



# POISON

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



Nufarm

# CHLORPYRIFOS 500 EC

**INSECTICIDE**

ACTIVE CONSTITUENT: 500g/L CHLORPYRIFOS  
(an anti-cholinesterase compound)  
SOLVENT: 480g/L LIQUID HYDROCARBONS

## GROUP 1 B INSECTICIDE

For the control of a wide range of insect pests on fruit, vegetables, oilseeds, cotton, cereals, pasture, turf and other situations as specified in the Directions For Use table.

IMPORTANT: READ THE ATTACHED LEAFLET  
BEFORE USING THIS PRODUCT.

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

### Contents: 5 Litres



Nufarm Australia Limited  
ACN 004 377 780  
103-105 Pipe Road  
Laverton Nth Vic 3026  
Tel: (03) 9282 1000  
Fax: (03) 9282 1001



**GENERAL INSTRUCTIONS:**

Before opening, carefully read Directions for Use, Precautionary Statements, Safety Directions and First Aid Instructions.

**STORAGE AND DISPOSAL:**

Store in closed, original container 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 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should NOT be burnt.

**SAFETY DIRECTIONS:**

Product is poisonous if absorbed by skin contact, inhaled or swallowed. 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 cotton overalls buttoned to the neck and wrist, 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.

**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, do NOT induce vomiting, give a glass of water, 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.

**MATERIAL SAFETY DATA SHEET**

For further information refer to the Material Safety Data Sheet (MSDS) which can be obtained from your supplier or the Nufarm website – [www.nufarm.com.au](http://www.nufarm.com.au)

**CONDITIONS OF SALE:**

"Any provisions or rights under the Trade Practices Act 1974 or relevant state legislation which cannot be excluded by those statutes or by law are not intended to be excluded by these conditions of sale. Subject to the foregoing, all warranties, conditions, rights and remedies, expressed or implied under common law, statute or otherwise, in relation to the sale, supply, use or application of this product, are excluded. Nufarm Australia Limited and/or its affiliates ("Nufarm") shall not accept any liability whatsoever (including consequential loss), or howsoever arising (including negligence) for any damage, injury or death connected with the sale, supply, use or application of this product except for liability which cannot be excluded by statute."

APVMA Approval No.: 32902/5L/0809

**In case of emergency: Phone (1 800) 033 498**

Ask for the shift supervisor. Toll free 24 hours.

Batch No.:

Date of Manufacture:



**ORGANOPHOSPHORUS PESTICIDES, LIQUID,  
TOXIC, N.O.S. (CONTAINS CHLORPYRIFOS)**

**UN No: 3018**

**PACKAGING GROUP: III**

**HAZCHEM: 2 X**

**IN AN EMERGENCY DIAL:  
000 POLICE OR FIRE BRIGADE**

**IN AN EMERGENCY, SPECIALIST ADVICE  
NUFARM AUSTRALIA LIMITED 1800 033 498**



OD019065

**GENERAL INSTRUCTIONS:**

Before opening, carefully read Directions for Use, Precautionary Statements, Safety Directions and First Aid Instructions.

**STORAGE AND DISPOSAL:**

Store in closed, original container 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 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should NOT be burnt.

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APVMA Approval No.: 32902/20L/0809

**In case of emergency:**

Phone (1 800) 033 498

Ask for the shift supervisor.

Toll free 24 hours.

Batch No.:

Date of Manufacture:



OD019065



Nufarm

# CHLORPYRIFOS 500 EC

## INSECTICIDE

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



ACTIVE CONSTITUENT: 500g/L CHLORPYRIFOS  
(an anti-cholinesterase compound)  
SOLVENT: 480g/L LIQUID HYDROCARBONS

### GROUP 1 B INSECTICIDE

For control of a wide range of insect pests on fruit, vegetables, oilseeds, cotton, cereals, pasture, turf and other situations as specified in the Directions For Use table.

IMPORTANT: READ THE ATTACHED BOOKLET BEFORE USING THIS PRODUCT.

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

**Contents: 20 Litres**



Nufarm Australia Limited  
ACN 004 377 780  
103-105 Pipe Road  
Laverton Nth Vic 3026  
Tel: (03) 9282 1000  
Fax: (03) 9282 1001



ORGANOPHOSPHORUS  
PESTICIDES, LIQUID, TOXIC, N.O.S.  
(CONTAINS CHLORPYRIFOS)

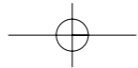
UN No: 3018

PACKAGING GROUP: III

HAZCHEM: 2 X

IN AN EMERGENCY DIAL:  
000 POLICE OR FIRE BRIGADE

IN AN EMERGENCY,  
SPECIALIST ADVICE NUFARM  
AUSTRALIA LIMITED 1800 033 498



**GENERAL INSTRUCTIONS:**  
Before opening, carefully read Directions for Use, Precautionary Statements, Safety Directions and First Aid Instructions.

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

**SAFETY DIRECTIONS:**  
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APVMA Approval No.: 32902/110L/0809

**In case of emergency:**  
Phone (1 800) 033 498  
Ask for the shift supervisor.  
Toll free 24 hours.  
Batch No.:  
DOM:



OD019065

Nufarm

# CHLORPYRIFOS 500 EC

## INSECTICIDE

**POISON**  
KEEP OUT OF REACH OF CHILDREN  
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ACTIVE CONSTITUENT: 500g/L CHLORPYRIFOS  
(an anti-cholinesterase compound)  
SOLVENT: 480g/L LIQUID HYDROCARBONS

**GROUP 1 B INSECTICIDE**

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Contents: 110 Litres



Nufarm Australia Limited  
ACN 004 377 780  
103-105 Pipe Road  
Laverton Nth Vic 3026  
Tel: (03) 9282 1000  
Fax: (03) 9282 1001



ORGANOPHOSPHORUS  
PESTICIDES, LIQUID,  
TOXIC, N.O.S. (CONTAINS  
CHLORPYRIFOS)

UN No: 3018

PACKAGING GROUP: III

HAZCHEM: 2 X

IN AN EMERGENCY  
DIAL: 000 POLICE OR  
FIRE BRIGADE

IN AN EMERGENCY,  
SPECIALIST ADVICE  
NUFARM AUSTRALIA  
LIMITED 1800 033 498



**GENERAL INSTRUCTIONS:**

Before opening, carefully read Directions for Use, Precautionary Statements, Safety Directions and First Aid Instructions.

**STORAGE AND DISPOSAL:**

Store in the closed, original container in a locked room or place away from children, animals, food, feedstuffs, seed and fertilisers. DO NOT re-use container. Triple or preferably pressure rinse containers before disposal. Add rinsings to spray tank. DO NOT dispose of undiluted chemicals on-site. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling break, crush or puncture and bury empty containers in a local authority landfill. If no landfill is available, bury the containers below 500 mm in 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. Empty contents fully into application equipment. Close all valves and return to point of sale for refill or storage.

**SAFETY DIRECTIONS:**

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APVMA Approval No.: 32902/1000L/0809

**In case of emergency:**

Phone (1 800) 033 498

Ask for the shift supervisor.

Toll free 24 hours.

Batch No.:

DOM:



OD019065

Nufarm

# CHLORPYRIFOS 500 EC

## INSECTICIDE

**POISON**  
KEEP OUT OF REACH OF CHILDREN  
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OPENING OR USING

ACTIVE CONSTITUENT: 500g/L CHLORPYRIFOS  
(an anti-cholinesterase compound)  
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**GROUP 1 B INSECTICIDE**

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HOUSEHOLDERS. HOUSEHOLDERS MUST NOT USE  
THIS PRODUCT IN OR AROUND THE HOME.

**Contents: 1000 Litres**



Nufarm Australia Limited  
ACN 004 377 780  
103-105 Pipe Road  
Laverton Nth Vic 3026  
Tel: (03) 9282 1000  
Fax: (03) 9282 1001

**ORGANOPHOSPHORUS  
PESTICIDES, LIQUID,  
TOXIC, N.O.S. (CONTAINS  
CHLORPYRIFOS)**

**UN No: 3018**

**PACKAGING GROUP: III**

**HAZCHEM: 2 X**

**IN AN EMERGENCY  
DIAL: 000 POLICE OR  
FIRE BRIGADE**

**IN AN EMERGENCY,  
SPECIALIST ADVICE  
NUFARM AUSTRALIA  
LIMITED 1800 033 498**



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

**Nufarm**

# **Chlorpyrifos**

## **500 EC**

**Insecticide**

**ACTIVE CONSTITUENT: 500g/L CHLORPYRIFOS**  
**(an anti-cholinesterase compound)**  
**SOLVENT: 480g/L LIQUID HYDROCARBONS**

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**IMPORTANT: READ THOROUGHLY BEFORE USING THE PRODUCT.**

Nufarm Australia Limited  
ACN 004 377 780

APVMA Approval No.: 32902/0809



103-105 Pipe Road  
Laverton North, Vic. 3026  
Tel: (03) 9282 1000  
Fax: (03) 9282 1001

## DIRECTIONS FOR USE

### 1. TREE AND VINE CROPS

Rate				
This table shows rates for <b>dilute spraying</b> . For <b>concentrate spraying</b> , refer to the <b>Mixing/Application</b> section.				
Crop	Insect	State	Rate	
			Vol/ha	Vol/100L
Apples, Pears	San Jose scale	NSW, SA, WA, Qld only	-	100mL (2% miscible winter oil may be added to the dormant spray)
	Woolly aphid			
	Mealy bugs	SA, WA only		
Avocado	Avocado leafroller, Ivy leafroller	Qld, WA only	1 or 2L	50 or 100 mL
	Ivy leafroller	NSW, WA only		
	Latania scale, Hairy caterpillars, Light brown apple moth, Redshouldered leaf beetle			

Critical Comments	
For all uses in this table: Apply by dilute or concentrate spraying equipment. Apply the same total amount of product to the target crop whether applying this product by dilute or concentrate spraying methods.	
Withholding Period <sup>1</sup>	Critical Comments
14 days	<b>Dormant period:</b> Apply as late as possible ensuring thorough coverage of limbs and branches. <b>Seasonal period:</b> Apply to coincide with crawler activity in mid-late November and later as necessary. Ensure thorough coverage of branches, foliage and fruit.
	Apply when infestation build-up is first noticed ensuring thorough coverage.
	Apply initially at petal fall and then 10-14 days later. Apply a follow-up application if necessary, 2-3 weeks prior to harvest. Ensure thorough coverage of all branches, foliage and fruit.
7 days	Use this rate in tank mix with 1L/ha (500 mL/100 L 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.
	Apply at first sign of pest activity before larvae move to fruit. Use higher rate when populations are high.
	Apply when populations indicate treatment is required. Spot spray affected trees only. Repeat as necessary. Use higher rate when populations are high.

## DIRECTIONS FOR USE CONTINUED

## 1. TREE AND VINE CROPS CONTINUED

Crop	Insect	State	Rate	
			Vol/ha	Vol/100L
Citrus	California red scale ( <i>Aonidiella aurantii</i> )	NSW, Vic, SA, WA only	–	100 mL alone or 50 mL + 1 L miscible summer spraying oil
		Qld only		100 mL alone or 100 mL + 1 L miscible summer spraying oil
Citrus, Pome Fruit	Wingless grasshopper	NSW, Vic, Tas, SA, WA only	500 mL	50 mL
Grape Vines	Light brown apple moth	All States	–	100 mL alone or 50 mL plus 1 L miscible winter oil
	Grapevine moth ( <i>Phalaenoides glyciniae</i> )	Qld, Tas, NSW, SA, WA only		
	Grapevine scale ( <i>Parthenolecanium persicae</i> )			
Kiwifruit	Common armyworm, Southern armyworm, Light brown apple moth	NSW, Vic, WA, SA, Tas, Qld only		50 mL
Mango	Common mango scale	Qld, WA only		100 mL
Stonefruit con't over	European earwig	NSW, WA, only	2L	

Withholding Period <sup>1</sup>	Critical Comments
14 days	Apply during November-March period. Two sprays may be required under conditions of heavy scale infestation. Apply with high volume sprayer to point of runoff. <b>Note: Do not use on citrus in areas where integrated control programmes are in operation.</b>
	Spray areas of crop infested with grasshoppers. Apply also as a barrier across the line of advance, when grasshoppers are invading the crop.
	Apply initial spray just after berry set (early October). Later schedule sprays should be made as required.
	Apply as a dormant spray, post pruning (July).
	Apply at green tip at least 10 days after dormant lime sulphur application and at pre-blossom. DO NOT apply post blossom.
21 days	Apply to coincide with crawler activity. Ensure thorough coverage of all branches, foliage and fruit.
14 days	<b>Spray Application:</b> Apply in a minimum of 2000L/ha in spring. If lower volume used increase concentration to apply 2L of product/ha.



## DIRECTIONS FOR USE CONTINUED

## 1. TREE AND VINE CROPS CONTINUED

Crop	Insect	State	Rate	
			Vol/ha	Vol/100L
Stonefruit continued	European earwig	NSW, WA, Tas, SA only	200 mL + 250 mL sunflower oil/5 kg cracked wheat or cracked sorghum	100 mL
	San Jose scale	Qld, WA, NSW only	–	100 mL (2% miscible winter oil may be added to the dormant spray)

## 2. FRUIT AND VEGETABLES

Crop	Insect	State	Rate	
			Vol/ha	Vol/100L
Bananas	Banana scab moth ( <i>Nacoleia octasema</i> )	Qld, WA only	<b>Aerial</b> 1 or 2 L in a minimum of 10 L water	200 mL in a minimum of 500 L water/ha
	Banana weevil borer	Qld, NSW, WA only	–	1 or 1.8 L
	Caterpillars	NSW only	–	200 mL

Withholding Period <sup>1</sup>	Critical Comments
14 days	<b>Bait Application:</b> Apply 5 kg of bait/ha in spring by fertiliser spreader. See General Instructions on preparation of cracked wheat or cracked sorghum bait.
	<b>Dormant Period:</b> Apply as late as possible ensuring thorough coverage of all branches. <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. <b>Note: Some fruit marking may occur if spraying is carried out under hot, dry conditions.</b>

Withholding Period <sup>1</sup>	Critical Comments
14 days	Apply from the first appearance of flower bell and repeat as populations indicate until fingers are exposed. Use high rate with onset of wet weather and/or heavy insect pressure. <b>Note: Burning of young fruit may occur under poor drying conditions.</b>
	After removal of trash, apply 500-700mL of spray depending on butt size, to the lower 30 cm of the butt and to the surrounding soil within a radius of 30 cm, ensuring thorough coverage of butt and suckers. <b>Sub-tropical areas:</b> Use high rate for annual control of borers. <b>Tropical areas:</b> Use high rate in September-November for initial spray and follow-up with low rate in February-April should insect pressure warrant a second application.
	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.

## DIRECTIONS FOR USE CONTINUED

## 2. FRUIT AND VEGETABLES CONTINUED

Crop	Insect	State	Rate	
			Vol/ha	Vol/100L
<b>Cabbage, Cauliflower</b>	African black beetle	NSW, WA only	2 L (Boom Spray)	300 mL (Drench)
<b>Carrots</b>	Light brown apple moth	All States	500 or 700 mL	–
<b>Cassava</b>	Cutworm ( <i>Agrotis spp.</i> )	Qld, WA only	700 mL	
<b>Cole Crops including Cabbage, Cauliflower, Brussel Sprouts, Broccoli</b>	Cabbage moth, Cabbage white butterfly, Cabbage aphid, Cluster caterpillar, Cabbage cluster caterpillar	NSW, Vic, Tas, SA, WA only	1.5 or 2 L	150 or 200 mL
	Corn earworm, Native budworm ( <i>Helicoverpa spp.</i> )	Qld, WA only	1.5 L	150 mL
	Corn earworm	NSW, Vic, SA, WA only	1.5 or 2 L	150 or 200 mL
	Native budworm ( <i>Helicoverpa punctiger</i> )	NSW, Vic, Tas, SA, WA only		
	Wingless grasshopper		500 mL	50 mL
	Redlegged earth mite, Blue oat mite	NSW, WA only	140 or 300 mL	–
<b>Cucurbits</b>	White flies		–	50 mL

Withholding Period <sup>1</sup>	Critical Comments
5 days	<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 100 mL of diluted spray to base of each plant. Treat as soon as the first signs of infestation are observed. <b>Note: If attack is prolonged follow up boom spray or drench treatment may be necessary.</b>
–	Apply when moths are first detected. Repeat at the higher rate if there is a re-occurrence of infestation. Apply to seedlings and soil at base of seedlings when cutworm activity is observed.
5 days	Spray at 10-14 day intervals. Use high rate under heavy pressure. <b>Large plants:</b> Use 1,000 L spray/ha. To improve spray coverage add non-ionic wetting agents as recommended. Apply as pests indicate commencing when pests first appear. <b>Large plants:</b> Use 1,000 L spray/ha. Apply at 10-14 day intervals. Use high rate under heavy pest pressure. <b>Large plants:</b> Use 1,000 L spray/ha. Apply at 10 day intervals commencing when pests first appear. Apply at 7 day intervals under heavy pest pressure. <b>Large plants:</b> Use 1,000 L spray/ha. Spray areas of crop infested with grasshoppers. Also apply as a barrier across the line of advance, when grasshoppers are invading the crop. Use higher rate for severe infestations. Headlands and vegetation surrounding the crop may also need to be sprayed. Apply when pest is first detected. If required repeat application every 10-14 days.

## DIRECTIONS FOR USE CONTINUED

## 2. FRUIT AND VEGETABLES CONTINUED

Crop	Insect	State	Rate	
			Vol/ha	Vol/100L
Ginger	Cutworm ( <i>Agrotis spp.</i> )	Qld, WA only	700 or 900 mL	–
Pineapples	Pineapple mealybug, Ants		–	50 or 100 mL
	White grubs		5 L	–
Potatoes	African black beetle	NSW, WA only	3-6 L	–
			900mL	
	Whitefringed weevil	NSW, Vic, WA only	6 L	
		WA, NSW only	1 L	
Wireworms	Vic, WA only	6 L		
Strawberries	Field crickets ( <i>Teleogryllus commodus</i> ), Mole crickets ( <i>Gryllotalpa spp.</i> )	Qld, WA only	100 mL/10kg bran <sup>2</sup>	
Silver Beet	Redlegged earth mite, Blue oat mite	NSW, Tas, WA only	140 or 300 mL	

Withholding Period <sup>1</sup>	Critical Comments
–	Apply when pest population is evident from damage to the primary shoot at or below ground, or to the first leaf during growth.
	Apply when pests are first seen and repeat at 90 day intervals or as necessary. Use a minimum of 3000 L of spray/ha. Use higher rate under heavy pest pressure.
	Apply as a pre-plant spray to a freshly cultivated soil surface. Incorporate immediately by rotary hoeing to a depth of 10-20 cm.
	Apply the spray to the soil immediately prior to planting, ensuring thorough incorporation to a depth of 15 cm. Use high rate under heavy pest pressure.
	Apply as a second spray as bands on either side of plants at final hilling-up. Ensure good incorporation of the spray immediately into the soil in the hill.
	Apply pre-plant and incorporate into the soil immediately after application.
	Apply at hilling-up or 7 weeks after planting as a follow-up to pre-plant incorporation.
	Apply as a band spray to the soil surface incorporating immediately. Use before planting in areas where wireworms are a known problem.
	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. <b>See General Instructions for preparation of bran baits.</b>
	Use higher rate for severe infestations. Headlands and vegetation surrounding the crop may also need to be treated.

## DIRECTIONS FOR USE CONTINUED

## 2. FRUIT AND VEGETABLES CONTINUED

Crop	Insect	State	Rate	
			Vol/ha	Vol/100L
Tomatoes	Tomato grub ( <i>Helicoverpa armiger</i> )	Qld, Vic, NSW, WA only	1.5 or 2 L	150 or 200 mL
	Native budworm ( <i>Helicoverpa punctiger</i> )	Tas, WA only		
	Green vegetable bug	Tas, SA, WA only		
	Green peach aphid	Qld, Vic, Tas, SA, WA only	1 L	100 mL
	Wingless grasshopper	NSW, Vic, Tas, SA, WA only	500 mL	50 mL
	African black beetle	NSW only	2 L (Boom Spray)	300 mL (Drench)

Withholding Period <sup>1</sup>	Critical Comments
3 days	Spray on 7-10 days schedule commencing at flowering. Use high rate under heavy pest pressure.
	Spray at first sign of bug activity. Use higher rate under heavy pest pressure.
	Spray when aphids are seen. <b>Large Plants:</b> Use 1,000 L spray/ha.
	Spray areas of crop infested with grasshoppers. Also apply as a barrier across the line of advance, when grasshoppers are invading the crop.
-	<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 100 mL of diluted spray to base of each plant. Treat as soon as first sign of infestation is noticed. <b>Note: If attack is prolonged follow up boom spray or drench treatment may be necessary.</b>

## DIRECTIONS FOR USE CONTINUED

## 2. FRUIT AND VEGETABLES CONTINUED

Crop	Insect	State	Rate	
			Vol/ha	Vol/100L
Vegetables <sup>3</sup> including asparagus, beans, beetroot, broccoli, brussels sprouts, cabbage, cauliflower, capsicum, carrot, celery, eggplant, onion, peas, potato, radish, rhubarb, shallot, sweet potato, tomato, turnip	Wingless grasshopper	NSW, Vic, Tas, SA, WA only	500 mL	50 mL
	Cutworm ( <i>Agrotis spp.</i> )	All States	700 mL	70 mL
	Field crickets ( <i>Teleogryllus commodus</i> ), Mole crickets ( <i>Gryllotalpa spp.</i> )	Qld, WA only	100 mL/ 10 kg bran <sup>2</sup>	–
	Vegetable weevil	NSW, WA only	800 mL	

## 3. FIELD CROPS AND PASTURE

Crop	Insect	State	Rate Volume/ha
Cereals, Pasture, Forage Crops	Southern armyworm ( <i>Persectania ewingii</i> ), Common armyworm ( <i>Mythimna convecta</i> )	All States	700 or 900 mL
Cereals can't over	Pasture webworm ( <i>Hednota spp.</i> )	NSW, Vic, Tas, SA only	700 mL

Withholding Period <sup>1</sup>	Critical Comments
Tomatoes 3 days	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 Cucurbits 5 days	Apply immediately infestation is observed. Increase concentration to compensate if application is below 1000 L spray/ha. Spray should cover soil out to at least 20 cm on both sides of row crop. Re-treat as necessary.
Asparagus Celery 14 days	Apply as pest populations indicate. <b>See General Instructions on preparation of bran baits.</b>
	Apply immediately infestation is observed. Apply as a band over the young plants and adjacent soil along the row. One treatment should be sufficient if plants are sprayed at the seedling stage or soon afterwards.

Withholding Period <sup>1</sup>	Critical Comments
Cereals 10 days (Harvest)	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 treatment as required.
2 days (Grazing)	Spray at first sign of damage. Apply from the ground with boom or mister or apply by air.

## DIRECTIONS FOR USE CONTINUED

## 3. FIELD CROPS AND PASTURE CONTINUED

Crop	Insect	State	Rate Volume/ha
Cereals continued	Pasture webworm ( <i>Hednota spp.</i> )	WA only	300 mL
Cereals, Pasture, Young Plants of Oil Seeds	Cutworm ( <i>Agrotis spp.</i> )	Qld, Tas, NSW, WA only	900 mL in a minimum of 100 L water
		Vic only	700 mL in a minimum of 100 L water
Cereals, Pasture, Oil Seeds	Cutworm ( <i>Agrotis munda</i> and <i>A. infusa</i> )	SA, WA only	120 mL/100 kg seed
Cereals	Cereal curculio		
Cereals, Pasture, Forage Crops can't over	Spur-throated locust	Qld, Vic, NSW, WA only	1.25 or 1.5 L
	Australian plague locust	Vic only	560 mL
			350 mL
		SA only	560 mL
		Qld, Vic, NSW, WA only	350 mL

Withholding Period <sup>1</sup>	Critical Comments
Cereals 10 days (Harvest)	<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 or mister or by air.
2 days (Grazing)	Apply immediately infestation is observed. Apply follow-up treatments as required.
–	<b>Apply as a seed dressing</b> , through an accurately calibrated applicator just prior to sowing. <b>Note: A sowing rate of 95 kg/ha (min.) is necessary to ensure economic responses are achieved.</b>
Cereals 10 days (Harvest)	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.
2 days (Grazing)	<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 band and then spray along the dense marching front. Continue spraying until all hoppers have been contacted.

## DIRECTIONS FOR USE CONTINUED

## 3. FIELD CROPS AND PASTURE CONTINUED

Crop	Insect	State	Rate Volume/ha
<b>Cereals, Pasture, Forage Crops continued</b>	Migratory locust	Qld, WA only	350 mL
	Blue oat mite	All States	140 mL
	Lucerne flea	NSW, Vic, Tas, SA, WA only	70 mL
	Redlegged earth mite		140 mL
<b>Cereals, Pasture, Oil Seeds</b>	Wingless grasshopper		500 mL
<b>Field Peas, Broad Beans, Chickpeas, Lupins, Lucerne, Lucerne Pastures &amp; Clover Seed Crops, Rapeseed/ Canola, Linseed, Safflower, Wheat, Oats, Barley, Rye, Triticale, Improved Annual Pastures, Established Perennial Pastures</b>	Blue oat mite, Redlegged earth mite	NSW, WA only	140 or 300 mL

Withholding Period <sup>1</sup>	Critical Comments
Cereals 10 days (Harvest)  2 days (Grazing)	Spray areas of crop, trees and roosting sites infested with locusts.
	Spray when pests appear in large numbers, 3-6 weeks after autumn rains. Respray as necessary. Avoid spraying when pests are sheltering. Spray when at least 2.5 cm cover of pasture or crop is present. DO NOT spray if rain is imminent.
	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.
	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.

## DIRECTIONS FOR USE CONTINUED

## 3. FIELD CROPS AND PASTURE CONTINUED

Crop	Insect	State	Rate Volume/ha
Cotton (Young Plants)	Cutworm ( <i>Agrotis spp.</i> )	Qld, NSW, WA only	900 mL in minimum of 100 L water
	Southern armyworm ( <i>Persectania ewingii</i> ), Common armyworm ( <i>Mythimna convecta</i> )		700 or 900 mL
	Pink spotted bollworm moth	Qld, WA only	1 L
	Spur-throated locust	Qld, WA, NSW only	1.25 or 1.5 L
	Wingless grasshopper		500 mL
	Cotton aphid		300 or 400 mL
	Cotton flea beetle, Red shouldered leaf beetle		900 mL or 1.5 L
	Springtails		300 mL
	Migratory locust		Qld, WA only
Hops	Common armyworm ( <i>Mythimna convecta</i> ), Southern armyworm ( <i>Persectania ewingii</i> )	Tas, WA only	160 mL/100 L water
	Light brown apple moth		

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Withholding Period <sup>1</sup>	Critical Comments
4 weeks (Harvest)	Apply immediately infestation is observed. Apply follow-up treatments as required.
4 weeks (Grazing)	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.
	Apply when 10-15 moths are trapped on two consecutive nights. This prevents infestation of bolls by larvae.
	Spray areas of crop infested with locusts. Apply spray to trees or roosting sites to control swarming adult locusts. <b>Late stage hoppers or adults:</b> Use higher rate.
	Spray areas of crop infested with grasshoppers. Apply also as a barrier across the line of advance when grasshoppers are invading the crop.
	Apply when pests first appear. Re-spray as indicated by field inspection. Use higher rate for higher populations.
	Apply when pests are present. Use higher rate under heavy pest pressure.
	Spray when large numbers of pests occur and damage is evident. Re-spray as necessary.
	Spray areas of crop, trees and roosting sites infested with locusts.
–	Apply as pests indicate, commencing when they first appear.

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## DIRECTIONS FOR USE CONTINUED

## 3. FIELD CROPS AND PASTURE CONTINUED

Crop	Insect	State	Rate Volume/ha
Lucerne (Young Plants)	Cutworm ( <i>Agrotis spp.</i> )	Qld, Tas, NSW, WA only	900 mL in a minimum of 100 L water
		Vic only	700 mL in a minimum of 100 L water
	Cutworm ( <i>Agrotis munda</i> and <i>A. intusa</i> )	SA, WA only	
Lucerne	Webspinner caterpillar ( <i>Loxostege spp.</i> )	NSW, WA, Qld only	700 mL
	Lucerne leaf roller ( <i>Merophyas divulsana</i> )		300 or 400 mL
Lucerne and Medics in Pasture and Forage Crops	Spotted alfalfa aphid, Bluegreen aphid	NSW, WA only	200 or 300 mL
		Qld, Vic, Tas, SA, WA only	
	Pea aphid	Qld, Vic, NSW, Tas, SA, WA only	
	Sitona weevil	NSW, Vic, Tas, SA, WA only	350 mL

Withholding Period <sup>1</sup>	Critical Comments
2 days (Grazing)	Apply immediately infestation is observed. Apply follow-up treatments as required.
	Spray when pests appear.
	Apply when pests first appear. <b>Late stage instar:</b> Use higher rate when larvae 1.5 cm in length are present and/or under heavy pest pressure.
	Spray when aphids first appear. Use the higher rate when large numbers of aphids are invading the crop. <b>Late stage instar:</b> Use higher rate when larvae 1.5 cm in length are present and/or under heavy pest pressure. <b>Seedling Lucerne, Medics:</b> Apply when 1-2 aphids/plants are observed. <b>Established Lucerne, Medics:</b> Apply when 20-40 aphids/stem are observed.
	Apply October to December or in autumn when adults occur in damaging numbers.

## DIRECTIONS FOR USE CONTINUED

## 3. FIELD CROPS AND PASTURE CONTINUED

Crop	Insect	State	Rate Volume/ha
<b>Maize, Soybeans, Sunflower</b>	False wireworm, Cockroaches, Field crickets	Qld, WA only	100 mL plus 125 mL sunflower oil /2.5 kg cracked wheat or cracked sorghum <sup>1</sup>
<b>Pasture</b>	Lawn armyworm ( <i>Spodoptera mauritia</i> )	Qld, NSW, WA only	700 mL
	Sod webworm ( <i>Herpetogramma licarsisalis</i> )	Qld, WA only	
	Blackheaded pasture cockchafer	NSW, Tas, Vic, SA, WA only	900 mL
	Corbie ( <i>Oncopera intricata</i> )	Tas only	1.5L
	Winter Corbie or Underground grass grub ( <i>Oncopera rufobrunnea</i> )	Tas, Vic, NSW only	1.5L
<b>Pasture, Forage Crops</b>	Underground grass grub or Underground grass caterpillar ( <i>Oncopera fasciculatus</i> )	SA, Vic, WA only	900 mL
	Underground grass grub ( <i>Oncopera rufobrunnea</i> )	NSW only	
	Brown pasture looper ( <i>Ciampa arietaria</i> )	NSW, Vic, Tas, SA, WA only	700 mL
	Pasture webworm ( <i>Hednota spp.</i> )		

Withholding Period <sup>1</sup>	Critical Comments
–	Apply at planting of crop. <b>See General Instructions on preparation of cracked wheat or sorghum bait.</b>
2 days (Grazing)	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.  Spray as early as possible once pests appear. Apply from the ground with boom or mister. Re-spray as necessary.  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.  Apply May to July for Winter Corbie and August to September for Corbie before grub populations reach damaging numbers. Check pastures regularly (as recommended by the Tasmanian Department of Primary Industries) from early May onwards for winter corbies and early August onwards for corbies and apply Nufarm Chlorpyrifos 500EC to winter corbie larvae that are 20mm or less in length and corbie larvae that are 40mm or less in length. Application to larger larvae may result in unsatisfactory control. Aim to apply to dry pastures that have been recently grazed during mid to late afternoon to obtain the best control.  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.
	Spray at first sign of pasture infestation.
	Spray at first sign of damage. Apply from the ground with boom or mister or apply by air.

## DIRECTIONS FOR USE CONTINUED

## 3. FIELD CROPS AND PASTURE CONTINUED

Crop	Insect	State	Rate Volume/ha
Rapeseed/ Canola	Wireworm, False wireworm	Qld, WA only	1 or 1.5 L/ha
Rice	Bloodworm	NSW, WA only	60 or 150 mL
	Brown planthopper	Qld, WA only	1.5 L
Sorghum <b>NOTE: DO NOT use on Sugar Drip or Alpha Sorghum. Check new varieties before applying to entire crop</b>	Southern armyworm ( <i>Persectania ewingii</i> ), Common armyworm ( <i>Mythimna convecta</i> )	NSW, Qld, WA only	700 or 900 mL
	Cutworm ( <i>Agrotis spp.</i> )		900 mL in minimum of 100 L water
	Spur-throated locust		1.25 or 1.5 L
	Australian plague locust		350 mL
	Migratory locust	Qld, WA only	350 mL
	Sorghum midge	Qld, NSW, WA only	500 mL
	Corn aphid ( <i>Rhopalosiphum maidis</i> )		
	False wireworm, Cockroaches, Field crickets	Qld, WA only	100 mL plus 125 mL sunflower oil / 2.5 kg cracked wheat or cracked sorghum <sup>1</sup>

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Withholding Period <sup>1</sup>	Critical Comments
–	Apply as a broadcast application. Use higher rate with extreme population numbers. See General Instructions on soil application.
10 days	Use higher rate when water more than 15 cm or amount of decaying plant material is high.  Apply when pest numbers reach 1-2 per tiller and repeat as necessary.
2 days (Harvest)	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.
2 days (Grazing)	Apply immediately infestation is observed. Apply follow-up treatments as required.
	Spray areas of crop infested with locusts. Apply spray to trees or roosting sites to control swarming adult locusts. <b>Late stage hoppers &amp; adults:</b> Use higher rate.
	<b>Adults:</b> Spray areas of crop 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.
	Spray areas of crop, trees and roosting sites infested with locusts.
	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.  Apply when damaging populations of aphids occur.
2 days (Grazing)	Apply at planting of crop. <b>See General Instructions on preparation of cracked wheat or cracked sorghum bait.</b>

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## DIRECTIONS FOR USE CONTINUED

## 3. FIELD CROPS AND PASTURE CONTINUED

Crop	Insect	State	Rate Volume/ha
Sugarcane	Southern armyworm ( <i>Persectania ewingii</i> ), Common armyworm ( <i>Mythimna convecta</i> )	Qld, WA only	700 or 900 mL
	Spur-throated locust		1.25 or 1.5 L
	Australian plague locust, Migratory locust		350 mL
	Sugarcane wireworm	Qld, WA, NSW only	1.5 L
	Symphylids	Qld, WA only	2 L
	African black beetle, Black beetle	NSW, WA only	1.5 L
Tobacco	Wireworm, False wireworm, Cutworm	Vic, WA only	3 L

Withholding Period <sup>1</sup>	Critical Comments
7 days (Harvest)	Spray over total 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.
2 days (Grazing)	Spray areas of crop infested with locusts. Apply spray to trees or roosting sites to control swarming locusts. <b>Late stage hoppers &amp; adults:</b> Use higher rate.
	<b>Adults:</b> Spray areas of crop 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. Spray areas of crop, trees and roosting sites infested with locusts.
	Apply as a low pressure (less than 35 kPa) or gravity feed spray onto 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.
	Apply at planting or ratooning. Apply as a low pressure (less than 35 kPa) 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.
-	Apply as a pre-plant spray to cultivated soil surface. Incorporate immediately by rotary hoeing to a depth of 10 cm.

## DIRECTIONS FOR USE CONTINUED

## 4. MISCELLANEOUS

## RESTRAINTS

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

Situation	Insect	State	Rate/Volume/ha
Domestic and public places. Commercial and industrial areas	Cockroaches ( <i>residual control and/or heavy infestations</i> ) Spiders	All States	95mL/10L water
	Silverfish, Cockroaches ( <i>light infestations</i> )		50mL/10L water
	Ants		95mL/10L water Use at least 1L of spray/10m <sup>2</sup> infested area
	Argentine ants	NSW, Vic, Tas, SA, WA only	
	Fleas (outdoor use only)	Qld, NSW, Tas, SA, WA, NT only	90mL/10L water
Light vegetation	Mosquito larvae	Qld, NSW, Vic, WA, NT only	30mL/ha
Medium vegetation			60mL/ha
Heavy vegetation			105mL/ha

Critical Comments
Apply as a coarse, low pressure spray to the point of run-off, to cracks, crevices, harbourages and other places where 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 the surfaces of the building.
Locate ant nests and treat appropriately. Spray ant tracks, nests or where ant activity is noticed. Apply to paths in continuous 30cm bands. Apply to base of buildings, walls, fences, rockworks, trunks of shrubs and trees and other hard surfaces to a height of 30cm. <b>Note: Argentine ants in WA: for domestic use only. All occurrences of Argentine ants are to be reported to the WA Department of Agriculture.</b> <b>Note: DO NOT apply inside buildings except as a crack and crevice treatment. DO NOT apply to surface areas such as interior floors and walls.</b>
Apply as a fine particle spray. <b>Outdoors:</b> Treat where animals rest and/or where pests have been seen. Remove animals during treatment and until spray deposits dry. <b>DO NOT treat pets with this product. Pets should be treated with a product registered for application to animals.</b>
Apply diluted in water as a spray to areas infested with mosquitoes.

## DIRECTIONS FOR USE CONTINUED

## 4. MISCELLANEOUS CONTINUED

Situation	Insect	State	Rate/Volume/ha
Light to Medium vegetation	Mosquito adults	All States	60mL/ha
Medium to Heavy vegetation			105mL/ha
Polluted Water Impoundments	Mosquitoes (larvae and adults)		2mL/10,000L water or 20mL/100m <sup>3</sup>
Hides/skins	Hide beetles		200mL/100L water. Use at least 30mL of spray/skin

Situation	Insect	State	Rate Volume/ha
Turf	Crickets	Qld, WA only	2.5kg bran bait <sup>a</sup>
	Funnel ant	Qld, WA, NSW only	<b>Field Application:</b> 2L per ha <b>Spot Spraying:</b> 5mL/5L water
	African black beetle	Qld, NSW, Vic, WA only	6 L/ha or 60 mL/100 m <sup>2</sup>
	Argentine stem weevil	NSW, Vic, Tas, SA, WA only	4 L/ha or 40 mL/100 m <sup>2</sup>
	Blackheaded pasture cockchafer		900 mL/ha or 9 mL/100 m <sup>2</sup>

Critical Comments
Apply diluted in water as a spray to areas infested with mosquitoes.
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 infestation, storage areas should be sprayed regularly. Repeat application every three months. Access through bales should be maintained for application of insecticides.

Withholding Period <sup>1</sup>	Critical Comments
2 days (Grazing)	Baits should only be used on turf farms not on recreational turf. <b>See General Instructions for Bait preparation.</b>
	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.
	Apply to lawn when pests appear. Water in immediately after application.
	Lightly water following application. Apply as late in the day as possible.
	Use sufficient water to give even coverage. Apply as late in the day as possible.

**DIRECTIONS FOR USE CONTINUED****4. MISCELLANEOUS CONTINUED**

Crop	Insect	State	Rate Volume/ha	
<b>Turf continued</b>	Brown pasture looper	NSW, Vic, Tas, SA, WA only	700 mL/ha or 7 mL/100 m <sup>2</sup>	
	Pasture webworm			
	Lawn armyworm	Qld, NSW, Vic, SA, WA only		
	Sod webworm	All States		
	Underground grass grub ( <i>Oncopora fasciculatus</i> )	NSW, Vic, SA, WA only		900 mL/ha or 9 mL/100 m <sup>2</sup>
	Winter Corbie ( <i>Oncopera rufobrunnea</i> ) Corbie ( <i>Oncopera intricata</i> )	Tas only		900mL/ha
	Crickets	Qld only		20 mL/20 L water

1. Refer Withholding Period Statements below.
2. Refer to Mixing instructions on preparation of bran bait.
3. Including: asparagus, beans, beetroot, broccoli, brussel sprouts, cabbages, cauliflowers, capsicums, carrots, celery, eggplants, onions, peas, potatoes, radishes, rhubarb, shallots, sweet potatoes, tomatoes and turnips.
4. Refer to mixing instructions on preparation of cracked wheat or cracked sorghum bait.

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

Withholding Period <sup>1</sup>	Critical Comments
2 days (Grazing)	Apply when pests first appear.
	Spray at first sign of damage. Apply with ground-rig boom or mister. Apply as late in the day as possible.
	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.
	Apply as soon as pests appear. Repeat as required.
	Apply when caterpillars are actively feeding. Spray before noticeable damage has occurred. Apply as late in the day as possible.
	Apply May to July for Winter Corbie and August to September for Corbie.
	Apply as required preferably late in the day.

**WITHHOLDING PERIOD:**

Grain sorghum crops: DO NOT HARVEST FOR 2 DAYS AFTER APPLICATION.  
 Tomatoes: DO NOT HARVEST FOR 3 DAYS AFTER APPLICATION.  
 Cole crops, cucurbits: DO NOT HARVEST FOR 5 DAYS AFTER APPLICATION.  
 Sugarcane, Avocado: DO NOT HARVEST FOR 7 DAYS AFTER APPLICATION.  
 Cereal crops: DO NOT HARVEST FOR 10 DAYS AFTER APPLICATION.  
 Bananas, Celery, citrus, grapevines, pome fruit, Stone fruit, Kiwifruit, Asparagus: DO NOT HARVEST FOR 14 DAYS AFTER APPLICATION.  
 Mango: DO NOT HARVEST FOR 21 DAYS AFTER APPLICATION.  
 Cotton: DO NOT HARVEST FOR 4 WEEKS AFTER APPLICATION.  
 DO NOT GRAZE OR CUT FOR STOCKFOOD FOR 4 WEEKS AFTER APPLICATION.  
 Cereal, grains, legumes, animal feeds, grasses, grasslike plants & other forages/forage crops: 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.

### 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.

### Aerial Application

For application by aircraft apply in 10-15L water per hectare.

### Dilute Spraying

Use a sprayer designed to apply high volumes of water up to the point of run-off and matched to the crop being sprayed.

Set up and operate the sprayer to achieve even coverage throughout the crop canopy. Apply sufficient water to cover the crop to the point of run-off. Avoid excessive run-off.

The required water volume may be determined by applying different test volumes, using different settings on the sprayer, from industry guidelines or expert advice.

Add the amount of product specified in the Directions for Use table for each 100L of water. Spray to the point of run-off.

The required dilute spray volume will change and the sprayer set up and operation may also need to be changed, as the crop grows.

### Concentrate Spraying

Use a sprayer designed and set up for concentrate spraying (that is a sprayer which applies water volumes less than those required to reach the point of run-off) and matched to the crop being sprayed.

Set up and operate the sprayer to achieve even coverage throughout the crop canopy using your chosen water volume.

Determine an appropriate dilute spray volume (See Dilute Spraying above) for the crop canopy. This is needed to calculate the concentrate mixing rate.

The mixing rate for concentrate spraying can then be calculated in the following way:

#### EXAMPLE ONLY

1. Dilute spray volume as determined above: For example 1500L/ha
2. Your chosen concentrate spray volume: For example 500L/ha
3. The concentration factor in this example is: 3X (ie  $1500L \div 500L = 3$ )
4. If the dilute label rate is 10mL/100L, then the concentrate rate becomes  $3 \times 10$ , that is 30mL/100L of concentrate spray.

The chosen spray volume, amount of product per 100L of water, and the sprayer set up and operation may need to be changed as the crop grows.

For further information on concentrate spraying, users are advised to consult relevant industry guidelines, undertake appropriate competency training and follow industry Best Practices.

### SOIL APPLICATION

**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. Gloves should be worn when preparing and applying bait.

**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. Gloves should be worn when preparing the bait.

### Spray Drift Minimisation

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.

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



**GENERAL INSTRUCTIONS CONTINUED****INSECTICIDE RESISTANCE WARNING****GROUP 1B INSECTICIDE**

For insecticide resistance management Nufarm Chlorpyrifos is a Group 1B insecticide.

Some naturally occurring insect biotypes resistant to Nufarm Chlorpyrifos 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 Nufarm Chlorpyrifos or other Group 1B insecticides are used repeatedly. The effectiveness of Nufarm Chlorpyrifos on resistant individuals could be significantly reduced. Since occurrence of resistant individuals is difficult to detect prior to use, Nufarm Australia Limited accepts no liability for any losses that may result from the failure of Nufarm Chlorpyrifos to control resistant insects. Nufarm Chlorpyrifos may be subject to specific resistance management strategies. For further information contact your local supplier, Nufarm Australia Limited representative or local agricultural department agronomist.

**COMPATIBILITY**

This product is compatible with the following:

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

**Insecticides and Miticides:** Acephate, Azinphos-methyl, Carbaryl, Cypermethrin, Deltamethrin, Demeton-s-methyl, Diazinon, Dichlorvos, Dicofof, Dimethoate, Endosulfan, Ethion, Fenvalerate, Maldison, Methidathion, Methomyl, Monocrotophos, Oils, Oxythioquinox, Parathion, Phosalone, Phosmet, Tetradifon, Trichlorfon.

**Fungicides:** Benomyl, Chorothalonil, Thiram, Tradimefon, Zineb, Ziram.

**Fertilizers:** Diammonium Phosphate, Limestone, Miloreanite, Monoammonium sulfate, Potash, Sulphur coated urea, Triple superphosphate, Urea.

**Adjuvants:** Spraymate Activator Surfactant, Spraymate Chemwet 1000.

**INCOMPATIBILITY**

This product is incompatible with the following:

**Herbicides:** Dicamba, MCPA, Tordon 75-D, Tordon 242, 2,4-D.

**Fertilizers:** Fixed coppers, liquid and organic coppers, wettable sulphur.

**Fertilizers:** Iron sulphate, Manganese sulphate, Zinc oxysulphate.

**RE-ENTRY PERIODS**

**Fields 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 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 CROPS, NATIVE AND OTHER NON-TARGET PLANTS**

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.

**PROTECTION OF LIVESTOCK**

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

**PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT**

Highly toxic to birds and reptiles. Very highly toxic to fish and aquatic invertebrates. DO NOT contaminate streams, rivers or waterways with the chemical or used containers.

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 re-apply to the same crop within 7 days (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 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 rain storm should be captured on farm for two days after application.

**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 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 (5L, 20L only)**

Store in closed, original container 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

**GENERAL INSTRUCTIONS CONTINUED**

designated collection point.

If not recycling, break, crush, or puncture and bury empty containers in a local authority landfill. If no landfill is available, bury the containers below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should NOT be burnt.

**Envirodrum 110L Mini Bulk Returnable Container (110L only)**

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

**Refillable containers (1000L only)**

Store in the closed, original container in a cool, well ventilated area away from children, animals, food, feedstuffs, seed and fertilizers. DO NOT store for prolonged periods in direct sunlight. 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 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 container, preparing spray and using the prepared spray wear cotton overalls buttoned to the neck and wrist, 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.

**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, do NOT induce vomiting, give a glass of water, activated charcoal may be advised. Give atropine if instructed. In eyes, hold eyes open, flood with water for at least 15 minutes and see a doctor.

**MATERIAL SAFETY DATA SHEET**

For further Information refer to the Material Safety Data Sheet (MSDS) which can be obtained from your supplier or the Nufarm website - [www.nufarm.com.au](http://www.nufarm.com.au)

**CONDITIONS OF SALE**

"Any provisions or rights under the Trade Practices Act 1974 or relevant state legislation which cannot be excluded by those statutes or by law are not intended to be excluded by these conditions of sale. Subject to the foregoing, all warranties, conditions, rights and remedies, expressed or implied under common law, statute or otherwise, in relation to the sale, supply, use or application of this product, are excluded. Nufarm Australia Limited and/or its affiliates ("Nufarm") shall not accept any liability whatsoever (including consequential loss), or howsoever arising (including negligence) for any damage, injury or death connected with the sale, supply, use or application of this product except for liability which cannot be excluded by statute."

APVMA Approval No: 32902/0809

**In case of emergency: Phone (1 800) 033 498**

Ask for the shift supervisor. Toll free 24 hours.