

# CAUTION

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



# Entrust\*

## Naturalyte\* Insect Control

ACTIVE CONSTITUENT: 800 g/kg SPINOSAD

**GROUP 5A INSECTICIDE**

***Broadacre Crops:*** For the control of heliothis in cotton and various caterpillar species (heliothis & loopers) in chickpeas and other pulses, soybeans and sorghum as specified in the Directions for Use.

***Horticultural Crops & Forestry:*** For the control of certain insect pests in fruit, herbs, ornamentals and amenity trees, vegetables and forestry (Eucalyptus spp. and Tea Tree) as specified in the Directions for Use.

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## DIRECTIONS FOR USE

### RESTRAINTS

**DO NOT** apply using Ultra Low Volume methods, except for COTTON.

**DO NOT** apply more than 3 applications to any COTTON crop in any one season.

**DO NOT** apply more than TWICE to each of the following crops in any one season: CHICKPEA & OTHER PULSES, SOYBEAN and SORGHUM. Product can be applied either twice to the crop during flowering or once at flowering and once up to 14 days before harvest.

**DO NOT** make more than 4 applications to any fruit or vegetable crop in any one season, except where otherwise indicated in the CRITICAL COMMENTS (also see the RESISTANCE statement).

**DO NOT** apply to citrus, tropical and sub-tropical fruit crops, pome and stone fruit orchards at the highest rate (12 g/100 L) if waterbodies, watercourses or wetlands are within 20 metres downwind of the application area.

CROPS	PEST	RATE	WHP	CRITICAL COMMENTS
<b>BROADACRE CROPS:</b>				
<b>Chickpeas</b>	Heliiothis ( <i>Helicoverpa</i> spp.)	45 - 60 g/ha	14 days	Use the low rate against light infestations of newly emerged larvae and higher rates when infestation is heavy and/or larvae are more advanced. <b>Note:</b> Entrenched larvae, or those not actively feeding, will not be controlled.
<b>Cotton</b>	Bollworm ( <i>Helicoverpa armigera</i> )  Native budworm ( <i>Helicoverpa punctigera</i> )	90 - 120 g/ha	28 days	Use the low rate against light infestations and higher rates when infestation is heavy (see <i>Guidelines</i> below). Carefully monitor eggs and larvae of <i>Helicoverpa</i> species by regular field scouting. Target sprays against brown eggs and newly hatched very small larvae. <i>Guidelines:</i> <b>Light infestation:</b> Use 150 mL/ha when infestation of <i>Helicoverpa</i> species is less than 10 eggs and 2 larvae per metre of row. <b>Heavy infestation:</b> Use 200 mL/ha when infestation of <i>Helicoverpa</i> species exceeds 10 eggs and/or 2 larvae per metre of row. <b>Note:</b> Larvae larger than 8 mm in length, and larvae feeding within bolls and squares may not be controlled.
<b>Pulses</b> (including but not limited to Adzuki beans, Cowpeas, Faba beans, Field peas, Lentils, Lupins, Kidney beans, Mungbeans and Navy beans)  <b>Sorghum</b>  <b>Soybeans</b>	Heliiothis ( <i>Helicoverpa</i> spp.)  Loopers ( <i>Chrysodeixis</i> spp.)  Soybean looper ( <i>Thysanoplusia orichalcea</i> )	60 - 90 g/ha	14 days	Use the low rate against light infestations and higher rates when infestation is heavy (see <i>Guidelines</i> below). Carefully monitor eggs and larvae of pests by regular field scouting. To achieve best results target sprays against brown eggs and newly hatched, very small larvae. <i>Guidelines:</i> <b>Light infestation:</b> Use 60 g/ha when infestation of <i>Helicoverpa</i> species is less than 10 eggs and 2 larvae per metre of row (pulse crops) or less than 2 larvae per head (sorghum) <b>Heavy infestation:</b> Use 600 mL/ha when infestation of <i>Helicoverpa</i> species exceeds 10 eggs and/or 2 larvae per metre of row (pulse crops) or 2 larvae per head (sorghum). <b>For Southern Australia:</b> If determining insect thresholds by sweep netting, follow the recommendations of your local Department of Agriculture or equivalent advice. <b>Note:</b> Entrenched larvae, or those not actively feeding, will not be controlled.

CROPS	PEST	RATE	WHP	CRITICAL COMMENTS
<b>HORTICULTURAL CROPS:</b>				
<b>FRUIT:</b> Bananas	Banana rust thrips Sugar cane bud moth 6 g/10 L	Not required	Bunch spray:	Apply as a fine spray to point of run-off (50 - 60 mL of solution) ensuring complete coverage of the bunch. Application should be made no later than 2 weeks after bunch emergence. Application should be made immediately after placement of the bunch cover. Good coverage of the bunch is essential. <b>Do not make more than 2 applications per crop.</b>

<b>VEGETABLE CROPS:</b>				
CROPS	PEST	RATE	WHP	CRITICAL COMMENTS
<b>VEGETABLES:</b> Carefully monitor crops for eggs and larvae of pest species by regular field scouting. Target sprays against mature eggs and newly-hatched larvae when numbers exceed spray threshold. Apply repeat applications at 7 - 14 day intervals as new infestations occur or as specified under CRITICAL COMMENTS. As part of IPM programs for potato moth, heliothis and diamondback moth, it is important to plough crops in immediately after harvest.				
<b>Brassica vegetables;</b> including Broccoli, Brussels sprouts, Cabbage, Cauliflower, Brassica Leafy vegetables (*see list at end of table) Radishes <sup>1</sup> , Swedes <sup>1</sup> , Turnips <sup>1</sup> <sup>1</sup> (See also under Root & Tuber Vegetables below)	Diamondback moth, Cabbage white butterfly, Cabbage cluster caterpillar, Cabbage centre grub, Loopers	60 g/ha + wetter	3 days	Use a minimum spray volume of 250 L/ha and ensure thorough crop coverage by increasing water volume with plant growth stage.  Add a non-ionic wetting agent at the recommended rate.
	Heliothis	60 - 120 g/ha + wetter		Use the lower rate when good coverage can be achieved and the high rate in maturing crops if crop canopies prevent good coverage.
	Western flower thrips	120 g/ha + wetter		Use this product as part of the WFT Resistance Management strategy (see end of table for details).
<b>Cucurbits;</b> including Cucumbers, Melons, Squash and Zucchini	Cucumber moth, Heliothis	60 - 120 g/ha	3 days	Use higher rates during periods of high insect pressure or when crop coverage is difficult.
	Western flower thrips	120 g/ha		Use this product as part of the WFT Resistance Management strategy (see end of table for details).
Culinary Herbs (*see list at end of table)	Diamondback moth, Loopers, Lightbrown apple moth	60 g/ha + wetter	3 days	Use a maximum spray volume of 250 L/ha. Ensure thorough coverage of the target area by increasing water volume with plant growth stage. Add a non-ionic wetting agent at the recommended rate.
	Heliothis	60 - 120 g/ha + wetter		As above, plus use the lower rate when good coverage can be achieved and the high rate in maturing crops if crop canopies prevent good coverage.

VEGETABLE CROPS (continued):				
CROPS	PEST	RATE	WHP	CRITICAL COMMENTS
<p><b>VEGETABLES:</b> Carefully monitor crops for eggs and larvae of pest species by regular field scouting. Target sprays against mature eggs and newly-hatched larvae when numbers exceed spray threshold. Apply repeat applications at 7 - 14 day intervals as new infestations occur or as specified under CRITICAL COMMENTS. As part of IPM programs for potato moth, heliothis and diamondback moth, it is important to plough crops in immediately after harvest.</p>				
<b>Fruiting vegetables;</b> including Eggplant, Okra, Peppers (Sweet - capsicums and Chillies), Sweet corn (see also under separate listing below)	Potato moth (tomato leaf miner)	60 - 120 g/ha or Dilute 6 - 12 g /100 L	<b>Tomatoes:</b> 1 day  <b>Sweet corn:</b> Not required  <b>All others:</b> 3 days	Use the per hectare rate when applying to bush tomatoes and sweet corn and the dilute rate (per 100 L) in trellised crops (see the "DILUTE SPRAYING" section in this booklet). Use the lower rate as part of an IPM program when heliothis is the dominant pest and good crop coverage is possible. Use higher rates during periods of high insect pressure or when crop coverage is difficult.
	Heliothis			
Tomatoes	Western flower thrips	120 g/ha or Dilute 12 g/100 L		Use this product as part of the WFT Resistance Management strategy (see end of table for details).
<b>Leafy vegetables;</b> including Lettuce, Endive, Silverbeet, Spinach and Brassica leafy vegetables (*see list at end of table)	Loopers	60 g/ha	3 days	See above under "VEGETABLES"
	Heliothis	60 - 120 g/ha		Use the lower rate as part of an IPM program when heliothis is the dominant pest and good crop coverage is possible. Use higher rates during periods of high insect pressure or when crop coverage is difficult.
	Western flower thrips	120 g/ha		Use this product as part of the WFT Resistance Management strategy (see end of table for details).
<b>Legume vegetables (succulent seeds and immature pods only);</b> including Beans, Peas, Snow peas and Sugar snap peas	Loopers	60 g/ha		<b>Do not make more than 3 applications per crop.</b>
	Heliothis	60 - 120 g/ha		Use higher rates during periods of high insect pressure or when crop coverage is difficult. <b>Note:</b> Entrenched larvae will not be controlled.
	Western flower thrips	120 g/ha		Use this product as part of the WFT Resistance Management strategy (see end of table for details).
<b>Root and tuber vegetables;</b> including Beetroot, Carrots, Celeriac, Galangal, Parsnips, Potatoes, Radishes (incl. Daikon), Sweet potato, Swedes, Turnips	Loopers	60 g/ha	3 days	See above under "VEGETABLES"
	Heliothis	60 - 120 g/ha		Use the lower rate when good coverage can be achieved and the high rate in maturing crops if crop canopies prevent good coverage.
	Lightbrown apple moth	60 g/ha		Entrenched larvae will not be controlled.
	Potato moth	60 - 120 g/ha + wetter		Only target foliar infestations of potato moth. Potato moth larvae within stems or below the soil will not be controlled. Add a non-ionic wetting agent at the recommended rate.

VEGETABLE CROPS (continued):				
CROPS	PEST	RATE	WHP	CRITICAL COMMENTS
<b>VEGETABLES:</b> Carefully monitor crops for eggs and larvae of pest species by regular field scouting. Target sprays against mature eggs and newly-hatched larvae when numbers exceed spray threshold. Apply repeat applications at 7 - 14 day intervals as new infestations occur or as specified under CRITICAL COMMENTS. As part of IPM programs for potato moth, heliothis and diamondback moth, it is important to plough crops in immediately after harvest.				
<b>Stalk &amp; Stem vegetables;</b> including Celery and Rhubarb	Heliothis	120 g/ha	1 day	See comments under "VEGETABLES" above
Sweet corn (see also above under Fruiting Vegetables)		60 - 120 g/ha	Not required	Use higher rates during periods of high insect pressure or when crop coverage is difficult.

CROPS	PEST	RATE	WHP	CRITICAL COMMENTS
<b>ORNAMENTALS:</b>				
<b>Ornamentals</b>	Western flower thrips	12 g/100 L	Not applicable	Use this product as part of the WFT Resistance Management strategy (see end of table for details).
	Caterpillars	6 g/100 L		Apply when infestation first identified. Repeat applications at no less than 10 day intervals. Caterpillars feeding in entrenched sites may not be controlled.
	Pear and Cherry slug	3 g/100 L		
<b>Ornamental and amenity trees</b>	Elm leaf beetle ( <i>Pyrrhalta luteola</i> )	6 g/100 L		Apply to point of run-off, targeting eggs and larvae. Adult beetles will not be controlled.

TREE & VINE CROPS:				
<i>In the following table, all rates (except in FORESTRY) are given for dilute spraying. For concentrate spraying refer to the "Concentrate Spraying" section in this booklet.</i>				
CROPS	PEST	RATE	WHP	CRITICAL COMMENTS
<b>FOR ALL TREE &amp; VINE CROPS:</b> Carefully monitor crops for eggs and larvae of pest species by regular field scouting. Target sprays against mature eggs and newly-hatched larvae when numbers exceed spray threshold. Apply repeat applications at 7 - 14 day intervals as new infestations occur unless otherwise directed in the CRITICAL COMMENTS.				
<b>Avocados</b> (see also under Tropical & Sub-Tropical Fruit Crops below)	Leafrollers (including Avocado leafroller, Ivy leafroller (Lightbrown apple moth), Loopers (including Ectropis looper)	6 g/100 L + wetting agent	Not required	See comments under "FOR ALL TREE & VINE CROPS" above
	Loopers	6 g/100 L		
<b>Berryfruit;</b> including Blackberries, Blueberries, Boysenberries, Cranberries, Currants, Gooseberries, Raspberries, Strawberries	Lightbrown apple moth, Heliothis	6 - 12 g/100 L	1 day	See comments under "FOR ALL TREE & VINE CROPS" above
	Western flower thrips	12 g/100 L		Use the higher rate in dense canopies and when larvae have begun webbing leaves and fruit. Use the lower rate under an IPM system or where good coverage is assured.
				Use this product as part of the WFT Resistance Management strategy (see end of table for details).

TREE & VINE CROPS (continued):				
In the following table, all rates (except in FORESTRY) are given for dilute spraying. For concentrate spraying refer to the "Concentrate Spraying" section in this booklet.				
CROPS	PEST	RATE	WHP	CRITICAL COMMENTS
<b>FOR ALL TREE &amp; VINE CROPS:</b> Carefully monitor crops for eggs and larvae of pest species by regular field scouting. Target sprays against mature eggs and newly-hatched larvae when numbers exceed spray threshold. Apply repeat applications at 7 - 14 day intervals as new infestations occur unless otherwise directed in the CRITICAL COMMENTS.				
Citrus Fruits; including Grapefruit, Lemons, Limes, Mandarins, Oranges	Citrus leafminer, Lightbrown apple moth	3 - 6 g/100 L + wetting agent	Not required	Citrus leafminer: Best results will be achieved when horticultural oil is used in place of a wetting agent. Only use oils when applying to non-bearing trees due to the risk of fruit phytotoxicity.  For the other pests, use higher rates for heavy infestations.
	Heliothis (Corn earworm and native budworm)	6 - 12 g/100 L + wetting agent		
Coffee	Avocado leaf roller	6 - 12 g/100 L + wetting agent	7 days	Use higher rates for heavy infestations.
Grapes	Lightbrown apple moth	6 g/100 L	14 days (For wine grapes: Refer to AWRI)	See comments under " <b>FOR ALL TREE &amp; VINE CROPS</b> " above
	Grapevine moth	1.5 g/100 L		
Kiwifruit (see also under Tropical & Sub-Tropical Fruit Crops below)	Lightbrown apple moth	6 g/100 L	7 days	
Mango (see also under Tropical & Sub-Tropical Fruit Crops below)	Flower-eating caterpillars Small mango tipborer	6 g/100 L + wetting agent	Not required	
	Large mango tipborer	1.5 g/100 L + wetting agent		
Pome fruit including Apples, Pears, Nashi, Loquats, Quince	Heliothis, Lightbrown apple moth, Loopers, Pear slug	6 g/100 L	3 days	Use this product as part of the WFT Resistance Management strategy (see end of table for details).
	Western flower thrips	12 g/100 L		
Stone fruit; including Apricots, Cherries, Nectarines, Peaches, Plums	Cherry slug	3 g/100 L	3 days, except for peaches where the Withholding Period is 7 days	See comments under " <b>FOR ALL TREE &amp; VINE CROPS</b> " above
	Lightbrown apple moth	6 g/100 L		
	Western flower thrips	12 g/100 L		Use this product as part of the WFT Resistance Management strategy (see end of table for details).
	Oriental fruit moth	12 g/100 L		

TREE & VINE CROPS (continued):				
In the following table, all rates (except in FORESTRY) are given for dilute spraying. For concentrate spraying refer to the "Concentrate Spraying" section in this booklet.				
CROPS	PEST	RATE	WHP	CRITICAL COMMENTS
<b>FOR ALL TREE &amp; VINE CROPS:</b> Carefully monitor crops for eggs and larvae of pest species by regular field scouting. Target sprays against mature eggs and newly-hatched larvae when numbers exceed spray threshold. Apply repeat applications at 7 - 14 day intervals as new infestations occur unless otherwise directed in the CRITICAL COMMENTS.				
<b>Tropical and Sub-Tropical Fruit Crops (inedible peel);</b> including Avocado <sup>2</sup> , Cherimoya, Custard apple, Durian, Feijoa, Guava, Jackfruit, Kiwifruit <sup>2</sup> , Longan, Lychee, Mango <sup>2</sup> , Mangosteen, Papaya, Passionfruit, Persimmon, Rambutan & Star apple <sup>2</sup> (See separate listings above also for these crops)	Flower-eating caterpillars, Leafrollers, Loopers, Yellow peach moth	6 g/100 L	Not required (except kiwifruit, which has a 7 day Withholding Period)	See comments under " <b>FOR ALL TREE &amp; VINE CROPS</b> " above  Addition of a non-ionic wetting agent at its recommended rate may improve control on difficult to wet foliage & fruit.
	Red-banded thrips, Sorghum head caterpillar	12 g/100 L		

CROPS	PEST	RATE	WHP	CRITICAL COMMENTS
<b>FORESTRY:</b>				
<b>Eucalyptus Plantations</b>	Larvae of Eucalyptus chrysomelid leaf beetle ( <i>Chrysophtharta bimaculata</i> and <i>C. agricola</i> )	7.5 - 15 g/ha + sticker or wetter	Not applicable	Use higher concentration for larger larvae and older trees. Larval mortality will not occur for at least 4 days after spraying. Note that Entrust is not effective against adult beetles. Do not spray if rain expected in the following 24 hr. Follow code of practice for aerial spraying for relevant state, including appropriate buffers. Add a non-ionic wetting agent at the recommended rate.
<b>Tea tree</b> ( <i>Melaleuca</i> spp.)	Pyrgo beetle ( <i>Paropsisterna tigrina</i> )	30 - 75 g/ha + wetting agent		Closely monitor plantation for egg, larval numbers and age of larvae. Use the higher rate for heavy infestations and for larger tea trees. Apply by ground based application equipment only in a minimum of 100 L/ha water. Use sufficient spray volume to ensure thorough coverage of flush leaf, and adjust spray volumes to stage of crop growth. For 1st - 2nd instar larvae, apply 200 mL/ha. For 3rd - 4th instar larvae, apply 200 - 300 mL/ha. For control of adults apply 300 - 500 mL/ha. Add a non-ionic wetting agent at the recommended rate.

**WFT Resistance Management Strategy**

Make 3 consecutive applications at either 3 - 5 day intervals when temperatures are greater than 20°C or at 6 - 12 day intervals when temperatures are less than 20°C. For any further sprays required, use an approved product from another chemical group. **Do not** make more than 3 consecutive applications of Entrust before switching to an approved product from another chemical group.

**\*Brassica Leafy Vegetables:** Includes Pak choy, Bok choy, Choi sum, Chinese broccoli (Gai lum/Gai lan/Kai lan), Chinese cabbage (Pet sai/Wong bok/Haksukai), Mibuna, Mustard spinach (Komatsuma), Kale, Indian mustard, Kai choy, Gai choy/Am soi, Tat soi and Leafy mustard.

**\*\* Culinary Herbs:** Includes Basil, Bay leaves, Borage, Chervil, Chives, Coriander, Dill, Fennel, Galangal, Lemon balm, Lemon grass, Lemon verbena, Kaffir lime leaves, Marigold flowers, Marjoram (Oregano), Mints, Mizuna, Nasturtium leaves, Parsley, Rosemary, Sage, Salad Burnett, Savory, Sorrel, Tarragon, Thyme, Turmeric.

**PEST NAMES:** Avocado leafroller: *Homona spargotis*; Banana rust thrips: *Chaetanaphothrips signipennis*; Cabbage cluster caterpillar: *Crocidolomia pavonana*; Cabbage centre grub: *Hellula hydralis*; Cabbage white butterfly: *Pieris rapae*; Citrus leafminer: *Phyllocnistis citrella*; Cucumber moth: *Diaphania indica*; Diamondback moth: *Plutella xylostella*; Grapevine moth: *Phalaenoides glycinae*; Heliothis caterpillars, corn earworm, native budworm: *Helicoverpa* spp.; Ivy leafroller: *Cryptoptila immersana*; Large mango tipborer: *Penicillaria jocosatrix*; Lightbrown apple moth: *Epiphyas postvittana*; Loopers: *Chrysodeixis* spp. and Geometrid loopers, Ectropis looper: *Ectropis savulosa*; Oriental fruit moth: *Grapholitha molesta*; Pear and/or cherry slug: *Caliroa cerasi*; Potato moth/tomato leaf miner: *Phthorimaea operculella*; Red-banded thrips: *Selenothrips rubrocinctus*; Small mango tipborer: *Chlumetia euthysticha*; Sorghum head caterpillar: *Cryptoblabes adoceta*; Sugar cane bud moth: *Opogona glycyphaga*; Western flower thrips: *Frankliniella occidentalis*; Yellow peach moth: *Conogethes punctiferalis*

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

## WITHHOLDING PERIODS (BROADACRE CROPS)

### COTTON:

DO NOT HARVEST FOR 28 DAYS AFTER APPLICATION.

DO NOT ALLOW LIVESTOCK TO GRAZE COTTON CROP, STUBBLE OR GIN TRASH WHICH HAS BEEN TREATED WITH Entrust Naturalyte Insect Control.

### CHICKPEAS & OTHER PULSES, SOYBEANS & SORGHUM:

DO NOT HARVEST FOR 14 DAYS AFTER THE LAST APPLICATION.

DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 14 DAYS AFTER THE LAST APPLICATION.

## EXPORT OF LIVESTOCK

When Entrust Naturalyte Insect Control is used as directed and the WHPs for grazing and cutting for stockfood are observed for the above broadacre crops, livestock fed treated commodities are considered acceptable to slaughter for export. However export requirements are subject to change. Consult your exporter for updated information about specific export market requirements before feeding treated animal feeds to livestock.

## HARVESTING WITHHOLDING PERIODS (HORTICULTURAL CROPS)

CITRUS FRUITS, SWEET CORN and TROPICAL and SUB-TROPICAL FRUIT CROPS (except Kiwifruit):

NOT REQUIRED WHEN USED AS DIRECTED.

BERRIES (except Grapes), CELERY and TOMATOES: DO NOT HARVEST FOR 1 DAY AFTER APPLICATION.

BROCCOLI, BRASSICA LEAFY VEGETABLES, BRUSSELS SPROUTS, CABBAGE, CAULIFLOWER, CULINARY HERBS (see list above), CUCURBITS (Cucumbers, Melons, Squash & Zucchini), GREEN BEANS and PEAS (Green, Snow and Sugar snap), LEAFY VEGETABLES (Lettuce and Spinach), EGGPLANT, PEPPERS (Capsicums and Chillies), POME FRUIT (Apples, Pears and Nashis), ROOT & TUBER VEGETABLES (Beetroot, Carrots, Parsnips, Potatoes, Radishes, Swedes and Turnips) and STONEFRUIT (except Peaches): DO NOT HARVEST FOR 3 DAYS AFTER APPLICATION.

COFFEE, KIWIFRUIT, PEACHES: DO NOT HARVEST FOR 7 DAYS AFTER APPLICATION.

GRAPES: DO NOT HARVEST FOR 14 DAYS AFTER APPLICATION.

GRAPES FOR EXPORT WINE: REFER TO THE LATEST ADDITION OF THE AWRI BOOKLET "AGROCHEMICALS REGISTERED FOR USE IN AUSTRALIAN VITICULTURE".

**Some crops for export to particular destinations outside of Australia may require a longer interval before harvest to comply with residue standards of importing countries. Please check with your exporter.**

## STOCKFOOD WITHHOLDING PERIOD

When Entrust Naturalyte Insect Control is used as directed and the WHPs are observed for the above horticultural crops, harvested crop commodities or their waste material, including processed waste (eg cannery waste), can be fed to livestock. Animals fed these treated commodities are considered acceptable to slaughter for export, provided no single crop waste makes up more than 40% of the animals' diet for periods exceeding 7 days. If animals are fed exclusively on single crop commodities or waste there could be a risk of animal residues exceeding export requirements. In this situation it is advisable to transfer stock to untreated feed for at least 14 days before sending to slaughter.

Please note that export requirements are subject to change. Consult your exporter for updated information about specific export market requirements for chemical residues before feeding treated crops to livestock.

## GRAZING WITHHOLDING PERIOD

ALL HORTICULTURAL CROPS, ORCHARDS, PLANTATIONS and VINEYARDS:

DO NOT ALLOW LIVESTOCK TO GRAZE CROP STUBBLE, OR IN ORCHARDS, PLANTATIONS OR VINEYARDS FOR 14 DAYS AFTER APPLICATION OF Entrust Naturalyte Insect Control.

## INSECTICIDE RESISTANCE WARNING

### GROUP 5A INSECTICIDE

For insecticide resistance management Entrust Naturallyte Insect Control is a Group 5A insecticide.

Some naturally occurring insect biotypes resistant to Entrust Naturallyte Insect Control and other Group 5A insecticides may exist through normal genetic variability in any insect population. The resistant individuals can eventually dominate the insect population if Entrust Naturallyte Insect Control or other Group 5A insecticides are used repeatedly. The effectiveness of Entrust Naturallyte Insect Control on resistant individuals could be significantly reduced. Since occurrence of resistant individuals is difficult

to detect prior to use, Dow AgroSciences accepts no liability for any losses that may result from the failure of Entrust Naturallyte Insect Control to control resistant insects.

### GENERAL INSTRUCTIONS

Entrust Naturallyte Insect Control is formulated as a wettable powder that is suitable for application in water by aircraft or ground rig. It has a unique mode of action and controls insect pests that are resistant to conventional insecticides. The active constituent is derived from the fermentation of a naturally occurring micro-organism. Entrust Naturallyte Insect Control works by both contact and ingestion. Exposed insects stop feeding almost immediately but may take up to 3 days to die.

### MIXING

Half fill the spray tank with water, add the appropriate amount of accurately measured Entrust Naturallyte Insect Control, then complete filling the tank.

Ensure thorough agitation by mechanical or hydraulic action at all times during mixing and application.

Use only clean water within the range pH 5-9 to dilute Entrust Naturallyte Insect Control.

### APPLICATION

Thorough coverage of the crop is essential. Do not apply when conditions are unsuitable for water-based spray applications. Avoid high temperature, strong winds, inversion conditions, imminent rain or any conditions that may reduce the quality of spray coverage or result in drift from the target area. Techniques to minimise drift should be employed at all times when aerially applying sprays to, or near, sensitive areas.

For optimum results follow the application specifications listed below:

- Ground Spraying: Apply in a minimum of 250 L/ha of water. Increase spray volumes as the crop grows. For ground-rig spraying in cotton, use a minimum water volume of 50 L/ha.
- Aerial Spraying: Apply in a minimum of 30 L/ha of water.

**Precautionary statement (Aerial Application):** Do not use human flaggers/markers unless they are protected by engineering controls such as enclosed cabs.

### DILUTE SPRAYING

Use a sprayer designed to apply high volumes of water up to the point of run-off and match 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 first 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 100 L of water. Spray to the point of runoff. If volume to be applied is <1000 L/ha then use the low volume (concentrate) application method for calculation of chemical rate. For volumes > 1000 L/ha use dilute spray rate.

### 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. Consult your local advisor, agronomist or Department of Agriculture to determine this volume. This is needed to calculate the concentrate mixing rate.

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

Concentrate Spraying Example

1. Dilute spray volume as determined above:  
e.g. 1000 L/ha
2. Your chosen concentrate spray volume: e.g. 500 L/ha
3. The concentration factor is 2X (1000 / 500)
4. If the dilute label rate is 6 g/100 L, then the concentrate rate becomes 2 X 6, i.e. 12 g/100 L of concentrate spray

The chosen spray volume, amount of product per 100 L 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. Always follow Industry Best Practices.

### RAINFASTNESS

Rain can wash Entrust Naturallyte Insect Control from treated plant surfaces and result in reduced insect control. Avoid making spray applications if rain is expected before the spray can dry completely.

## CLEANING SPRAY EQUIPMENT

After using Entrust Naturallyte Insect Control empty the tank and completely drain the system. Rinse the tank, pumps, lines, hoses, filters and nozzles by circulating clean water through the system. Drain and repeat the rinsing procedure twice.

## PROTECTION OF LIVESTOCK

Dangerous to bees. Avoid direct application or drift of the spray mix onto beehives. Once the spray deposit has dried, foraging bees will not be affected.

## PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

Highly toxic to aquatic invertebrates and algae.

DO NOT allow the product or used containers to enter dams, ponds, waterways or drains.

DO NOT allow irrigation water from treated paddocks to enter adjacent pastures, crops or water supplies.

DO NOT apply in strong winds, inversion conditions or any other conditions that may result in drift onto adjacent pastures, crops or water supplies.

## PROTECTION OF NON-TARGET INSECTS

Beneficial insects contribute to control of pest outbreaks.

Applications of Entrust Naturallyte Insect Control are unlikely to affect lacewings (*Chrysopa* spp.), predatory bugs (*Geocoris*, *Orius* and *Nabis* spp.), spiders and most species of ladybird beetles (*Coccinella*, *Diomus* and *Harmonia* spp.).

However some species of beneficial insects are sensitive to Entrust Naturallyte Insect Control and its use may temporarily reduce populations of parasitoid wasps (especially *Trichogramma* spp.), ants, some beetles and tachinid flies. This may lead to some disruption of IPM systems based on these species, but generally populations will recover. However, effects on beneficial insects at the highest rate (12 g /100 L) have not been tested. Therefore this rate should be used with caution where IPM is practiced.

## STORAGE AND DISPOSAL

Store in the closed, original container in a dry, cool, well-ventilated area out of direct sunlight.

DO NOT store near food, feedstuffs, fertilisers or seed.

Shake bag contents into spray tank until the bag is empty. Do not dispose of undiluted chemical on site. Puncture or shred and bury empty bags in a local authority landfill.

If no landfill is available, bury the bags below 500 mm in a disposal pit specifically marked and set up for this purpose, clear of waterways, desirable vegetation and tree roots. Empty bags and product should not be burnt.

## SMALL SPILL MANAGEMENT

Sweep up material and contain in a refuse vessel for disposal in the same manner as for the bags (see STORAGE AND DISPOSAL section).

## SAFETY DIRECTIONS

- May irritate the eyes, nose and throat.
- Avoid contact with eyes.
- Do not inhale dust.
- When preparing solution and using the prepared solution, wear cotton overalls buttoned to the neck and wrist and a washable hat and elbow-length PVC gloves.
- Wash hands after use.
- After each day's use, wash gloves and contaminated clothing.

## FIRST AID

If poisoning occurs, contact a doctor or Poisons Information Centre. (Phone: Australia 13 11 26)

## SAFETY DATA SHEET

Additional information is listed on the Safety Data Sheet for Entrust Naturallyte Insect Control which is available from Dow AgroSciences on request. Call Customer Service Toll Free on 1-800 700 096 or visit [www.dowagrosciences.com.au](http://www.dowagrosciences.com.au)

## NOTICE

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

APVMA Approval No. 56881/0506

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

**EMERGENCY RESPONSE**  
**(ALL HOURS)**  
RING FROM ANYWHERE  
IN AUSTRALIA  
**1-800 033 882**  
(LOCAL CALL FEE ONLY)