

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

SINON

# CHLORPYRIFOS 500

## INSECTICIDE

**ACTIVE CONSTITUENT: 500 g/L CHLORPYRIFOS (An Anticholinesterase Compound)**  
**Solvent: 470 g/L HYDROCARBON LIQUID**

**GROUP 1B INSECTICIDE**

For the control of certain insect pests of: cassava, cereals, forage crops, fruit, ginger, grapevines, hops, oilseeds, pasture, pineapples, sugarcane, turf and vegetable crops, and other situations as specified in the Directions for Use table.

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

READ THE ATTACHED LEAFLET BEFORE USING THE PRODUCT.

**Contents: 20 L to 110 L**

Sinon Australia Pty Ltd  
ACN 102 741 024  
Level 7, 60 York Street,  
Sydney NSW 2000  
TEL: 03 5441 8907

## STORAGE AND DISPOSAL

Store in closed, original container in a cool, well ventilated area. Do not store for prolonged periods in direct sunlight. Triple rinse containers before disposal. Add rinsings to spray tank. Do not dispose of undiluted chemicals on site. If not recycling, break, crush or puncture and deliver empty packaging for appropriate disposal to an approved waste management facility. If an approved waste management facility is not available, bury the empty packaging 500 mm below the surface in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots, in compliance with relevant Local, State or Territory government regulations. DO NOT burn empty containers or product.

This container can be recycled if it is clean, dry, free of visible residues and has the drumMUSTER logo visible. Triple rinse container before disposal. Dispose of rinsate by adding to the spray tank. Do not dispose of undiluted chemicals on site. Wash outside of the container and the cap. Store cleaned container in a sheltered place with cap removed. It will then be acceptable for recycling at a drumMUSTER collection or similar container management site. The cap should not be replaced but may be taken separately.

## Refillable containers

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

## SAFETY DIRECTIONS:

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. Will irritate the eyes and skin. Avoid contact with eyes and skin. Do not inhale vapour or spray mist. When opening the container, preparing spray and using the prepared spray, wear chemical resistant clothing buttoned to the neck and wrist and washable hat, elbow-length PVC gloves, goggles, 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 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 days use, wash gloves, goggles, contaminated clothing and respirator and if rubber wash with detergent and warm water.

## FIRST AID:

If swallowed, splashed on skin or in eyes, or inhaled, contact a Poisons Information Centre (Phone Australia 131126) or a doctor at once. Remove any contaminated clothing and wash skin thoroughly. If swallowed, activated charcoal may be advised. Give atropine if instructed. If in eyes, hold eyes open, flood with water for at least 15 minutes and see a doctor.

## SAFETY DATA SHEET

For further information refer to the Safety Data Sheet which is available from the supplier.

## NOTICE TO BUYER

Seller warrants that the product conforms to its chemical description and is reasonably fit for the purpose stated on the label when used in accordance with directions under normal conditions of use. No warranty of merchantability for a particular purpose, express or implied, extends to the use of the product contrary to label instructions, or under abnormal conditions.

APVMA Approval No: 86189/120853

Batch No:

Date of Manufacture:

UN. 3018, 2WE, PGIII  
ORGANOPHOSPHORUS  
PESTICIDE, LIQUID, NOS



IN A TRANSPORT EMERGENCY  
DIAL 000  
POLICE OR FIRE BRIGADE

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Sydney NSW 2000  
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## DIRECTIONS FOR USE

CROP	INSECT	STATE	RATE		WITHHOLDING PERIOD	CRITICAL COMMENTS
			Vol/ha	Vol/100 L		
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 is essential.
Avocado	Avocado leafroller	QLD, WA ONLY	1 or 2 L	50 or 100 mL	7 days	Use this rate in tank mix with 1 L/ha (500 mL/100L of water) of Dichlorvos (500 g/L). For low volume spray equipment use L/ha rate. Apply at first sign of pest activity before larvae move to fruit. Use higher rate when populations are high.
	Ivy Leafroller	NSW, WA ONLY				Apply at first sign of pest activity before larvae move to fruit. Use higher rate when populations are higher. For low volume spray equipment use L/ha rate.
	Latania scale, hairy caterpillars, light brown apple moth, Redshouldered leaf beetle	NSW, WA ONLY				Apply when populations indicate treatment is required. Spotspray affected trees only. Repeat as necessary. Use higher rate when populations are high.
Bananas	Banana Scab Moth ( <i>Nacoleia octasema</i> )	QLD, WA ONLY	1-2 L	200 mL	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	-	1-1.8 L		After removal of trash, apply 500-700 mL of spray (depending on butt size) to lower 30cm of the butt and to the surrounding soil within 30cm, ensuring thorough coverage of butt and suckers. Sub-tropical areas: Use high rate for annual control of borers. Tropical areas: Use high rate in Sept-Nov for initial spray and follow-up with low rate in Feb-April should insect numbers warrant a second application.
	Caterpillars	NSW, WA ONLY	-	200 mL		Apply from the first appearance of flower bell and repeat as populations indicate until fingers are exposed. Use as ground application only, do not apply by air.
Carrots	Light brown apple moth	NSW, WA ONLY	500 mL or 700 mL	-		Apply when moths are first detected. Repeat at the higher rate if there is a recurrence of infestation.
Cassava	Cutworm ( <i>Agrotis spp.</i> )	QLD, WA ONLY	700 mL	-		Apply to seedlings and soil at the base of seedling, when cutworm activity is observed.
Citrus	California Red Scale ( <i>Aonidella aurantii</i> )	QLD, VIC, NSW, SA, WA ONLY	-	100 mL or 50 mL + 1 L miscible Summer spraying oil		Apply during November/March period. Two sprays may be required under conditions of heavy scale infestation. Apply with high volume sprayers to point of run-off. <b>Note:</b> Do not use on citrus in area where integrated control programs are in operation.
Citrus, Pome Fruit	Wingless Grasshopper	NSW, VIC, TAS, SA, WA ONLY	500 mL	50 mL		Spray areas of crop infested with grasshoppers. Apply also as a barrier across the line of advance, when grasshoppers are invading the crop.

Cole crops including Cabbage, Cauliflower	Cabbage moth, Cabbage white butterfly, Cabbage Aphid, Cluster Caterpillar, Cabbage Cluster Caterpillar	NSW, VIC, TAS, SA, WA ONLY	1.5-2 L	150 mL-200 mL	5 days	Spray at 10-14 day intervals. Use high rate under heavy pressure. <b>Large Plants:</b> Use 1000L/ha. To improve spray coverage add non-ionic wetting agents as recommended.
	Corn Earworm, Native Budworm ( <i>Helicoverpa spp.</i> )	QLD, WA ONLY	1.5 L	150 mL		Apply as pests indicate commencing when pests first appear. <b>Large Plants:</b> Use 1000 L/ha
	Corn Earworm	NSW, VIC, SA, WA ONLY	1.5-2 L	150 mL-200 mL		Apply at 10-14 day intervals. Use high rate under heavy pest pressure. <b>Large Plants:</b> Use 1000 L/ha
	Native Budworm ( <i>Helicoverpa punctigera</i> )	NSW, VIC, SA, TAS, WA ONLY				Apply at 10-day interval commencing when pests first appear. Apply at 7-day interval under heavy pest pressure. <b>Large Plants:</b> Use 1000 L/ha
Cabbage, Cauliflower	African black beetle	NSW, WA ONLY	2 L (boomspray)	300 mL (drench)	-	<b>Boom Spray:</b> Apply in 500 – 1000 L of water/ha at or soon after planting as a 10-15 cm band spray. <b>Drench:</b> Apply 100mL of diluted spray to base of each plant. Treat as soon as the first signs of infestation are observed. <b>Note:</b> If attack is prolonged follow up boom spray or drench treatment may be necessary.
Cucurbits	White flies	NSW, WA ONLY	-	50 mL/100L		Apply when pest is first detected. If required repeat applications every 10-14 days.
Ginger	Cutworm ( <i>Agrotis spp.</i> )	QLD, WA ONLY	700-900 mL			Apply when pest population is evident from damage to the primary shoot at or below ground, or to the first leaf during growth.
Grapevines	Light brown apple moth	ALL STATES	500 mL	50 mL		14 days
	Grapevine moth	QLD, NSW, TAS, SA, WA ONLY	-	100 mL alone or add 50mL + 1 L miscible Winter Oil		Apply as a dormant spray, post pruning (July)
	Grapevine scale					
Kiwi Fruit	Common armyworm, Southern armyworm	NSW, VIC, WA, SA, TAS, QLD ONLY	1 L	50 mL	14 days	Apply at green tip at least 10 days after dormant lime sulphur application and pre-blossom. Do not apply post blossom.
Mango	Common mango scale	QLD, WA ONLY	-	100 mL	21 days	Apply to coincide with crawler activity. Ensure thorough coverage of all branches, foliage and fruit.
Pineapples	Pineapple Mealy-bug, Ants	QLD, WA ONLY	-	100 mL use a minimum of 3000 L water/ha	-	Apply when pests are first seen and repeat at 90-day intervals or as necessary.
Potatoes	African Black Beetle	NSW, WA ONLY	3-6 L & 900 mL	-	-	Apply the spray to the soil immediate prior to planting, ensuring thorough incorporation to a depth of 15cm. Use high rate under heavy pest pressure. Apply as a second spray at tuber initiation.
	White fringed weevil	NSW, VIC, WA ONLY	6 L			Apply pre-plant and incorporate into the soil immediately after application.
		WA, NSW ONLY	1 L			Apply at hilling-up or 7 weeks after planting as a follow up to pre-plant incorporation.
	Wireworm	VIC, WA ONLY	6 L			Apply as a band spray to the soil surface incorporating immediately. Use before planting in areas where wireworm is a known problem.
Silverbeet	Redlegged earth mite, Blue Oat mite	NSW, WA ONLY	140 or 300 mL	-	-	Use higher rate for severe infestations. Headlands and vegetation surrounding the crop may also need to be treated.

Stonefruit	European earwig	NSW, WA ONLY	2 L	100 mL	14 days	<p><b>Spray application:</b> Apply in a minimum of 2000 L/ha in Spring. If lower volume used increase concentration to apply 2 L of product/ha.</p> <p><b>Bait Application:</b> Apply 5kg of bait/ha in Spring by fertiliser spreader. See General Instruction on preparation of cracked wheat or cracked sorghum bait.</p>
			200 mL + 250 mL Sunflower oil/5 kg cracked wheat or cracked sorghum bait			
	San Jose Scale	QLD, WA, NSW ONLY	-	100 mL (2% Miscible oil may be added to the dormant spray)		<p><b>Dormant Period:</b> Apply as late as possible ensuring thorough coverage of all branches.</p> <p><b>Seasonal Period:</b> Apply to coincide with crawler activity in mid-late November and later if necessary. Ensure thorough coverage of all branches, foliage and fruit.</p> <p><b>Note:</b> Some fruit marking may occur if high volume spraying is carried out under hot, dry conditions.</p>
Strawberries	Field crickets, Mole crickets	QLD, WA ONLY	100 mL/10kg bran bait	-	-	Apply in recently ratooned strawberry patches or newly planted runners when damage or pest populations indicate. Broadcast, preferably in late afternoon, to base of plants and inter-row-space. See General Instructions on preparation of bran baits.
Tomatoes	Green Vegetable Bug	TAS, SA, WA ONLY	1.5 L	150 mL	3 days	Spray at first sign of bug activity.
	Green Peach Aphid	QLD, VIC, TAS, SA, WA ONLY	1 L	100 mL	3 days	Spray when aphids are seen. <b>Large Plants:</b> Use 1000 L/ha
	False wireworm ( <i>Gonocephalum spp.</i> )	QLD, WA ONLY	700 mL	70 mL	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 line. Use a minimum spray volume of 20 L/ha
	Tomato Grub ( <i>Helicoverpa armigera</i> )	QLD, VIC, NSW, WA ONLY	1.5 L – 2 L	150 – 200 mL	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, WA ONLY				
Vegetables	Wingless grasshopper	NSW, VIC, SA, TAS, WA ONLY	500 mL	50 mL	Tomatoes 3 days	Spray area of crop infested with grasshoppers. Apply also as a barrier across the line of advance when grasshoppers are invading the crop.
Young Plants of Vegetables	Cutworm ( <i>Agrotis spp.</i> )	ALL STATES	700 mL	70 mL	Cole Crop 5 days	Apply immediately infestation is observed. Increase concentration to compensate if application is below 100 L/ha. Spray should cover soil out to at least 20cm on both sides of row crop. Re-treat as necessary.
	Field Crickets ( <i>Telegrillus commodus</i> ), Mole Crickets ( <i>Gryllotalpha spp.</i> )	QLD, WA ONLY	100 mL/10 kg bran bait	-	-	Apply as pest population indicates. See General Instructions on preparation of bran baits.

CROP/ SITUATION	INSECT	STATE	RATE Vol/ha	Withholding Period	CRITICAL COMMENTS
Cereals, pasture, forage crops	Southern armyworm, Common armyworm	ALL STATES	700 or 900 mL	Cereals – 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. <b>Late stage instar:</b> Use higher rate when larvae 3cm in length. Apply follow-up treatment as required.
Cereals	Pasture webworm	NSW, VIC, TAS, SA ONLY	700 mL		Spray at first sign of damage. Apply with ground-rig boom, mister or by air <b>Pre-plant:</b> Apply with the label rate of an approved tillage herbicide to foliage prior to any cultivation <b>Post-emergence:</b> Apply at first sign of damage. Apply with ground-rig boom, mister or by air.
		WA ONLY	300 mL		
Cereals, pasture young plants of oil seeds	Cutworm	QLD, NSW, TAS, WA ONLY	900 mL, in a minimum of 100L water		Apply immediately infestation is observed. Apply follow-up treatments as required.
		VIC ONLY	70 0mL in a minimum of 100 L water		
Cereals, pasture, oil seeds	Cutworm ( <i>Agrotis munda</i> and <i>A. infusa</i> )	SA, WA ONLY			
Cereals	Cereal curculio	SA, WA ONLY	120 mL/100 kg seed	N/A	Apply as a seed dressing just prior to sowing through an accurately calibrated applicator. <b>Note:</b> A sowing rate of 95kg/ha (min) is necessary to ensure economic responses are achieved.
Cereals, pasture, forage crops	Spur-throated locust	QLD, NSW, VIC, WA ONLY	1.25 or 1.5 L	Cereals – 10 days Grazing – 2 days	Spray areas of crop or pasture infested with locusts. Apply spray to trees or roosting sites to control swarming adult locusts. <b>Late stage hoppers and adults:</b> Use higher rate <b>Adults:</b> Spray areas of crop or pasture infested with locusts <b>Hoppers:</b> Spray a swath in advance of marching band and then spray along the dense marching front. Continue spraying until all hoppers have been contacted. <b>Adults:</b> Spray areas of crop or pasture infested with locusts. <b>Hoppers:</b> Spray a swath in advance of marching bank and then spray along the dense marching front. Continue spraying until all hopper have been contacted. Spray areas of crop, trees and roosting sites infested with locust.
	Australian plague locust	VIC ONLY	560 mL		
			350 mL		
		SA ONLY	560 mL		
		QLD, NSW, WA ONLY	350 mL		
	Migratory Locust	QLD, WA ONLY			
	Blue oat mite	ALL STATES	140 mL		
Redlegged earth mite	NSW, VIC, WA, SA, TAS ONLY	70 mL			
	Lucerne flea				
Cereals, pasture, oil seeds	Wingless grasshopper	NSW, VIC, TAS, SA ONLY	500 mL		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. <b>DO NOT</b> spray if rain is imminent. Spray area of crop or pasture infested with grasshoppers. Apply also as a barrier across the line of advance, when grasshoppers are invading the crop.

Field peas, broad beans, chickpeas, lupins, lucerne, lucerne pastures and clover seed crops. Rapeseed, linseed, safflower, wheat, oats, barley, rye, triticale. Improved annual pastures, establishing perennial pastures	Blue oat mite, Redlegged earth mite	NSW, WA ONLY	140-300 mL	Cereals – 10 days Grazing – 2 days	Apply as a ground spray immediately prior to seedling emergence using sufficient water to give good coverage. If mite activity is severe, also spray headlands and surrounding vegetation prior to seedling emergence.
Cotton (young plants)	Cutworm	QLD, NSW, WA ONLY	900 mL in a minimum of 100 L water	DO NOT harvest for 4 weeks after application.	Apply immediately infestation is observed. Apply follow-up treatments as required.
Cotton	Southern armyworm, Common armyworm		700 or 900 mL	DO NOT graze or cut for stockfood for 4 weeks after application.	Spray over total crop area when infestation is widespread. When pests are moving as an "army" treat broad strip over and in advance of the infestation. <b>Late stage instar:</b> Use higher rate when larvae 3cm in length. Apply follow-up treatments as required.
	Pink spotted bollworm moth	QLD, WA ONLY	1 L		Apply when 10 – 15 moths are trapped on two consecutive nights. This prevents infestation of bolls by larvae.
	Spur throated locust	QLD, NSW, WA ONLY	1.25 or 1.5 L		Spray areas of crop infested with locusts. Apply spray to trees or roosting sites to control swarming adult locusts. <b>Late stage instar:</b> Use higher rate
	Wingless grasshopper		500 mL		Spray areas of crop infested with grasshoppers. Apply also as a barrier across the line of advance when grasshoppers are invading the crop.
	Cotton aphid		300 or 400 mL		Apply when pests first appear. Re-spray as indicated by field inspection. Use higher rate for higher populations.
	Cotton flea beetle, Red shouldered leaf beetle		900 mL or 1.5 L		Apply when pests are present. Use higher rate under heavy pest pressure.
	Springtails		300 mL		Spray when large numbers of pests occur, and damage is evident. Re-spray as necessary.
	Migratory locust	QLD, WA ONLY	350 mL		Spray areas of crop, trees and roosting sites infested with locusts.
	Wireworm, False wireworm	QLD, NSW, WA ONLY	In-furrow: 5 to 15 mL/100m row <u>or</u> 500 mL to 1.5 L/ha for tow spacing of 1 metre		Use higher rate with extreme population numbers. See General Instructions on soil application.



Lucerne (young plants)	Cutworm	QLD, NSW, TAS, WA ONLY	900 mL in a minimum of 100 L water	Grazing – 2 days	Apply immediately infestation is observed. Apply follow-up treatments as required.
	Cutworm ( <i>Agrotis munda</i> and <i>A. infusa</i> )	VIC ONLY SA, WA ONLY	700 mL in a minimum of 100 L water		
Lucerne	Webspinner caterpillar	QLD, NSW, WA ONLY	700 mL		Spray when pests appear.
	Lucerne leafroller		300 or 400 mL		Apply when pests first appear. <b>Late stage instar:</b> use higher rate when larvae 1.5cm in length are present and/or under heavy pest pressure.
Lucerne and medics in pasture and forage crops	Spotted alfalfa aphid Bluegreen aphid	NSW ONLY	200 or 300 mL		Spray when pests first appear. Use the higher rate when large numbers of aphids are invading the crop.
		QLD, VIC, TAS, SA, WA ONLY			Seedling lucerne, medics: apply when 1 – 2 aphids/plant are observed. Established lucerne, medics: apply when 20-40 aphids/stem are observed.
	Pea aphid	QLD, NSW, VIC, TAS, SA, WA ONLY			
	Sitona weevil	NSW, VIC, TAS, SA, WA ONLY	350 mL		Apply October to December, or in autumn when adults occur in damaging numbers.

Maize	African black beetle	NSW, WA ONLY	20 mL/100m of row <u>or</u> 2 L/ha for row spacing of 1 metre	N/A	Apply at sowing as a 15 – 20cm band spray. For best results spray nozzles should be in front of press wheels on planter. Press wheels assist in establishment.
Maize, soybeans, sunflower	False wireworm, Cockroaches, Field crickets	QLD, WA ONLY	100 mL + 125mL sunflower oil/2.5kg cracked wheat <u>or</u> cracked sorghum bait/ha		Apply at planting of crop. See General Instructions on preparation of cracked wheat or sorghum bait
Maize, sunflower	Wireworm False wireworm	QLD, NSW, WA ONLY	In-furrow: 5 to 15 mL/100m row <u>or</u> 500 mL to 1.5 L/ha for row spacing of 1 metre		Use higher rate with extreme population numbers. See General Instructions on soil application
Pasture	Lawn armyworm		700 mL	Grazing – 2 days	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. Apply follow-up treatments as required.
	Sod webworm	QLD, WA ONLY			Spray as early as possible once pests appear. Apply with ground-rig boom or mister. Re-spray as necessary.
	Blackheaded pasture cockchafer	NSW, VIC, TAS, SA, WA ONLY	900 mL		Treat when larvae are actively foraging as indicated by numerous piles of fresh soil, or casts on the surface. This usually occurs after showers of rain following short dry spells. Apply by ground-rig boom.
Pasture, forage crops	Underground grass grub	NSW, VIC, SA, WA ONLY			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	NSW, VIC, TAS, SA, WA ONLY	700 mL		Spray at first sign of pasture infestation.
	Pasture webworm				Spray at first sign of damage. Apply with ground-rig boom, mister or by air.
Rapeseed	Wireworm, False wireworm	QLD, WA ONLY	1 or 1.5 L/ha	N/A	Apply as a broadcast application. Use higher rate with extreme population numbers. See General Instructions on soil application.
Rice	Bloodworm	NSW, WA ONLY	60 or 150 mL	10 days	Use higher rate when water more than 15cm or amount of decaying plant material is high.
	Brown planthopper	QLD, WA ONLY	1.5 L		Apply when pest numbers reach 1-2 per tiller and repeat as necessary.

Sorghum <b>Note:</b> (Do not use on Sugar Drip or Alpha sorghum. Check new varieties before applying to entire crop)	Southern armyworm Common armyworm	QLD, NSW, WA ONLY	700 or 900 mL	Grazing – 2 days Harvest – 2 days	Spray over total crop area when infestation is widespread. When nests are moving as an “army” treat a broad strip over and in advance of the infestation. <b>Late stage instar:</b> Use higher rate when larvae 3 cm in length. Apply follow-up treatments as required.
	Cutworm		900 mL in a minimum of 100 L water		Apply immediately infestation is observed. Apply follow-up treatments as required.
	Spur-throated locust		1.25 or 1.5 L		Spray areas of crop infested with locusts. Apply spray to trees or roosting sites to control swarming adult locusts. <b>Late stage instar:</b> use higher rate.
	Australian plague locust		350 mL		<b>Adults:</b> Spray areas of crop infested with locusts. <b>Hoppers:</b> Spray a swath in advance of marching band and the dense marching front. Continue spraying until all hoppers have been contacted.
	Migratory locust	QLD, WA ONLY			Spray areas of crop, trees and roosting sites infested with locusts.
	Sorghum midge	QLD, NSW, WA ONLY	500 mL		Check regularly (preferably in the morning) and apply when 1 –2 midge per head are present from first emergence of boot to pollen shedding. With repeated attack, spray at intervals of 5 days or less.
	Wireworm False wireworm	QLD, NSW, WA ONLY	In-furrow: 5 to 15 mL/100m row <u>or</u> 500 mL to 1.5 L/ha for row spacing of 1 metre	N/A	Use high rate with extreme population numbers. See General Instructions on soil application.
	Corn aphid		500 mL	2 days Grazing – 2 days	Apply when damaging populations of aphids occur.
False wireworm, Cockroaches, Field Crickets	QLD, WA ONLY	100 mL + 125 mL Sunflower oil/2.5 kg cracked wheat <u>or</u> cracked sorghum bait/ha	Apply at planting of crop. See General Instructions on preparation of cracked wheat or cracked sorghum bait.		

Sugarcane	Southern armyworm Common armyworm	QLD, WA ONLY	700 or 900 mL	7 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. <b>Late stage instar:</b> Use higher rate when larvae 3 cm in length. Apply follow-up treatments as required.
	Spur-throated locust		1.25 or 1.5 L		Spray areas of crop infested with locusts. Apply spray to trees or roosting sites to control swarming adult locusts. <b>Late stage hoppers and adults:</b> use higher rate.
	Australian plague locust, Migratory locust		350 mL		<b>Adults:</b> Spray areas of crop infested with locusts. <b>Hoppers:</b> Spray in a swath in advance of marching band and then spray along the dense marching front. Continue spraying until all hoppers have been contacted.
	Symphylids		2 L		Spray areas of crop, trees and roosting sites infested with locusts.
	Sugarcane wireworm	QLD, NSW, WA ONLY	1.5 L		Apply as a low pressure (less than 35kPa) or gravity feed spray onto the plant sett and adjacent to soil, at the point of exit from the rear of the planting machine, immediately prior to soil cover being brought in over the sett.
	African Black Beetle Black beetle	NSW, WA ONLY	1.5 L		Apply at planting or ratooning. Apply as a low pressure (less than 35kPa) or gravity feed spray onto the plant sett and adjacent soil through a nozzle placed above the planter boards. Repeat treatment within 12 weeks of planting if black beetles re-occur.
Tobacco	Wireworm, False wireworm, Cutworm	VIC, WA ONLY	3 L		Apply as a pre-plant spray to cultivated soil surface. Incorporate immediately by rotary hoeing to a depth of 10cm

Turf  <b>Not in residential/home/public spaces</b>	Funnel Ant	Qld, NSW, ACT only	2.0 L/ha or 5 mL/5 L spot spray	Do not feed turf/lawn clippings from area to poultry or livestock	For spot spraying, apply 30 mL spray to each mound. In areas of high density, a repeat application may be necessary to ensure thorough mound coverage. <b>DO NOT GRAZE TREATED TURF OR FEED TREATED GRASS CLIPPINGS TO ANIMALS.</b>
	African Black Beetle	Qld, NSW, ACT, Vic, WA only	6.0 L/ha or 60 mL/100m <sup>2</sup>		Apply to lawn when pests appear. Water in immediately after application
	Argentine Stem Weevil	NSw, ACT, Vic, Tas, SA, WA only	4.0 L/ha or 40 mL/100m <sup>2</sup>		Lightly water following application. Apply as late in the day as possible.
	Blackheaded Pasture Cockchafer		900 mL/ha or 9 mL/100m <sup>2</sup>		Use sufficient water to give even coverage. Apply as late in the day as possible.
	Brown Pasture Looper		700 mL/ha or 7 mL/100m <sup>2</sup>		Apply when pests first appear.
	Pasture Webworm				Spray at first sign of damage. Apply with ground-rig boom or mister. Apply as late in the day as possible.
	Lawn Armyworm	Qld, NSW, ACT, Vic, SA, WA only	900 mL/ha or 9 mL/100m <sup>2</sup>		Spray over total lawn area when infestation is present. When pests are moving, treat strip over and in advance of infestation. Apply follow-up treatments as required.
	Sod Webworm	All States			Apply as soon as pests appear. Repeat as required.
	Underground Grass Grub	NSW, ACT, Vic, SA, WA only			Apply when caterpillars are actively feeding. Spray before noticeable damage has occurred. Apply as late in the day as possible.
Crickets	Qld only	20 mL/20 L	Apply as required preferably late in the day.		
<b>SITUATION</b>	<b>INSECT</b>	<b>STATE</b>	<b>RATE</b>	<b>WITHHOLDING PERIOD</b>	<b>CRITICAL COMMENTS</b>
Agricultural, commercial and industrial areas  <b>Not in residential/home/public spaces</b>	Argentine Ant	ALL STATES	1 L/100 L water	N/A	Spray ant tracts, nests or where ant activity is noticed. Apply to paths in continuous 30cm bands. Apply to base of building walls, fences, rockwork trunks or shrubs and trees, and other hard surfaces to a height of 30cm.  <b>Note:</b> All occurrences of Argentine ants are to be reported to WA Department of Agriculture.

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

## WITHHOLDING PERIODS:

DO NOT graze or cut cereals, pastures or forage crops for stock food for 2 days after application.

Cotton: DO NOT harvest for 4 weeks after application.  
DO NOT graze or cut for stockfood for 4 weeks after application.

DO NOT spray the following crops later than the number of days shown, before harvest:

Mango	21 days
Banana, Citrus, Grape Vines, Kiwifruit, Pome Fruit, Stone Fruit, Asparagus	14 days
Cereal grain crops	10 days
Avocado, Sugarcane	7 days
Cole crops, cucurbits	5 days
Tomatoes	3 days
Sorghum grain crops	2 days

## GENERAL INSTRUCTIONS

Before opening carefully read Directions for use, Precautionary Statements, Safety Directions, First Aid Instructions and attached leaflet.

## MIXING

Measure out the required amount of Sinon Chlorpyrifos 500 and add directly to the spray vat with agitation.

## 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, azinophos-methyl, carbaryl, cypermethrin, deltamethrin, demeton-S-methyl, diazinon, dichlorvos, dicofol, dimethoate, endosulfan, ethion, fenvalerate, maldison, methidathion, methomyl, monocrotophos, oils, oxythinox, parathion, phosalone phosmet tetradifon, trichlorfon.

Fungicides: Benomyl, chlorothalonil, thiram, triadimefon, zineb, ziram.

Fertilisers: Diammonium phosphate, limestone, miloreanite, mono-ammonium sulphate, Potash, sulphur coated urea, triple super phosphate, urea.

## INSECTICIDE RESISTANCE WARNING

GROUP	<b>1B</b>	INSECTICIDE
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For insecticide resistance management Sinon Chlorpyrifos 500 Insecticide is a Group 1B insecticide.

Some naturally occurring insect biotypes resistant to Sinon Chlorpyrifos 500 Insecticide 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 Sinon Chlorpyrifos 500 Insecticide or other Group 1B insecticides are used repeatedly. The effectiveness of Sinon Chlorpyrifos 500 Insecticide on resistant individuals could be significantly reduced. Since occurrence of resistant individuals is difficult to detect prior to use, Sinon Australia Pty Ltd accepts no liability for any losses that may result from the failure of Sinon Chlorpyrifos 500 Insecticide to control resistant insects.

Sinon Chlorpyrifos 500 Insecticide may be subject to specific resistance management strategies. For further information contact your local supplier, Sinon representative or local agricultural department agronomist.

## PRECAUTIONS

### RE-ENTRY PERIODS

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.

Cotton Chippers: Do not allow entry into treated areas 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. DO NOT feed grass clippings from treated area to poultry and animals.

## PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

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

DO NOT re-apply to the same crop within 10 days (unless specifically recommended in the directions for use).

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" of the "Pilots and Operators Manual" should be applied.

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, an unsprayed row of orchard trees, or hail netting.

Situation	Recommended buffer Distance (m)
Orchard (dormant trees, citrus, large trees)*	30
Cotton (aerial application)	300
Other crops (aerial application)	100

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

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

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

DO NOT contaminate ponds, waterways and drains with this chemical or used containers.

## STORAGE AND DISPOSAL

Store in closed, original container in a cool, well ventilated area. Do not store for prolonged periods in direct sunlight.

Triple rinse containers before disposal. Add rinsings to spray tank. Do not dispose of undiluted chemicals on site.

If not recycling, break, crush or puncture and deliver empty packaging for appropriate disposal to an approved waste management facility. If an approved waste management facility is not available, bury the empty packaging 500 mm below the surface in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots, in compliance with relevant Local, State or Territory government regulations. DO NOT burn empty containers or product.

This container can be recycled if it is clean, dry, free of visible residues and has the drumMUSTER logo visible.

Triple rinse container before disposal. Dispose of rinsate by adding to the spray tank. Do not dispose of undiluted chemicals on site. Wash outside of the container and the cap. Store cleaned container in a sheltered place with cap removed. It will then be acceptable for recycling at a drumMUSTER collection or similar container management site. The cap should not be replaced but may be taken separately.

## Refillable containers

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

## SAFETY DIRECTIONS:

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. Will irritate the eyes and skin. Avoid contact with eyes and skin. Do not inhale vapour or spray mist. When opening the container, preparing spray and using the prepared spray, wear chemical resistant clothing buttoned to the neck and wrist and washable hat, elbow-length PVC gloves, goggles, 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 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 days use, wash gloves, goggles, contaminated clothing and respirator and if rubber wash with detergent and warm water.

**FIRST AID**

If swallowed, splashed on skin or in eyes, or inhaled, contact a Poisons Information Centre (Phone Australia 131126) or a doctor at once. Remove any contaminated clothing and wash skin thoroughly. If swallowed, activated charcoal may be advised. Give atropine if instructed. If in eyes, hold eyes open, flood with water for at least 15 minutes and see a doctor.

**SAFETY DATA SHEET**

For further information refer to the Safety Data Sheet which is available from the supplier.

**NOTICE TO BUYER**

Seller warrants that the product conforms to its chemical description and is reasonably fit for the purpose stated on the label when used in accordance with directions under normal conditions of use. No warranty of merchantability for a particular purpose, express or implied, extends to the use of the product contrary to label instructions, or under abnormal conditions.