

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

ChemAg

Chlorpyrifos Insecticide and Termiticide

ACTIVE CONSTITUENT: 500g/L CHLORPYRIFOS (an anticholinesterase compound)
SOLVENT: 486 g/L HYDROCARBON LIQUID

GROUP	1B	INSECTICIDE
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For the control of a wide range of insect pests on fruit, vegetables, oilseeds, cotton, cereals, pasture and turf, the post-construction management of subterranean termites in accord with Australian Stand AS 3660.2 and other domestic insect pests as specified in the Directions for Use table.

**IMPORTANT: READ THE ATTACHED BOOKLET THOROUGHLY
BEFORE OPENING OR USING THIS PRODUCT**

Contents: 5L, 20L

ChemAg Pty Ltd
Suite 22, 11 Preston St
Como, Western Australia 6152
Phone (08) 93671799

NRA Approval No: 51190/0502

STORAGE AND DISPOSAL:

Store in closed, original container in a cool, well-ventilated area. Do not store for long periods in direct sunlight. 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 at a depth of 500mm or deeper 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. Rinsate/rinse water should be disposed of in accordance with appropriate State legislation and should preferably be sprayed on to an application site or added as up to 10% of the diluent the next time this product or another similar termiticide is used. Do not put down sewers, gutters or storm water drains. In some States wastes can only be buried at a licensed landfill.

SAFETY DIRECTIONS:

General Use

Product is poisonous if absorbed by skin contact, inhaled or swallowed. Repeated minor exposure may have a cumulative poisoning effect. Obtain an emergency supply of atropine tablets 0.6 mg. Will irritate the eyes and skin. Avoid contact with eyes and skin. DO NOT inhale vapour or spray mist.

When opening the container, preparing the spray or using the prepared spray, wear cotton overalls buttoned to the neck and wrist and a washable hat and elbow-length PVC gloves and face shield or goggles.

If product is spilt on skin, immediately wash area with soap and 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 and contaminated clothing.

For Use As A Termiticide

Product is poisonous if absorbed by skin contact, inhaled or swallowed. Repeated exposure may cause allergic disorders. Repeated minor exposure may have a cumulative poisoning effect. Obtain an emergency supply of atropine tablets 0.6 mg. Will irritate the eyes and skin. Avoid contact with eyes and skin. DO NOT inhale vapour or spray mist.

When opening the container, preparing the spray and using the prepared spray wear chemical resistant clothing buttoned to the neck and wrist and a washable hat, elbow-length PVC gloves, goggles, chemical resistant footwear, half facepiece respirator, with combined dust and gas cartridge. If clothing becomes contaminated with product or wet with spray, remove clothing immediately. If product is in the 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, 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. (Ph: 13 11 26). If swallowed, DO NOT induce vomiting. Give a glass of water. If swallowed, give one atropine tablet every 5 minutes until dryness of the mouth occurs - if poisoned by skin absorption or through lungs, remove any contaminated clothing, wash skin thoroughly and give atropine tablets as above. Get to a doctor or hospital quickly. 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 (MSDS) for **ChemAg Chlorpyrifos Insecticide and Termiticide**, which is available from **ChemAg** on request.

CONDITIONS OF SALE:

ChemAg Pty Ltd accepts responsibility of the consistent quality of this product; however since application of this product is beyond the control of **ChemAg** Pty Ltd and since all conditions of application cannot be seen, **ChemAg** Pty Ltd accepts no responsibility whatsoever for any injury, damage, loss or other results following the use of this product whether used in accordance with directions or not; subject to any overriding statutory provision and provided that such liability under those provisions shall be limited to the replacement of the goods as supplied or the rendering again of the services that are provided. The buyer accepts and uses this material subject to these conditions.

UN No. 3018
ORGANOPHOSPHOROUS, PESTICIDE,
LIQUID, TOXIC, PKGIII HAZCHEM 2X

IN A TRANSPORT EMERGENCY ONLY
DIAL 000
FOR POLICE OR FIRE BRIGADE



NRA Approval Number:51190/0502

Date Of Manufacture:

Batch Number:

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**THIS PRODUCT IS TOO HAZARDOUS FOR USE BY HOUSEHOLDERS.
HOUSEHOLDERS MUST NOT USE THIS PRODUCT IN OR AROUND THE HOME.**

IMPORTANT: READ THIS BOOKLET THOROUGHLY

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AGRICULTURAL DIRECTIONS FOR USE

DIRECTIONS FOR USE : FRUIT & VEGETABLES

Crop	Insect	State	Rate Vol./ha	Rate Vol/100L	Withholding Period	Critical Comments
Apples Pears	San Jose Scale	NSW, SA, WA QLD only	-	100mL (2% miscible winter oil may be added to the dormant spray	14 days	Dormant period: Apply as late as possible ensuring thorough coverage of limbs and branches. Seasonal period: Apply to coincide with crawler activity in mid-late November and later as necessary. Ensure thorough coverage of limbs, branches foliage and fruit.
	Woolly aphid					Apply when infestation build-up is first noticed ensuring thorough coverage
	Mealy Bugs	SA, WA only				Apply initially at petal fall and then 10-14 days later. Apply a follow-up application if necessary, 2-3 weeks prior to harvest. Thorough coverage of all limbs and branches are essential.
Bananas	Banana Scab Moth (<i>Nacoleia octasema</i>)	QLD only	1-2L	200mL	14 days	Apply from the first appearance of flowers and repeat as populations indicate until fingers are exposed. Use high rate with onset of wet weather and/or heavy insect pressure.
	Banana Weevil Borer	QLD, NSW, WA only	-	1-1.8L		After removal of trash, apply 500-700mL of spray (depending on bun size) to the lower 30cm of the butt and to the surrounding soil within a radius of 30cm, ensuring thorough coverage of butt and suckers. Sub-tropical areas: Use high rate for annual control of borders. Tropical areas: Use high rate in Sep-Nov for initial spray and follow up with low rate in Feb-April should insect numbers warrant a 2 nd application.
Cassava	Cutworm (<i>Agrotis spp.</i>)	QLD only	700mL	-	Nil	Apply to seedlings and soil at the base of seedlings when cutworm activity is observed
Citrus	California Red Scale (<i>Aonidella aurantii</i>)	QLD, VIC, NSW, SA, WA only	-	100mL or 50mL plus 1L miscible summer spraying oil	14 days	Apply during Nov-March period. Two sprays may be required under conditions of heavy scale infestation. Apply with high volume sprayers to point of run-off. NOTE: Do not use on citrus in areas where integrated control programs are in operation.
	Wingless Grasshopper		500mL	50mL		Spray areas of crop-infested with grasshoppers. Apply also as a barrier across the line of advance, when grasshoppers are invading the crop.

DIRECTIONS FOR USE: FRUIT & VEGETABLES (cont.)

Crop	Insect	State	Rate Vol./ha	Rate Vol/100L	Withholding Period	Critical Comments
Cole crops including Cabbage, Cauliflower, Brussel Sprouts, Broccoli	Cabbage Moth, Cabbage White Butterfly, Cabbage Aphid, Cluster Caterpillar, Cabbage Cluster Caterpillar	NSW, VIC, WA TAS SA only	1.5-2L	150-200mL	5 days	Spray at 10-14 day intervals. Use high rate under heavy pressure. Large Plants: Use 1000L/ha. To improve spray coverage, add non-ionic wetting agents as recommended.
	Corn Earworm, Native Budworm (<i>Helicoverpa spp</i>)	QLD only	1.5L	150mL		Apply as pests indicate commencing when pests first appear. Large Plants: Use 1000L/ha
	Corn Earworm	NSW, VIC, SA, WA only	1.5-2L	150-200mL		Apply at 10-14 day intervals. Use high rate under heavy pest pressure. Large Plants: Use 1000L/ha
	Native Budworm (<i>Helicoverpa punctigera</i>)	NSW, VIC, SA, TAS, WA only	1.5-2L	150-200mL		Apply at 10-day intervals commencing when pests first appear. Apply at 7-day intervals under heavy pest pressure. Large Plants: Use 1000L/ha
Grape Vines	Lightbrown Apple Moth	ALL STATES	500mL	50mL	14 days	Apply initial spray just after berry set (early October). Later schedule sprays should be made as required
	Grapevine Moth (<i>Phalaenoides glyciniae</i>)	QLD TAS, SA NSW WA only				
	Grapevine Scale (<i>Parthenolecanium persicae</i>)	QLD, TAS, SA, NSW WA only	-	100mL or 50mL plus 1L miscible winter oil		Apply as a dormant spray, post pruning (July)
Ginger	Cutworm (<i>Agrotis spp</i>)	QLD only	700-900mL	-	NIL	Apply when pest population is evident from damage to the primary shoot at or below ground, or to the first leaf during growth
Pineapples	Pineapple, Mealy-bug, Ants	QLD only	-	50-100mL use a minimum of 3000L water/ha	NIL	Apply when pests are first seen and repeat at 90-day intervals or as necessary. Use Higher rate under heavy pest pressure. Use a minimum of 3000L/ha spray ha.
Potatoes	African Black Beetle	NSW only	3.6L and 900mL	-	NIL	Apply the spray to the soil immediately prior to planting, ensuring thorough incorporation at a depth of 15cm. Use high rate under heavy pest pressure. Apply as a second spray at tuber initiation.
Strawberries	Field Crickets (<i>Teleogryllus commodus</i>), Mole Crickets (<i>Gryllotalpa spp</i>)	QLD only	100mL/Kg bran bait	-	NIL	Apply in recently ratooned strawberry patches or newly planted runners when damage or pest populations indicate. Broadcast, preferably in the late afternoon to base of plants and inter-row space. Refer to Mixing Instructions on preparation of bran bait

DIRECTIONS FOR USE: FRUIT & VEGETABLES (cont.)

Crop	Insect	State	Rate Vol./ha	Rate Vol/100L	Withholding Period	Critical Comments
Tomatoes	Tomato Grub (<i>Helicoverpa armiger</i>)	QLD, VIC WA, NSW only	1.5-2L	150-200mL	3 days	Spray on 7-10 day schedule commencing at flowering. Use high rate under heavy pest pressure
	Native Budworm (<i>Helicoverpa punctigera</i>)	TAS only				
	Green Vegetable Bug	TAS SA WA only	1.5L	150mL	3 days	Spray at first sign of bug activity.
	Green Peach Aphid	QLD VIC TAS SA WA only	1L	100mL	3 days	Spray when aphids are seen. Large Plants: Use 1000L/ha.
	False Wireworm (<i>Gonocephalum spp</i>)	QLD only	5L	-	3 days	Apply as a band spray at least 10cm wide into the open furrow at planting. Spray the entire furrow width using a nozzle directly behind the planting tyne. Use a minimum spray volume of 20L/ha. See general instructions Soil Application
Young plants of Vegetables Asparagus, beans, beetroot, broccoli, brussel sprouts, cabbages, cauliflower, capsicums, carrots, celery, eggplants, onions, peas, potatoes, radishes, rhubarb, shallots, sweet potatoes, tomatoes and turnips.	Wingless Grasshopper	NSW VIC TAS SA only	500mL	50mL	Refer to WHP's for each crop	Spray areas of crops infested with grasshoppers. Apply also as a barrier across the line of advance when grasshoppers are invading the crop
Young plants of Vegetables Asparagus, beans, beetroot, broccoli, brussel sprouts, cabbages, cauliflower, capsicums, carrots, celery, eggplants, onions, peas, potatoes, radishes, rhubarb, shallots, sweet potatoes, tomatoes and turnips.	Cutworm (<i>Agrotis spp</i>)	ALL STATES	700mL	70mL	Refer to WHP's for each crop	Apply immediately infestation is observed. Increase concentration to compensate is application is below 1000L/ha. Spray should cover soil out to at least 20cm on both sides of row crop. Re-treat as necessary
	Field Crickets (<i>Teleogryllus commodus</i>), Mole Crickets (<i>Gryllotalpa spp</i>)	QLD only	100mL/10kg Bran bait	-		Apply as pest populations indicate Refer to Mixing Instructions on preparation of bran bait

DIRECTIONS FOR USE: FIELD CROPS & PASTURE

Crop	Insect	State	Rate Vol./ha	Withholding Period	Critical Comments
Cereals, Pastures, Forage Crops	Southern Armyworm (<i>Persectania ewingii</i>), Common Armyworm (<i>Mythimna convecta</i>)	ALL STATES	700-900mL	Grazing-(other than cotton) 2 days Harvest 10 Days *Cotton – 4 weeks (harvest and grazing)	Spray over total crop area when infestation is widespread. When pests are moving as an “army” treat as a broad strip over and in advance of the infestation. Late Stage instar: Using higher rate when larvae 3cm in length. Apply follow-up treatment as required
Cereals	Pasture Webworm (<i>Hednota spp</i>)	NSW VIC TAS WA only	700mL		Spray at first sign of damage. Apply from the ground with boom or mister or apply by air.
Cereals, Pasture, Young Plants of Oil Seeds* (except cotton)	Cutworm (<i>Agrotis spp</i>)	QLD TAS NSW WA only	900mL in a min of 100L water		Apply immediately infestation is observed. Apply follow-up treatment as required
		VIC only	700mL in a min of 100L water		Apply immediately infestation is observed. Apply follow-up treatment as required
Cereals, pasture, Oil Seeds* (except cotton)	Cutworm (<i>Agrotis munda and A. infusa</i>)	SA only	700mL in a min of 100L water		Apply immediately infestation is observed. Apply follow up treatment as required.
Cereals	Cereal curculio	SA ,WA only	120mL/100Kg seed		Apply as a seed dressing just prior to sowing through an accurately calibrated applicator. NOTE: A sowing rate of 95Kg/ha (min) is necessary to ensure economic responses are achieved
Cereals, Pasture, Forage Crops	Spur-throated Locust	QLD, VIC, NSW WA only	1.25L-1.5L		Spray areas of crop or pasture infested with locusts. Apply spray to trees or roosting sites to control swarming adult locusts. Late stage hoppers and adults: Use higher rate.
	Australian Plague Locust	QLD, NSW, WA and VIC only	350mL		Adults : Spray areas of crop or pasture infested with locusts
		SA only	560mL		Hoppers: Spray a swath in advance of marching band and then spray along the dense marching front. Continue spraying until all hoppers have been contacted. Adults: Spray areas of crop or pasture infested with locusts Hoppers: Spray a swath in advance of marching band and then spray along the dense marching front. Continue spraying until all hoppers have been contacted.
	Migratory Locust	QLD only	350ml		Spray areas of crop, trees and roosting sites infested with locusts.
	Blue Oat Mite	ALL STATES	70 to 140mL	Spray when pests appear in large numbers, 3-6 weeks after autumn rains. Re-spray as necessary. Avoid spraying when pests are sheltering. Spray when at least 2.5cm cover of pasture or crop is present. DO NOT spray if rain is imminent	
	Lucerne Flea	NSW VIC TAS SA WA only	70ml		
	Redlegged earthmite		140ml		
Cereals, Pasture, Oil Seeds*	Wingless Grasshopper	NSW VIC TAS SA only	500mL	Spray areas of crop or pasture infested with grasshoppers. Apply also as a barrier across the line of advance when grasshoppers are invading the crop.	
Cotton (young plants)	Cutworm (<i>Agrotis spp</i>)	QLD NSW only	900mL in a minimum of 100L water	Cotton – 4 weeks (harvest and grazing)	Apply immediately infestation is observed. Apply follow-up treatments as required
Cotton	Southern Armyworm (<i>Persectania ewingii</i>) Common Armyworm (<i>Mythimna convecta</i>)		700-900mL		Spray over total crop area when infestation is widespread. When pests are moving as an “army” treat a broad strip over in advance of the infestation. Late Stage instar: Use higher rate when larvae 3cm in length. Apply follow-up treatments as required.
	Spur-throated Locust		1.25-1.5L		Spray areas of crop infested with locusts. Apply spray to trees or roosting sites to control swarming adult locusts.

DIRECTIONS FOR USE: FIELD CROPS & PASTURE

Crop	Insect	State	Rate Vol./ha	Withholding Periods	Critical Comments
Cotton (cont.)	Wingless Grasshopper	QLD NSW only	500mL	Cotton – 4 weeks (harvest and grazing)	Late Stage Hoopers or Adults: Use higher rate. Spray areas of crop infested with grasshoppers. Apply as a barrier across the line of advance when grasshoppers are invading the crop.
	Cotton Aphid		300-400mL		Apply when pests first appear. Re-spray as indicated by field inspection.
	Cotton Flea Beetle, Red Shouldered Leaf Beetle		900mL-1.5L		Apply when pests are present. Use higher rate under heavy pest pressure.
	Springtails		300mL		Spray when large numbers of pests occur and damage is evident. Re-spray as necessary
Hops	Southern Armyworm (<i>Persectania ewingii</i>), Common Armyworm (<i>Mythimna convecta</i>) Light brown Apple Moth	TAS only	160mL per 100L water	NIL	Apply as pests indicate, commencing when the first appear
Lucerne (young plants)	Cutworm (<i>Agrotis spp</i>)	QLD TAS NSW WA only	900mL in a min of 100L water	Harvest 10 days Grazing 2 days	Apply immediately infestation is observed. Apply follow-up treatments as required
		VIC only	700mL in a min of 100L water		
Lucerne	Cutworm (<i>Agrotis munda and A. infusa</i>)	SA only			
	Webspinner caterpillar (<i>Loxostege spp</i>)	NSW QLD only	700mL		Spray when pests appear
Lucerne Leaf Roller (<i>Merophyas divulsana</i>)	300-400mL			Apply when pests first appear. Late stage instar: Use higher rate when larvae 1.5cm in length are present and/or under heavy pest pressure.	
Lucerne and Medics in pasture & Forage Crops	Spotted Alfalfa Aphid, Bluegreen Aphid	NSW, QLD, TAS, SA, WA only	200-300mL	NIL	Spray when aphids first appear. Use the high rate when large numbers of aphids are invading the crop.
	Pea Aphid	QLD VIC NSW TAS SA only			Seedling lucerne, medics: Apply 1-2 aphids/plant are observed.
	Sitona Weevil	QLD, VIC, TAS, NSW, SA WA only	350mL		Established lucerne, medics: Apply when 20-40 aphids/stem are observed
					Apply October to December, or in Autumn when adults occur in damaging numbers
Maize, Soybeans, Sunflower	False Wireworm, Cockroaches, Field Crickets	QLD only	100mL plus 125mL sunflower oil per 2.5kg cracked wheat or cracked sorghum bait	NIL	Apply at planting of crop. Refer to mixing instructions on preparation of cracked wheat or cracked sorghum bait.

DIRECTIONS FOR USE: FIELD CROPS & PASTURE

Crop	Insect	State	Rate Vol./ha	Withholding Periods	Critical Comments
Pasture	Lawn Armyworm (<i>Spodoptera mauritia</i>)	QLD only	700mL	Harvest 10 days Grazing 2 days	Spray over total crop area when infestation is widespread. When pests are moving as an "army" treat a broad strip over and in advance of the infestation. Apply follow-up treatments as required
	Sod Webworm (<i>Herpetogramma licarsisalis</i>)	QLD only	700mL		Spray as early as possible once pests appear. Apply from the ground with boom or mister. Re-spray as necessary
	Blackhead Pasture Cockchafer	NSW VIC SA WA only	900mL		Spray only when rain is imminent
Pasture, Forage Crops	Underground Grass Grub (<i>Oncopera fasciculata</i>)	NSW VIC SA WA only	900mL		Apply when caterpillars are actively feeding. Spray before noticeable damage has occurred. Graze pasture prior to spraying to ensure penetration of spray into the pasture sward
	Brown Pasture Looper (<i>Ciampa arieteraia</i>)	NSW VIC TAS SA WA only	700mL		Spray at first sign of pasture infestation
	Pasture Webworm (<i>Hednota spp</i>)	NSW VIC TAS SA WA only	700mL		Spray at first sign of damage. Apply from the ground with boom or mister or apply by air.
Rice	Bloodworm	NSW only	60 or 150mL	Harvest 10 days	Use higher rate when water more than 15cm or amount of decaying plant material is high.
	Brown Planthopper	QLD only	1.5L		Apply when pest numbers reach 1-2 per tiller and repeat as necessary
Sorghum Note: Do not use on Sugar Drip or Alpha Sorghum. Check new varieties before applying to entire crop	Southern Armyworm (<i>Persectania ewingii</i>), Common Armyworm (<i>Mythimna convecta</i>)	NSW QLD only	700-900mL	Harvest 2 days Grazing 2 days	Spray over total crop area when infestation is widespread. When pests are moving as an "Army" treat in a broad strip over and in advance of the infestation. Late Stage instar: Use higher rate when larvae 3cm in length. Apply follow-up treatments as required.
	Cutworm (<i>Agrotis spp</i>)	NSW QLD only	900mL in min of 100L water		Apply immediately infestation is observed. Apply follow up treatment as required.
	Spur-throated Locust	NSW QLD only	1.25-1.5L		Spray areas of crop infested with locusts. Apply spray to trees or roosting sites to control swarming adult locusts. Late Stage Hoppers and Adults: Use higher rate

DIRECTIONS FOR USE: FIELD CROPS & PASTURES (cont.)

Crop	Insect	State	Rate Vol./ha	Withholding Periods	Critical Comments
Sorghum (cont.)	Australian Plague Locust	NSW QLD only	350mL	Harvest 2 days Grazing 2 days	Adults: Spray areas of crop infested with locusts. Hoppers: Spray a swath in advance of marching band and then spray along the dense marching front. Continue spraying until all hoppers have been contacted
	Migratory Locust	QLD only	350mL		Spray areas of crop, trees and roosting sites infested with locusts
	Sorghum Midge	NSW QLD only	500mL		Check regularly (preferably in morning) and apply when 1-2 midge per head are present from the first emergence of boot to pollen shedding. With repeated attack spray at intervals of 5 days or less. NOTE: Do not use this product on Sugar Drip or Alpha sorghum. Check new varieties before applying to entire
	Corn Aphid (<i>Rhopalsiphum maidis</i>)	NSW QLD only	500mL		Apply when damaging populations of aphids occur.
	False Wireworm, Cockroaches, Field crickets	QLD only	100mL plus 125mL sunflower oil per 2.5Kg cracked wheat or cracked sorghum bait		Apply at planting of crop.
Sugarcane	Southern Armyworm (<i>Persectaina ewingii</i>), Common Armyworm (<i>Mythimna convecta</i>)	QLD only	700-900mL	Harvest 7 days. Grazing 2 days	Spray over the total area when infestation is widespread. When pests are moving as an "army" treat a broad strip over and in advance of the infestation. Late stage instar: Use higher rate when larvae 3cm in length. Apply follow-up treatment
	Spur-throated Locust	QLD only	1.25-1.5L		Spray areas of crop infested with locusts. Apply spray to trees or roosting sites to control swarming adult locusts. Late stage hoppers and adults: Use higher rate.
	Australian Plague Locust	QLD only	350mL		Adults: Spray areas of crop infested with locusts. Hoppers: Spray a swath in advance of marching band and then spray along the dense marching front. Continue spraying until all hoppers have been contacted
	Migratory Locust	QLD only	350mL		Spray areas of crop, trees and roosting sites infested with locusts
	Sugarcane Wireworm	QLD only	1.5L		Apply as a low pressure (less than 35kPa) or gravity feed spray into the plant sett and adjacent soil, at the point of exit from the rear of the planting machine, immediately prior to soil cover being brought in over the sett
Tobacco	Wireworm, False Wireworm, Cutworm	VIC only	3L	NIL	Apply as pre-plant to cultivated soil surface. Incorporate immediately by rotary hoeing to a depth of 10cm

DIRECTIONS FOR USE MISCELLANEOUS

Situation	Pest	State	Rate	Withholding Period	Critical Comments
Turf	Crickets	QLD only	2.5kg bait per Ha	Refer to WHP	Baits should only be used on turf farms not on recreational turf. See general instructions for bait preparation
	Funnel Ant	QLD NSW only	Field application: 2L per ha Spot Spraying: 5mL/5L water		For Spot Spraying: Apply 30mL of spray to each mound. In areas of high mound density a repeat application is necessary to ensure through mound coverage
	African Black Beetle	QLD NSW VIC WA only	6L/ha or 60mL/100m ²		Apply to lawn when pests appear. Water in immediately after application.
	Argentine Stem Weevil	NSW VIC TAS SA WA only	4L/ha or 40mL /100m ²		Lightly water following application. Apply as late in the day as possible.
	Blackhead Pasture Cockchafer	NSW VIC TAS SA WA only	900mL/ha or 9mL/100m ²		Use sufficient water to give even coverage. Apply as late in the day as possible.
	Brown Pasture Looper	NSW VIC TAS SA WA only	700mL/ha or 7mL/100m ²		Apply when pests first appear
	Pasture Webworm	NSW VIC TAS SA WA only	700mL/ha or 7mL/100m ²		Spray at first sign of damage. Apply with grounding boom or mister. Apply as late in the day as possible
	Lawn Armyworm	QLD NSW VIC SA WA only	700mL/ha or 7mL/100m ²		Spray over total lawn area when infestation is present. When pests are moving treat strip over and in advance of infestation. Apply follow-up treatment as required
	Sod Webworm	ALL STATES	700mL/ha or 7mL/100m ²		Apply as soon as pests appear. Repeat as required.
	Underground Grass Grub	NSW VIC SA WA only	900mL/ha or 9mL/100m ²		Apply when caterpillars are actively feeding. Spray before noticeable damage has occurred. Apply as late in the day as possible
Crickets	QLD only	20mL/20L water	Apply as required, preferably late in the day		

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

WITHHOLDING PERIOD

Beans, beetroot, carrots, capsicum, cassava's, egg plant, ginger, hops, onions, peas, pineapples, potatoes, radish, rhubarb, shallots, strawberries, sweet potatoes, tobacco and turnip: **NOT REQUIRED WHEN USED AS DIRECTED.**

Grain Sorghum, Lucerne: **DO NOT APPLY LATER THAN 2 DAYS BEFORE HARVEST . DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 2 DAYS AFTER APPLICATION.**

Tomatoes: **DO NOT APPLY LATER THAN 3 DAYS BEFORE HARVEST.**

Cole crops: **DO NOT APPLY LATER THAN 5 DAYS BEFORE HARVEST.**

Sugar cane: **DO NOT APPLY LATER THAN 7 DAYS BEFORE HARVEST .**

Cereals (except grain sorghum), legumes, forage crops, maize, pasture, rice: **DO NOT APPLY LATER THAN 10 DAYS BEFORE HARVEST . DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 2 DAYS AFTER APPLICATION.**

Asparagus, Bananas, celery, citrus, grapevines, pome fruit , **DO NOT APPLY LATER THAN 14 DAYS BEFORE HARVEST**

Cotton: **DO NOT HARVEST FOR 4 WEEKS AFTER APPLICATION. DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 4 WEEKS AFTER APPLICATION**

All other animal feeds: **DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 2 DAYS AFTER APPLICATION**

Turf: **DO NOT FEED TURF/LAWN CLIPPINGS FROM TREATED AREA TO POULTRY OR LIVESTOCK**

GENERAL INSTRUCTIONS

Before opening, carefully read Directions for Use, Precautionary Statements, Safety Directions and First Aid Instructions. Thorough coverage is essential. For application by aircraft apply in 10-15L water per hectare. Care should be taken when applying this product to any released sorghum hybrid or variety. Treat a small area first and observe for 3-4 days.

Mixing

Slowly add the required amount of this product to water in spray tank under agitation. The special formulation of this product ensures rapid mixing.

Soil Application (*in furrow*)

Apply as a band spray to the open furrow before planting. Spray the entire furrow width using a nozzle located directly behind the the seed tube. Ensure all spray is directed into the furrow containing bottom, sides and all soil drawn into the furrow at closure. Use a minimum of 20L of water/ha. Use the higher rate under extreme pest pressure.

Preparation of Bran Bait: Mix 10mL of this product per kg of bran using sufficient water to give a moist crumb structure. Allow to stand for 2-3 hours before application. Elbow-length PVC Gloves should be worn when preparing any applying bait. REFER TO SAFETY DIRECTIONS PRIOR TO PREPARATION.

Preparation of Cracked Wheat or Cracked Sorghum Bait: Mix the required volume of this product and sunflower oil together. Then add to the wheat or Sorghum, mixing thoroughly. Elbow-length PVC Gloves should be worn when preparing the bait. REFER TO SAFETY DIRECTIONS PRIOR TO PREPARATION.

COMPATIBILITY

This product is compatible with the following:

Herbicides: Atrazine, Bromoxynil, Chlorsulfuron, Diclofop-methyl, Diuron, Flamprop-methyl, Fluometuron, Glyphosate, Paraquat, Paraquat & Diquat, Pendimethalin, Trifluralin.

Insecticides and Miticides: Acephate, Azinphosmethyl, Carbaryl, Cypermethrin, Deltamethrin, Diazinon, Dichlorvos, Dicofol, Dimethoate, Endosulfan, Ethion, Fenvalerate, Maldison, Methidathion, Methomyl, Monocrotophos, Oils, Oxythioquinox, Parathion, Phosalone, Phosmet, Plictran 600M, Tetradifon, Trichlorfon.

Fungicides: Benomyl, Captafol, Chorothalonil, Thiram, Triadimefon, Zineb, Ziram

Fertilisers : Diammonium Phosphate, Limestone, Miloreanite, Mono-ammonium sulfate, Potash, Sulphur coated Urea, Triple superphosphate, Urea.

This product is incompatible with the following:

Herbicides: Dicamba, MCPA, Tordon 50D, Tordon 242, 2,4-D.

Fungicides: Fixed Coppers, liquid and organic coppers, wettable sulphur.

Fertilisers: Iron sulphate, manganese sulphate, Zinc oxysulphate.

Spray Drift Minimisation

Options for minimising drift to sensitive areas include not spraying within a certain distance of sensitive areas when the wind is blowing towards them (see table for guidance) or ensuring that drifting spray will be intercepted by a catching surface such as a row of shelter trees, unsprayed row of orchard trees or hail netting.

Situation	Recommended buffer distance (m)
Orchard (dormant trees, citrus, large trees)	30
Cotton	300
Other crops	100

CLEANING SPRAY EQUIPMENT

After using **ChemAg** Chlorpyrifos Insecticide and Termiticide, empty the spray equipment completely and drain the whole system. Thoroughly wash inside the tank using a pressure hose, and drain. To wash the system, quarter fill the tank with clean water and circulate through the pump, lines, hoses and nozzles (for knapsacks spray the waste through the nozzle). Drain and repeat the washing procedure twice. Dispose of rinsate / rinse water in accordance with **STORAGE AND DISPOSAL** instructions.

INSECTICIDE RESISTANCE WARNING

For insecticide resistance management **ChemAg** Chlorpyrifos Insecticide and Termiticide is a Group 1B insecticide.

Some naturally occurring insect biotypes resistant to **ChemAg** Chlorpyrifos Insecticide and Termiticide and other Group 1B insecticides may exist through normal genetic variability in any insect population. The resistant individuals can eventually dominate the insect population if **ChemAg** Chlorpyrifos Insecticide and Termiticide or other Group 1B insecticides are used repeatedly. The effectiveness of **ChemAg** Chlorpyrifos Insecticide and Termiticide on resistant individuals could be significantly reduced. Since occurrence of resistant individuals is difficult to detect prior to use, **ChemAg** Pty Ltd accepts no liability for any losses that may result from the failure of ChemAg Chlorpyrifos Insecticide and Termiticide to control resistant insects.

ChemAg Chlorpyrifos Insecticide and Termiticide may be subject to specific resistance management strategies. For further information contact your local supplier, **ChemAg** Pty Ltd representative or local agricultural department agronomist.

PRECAUTIONS

RE-ENTRY TO TREATED AREAS

Field crops, tree crops and vines: DO NOT allow entry into treated crops until spray deposits have dried. If prior entry is required, limit duration of entry and wear cotton overalls buttoned to the neck and wrist (or equivalent clothing) and chemical resistant gloves. Clothing must be laundered after each day's use.

Greenhouses: DO NOT allow entry into greenhouses until spray deposits have dried and treated areas are adequately ventilated. If prior entry is required, limit duration of entry and wear cotton overalls buttoned to the neck and wrist (or equivalent clothing) and chemical resistant gloves and half piece respirator. Clothing must be laundered after each day's use.

Cotton Chippers: DO NOT allow entry to treated crops until spray deposits have dried. After this time, wear shoes or boots, socks, long trousers, long sleeved shirt, gloves and hat.

PROTECTION OF LIVESTOCK

Dangerous to bees. DO NOT spray any plants in flower while bees are actively foraging.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

VERY HIGHLY TOXIC TO FISH AND AQUATIC INVERTEBRATES. HIGHLY TOXIC TO BIRDS AND REPTILES.

DO NOT re-apply to the same crop within 7days (unless specifically recommended in the directions for use).

DO NOT apply when irrigating, or to waterlogged soil, or while water remains on the surface or in furrows, unless water is captured on farm.

DO NOT apply if heavy rains or storms that are likely to cause surface run-off are forecast in the immediate area within two days of application.

DO NOT allow contaminated run-off water from treated paddocks to enter adjacent areas or water bodies. Run-off contaminated by irrigation events (tailwater) and a 25-mm rainstorm should be captured on farm for two days after application.

Spray Drift Warning

Spray drift may occur under adverse meteorological conditions or from certain spray equipment. DO NOT allow spray to drift onto sensitive areas including, but not limited to, natural streams, rivers or waterways and human dwellings. A spray drift management strategy such as those in the 'Best Management Practices Manual for Cotton Growers' or the 'Pilots and Operators Manual' should be applied. See also **Spray Drift Minimisation** above.

SMALL SPILL MANAGEMENT:

Wear appropriate clothing and protective equipment whilst cleaning up small spills (see **Safety Directions**). Apply absorbent material such as earth, sand, cat litter or clay granules to the spill. Sweep up material and contain in a refuse vessel for disposal. If spilled inside a building, wash contaminated surfaces to deactivate the Chlorpyrifos with a dilute solution of bleach (sodium hypochlorite), prepared according to the bleach label instructions.

Dispose of the contaminated material in accordance with **Storage and Disposal** Instructions below.

STORAGE AND DISPOSAL:

Store in the closed, original containers in a cool, well-ventilated area. Do not store for prolonged periods in direct sunlight. 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. Rinsate / rinse water should be disposed of in accordance with appropriate state legislation and should be preferably sprayed on to an application site or added as up to 10% of the diluent the next time this product or another similar termiticide is used. **DO NOT** put rinse water down sewers, gutters or storm water drains. In some states wastes can only be buried at a licensed landfill.

SAFETY DIRECTIONS:

Product is poisonous if absorbed by skin contact, inhaled or swallowed. Repeated minor exposure may have a cumulative poisoning effect. Obtain an emergency supply of atropine tablets 0.6 mg. Will irritate the eyes and skin. Avoid contact with eyes and skin. Do not inhale vapour or spray mist.

When opening the container, preparing the spray or using the prepared spray, wear cotton overalls buttoned to the neck and wrist and a washable hat and elbow-length PVC gloves and face shield or goggles.

If product is spilt on skin, immediately wash area with soap and 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 and contaminated clothing.

FIRST AID:

If poisoning occurs, contact a doctor or Poisons Information Centre. (Ph.: 13 11 26). If swallowed, DO NOT induce vomiting. Give a glass of water. If swallowed, give one atropine tablet every 5 minutes until dryness of the mouth occurs - if poisoned by skin absorption or through lungs, remove any contaminated clothing, wash skin thoroughly and give atropine tablets as above. Get to a doctor or hospital quickly. 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 (MSDS) for **ChemAg** Chlorpyrifos Insecticide and Termiticide. Available upon request from the **ChemAg** on request.

DIRECTIONS FOR USE - MANAGEMENT OF SUBTERRANEAN TERMITES (All States, except Tasmania)

RESTRAINTS

DO NOT apply to soils if excessively wet, immediately after heavy rain or if heavy rains are expected within 48 hours to avoid run-off of chemical.

DO NOT use at less than indicated label rates.

DO NOT use in cavity walls, except for direct treatment of nest.

DO NOT use on alkaline soils in SA (use on neutral or acid soils only) or on dolomite based sub-slab bedding material.

ENSURE that dolomite sub slab bedding material is permeable to termiticide application. (DEPENDING ON CURRENT LABEL)

RATES OF APPLICATION

IMPORTANT: ChemAg Chlorpyrifos Insecticide and Termiticide should be used as part of an overall termite management program as detailed in Australian Standard Series AS 3660. A great deal of care is required to understand construction details of the building and to apply the product in a manner which ensures a complete chemical soil barrier. Where necessary, the barrier may need to be re-applied under the building. Application equipment must be fitted with a flow meter and pressure regulator on the application device. The purpose of a chemical soil barrier is to impede and discourage concealed termite entry into a structure. Barriers may still be bridged by termites, but their entry can then be more easily detected during routine inspections. If a barrier is not complete or breached, then concealed termite entry may occur. It is often not possible to form a complete barrier around existing structures in which case other termite management options and/or more frequent inspections will also need to be considered.

POST-CONSTRUCTION USAGE RATES

SITUATION	RATE	CRITICAL COMMENTS
Installing a chemical soil barrier around and under buildings.	Horizontal Barriers: 100mL/m ² Vertical Barriers: 2L/m ³	Horizontal Barriers: Use 100mL of ChemAg Chlorpyrifos Insecticide and Termiticide per 5L of water and apply the mixture (emulsion) at a rate of 5L/m ² . Vertical Barriers: Use 2L of ChemAg Chlorpyrifos Insecticide and Termiticide per 100L of water and apply the mixture at a rate of 100L/m ³ . See APPLICATION VOLUME section in GENERAL INSTRUCTIONS for further information. 2L/100L is equivalent to a 1% active ingredient emulsion. See Service requirement in GENERAL INSTRUCTIONS for expected barrier life.
Installing a chemical soil barrier around and under buildings north of the Tropic of Capricorn or where <i>Mastotermes darwiniensis</i> is a concern.	Horizontal Barriers: 200mL/m ² Vertical Barriers: 4L/m ³	This is an optional high rate for use north of the Tropic of Capricorn, or where <i>M darwiniensis</i> is a concern. Horizontal Barriers: Use 200mL of ChemAg Chlorpyrifos Insecticide and Termiticide per 5L of water and apply the mixture (emulsion) at a rate of 5L/m ² . Vertical Barriers: Use 4L of ChemAg Chlorpyrifos Insecticide and Termiticide per 100L of water and apply the mixture at a rate of 100L/m ³ . See APPLICATION VOLUME section in GENERAL INSTRUCTIONS for further information. 4L/100L is equivalent to a 2% active ingredient emulsion. See Service requirement in GENERAL INSTRUCTIONS for expected barrier life.
Installing a chemical soil barrier around new and existing poles, eg. transmission and building poles, fence posts and palings.	200mL/10L of water or creosote	Trench (preferred) or rod and puddle-treat backfill, ensuring a complete and continuous treated soil barrier is provided around the pole or post, to a minimum depth of 300mm and minimum width of 150mm. Use 100L of emulsion per m ³ of soil. In addition, infested poles may be drilled near ground level and the cavity flooded with the emulsion. This allows seepage to form a treated soil barrier. Note: A 50mm gap between fence palings and soil will reduce termite attack and fungal decay. Only soil in contact with palings should be treated. <ul style="list-style-type: none"> • Replenishment is recommended within 2 years north of the Tropic of Capricorn and 5 years in other areas. • If the barrier is disturbed, or rain falls immediately after application, retreat to restore continuity and completeness of the barrier. Refer to Australian Standard Series AS 3660.

Treatment of termite nest or colony.	100mL/10L of water	Once the nest or colony has been located it should be broken open and flooded with emulsion. This includes nests located in trees. When treating trees, the addition of a wetting agent is suggested. Refer to Australian Standard Series AS 3660.
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NOT TO BE USED FOR ANY PURPOSE, OR IN ANY MANNER, CONTRARY TO THIS LABEL UNLESS AUTHORISED UNDER APPROPRIATE LEGISLATION

APPLICATION INSTRUCTIONS – TERMITES MANAGEMENT

APPLICATION EQUIPMENT

Hand Spraying

For hand spraying use a rose head shrouded nozzle, operating at 170 kPa, with a flow meter and pressure regulator fitted to the hand-piece.

Treatment Beneath Concrete Slabs or Sealed Areas

Where it is not possible or practical to remove the slab to allow direct application to the soil, use a sub-slab injector fitted with multi-directional tip (eg. a B&G or similar system) with a 5 degree upward angle (eg. 3 way or 4 way) operated at 170 kPa. Ensure a strong seal with the top of the drill hole to avoid leakage. For the best distribution, the injector needs to be held vertically, at right angles to the slab, and rotated during the application through 90 degrees (if using a 4 way dispersion tip), or through 120 degrees (for a 3 way dispersion tip).

Injection into Soil

Where it is not possible or practicable to trench the soil; use a soil rod with a 3 or 4 way multi-directional tip (B&G, or similar) operated at 170 kPa. The 4 way tip needs to be rotated during the application through 90 degrees and the 3 way tip through 120 degrees.

APPLICATION VOLUME

To compensate for impervious soils such as heavy clay where application of 5L/m² would cause run-off, it may be necessary to apply a volume of emulsion less than 5L/m². When reducing the total volume of emulsion used, increase the concentration accordingly to match the label rate by mixing the required amount of **ChemAg Chlorpyrifos Insecticide and Termiticide** per m² in a lesser volume of water. **DO NOT** use emulsion volumes less than 2L for every square metre to be treated.

Note: Use of emulsion volumes other than the recommended 5L/m² is only permitted when installing barriers in exposed soil. It is not permitted when injecting through the slab or into sealed areas.

Existing Structures

a) Strategic Drilling Through Slab, or Sealed Areas

For treatment of slabs when termites are entering the building through the slab, where reticulation systems do not exist, slab drilling and injection will be required. In most cases, unless there is a known severe termite hazard, grid drilling of the slab is not required. Any such need is to be determined by a licensed Pest Manager.

Treatment needs to be made around the inside of all exterior walls to complete a termite barrier, along both sides of interior wall partitions, around plumbing/electrical or piping entry points and along major cracks or expansion joints. When treating along major cracks or expansion joints it is recommended that holes are drilled alternately on either side of the crack at the recommended drill hole spacings.

For a sand base or sandy soil, apply through a row of holes drilled no more than 300mm apart and 100-200mm out from the wall, crack or pipe. For a clay base, apply through a row of holes drilled 150mm apart and 100mm from the wall, crack or pipe. Apply 10L of emulsion per linear metre and ensure the holes are securely plugged after treatment.

b) External Barriers

An external barrier should be installed around the perimeter of the building and should circumference all pipes and service facilities. External barriers should be created by using either a vertical or horizontal barrier, as determined by the building construction type and adjoining ground level. **An external barrier is an essential part of the treatment when relying on a chemical soil barrier to provide the full termite management system as per AS 3660.**

An external horizontal barrier is only required when prevention of concealed vertical access by termites is necessary at the perimeter (eg, when ground level is equal to the top of a slab, where the slab is also a barrier to concealed termite movement into the building). A vertical barrier is required when prevention of concealed horizontal access is necessary (eg, where ground level is higher than building material vulnerable to concealed horizontal entry by termites).

- i) **Horizontal Barrier:** Use a rose head shower nozzle operated at 170 kPa to apply the required rate of 1.5L of the correctly diluted **ChemAg** Chlorpyrifos Insecticide and Termiticide per lineal metre (150mm wide) to soil loosened to a depth of at least 80mm (see **APPLICATION VOLUME Section**).
- ii) **Vertical Barrier:** The vertical barrier should be at least 150mm wide and should reach down to 50mm below the top of the footings. To achieve this trench to the top of the footings, and where this is not possible, a combination of trenching (preferably at least 300mm deep) and rodding into the base of the trench may be necessary.

Apply **ChemAg** Chlorpyrifos Insecticide and Termiticide emulsion at 100L per cubic metre of backfill soil, this equates to 1.5L of emulsion/linear metre of a trench 150mm wide and 100mm deep. Where the required vertical barrier is deeper than 100mm, ensure the same rate of application for the extra volume of soil. Use a rose head shower nozzle operated at 170 kPa to flood the base of the open trench and also to treat the backfill soil as it is replaced into the trench to ensure even distribution. Where rodding is necessary, rod before the trench is treated using the spacings in the following table.

Rod Spacings:

Heavy Clay	Clay Loams	Sands
150 mm	200 mm	300 mm

Insert the rod to the foundation foot as close as possible to the house wall ensuring the chemical is applied during insertion and withdrawal. (See **APPLICATION EQUIPMENT Section, Injection into Soil**)

c) Suspended Floors

Install horizontal and vertical barriers as specified in Australian Standard Series AS 3660 to adjoin all substructure walls, stumps, piers, pipes and wastes using the techniques described for **external barriers around concrete slabs**. (See **Existing Structures Section**.)

GENERAL INSTRUCTIONS – Termite Management

Termite Management

To minimise the risk of termite infestation, the subfloor area of buildings should be kept free of stored or waste timber and all other building materials that attract termites. Appropriate action should also be taken to eliminate any undue dampness caused by leaking water or sewerage pipes, or inadequate drainage. Subterranean termites need a constant source of moisture to survive. Provision of adequate ventilation in the subfloor area also helps eliminate undue dampness. Pest managers using this product for termite management should advise the home owner that disturbing the treated soil barrier with subsequent construction of additions or alterations, paths, steps, landscaping, etc, may render the termite management system in place ineffective unless further management options are considered.

Colonies not in contact with the ground

Occasionally subterranean termites establish a colony in a building without having contact with the soil because they have access to a continuous supply of moisture (eg. from a faulty plumbing fixture or leaking roof). Such colonies are not affected by chemical soil barriers and should be treated as recommended for established colonies, as per Australian Standard Series AS 3660. **ChemAg** Chlorpyrifos Insecticide and Termiticide may be applied directly to the termite colony in such situations.

Service requirement

Regular, competent inspections by a licensed Pest Manager are recommended as part of an overall termite management program to determine the prevailing termite pressure and environmental conditions and consequent requirement for further termite management options. Inspections should be performed at least on an annual basis, but more frequent inspections are strongly recommended.

At the 1% application rate, **ChemAg** Chlorpyrifos Insecticide and Termiticide can provide an effective chemical soil barrier in subfloor regions for 4 years or more north of the Tropic of Capricorn, and 10 years or more south of the Tropic of Capricorn. At the 1% application rate, **ChemAg** Chlorpyrifos Insecticide and Termiticide can provide an effective chemical soil barrier in exposed situations for 2 years north of the Tropic of Capricorn, and up to 5 years or more south of the Tropic of Capricorn.

At the 2% application rate north of the Tropic of Capricorn, **ChemAg** Chlorpyrifos Insecticide and Termiticide can provide an effective chemical soil barrier in subfloor regions for 6 years or more and in exposed situations for up to 3 years or more.

The actual period of efficacy will depend on many factors such as termite hazard, climatic conditions, soil types and soil disturbance and gardening/landscaping practices.

DIRECTIONS FOR USE: GENERAL PEST CONTROL

RESTRAINTS

DO NOT spray polycarbonate surfaces/roof sheeting or aged vinyl wall cladding as solvent may cause etching.

SITUATION	PEST	RATE	CRITICAL COMMENTS
Domestic and public places, commercial and industrial areas.	Cockroaches (residual control and/or heavy infestations)	195mL/10L of water	Apply as a coarse, low pressure spray to the point of run-off, to cracks, crevices, harbourages, eaves, downpipes and other places where the pests may occur. For optimum control of webbing spiders, use a 2-part treatment. After applying as a coarse, low pressure spray to harbourages where the spiders may occur, apply a light spray over surfaces of the building.
	Spiders		
	Silverfish	50mL/10L	
	Cockroaches (light infestations)	of water	
	Ants including Argentine ants	95mL/10L of water. Use at least 1L spray/ 10 m ² infested area	Locate ant nests and treat appropriately. Spray ant tracks or where ant activity is noticed. Apply to paths in continuous 300mm bands. Apply to base of buildings, walls, fences, rock-works, trunks of shrubs and trees, and other hard surfaces to a height of 300mm.
Domestic and public places, commercial and industrial areas.	Fleas (outdoor use only)	90mL/10L of water	Apply as a fine droplet spray. Outdoors only. Treat areas where animals frequent. Remove animals during treatment and until spray deposit is dry. Do not treat pets with this product. Pets should be treated with a product registered for application to animals.
Hides/Skins	Hide beetles	200mL/100L of water. Use at least 30mL of spray/ skin	Apply spray to flesh side of skins or hides sufficient to moisten them. Ensure coverage of ears and lugs. To minimise the chance of later infestations, storage area should be sprayed regularly. Repeat application every 3 months. Access through bales should be maintained for application of product.
Light vegetation	Mosquito larvae	30mL/ha	Dilute with water and apply as a spray to areas infested with mosquitoes.
Medium vegetation		60mL/ha	
Heavy vegetation		105mL/ha	
Light to medium vegetation	Mosquito adults	60mL/ha	
Medium to heavy vegetation		105mL/ha	
Polluted water impoundments	Mosquitoes (larvae and adults)	2mL/ 10,000L of water or 20mL/100 m ³ of water.	

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

GENERAL INSTRUCTIONS

MIXING

Half fill the spray tank with water (or creosote where applicable) and add the required amount of **ChemAg** Chlorpyrifos Insecticide and Termiticide , then add the remaining water (or creosote) with an agitator running. If using a knapsack sprayer gently shake before using. Only mix sufficient chemical for each specific application.

CLEANING SPRAY EQUIPMENT

After using **ChemAg** Chlorpyrifos Insecticide and Termiticide, empty the spray equipment completely and drain the whole system. Thoroughly wash inside the tank using a pressure hose, and drain. To wash the system, quarter fill the tank with clean water and circulate through the pump, lines, hoses and nozzles (for knapsack sprayers spray to waste through the nozzle). Drain and repeat the washing procedure twice.

Disposal of rinsate/rinse water in accordance with Storage and Disposal instructions below.

GROUP	1B	INSECTICIDE
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INSECTICIDE RESISTANCE WARNING

For insecticide resistance management **ChemAg** Chlorpyrifos Insecticide and Termiticide is a Group 1B insecticide. Some naturally occurring insect biotypes resistant to **ChemAg** Chlorpyrifos Insecticide and Termiticide and other Group 1B insecticides may exist through normal genetic variability in any insect population. The resistant individuals can eventually dominate the insect population if **ChemAg** Chlorpyrifos Insecticide and Termiticide or other Group 1B insecticides are used repeatedly. The effectiveness of **ChemAg** Chlorpyrifos Insecticide and Termiticide on resistant individuals could be significantly reduced. Since occurrence of resistant individuals is difficult to detect prior to use, ChemAg accepts no liability for any losses that may result from the failure of **ChemAg** Chlorpyrifos Insecticide and Termiticide to control resistant insects.

ChemAg Chlorpyrifos Insecticide and Termiticide may be subject to specific resistance management strategies. For further information contact your local supplier or ChemAg representative.

PRECAUTIONS:

DO NOT apply inside buildings except as a crack and crevice treatment.

DO NOT apply to surface areas such as interior floors or walls

RE-ENTRY TO TREATED AREAS Post construction termite control and general pest control

DO NOT permit re-occupation of any premises until treated areas are completely dry (normally 3-4 hours) and adequately ventilated.

PROTECTION OF PETS AND LIVESTOCK

Before spraying remove animals and pets from buildings and other areas to be treated. Cover or remove any open food and water containers.

Cover or remove fish tanks before spraying. **DO NOT** allow animals and pets to contact treated areas for at least 24 hours.

Dangerous to bees. **DO NOT** spray any plants in flower while bees are actively foraging.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

VERY HIGHLY TOXIC TO FISH AND AQUATIC INVERTEBRATES. Rinse waters and run-off from treated areas MUST NOT enter drains or waterways. For under-slab treatments the moisture membrane MUST be installed immediately after treatment. DO NOT apply to waterlogged soils. DO NOT apply if heavy rains are expected to occur within 48 hours of application.

HIGHLY TOXIC TO BIRDS. DO NOT treat fill unless it has been placed back in the trench to form the chemical soil barrier.

DO NOT spray directly on to the foliage of plants as damage to some species is possible.

SMALL SPILL MANAGEMENT

Wear appropriate clothing and protective equipment whilst cleaning up small spills (see **SAFETY DIRECTIONS**). Apply absorbent material such as earth, sand, cat litter or clay granules to the spill. Sweep up material and contain in a refuse vessel for disposal. If spilled inside a building, wash contaminated surfaces to deactivate the chlorpyrifos with a dilute solution of bleach (sodium hypochlorite), prepared according to the bleach label instructions. Dispose of the contaminated material in accordance with **STORAGE AND DISPOSAL** instructions below.

STORAGE AND DISPOSAL

Store in closed, original container in a cool well-ventilated area. Do not store for long periods in direct sunlight. 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 local landfill is available, bury the containers at a depth of 500mm or more 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. Rinsate/rinse water should be disposed of in accordance with appropriate State legislation and should preferably be sprayed on to an application site or added as up to 10% of the diluent the next time this product or another similar termiticide is used. Do not put down sewers, gutters or storm water drains. In some States wastes can only be buried at a licensed landfill.

SAFETY DIRECTIONS

For General Use

Product is poisonous if absorbed by skin contact, inhaled or swallowed. Repeated minor exposure may have a cumulative poisoning effect. Obtain an emergency supply of atropine tablets 0.6 mg. Will irritate the eyes and skin. Avoid contact with eyes and skin. Avoid inhaling spray mist. When opening the container, preparing the spray, or using the prepared spray, wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length PVC gloves, face shield or goggles. If product on skin, immediately wash area with soap and 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 and contaminated clothing.

For Use As A Termiticide

Product is poisonous if absorbed by skin contact, inhaled or swallowed. Repeated exposure may cause allergic disorders. Repeated minor exposure may have a cumulative poisoning effect. Obtain an emergency supply of atropine tablets 0.6 mg. Will irritate the eyes and skin. Avoid contact with eyes and skin. Do not inhale vapour or spray mist.

When opening the container, preparing the spray and using the prepared spray wear chemical resistant clothing buttoned to the neck and wrist and a washable hat, elbow-length PVC gloves, goggles, chemical resistant footwear, half facepiece respirator, with combined dust and gas cartridge. If clothing becomes contaminated with product or wet with spray, remove clothing immediately. If product is spilt on the skin, immediately wash area with soap and water. If product is in the 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, 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. (Ph.: 13 11 26). If swallowed, DO NOT induce vomiting. Give a glass of water. If swallowed, give one atropine tablet every 5 minutes until dryness of the mouth occurs - if poisoned by skin absorption or through lungs, remove any contaminated clothing, wash skin thoroughly and give atropine tablets as above. Get to a doctor or hospital quickly. 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 **ChemAg** Chlorpyrifos Insecticide and Termiticide which is available from **ChemAg** on request.

NRA Approval No. 51190/0502