POISON

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

Infopest ✓ Verified

Cropro Zeus*

Termiticide and Insecticide

RLP Approved

ACTIVE CONSTITUENT: 100 g/L BIFENTHRIN
SOLVENTS: 562 g/L LIQUID HYDROCARBON
50 g/L N-METHYL-2-PYRROLIDONE

GROUP	3A	INSECTICIDE

For the protection of structures from subterranean termite damage and for the control of termites and a range of other urban pests, and for the control of various insect and mite pests in a variety of crops, including turf, as specified in the Directions for Use Table

IMPORTANT: READ THE ATTACHED BOOKLET BEFORE USE

Contents: , 1L, 5L, 20L

PCT Holdings Pty Ltd
ACN 099 023 962
Unit 1, 74 Murdoch Circuit
ACACIA RIDGE QLD 4110
http://pct.au.com

CUSTOMER SERVICE FREECALL 1 800 630 877
EMERGENCY RESPONSE (ALL HOURS) FREECALL 1 800 630 877

* Zeus is a trademark of PCT

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

Pest Control: Do not allow people or pets to contact treated areas until the spray has dried. When prior entry is necessary, wear cotton overalls buttoned to the neck and wrist, elbow-length PVC, neoprene or nitrile gloves and chemical resistant footwear. Clothing must be laundered after each day's use.

***Agricultural Crops*:** Do not re-enter treated field/crop until spray deposits have dried, unless wearing suitable protective clothing (i.e. waterproof hat, overalls, boots and gloves).

STORAGE, SPILLAGE AND DISPOSAL

Store in closed original containers, in a cool, well ventilated area away from children, animals, food and feedstuffs. Do not store for prolonged periods in direct sunlight. In case of spillage, confine and absorb spilled product with absorbent material such as sand, clay or cat litter. Dispose of waste as indicated below or according to the Australian Standard AS 2507 - Storage and Handling of Pesticides. Do NOT allow spilled product to enter sewers, drains, creeks or any other waterways.

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 500mm 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 either by dilution and use according to the Directions for Use table 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 table. Do not re-use empty container.

SAFETY DIRECTIONS – Pest Control

Poisonous if swallowed. Will damage 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 the 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, chemical resistant footwear and half facepiece respirator with 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. 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 and if rubber wash with detergent and warm water and contaminated clothing.

SAFETY DIRECTIONS – AGRICULTURAL CROPS

Poisonous if swallowed. Attacks eyes. Will irritate the skin. Avoid contact with eyes and skin. Do not inhale spray mist. When preparing spray, wear cotton overalls buttoned to the neck and wrist and washable hat, elbow-length PVC gloves and goggles. When using the prepared spray wear cotton overalls buttoned to the neck and wrist and washable hat and elbow length PVC gloves. If product in eyes, wash it out immediately with water Wash hands after use. After each day's use, wash gloves, goggles and contaminated clothing.

FIRST AID

If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 131126.

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 on the Material Safety Data Sheet for Cropro Zeus Termiticide and Insecticide which is available from PCT Holdings Pty Ltd on request. Call Customer Service Toll Free on 1800 630 877 or visit our web site at http://pct.au.com

NOTICE

PCT Holdings Pty Ltd warrants that this product conforms to its chemical description and is reasonably fit for the purposes stated on the label when used in accordance with Directions for Use under normal conditions of use. No warranty of merchantability or fitness for a particular purpose, express or implied, extends to the use of the product contrary to label instructions or under off-label permits not endorsed by PCT Holdings Pty Ltd, or under abnormal conditions.

APVMA Approval No.: 58368/52213

D.O.M./Batch No.:

POISON

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

Cropro Zeus*

Termiticide and Insecticide

ACTIVE CONSTITUENT: 100g/L BIFENTHRIN
SOLVENTS: 562g/L LIQUID HYDROCARBON
50g/L N-METHYL-2-PYRROLIDONE

GROUP	3A	INSECTICIDE

For the protection of structures from subterranean termite damage and for the control of termites and a range of other urban pests, and for the control of various insect and mite pests in a variety of crops, including turf, as specified in the Directions for Use Table

IMPORTANT: READ THIS BOOKLET BEFORE USE

PCT Holdings Pty Ltd
ACN 099 023 962
Unit 1, 74 Murdoch Circuit
ACACIA RIDGE QLD 4110
http://pct.au.com

CUSTOMER SERVICE FREECALL **1 800 630 877**
EMERGENCY RESPONSE (ALL HOURS) FREECALL **1 800 630 877**

APVMA Approval No.: 58368/52213

* Zeus is a trademark of PCT

DIRECTIONS FOR USE- PEST CONTROL USES

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 for direct treatment of the nest).

Pest	Situations	State	Rate	Critical Comments
Spiders	External areas & surrounds of Domestic, Commercial, Public and Industrial buildings & structures.	All States	25 - 50 mL/10L	Use the higher rate in situations where pest pressure is high or when rapid knockdown and/or maximum residual control is desired. Pay particular attention to protected dark areas such as cracks and crevices, under floors, eaves and other known hiding or resting-places. As a surface spray; apply as a coarse, low-pressure spray to areas where spiders hide, frequent and rest. Spray to the point of run-off using around 5L of spray per 100 m^2 ensuring thorough coverage of the treated surfaces. For crack and crevice treatments use an appropriate solid stream nozzle. For maximum spider control use a two-part treatment. 1. Treatment of cracks and crevices. 2. Overall band spray of surfaces.
Papernest wasps	External areas & surrounds of Domestic, Commercial, Public and Industrial buildings & 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 areas & surrounds of Domestic, Commercial, Public and Industrial buildings & structures.	All States	50-100mL /10L	On non-porous surfaces apply as a coarse spray at the rate of 1L of emulsion per 20m^2. When treating non-porous surfaces do not exceed the point of run-off. On porous surfaces or for use through power equipment, spray at the rate of IL of emulsion per 10m^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 of 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 10L per 100 m^2. Higher volumes of water may be needed if organic matter is present or foliage is dense.
Subterranean Termites	Domestic, commercial, public and industrial buildings and structures, service poles, fence posts and nest eradication	All States, except TAS	Refer to Table A	Refer to Table B

Table A: Cropro Zeus Termiticide and Insecticide use rates for the management of subterranean termites

Situations	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*
Perimeter barriers for new and existing buildings	1.0 L/100 L	At least 10 years	1.5 L/100 L	Up to 5 years
	500 mL/100 L	10 years	1.0 L/100 L	Up to 4 years
	250 mL/100 L	3 years	750 mL/100 L	Up to 3 years
Post-construction barriers under slabs and under suspended floors with less than 400 mm crawl space	1.0 L/100 L	At least 10 years	1.5 L/100 L	Up to 5 years
	500 mL/100 L	10 years	1.0 L/100 L	Up to 4 years
			750 mL/100 L	Up to 3 years
Protection of Poles & Fence Posts	500mL/100L	Up to 10 years	1.5L/100L	Up to 5 years
			1L/100L	Up to 4 years
			750mL/100L	Up to 3 years
Nest Eradication	500mL/100L	Not Applicable	500mL/100L	Not Applicable

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

* The length of the protection period is determined by a variety of factors including termite hazard, climate, soil conditions and the rate of the termiticide applied. These factors should be taken into consideration when evaluating the need for retreatment. Annual inspections by a competent Pest Control Operator are recommended to determine the need for further termite management options. Under high termite challenge, more frequent inspections are advised.

Table B: Critical Comments for the Management of Subterranean Termites

Situations	Critical Comments
Perimeter Barriers – Existing buildings	➢ Perimeter barriers (both horizontal and vertical, external and, where appropriate, internal and subfloor) are essential for effective termite protection. Perimeter barriers should be installed around slabs, piers, substructure walls and external penetration points upon completion of the building. ➢ Apply using suitable equipment to form a continuous (horizontal and vertical) chemical barrier to a depth of 80 mm below the top of foots around the structure. Formation of the barrier may require several application techniques, including soil trenching and/or rodding and open wand application. ➢ Chemical barriers which have been disturbed by construction, excavation or landscaping should be reapplied to restore continuity of the barrier.
Post-construction barrier management – Management of termites in existing buildings	➢ Apply with suitable application equipment to form a continuous vertical and horizontal chemical barrier around and under the structure with particular emphasis on known infestation areas. The formation of the barrier may require a combination of several application techniques, including trenching, soil rodding, sub-slab injection and open wand applications. ➢ Chemical barriers beneath concrete slabs, paths, driveways etc. will require concrete drilling. Holes should be drilled 150 to 300 mm apart and no more than 150 mm from walls or expansion joints. To enhance soil distribution, use a lateral dispersion tip on the injector and apply up to 10 L of emulsion per linear metre. ➢ For areas beneath suspended floors with inadequate access (i.e. less than 400 mm clearance), the entire subfloor area should be treated as a continuous horizontal barrier which completely abuts any internal vertical barriers around substructure walls. Otherwise, install perimeter barriers around each individual pier, stump, penetration point and substructure wall. ➢ Chemical barriers that have been disturbed by construction, excavation or landscaping should be reapplied to restore continuity of the barrier.
Protection of Service Poles and Fence Posts	➢ Create a continuous termiticide barrier 450mm deep and 150mm 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 100L of emulsion per m^3 of soil. ➢ Regular inspections should be undertaken to determine when and if retreatment is necessary. If disturbance of the barrier has occurred, retreatment of the area affected will be required. ➢ 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.**
Eradiation of Termite Nests	➢ Locate nest and flood with Cropro Zeus emulsion. Trees, poles, posts and stumps containing nests may require drilling prior to treatment with Cropro Zeus 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 inspections, must be stated on a durable notice as required by 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.

GENERAL INSTRUCTIONS – PEST CONTROL

Pest Control – Cropro Zeus is a powerful knockdown and residual control agent. Ants, cockroaches, fleas, flies, mosquitoes, spiders, ticks and wasps are controlled by direct contact with the spray and also by the residual action as they come into contact with treated surfaces.

Termites – The use of Cropro Zeus will help prevent and control subterranean termite infestations in and around structures, service poles and fence posts. A dilute termiticidal emulsion must be adequately dispersed into the soil to establish a barrier between the structure to be protected and subterranean termites in the soil. The purpose of external and vertical termite barriers, which are an essential part of the treatment, is to prevent concealed termite entry into the structure. The horizontal and vertical chemical barriers must be placed in accordance with the Australian Standard AS 3660 series.

For treatment of existing buildings, both horizontal and vertical barriers may be required around and under the buildings. Barriers must provide a continuous, no gap zone of protection between the structure and the termite colony. Therefore it is essential that the barrier be established by a Pest Control Operator familiar with the construction details of the building. Further details are provided in the "Horizontal Barrier Treatment" and "Vertical Barrier Treatment" sections of this label and in the Australian Standard AS 3660 Series.

Horizontal Barrier Treatments: Use 5L of emulsion per m^2 of soil. Apply the diluted mixture to the soil surface evenly so that a continuous barrier with no gaps is formed. To minimise drift, use low pressure, high volume spray equipment delivering large droplets. On impervious soils, where the application of 5L diluted mixture per m^2 would result in run-off, the total volume of mixture applied may be reduced provided the concentration of Cropro Zeus in the mixture is increased by accordingly, e.g. if the intended rate of application is 1.0 L/100 L, and the amount of spray applied is halved (2.5 L/ m^2), the concentration of Cropro Zeus should be doubled to 1.0 L/50 L (or 2.0 L/100 L).

DO NOT apply less than 2L diluted mixture per m^2.

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

Vertical Barrier Treatments: To install a vertical barrier use a minimum of 100 L of diluted mixture per m^3 of soil. Vertical barriers must be a minimum of 150 mm wide, extend 80 mm below the top of footings and must be continuous with no gaps. Vertical barriers can be formed by trenching to the required depth and treating the soil as the trench is backfilled, by soil rodding or by the use of reticulation systems, as described in the Australian Standard AS 3660 Series. When using the soil rodding method to establish a vertical barrier, use the distance between rod spacings given in the table below. Loosen soil to a depth of 150 mm to improve soil penetration.

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

Perimeter Barrier Treatments: Perimeter barriers consist of horizontal barriers at least 150 mm wide adjoining a vertical barrier of at least 150 mm in width. A perimeter barrier must completely surround all buildings/structures, 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 abut all substructure walls.

To ensure a continuous barrier use at least 100 L of diluted mixture per m^3 of soil. This can be achieved by applying 5 L of diluted mixture per linear metre for a 300 mm vertical barrier, or 10 L of diluted mixture per linear metre for a 600 mm deep vertical barrier.

Treat both sides of single brick walls down to the footing to prevent termites gaining access behind engaged piers.

Post-Construction Treatments under Concrete Slabs: For concrete slabs, the diluted mixture may be injected through holes drilled in the slab at intervals between 150 mm and 300 mm. Recommended spacings between holes is given in the table below:

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

Lateral dispersion tips are recommended to ensure even distribution.

The decision to drill concrete floor slabs and inject Cropro Zeus must only be made after thorough inspection of the building and after full assessment of termite activity.

Equipment used for injection of Cropro Zeus into pre-drilled holes indoors must be in good working order, without any leaks and must be fitted with a working tip shut-off to prevent nozzle dripping. Lateral dispersion tips are recommended to ensure even distribution. Drill holes must be resealed after injection.

Treatment In Conjunction with Physical Barriers: In situations where the termite management system includes physical and chemical barriers, each certified system must be installed according to the relevant and appropriate specifications for the product and the Australian Standard AS 3660 Series.

SERVICE REQUIREMENTS:

Service requirements can only be determined following inspection by a licensed Pest Control Operator as Subterranean termites are capable of bridging termite barriers. Inspections, in accordance with the Australian Standard AS 3660 series, should be conducted at least annually with more frequent inspections being required in high-risk termite areas.

Determination of the need for servicing requires consideration of factors such as termite pressure, integrity of the barrier and age and longevity of the termiticide applied.

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

MIXING

Add the required quantity of Cropro Zeus Termiticide and Insecticide to water in the spray tank and mix thoroughly. Maintain agitation during both mixing and application.

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

PRECAUTIONS AND RE-ENTRY PERIOD – PEST CONTROL

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

Re-entry Period

Do not allow people and pets to contact treated areas until the spray has dried. When prior entry is necessary, wear cotton overalls buttoned to the neck and 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, waterways or drains with product or the used container.

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.

SAFETY DIRECTIONS – Pest Control

Poisonous if swallowed. Will damage 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 the 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, chemical resistant footwear and half facepiece respirator with 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. 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 and if rubber wash with detergent and warm water and contaminated clothing.

DIRECTIONS FOR USE – AGRICULTURAL CROPS

RESTRAINTS

DO NOT use as a foliar spray in banana plantations and orchards where mite predators and other beneficials are established and providing effective mite control and/or other pest control.

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

DO NOT apply to bananas by aircraft

CROP	PEST	STATE	RATE	WHP	CRITICAL COMMENTS
Bananas	Banana weevil borer *(Cosmopolites sordidus)* Banana rust thrips *(Chaetanaphothrips signipennis)*	QLD, NSW, WA, NT only	**Seasonal Program** Stool Treatment Method 250-330 mL/100L twice per year OR 660 mL/100L Once per year Band Treatment Method 250 mL/100L twice per year **Monitoring Program** Stool Treatment Method 330 mL/100L Band Treatment Method 250 mL/100L	1 day	**Seasonal Program** **Twice per year timing** Apply in October/November (spring/early summer) and March/April (late summer/autumn). Use the higher rate (concentration) when borer pressure or damage is high. Once per year Timing Apply in October/November OR March/April Monitoring Program Monitor weevil borer populations carefully by trap counts and/or corn damage ratings, beginning in September when pest activity is on the increase and continue until April. Apply treatment when banana weevil borers reach or exceed acceptable threshold levels. Monitor borer control after application and re-treat as required. **Banana Weevil borer:** Application should be made **after rain or irrigation** during periods of high adult borer activity. **Banana rust thrips:** Application against banana weevil borer will give coincident rust thrips control, particularly when application is made when thrips activity is on the increase usually beginning September and into the summer months. **Application Method** Stool Treatment Application Remove trash from the base of stools and apply 500 – 700 mL of spray solution to each stool, depending on stool size. Treat the bottom 30cm of each stool as well as the soil in a 30cm band around each stool, ensuring thorough treatment of both butt(s) and follower(s). Use the lower spray volume of 500mL on small stools less than 50cm across the entire base. Band Treatment Application Apply as a band application with a side delivery boom and offset nozzles on both sides of the row with the spray pattern positioned to spray 30cm of soil on either side of the row and 30cm in height. Aim to apply a total spray volume of 1L/stool area. For single sucker row configurations apply 28L of solution per 100 meters of row in a band 0.5m wide on each side of the row overlapping in the centre. For double sucker configurations apply 56L of solution per 100 metres of row in a band 1m wide on each side of the double row with the spray pattern overlapping between the rows.
	Strawberry spider mite *(Tetranychus lambi)*	QLD & WA only	40mL/100L	8 days	Monitor mite population on old leaves particularly during hot dry conditions. Apply Cropro Zeus Termiticide and Insecticide as a preventative rather than a curative treatment before damage occurs, and before mite numbers build up to damaging levels. Follow up applications may be required at 10 to 14 day intervals. Thorough coverage of the lower leaf surface is essential to ensure good control. Use a total spray volume of 300-500L/ha.

CROP	PEST	STATE	RATE	WHP	CRITICAL COMMENTS
Canola, Faba beans, Subterranean clover, Clover, Barley, Field Peas, Lupins, Lucerne & Wheat	Redlegged Earth Mite *(Halotydeus destructor)* Brown pasture looper *(Ciampa arietaria)*	All States	50-100 mL/ha	4 weeks (grazing)	Apply as a broadcast ground rig application in a total water volume of 50-200L/ha or by air in a minimum total water volume of 20 L/ha. Apply to bare soil after conventional cultivation and sowing or onto well grazed or sprayed pasture after direct drilling. Treat infested paddocks after sowing and before or soon after seedling emergence. Use the higher rate on heavier infestations and for longer residual protection. Cropro Zeus Termiticide and Insecticide is compatible with some herbicides. See compatibility statement for details.
	Blue oat mite *(Penthaleus major)* Pasture webworm *(Hednota spp.)*		100mL/ha		
	Bryobia mites *(Bryobia spp.)*		200mL/ha		
Canola	Vegetable weevil (*Listroderes difficilis*)	All States	100 – 200mL/ha		Use the 100mL rate when pest pressure is low. Monitor adjacent habitat and edges of the field for the presence of vegetable weevil prior to making a decision whether to spray.
Peaches, Nectarines, Plums, Apricots	Carpophilus beetles (*Carpophilus* spp.)	All States	Dilute spraying 50mL/100L Concentrate spraying Refer to the mixing/ application section	1 day	Monitor stone fruit orchards for Carpophilus beetle as fruit approach maturity and becomes susceptible to attack. Apply Cropro Zeus Termiticide and Insecticide as a dilute spray before beetles reach damaging levels. Apply to the foliage and fruit of trees. Continue to monitor beetle numbers and if necessary reapply Cropro Zeus Termiticide and Insecticide up to 1 day before harvest or use another insecticide registered for this purpose. Apply no more than 2 applications per season. **There must be a minimum of 10 days between re-treatment and the initial application.** Apply the same total amount of product to the target crop whether applying this product by dilute or concentrate spraying methods. Do not use at rates greater than 100 mL per 100L water when using concentrate spraying. Cultural methods (eg destruction of fallen fruit by mulching) should be used to prevent excessive build up of Carpophilus beetle.
Citrus	Leafeating weevil *(Eutinophaea bicristata)*	All States	Pre-emergence program 12.5 or 25mL/tree Post- emergence monitoring program 6mL/tree	-	Apply as a high volume band application in a 1.5 to 2 metres wide swath, to the ground, sides of the row, under each tree. Aim to apply a total spray volume of 5 to 10 L/tree (eg at 250 trees/ha = 1250 to 2500L/ha). **Pre-emergency program:** Apply just prior to, or at the first sign of major beetle emergence in mid-October. Use the higher rate in blocks with a history of high beetle numbers or when longer residual control is required. **Post-emergence monitoring program:** Apply at peak beetle emergence in October/ November as indicated by field monitoring. (Refer to monitoring statement on label). Follow up treatment may be necessary based on a threshold of 25 beetles per 10 sites per orchard in consecutive counts 1-2 weeks apart.

CROP	PEST	STATE	RATE	WHP	CRITICAL COMMENTS
Cotton	Native budworm *(Helicoverpa punctigera)* Cotton bollworm *(Helicoverpa armigera)* Two-spotted mite (*Tetranychus urticae*) Green mirid (*Creontiades dilutus*) Apple dimpling bug (*Campylomma liebknechti*)	QLD, NSW, WA only	600-800 mL/ha	14 days DO NOT GRAZE OR CUT FOR STOCK FEED DO NOT FEED COTTON TRASH TO LIVESTOCK	Apply as indicated by field checks. Use the higher rate when pest pressure is high, conditions favour pest development and when increased residual protection is required. **Budworm and Bollworm:** Applications should be timed to coincide with egg hatch and when small larvae up to 5mm are present. Do not apply this product to *Helicoverpa (=Heliothis) armigera* larvae larger than 5mm in length. **Two spotted mite:** Applications against *Helicoverpa* spp will give good control of coincident two spotted mite, particularly when applied on low mite populations (around 10% leaf infestation). If conditions continue to favour mite development a second application may be required 14 to 20 days later. **Green mirid & Apple dimpling bug:** Apply at recommended threshold levels as indicated by field checks. Use the higher rate for increased pest pressure and longer residual protection.
	False wireworm (*Pterohelaeus alternatus*) Sugarcane wireworm (*Agrypnus variabilis*)		375 mL/ha* OR 3.8 mL/100 m of row		**Wireworms:** Apply as a spray into the furrow at planting. Use a spray nozzle which will deliver a coarse spray in a total volume of 60 to 100 L/ha in a 10 cm band over the seed before soil is brought in behind covering tines in front of the press wheel. *The rate is based on a 1m row spacing. If row spacing varies from 1m then apply at the use rate according to mL/100m of row.
Grapes	Fig longicorn *(Acalolepta vastator)*	NSW, ACT only	1000mL/100L	-	The application MUST be made at late dormancy after pruning and before bud burst. Apply a single high volume spray, with nozzles directing the spray solution to the trunk and cordons (arms) of grape vines to achieve thorough wetting of the bark. Total spray volume should be about 500mL/vine achieved by hand application.
Lucerne seed crops	Native budworm *(Helicoverpa punctigera)*	All states	400-600 mL/ha	-	Do not treat lucerne seed crops for alfalfa sprout production. Apply as indicated by field checks after the commencement of flowering. Use the higher rate when pest pressure is high, conditions favour pest development and when increased residual protection is required. **Native Budworm:** Applications should be timed to coincide with egg hatch and when small larvae up to 5mm are present.
Navy beans	Native budworm *(Helicoverpa punctigera)* Corn earworm *(Helicoverpa armigera)*	All states	600-800 mL/ha	14 days (harvest and grazing)	Apply as indicated by field checks from flowering onwards. Use the higher rate when pest pressure is high, conditions favour pest development and when increased residual protection is required. **Budworm and Earworm:** Applications should be timed to coincide with egg hatch and when small larvae up to 5mm are present. Do not apply this product to *Helicoverpa* (= Heliothis) *armigera* larvae larger than 5mm in length
Pears	Longtailed mealybug *(Pseudococcus longispinus)*	VIC only	25mL/100 L plus DC Tron at 1L/100L	14 days	Examine wood for the presence of over wintering Longtailed mealy bugs but do not spray until larger numbers of young nymphs emerge in spring. Apply this mixture to near the point of runoff to all above ground parts of the tree between green tip to commencement of flowering. Do not spray after flowering has commenced.

Sugarcane	Sugarcane wireworm *(Agrypnus spp.)*	QLD, NSW & WA only	375mL/ha* or 5.6mL/100m of row	-	Apply as a spray into the furrow at planting. Use a spray nozzle which will deliver a coarse spray in a total volume of 60-100L/ha in a band 20-30cm wide over the base of the furrow on top of the setts and before covering soil is brought in by tynes. *The rate is based on a 1.5m row spacing. If row spacing varies from 1.5m then apply at the use rate according to mL/100m of row.

CROP	PEST	STATE	RATE	WHP	CRITICAL COMMENTS
Tomatoes	Native budworm, *(Helicoverpa punctigera)* Corn earworm *(Helicoverpa armigera)* Two spotted mite *(Tetranychus urticae)* Tomato russet mite *(Aculops lycopersici)*	All States	High Volume 40-60mL/100L or Low Volume 600mL/ha	1 day	Do not use low volume ground or air application on trellis tomatoes. <u>Crop Monitoring Program</u> ***Helicoverpa* spp**: Apply as indicated by field checks. Applications should be timed to coincide with egg hatch and when small larvae up to 5mm are present. Do not apply this product to *Helicoverpa (=Heliothis) armigera* larvae larger than 5mm in length. **Mites:** Applications against *Helicoverpa* spp will give good control of coincident mites, particularly when applied on low mite populations. If conditions continue to favour mite development, a second application may be required 14-20 days later. <u>Schedule Spray Program</u> If fields are not checked during pest infestation periods, apply on a 7-10 day alternating program with a non pyrethroid insecticide. Use the higher rate (high volume application) and shorter interval when pest infestation is more severe and when increased residual protection is required. Do not apply this product to *Helicoverpa armigera* larvae larger than 5mm in length. Apply as indicated by pest incidence and repeat as necessary. Use a total spray volume of 2500 L/ha.
	Whitefly *(Trialeurodes vaporariorum)*		30mL/100L water		
Turf (for example, lawns, commercial turf farms, parks, recreational areas, bowling greens, sports fields)	Lawn Army Worm *(Spodoptera mauritia)* Sod Webworm *(Herpetogramma licarsisalis)*	All States	1.2 L/ha (12 mL/100 m^2)	-	Mix Cropro Zeus in water and apply evenly over the area to be treated using spray application equipment. Use a minimum total spray volume of at least 200 L/ha (2 L/100 m^2). To ensure optimal control, irrigate the treated area with up to 4 mm of water soon after application. Inspect treated areas for continuing activity. Reapply as required. Where a rate range is indicated use lower rates under lower insect pressure and higher rates under higher insect pressure. Apply after mowing to minimise loss of insecticide in clipping. DO NOT apply to soils if excessively wet or immediately after heavy rain.
	Argentine stem weevil adults *(Listronotus bonariensis)* Billbug adults *(Sphenophorus* sp.)		1.2-2.4 L/ha (12-24 mL/100 m^2)		
	African black beetle adults *(Heteronychus arator)*		2.4-3.6 L/ha (24-36 mL/100 m^2)		
	Black ant, coastal brown ant, funnel ant, meat ant, sugar ant and stinging ant only		1.2-4.4 L/ha (12-44 mL/100 m^2)		Mix Cropro Zeus in water and apply evenly over the area to be treated using spray application equipment. Apply to areas where ants are active. Where possible spray directly into the nests. Use the low rate for maintenance treatments or to control light infestations and for maximum residual control. The elimination of funnel ants from a particular site will generally require more than one application. Initial applications should be applied over affected areas. As the initial numbers of active colonies is reduced, application should shift targeting active mounds. Apply spray directly to the mound and in the area immediately surrounding active mounds (300 mm radius).

WITHHOLDING PERIODS:

APRICOTS, NECTARINES, PEACHES, PLUMS, TOMATOES: DO NOT HARVEST FOR 1 DAY AFTER APPLICATION

BANANAS	:	**For Ground Applications – DO NOT HARVEST FOR 1 DAY AFTER APPLICATION** **For Foliar Applications – DO NOT HARVEST FOR 8 DAYS AFTER APPLICATION.**
COTTON	:	**DO NOT HARVEST FOR 14 DAYS AFTER APPLICATION** **DO NOT GRAZE OR CUT FOR STOCK FEED** **DO NOT FEED COTTON TRASH TO LIVESTOCK**
PEARS	:	**DO NOT HARVEST FOR 14 DAYS AFTER APPLICATION**
NAVY BEANS:		**DO NOT HARVEST, GRAZE OR CUT FOR STOCK FOOD FOR 14 DAYS AFTER APPLICATION**
CANOLA, SUBTERRANEAN CLOVER, CLOVER, FIELD PEAS, FABA BEANS, WHEAT BARLEY, LUCERNE AND LUPINS	:	**DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 4 WEEKS AFTER APPLICATION** **HARVEST WHP: NOT REQUIRED WHEN USED AS DIRECTED**
CITRUS, GRAPES, SUGARCANE:	:	**NOT REQUIRED WHEN USED AS DIRECTED**

GENERAL INSTRUCTIONS
Cropro Zeus Termiticide and Insecticide is a contact and residual insecticide/miticide. It can be used as a protective treatment when applied at regular intervals or as a knockdown treatment to control existing pests. Best results are obtained when Cropro Zeus Termiticide and Insecticide is applied before pest populations build up to damaging levels.

This product is not suitable for use in Integrated Pest Management (IPM) programs where mite or other insect predators or parasites are established and providing effective mite and other insect control.

APPLICATION
Cropro Zeus Termiticide and Insecticide may be applied by either ground rig or aircraft. Thorough coverage is essential to ensure adequate control. Do not apply as a fog or mist.

Dilute Spraying:
- Use a sprayer designed to apply high volumes of water up to the point of run-off.
- Set up and operate the sprayer to achieve even coverage throughout the crop canopy. Apply sufficient water to cover the crop to point of run-off. Avoid excessive run-off.
- The required water volume may be determined by applying different test volumes, using different settings on the sprayer, from industry guidelines or expert advice.
- Add the required amount of product specified in the Directions for Use for each 100L of water. Spray to the point of run-off.
- The required dilute spray volume will change as sprayer set up and operation may also need to be changed, as the crop grows.

Concentrate spraying:
- Use a sprayer designed and set up for concentrate spraying (that is a sprayer which applies water volumes less than those required to reach the point of run-off) and matched to the crop being sprayed.
- Set up and operate the sprayer to achieve even coverage throughout the crop canopy using your chosen water volume.
- Determine the appropriate dilute spray (see dilute spraying above) for crop canopy. This is needed to calculate the concentrate mixing rate.
- The mixing rate for concentrate spraying can then be calculated in the following way:

EXAMPLE ONLY:
i) Dilute spray volume as determined above: For example 1000L/ha
ii) Your chosen concentrate spray volume: For example 500L/ha
iii) The concentration factor in this example is: 2 x (ie 1000L ÷ 500L = 2)
iv) If the dilute label rate is 50mL/100L, then the concentrate rate becomes 2 x 50, which is 100mL/100L of concentrate spray.

- The chosen spray volume, amount of product per 100L of water, and the sprayer set up and operation may need to be changed as the crop grows.
- For further information on concentrate spraying, users are advised to consult the relevant industry guidelines, undertake appropriate competency training and follow industry Best Practices.

Ground Application: Applications should be made as a fine spray preferably using hollow cone nozzles and a droplet size of 150 to 200 microns. The application volume will depend on the type of crop to be treated. The following are suggested:

Low volume broadacre application to – e.g. cereals, canola, grain legumes, lucerne, subterranean clover: 50-200L/ha.
Low volume row crops applications to tomatoes, navy beans: 50-200L/ha.

High volume applications to row crops – e.g. trellised tomatoes: 200 – 1000 L/ha except as noted in critical comments. Use 200 L/ha from transplanting increasing to 1000 L/ha at maturity.

High volume directed spray:
Grapes: Apply by hand application, using a high volume coarse spray of 500mL/vine. (e.g. at approx. 2500 vines/ha = 1250L/ha).

Foliar sprays to bananas: 300 to 500 L/ha.

High volume application to stone fruit: 1000 to 2000L/ha

Soil Applied Sprays:
High volume application
Bananas:
Stool treatment: Apply as a coarse spray at 500-750 mL per stool.
Band treatment: Apply as a band application with a side delivery boom and offset nozzles – 1L of spray solution per stool.
Citrus: Apply as a high volume, directed spray to the ground under each tree. For optimum control apply to both sides of the tree. Total spray volume should be 5 to 10 L/tree (e.g. at 250 trees/ha = 1250 to 2500L/ha).

In furrow applications:
Sugarcane: Use a coarse spray: 60 to 100 L/ha as a band over the seed or sett before covering with soil – refer to critical comments for details.

Aerial Application:
Use at least 20 L/ha of total spray volume. Spray during the cooler parts of the day or night. To reduce possibility of drift avoid spraying in calm conditions or when wind is light and variable. Preferably, spray in a crosswind. Use suitable application equipment and/or nozzles to deliver a fine spray with a droplet size of 150 to 200 microns.

A spray drift minimisation strategy should be employed at all times when aerially applying sprays to, or near, sensitive areas. The strategy envisaged is best exemplified by the cotton industry's Best Management Practice manual.

MONITORING
Post-emergency monitoring of Citrus leaf eating weevil populations: At first sign of major beetle emergence in mid October commence monitoring at 1 to 2 week intervals. Place polystyrene fruit box (330 x 480mm) under tree, shake branches vigorously, repeat on ten randomly selected trees throughout orchard. If 25 beetles or more are recorded in consecutive counts, treatment is required.

MIXING
Add the required quantity of Cropro Zeus Termiticide and Insecticide to water in the spray tank and mix thoroughly. Maintain agitation during mixing and application.

COMPATIBILITY
Cropro Zeus Termiticide and Insecticide is compatible with commonly used fungicides such as Dithane M45, Antracol, Chlorothalonil 500 and the herbicides – Sprayseed, Broadstrike, Spinnaker, Simazine 900, Dual, Metribuzin, Chlorsulfuron, Triasulfuron and pendimethalin.

SURFACTANTS
Cropro Zeus Termiticide and Insecticide contains a surfactant. Additional surfactant may only be necessary on hard to wet plants and in high volume situations.

NOTICE
Helicoverpa (= Heliothis) armigera resistance in Northern NSW and Qld. To help contain pyrethroid resistance in *H. armigera*, the Summer Crop Insecticide Strategy as developed by the Qld Department of Primary Industries and NSW Agriculture should be adhered to. Failure to observe the strategy may result in widespread resistance affecting the future viability of summer cropping.

RESISTANCE WARNING

GROUP	3A	INSECTICIDE

For insecticide resistance management Cropro Zeus Termiticide and Insecticide is a Group 3A insecticide. Some naturally occurring insect biotypes resistant to Cropro Zeus Termiticide and Insecticide and other Group 3A insecticides may exist through normal genetic variability in any insect population. The resistant individuals can eventually dominate the insect population if Cropro Zeus Termiticide and Insecticide or other Group 3A insecticides are used repeatedly. The effectiveness of Cropro Zeus Termiticide and Insecticide 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 loses that may result from the failure of Cropro Zeus Termiticide and Insecticide to control resistant insects.
Cropro Zeus Termiticide and Insecticide may be subject to specific resistance management strategies. For further information contact your local supplier, PCT representative or local agricultural department agronomist.

STONE FRUIT EXPORT ADVICE

Export of Treated Stone Fruit – some export markets do not have suitable Maximum Residue Limits or import tolerance in place. Please contact PCT or the Australian Fresh Stone Fruit Growers Association prior to using this product on fruit destined for export.

RE-ENTRY TO TREATED FIELDS/CROPS

Do not re-enter treated field/crop until spray deposits have dried, unless wearing suitable protective clothing (i.e. waterproof hat, overalls, boots and gloves).

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

Dangerous to fish and aquatic organisms. Do not contaminate dams, rivers, streams, waterways or drains with this product or the used container. Tail drains which flow from treated areas should be prevented from entering the river systems.

PROTECTION OF LIVESTOCK

Dangerous to bees. DO NOT spray any plants in flower when bees are foraging. Spray in the early morning when bees are not actively foraging.

STORAGE, SPILLAGE AND DISPOSAL

Store in closed original containers, in a cool, well ventilated area away from children, animals, food and feedstuffs. Do not store for prolonged periods in direct sunlight. In case of spillage, confine and absorb spilled product with absorbent material such as sand, clay or cat litter. Dispose of waste as indicated below or according to the Australian Standard AS 2507 - Storage and Handling of Pesticides. Do NOT allow spilled product to enter sewers, drains, creeks or any other waterways.

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 500mm 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 either by dilution and use according to the Directions for Use table 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 table. Do not re-use empty container.

SAFETY DIRECTIONS – AGRICULTURAL CROPS

Poisonous if swallowed. Attacks eyes. Will irritate the skin. Avoid contact with eyes and skin. Do not inhale spray mist. When preparing spray, wear cotton overalls buttoned to the neck and wrist and washable hat, elbow-length PVC gloves and goggles. When using the prepared spray wear cotton overalls buttoned to the neck and wrist and washable hat and elbow length PVC gloves. If product in eyes, wash it out immediately with water Wash hands after use. After each day's use, wash gloves, goggles and contaminated clothing.

FIRST AID

If poisoning occurs, contact a doctor or Poisons Information Centre. Phone 13 1126.

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 on the Material Safety Data Sheet for Cropro Zeus Termiticide and Insecticide which is available from PCT Holdings Pty Ltd on request. Call Customer Service Toll Free on 1800 630 877 or visit our web site at http://pct.au.com

NOTICE

PCT Holdings Pty Ltd warrants that this product conforms to its chemical description and is reasonably fit for the purposes stated on the label when used in accordance with Directions for Use under normal conditions of use. No warranty of merchantability or fitness for a particular purpose, express or implied, extends to the use of the product contrary to label instructions or under off-label permits not endorsed by PCT Holdings Pty Ltd, or under abnormal conditions.