500 mL/m ³ in the glueline and 200 mL in the faces	<p>Glue Line Treatment</p> <ol style="list-style-type: none"> 1. Calculate the usage of glue per cubic metre of panel. 2. Add CHAINDRITE PROFESSIONAL TIMBER PROTECTION 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. <p>Face Treatment</p> <ol style="list-style-type: none"> 1. Calculate the uptake of solution by faces. 2. Add CHAINDRITE PROFESSIONAL TIMBER PROTECTION 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.
Glueline treatment of softwood plywood and LVL (3.2mm thick veneer) for use in Hazard Class H2	All Termites EXCLUDING <i>Mastoterms darwiniensis</i>	All areas South of the Tropic of Capricorn	250 mL/m ³ in the glueline and 50 mL in the faces	<p>Glue Line Treatment</p> <ul style="list-style-type: none"> • Calculate the usage of glue per cubic metre of panel. • Add CHAINDRITE PROFESSIONAL TIMBER PROTECTION 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. <p>Face Treatment</p> <ul style="list-style-type: none"> • Calculate the uptake of solution by faces. • Add CHAINDRITE PROFESSIONAL TIMBER PROTECTION 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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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 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-CHAINDRITE PROFESSIONAL TIMBER PROTECTION 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 in to contact with treated surfaces.

Termites: The use of CHAINDRITE PROFESSIONAL TIMBER PROTECTION 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.

Termites Timber: The use of CHAINDRITE PROFESSIONAL TIMBER PROTECTION to both timber and timber-based products as specified in the Directions for Use Table will protect treated products from damage by subterranean termites. In most situations protection will be afforded against all termite species including *Coptotermes acinaciformis* and *Mastotermes darwiniensis*. The treatment should be conducted in accordance with Australian Standard AS1604 Series.

INSECTICIDE RESISTANCE WARNING

GROUP	3A	INSECTICIDE
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For insecticide resistance management CHAINDRITE PROFESSIONAL TIMBER PROTECTION is a Group 3A insecticide. Some naturally occurring insect biotypes resistant to CHAINDRITE PROFESSIONAL TIMBER PROTECTION 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 CHAINDRITE PROFESSIONAL TIMBER PROTECTION or other group 3A insecticides are used repeatedly. The effectiveness of CHAINDRITE PROFESSIONAL TIMBER PROTECTION on resistant individuals could be significantly reduced. Since occurrence of resistant individuals is difficult to detect prior to use, Sherwood Chemicals Ltd. accepts no liability for any losses that may result from the failure of CHAINDRITE PROFESSIONAL TIMBER PROTECTION to control resistant insects. CHAINDRITE PROFESSIONAL TIMBER PROTECTION may be subject to specific resistance management strategies. For further information, contact your local supplier, SHERWOOD CHEMICALS representatives or local agricultural department agronomist.

MIXING – Termiticidal Uses

Add the required quantity CHAINDRITE PROFESSIONAL TIMBER PROTECTION 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.

MIXING – Timber

Add the required quantity of CHAINDRITE PROFESSIONAL TIMBER PROTECTION to diluent in the holding tank or glue mixer and mix thoroughly. Maintain agitation during both mixing and application.

CRITICAL APPLICATION DETAILS – TERMITICIDAL USES

The application of CHAINDRITE PROFESSIONAL TIMBER PROTECTION 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 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 m³ 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 600mm 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 emulsion 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 CHAINDRITE PROFESSIONAL TIMBER PROTECTION 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 CHAINDRITE PROFESSIONAL TIMBER PROTECTION 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:

CHAINDRITE PROFESSIONAL TIMBER PROTECTION 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 CHAINDRITE PROFESSIONAL TIMBER PROTECTION 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.

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 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

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. 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 container, 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.

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

For 1 L, 5 L, 20 L, 200L, 1000L containers: Triple or preferably pressure rinse containers before disposal. Add rinsing to spray tank. DO NOT dispose of undiluted chemicals on-site. If recycling, replace cap and return clean containers to recycler 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, 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.

Envirodrum Micro Matic valve (60L, 110 L)

Store the original sealed Envirodrum in cool well-ventilated areas. DO NOT store for prolonged periods in direct sunlight. DO NOT tamper with Micro Matic valve or the security seal. DO NOT contaminate the Envirodrum with water or any foreign matter. After each use of the product, please ensure that the Micro Matic coupler delivery system and hoses are disconnected, triple rinsed with clean water and drained accordingly. When the contents of the Envirodrum have been used, please return the Envirodrum to the point of purchase. The Envirodrum remains the property of Sherwood Chemicals.

SAFETY DIRECTIONS

Poisonous if swallowed. Will damage the eyes and will irritate the skin. Avoid contact with eyes and skin. DO NOT inhale vapour or spray mist. When opening the container and preparing spray, wear cotton, overalls buttoned to the neck and wrist, a washable hat, elbow-length PVC, neoprene or nitrile gloves, face shield or goggles and chemical resistant footwear. When using prepared spray, wear cotton overalls buttoned to the neck and wrist, a washable hat, elbow-length PVC, neoprene or nitrile gloves and chemical resistant footwear. When using in enclosed areas wear cotton overalls buttoned to the neck and wrist, a washable hat, elbow-length PVC, neoprene or nitrile gloves, and chemical resistant footwear and half-face respirator with the combined dust and gas cartridge. If clothing becomes contaminated with product or wet with spray, remove clothing immediately. If product or spray on skin, immediately wash area with soap and water. If product in eyes wash it out immediately with water. Thoroughly ventilate treated areas before reoccupying. 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; New Zealand 0800 764 766. If swallowed, do NOT induce vomiting. Give a glass of water. If in eyes, hold eyes open, flood with water for at least 15 minutes and see a doctor.

MATERIAL SAFETY DATA SHEET

Additional information is listed in the Material Safety Data Sheet (MSDS). A MSDS for CHAINDRITE PROFESSIONAL TIMBER PROTECTION is available from Sherwood Chemicals on request. Call customer service on 08 9219 4683

CONDITIONS SALE: The use of CHAINDRITE PROFESSIONAL TIMBER PROTECTION being beyond the control of the manufacturer, no warranty expressed or implied is given by Sherwood Chemicals regarding its suitability, fitness or efficiency for any purpose for which it is used by the buyer, whether in accordance with the directions or not Sherwood Chemicals accept no responsibility for any consequence whatsoever resulting from the use of this product.

APVMA Approval No.:

1L	61819/1L/0310
5L	61819/5L/0310
20L	61819/20L/0310
60L	61819/60L/0310
110L	61819/110L/0310
200L	61819/200L/0310
1000L	61819/1000L/0310