

DANGEROUS POISON

KEEP OUT OF REACH OF CHILDREN

READ SAFETY DIRECTIONS BEFORE OPENING OR USING

LANNATE® L

INSECTICIDE

ACTIVE CONSTITUENT:

225 g/L METHOMYL (an anticholinesterase compound)

SOLVENT: 479 g/L METHANOL

GROUP 1A INSECTICIDE

For the control of certain insect pests of cereals, fruit, legumes, cotton, oilseed crops, tobacco, potatoes, vegetables, pastures, peanuts, ginger, duboisia and other crops as listed in the directions for use table.



Nufarm

Grow a better tomorrow.

DIRECTIONS FOR USE**RESTRAINTS**

DO NOT use in covered or protected situations such as glasshouses, greenhouses or plastic tunnels.

CROP	PEST	STATE	RATE		WITHHOLDING PERIOD		CRITICAL COMMENTS
			per 100L	per ha	harvest	grazing	
Adzuki beans	Budworm (<i>Helicoverpa</i> spp.)	NSW & WA only	-	0.5 to 1L	7 days	Nil	OVICIDE/LARVICIDE: Use only where crops are monitored regularly. Use low rate when eggs are present and high rate when heavy egg lay occurs and/or when first to second instar larvae are present (up to 5mm long).
				1.5 to 2L			LARVICIDE: Apply when infestation reaches an economically damaging level and repeat if necessary. Use low rate on small larvae and light infestations and high rate on large larvae and heavy infestations.
	Green vegetable bug (<i>Nezara viridula</i>)			1.5L			Apply when infestation reaches an economically damaging level and repeat if necessary.
Apples	Light brown apple moth (<i>Epiphyas postvittana</i>)	Qld, Vic, WA, Tas & SA only	150 to 200mL		1 day	Nil	Apply at calyx stage and repeat at 14 day intervals or as required depending on infestation. Only use low rate in NSW, but in other states use high rate if infestation is heavy.
		NSW only	150mL				
	Codling moth (<i>Cydia pomonetta</i>)	NSW, Vic & WA only		Apply on a 14 day schedule for late season control of light infestation only. Moderate to heavy infestations of codling moths will not be controlled.			
	Budworm (<i>Helicoverpa</i> spp.)	Tas & WA only	150 to 200mL	Apply when number of larvae on shoots suggests economic damage is imminent.			
Apples	Thrips (<i>Thysanoptera</i>), Apple dimpling bug (<i>Campylomma livida</i>)	Qld & WA only	200mL		1 day	Nil	Apply when pests appear and repeat when necessary. Apply as a high volume spray ensuring adequate spray penetration to obtain effective control of the pests. Bees - only apply when bees are not foraging.
Beans: Broad beans, French beans, Navy beans, Long beans, Legume seed crops	Bean fly (<i>Ophiomyia phaseoti</i>)	Qld, NSW, WA & NT only	100mL	1.5 to 2L	1 day	Nil	Apply 3 days after seedlings emerge then 4 days later. Repeat at weekly intervals until blossoming.
	Bean thrips	Qld, NSW, SA, WA & NT only					Apply when pests first appear. Repeat depending on infestation. Spray to penetrate blossoms.
	Native budworm (<i>H. punctigera</i>), Corn earworm (<i>Helicoverpa armigera</i>)	Qld, WA, NSW, NT & Tas only					OVICIDE/LARVICIDE: Refer to Ovicidal/Larvicidal application instructions. NOTE: Control of Green vegetable bug is important during and after flowering.
	Native budworm (<i>H. punctigera</i>)	Qld, Tas, NT & WA only		500mL to 1L			
	Corn earworm (<i>H. armigera</i>)	NT, WA & Qld only					
	Loopers (<i>Chrysodeixis</i> spp.), Green vegetable bug (<i>Nezara viridula</i>)	Qld, NT, WA & NSW only	-	1.5L			
	Bean pod borer (<i>Maruca testulalis</i>)	Qld, WA & NT only	-	1.5 to 2L			Apply when pests first appear. Repeat depending on infestation.
Blueberries	Monolepta beetle (<i>Monolepta australis</i>), <i>Helicoverpa</i> spp., Plague thrip (<i>Thrips imaginis</i>)	NSW & WA only	100mL	-	5 days	Nil	Monolepta beetle: Apply according to pest incidence. Helicoverpa spp.: Apply when the infestation reaches an economically damaging level. Plague thrip: Apply when numerous on flowers.

CROP	PEST	STATE	RATE		WITHHOLDING PERIOD		CRITICAL COMMENTS
			per 100L	per ha	harvest	grazing	
Brassicas: Brussels sprouts, Cauliflower, Broccoli, Cabbages	Cabbage white butterfly (<i>Pieris rapae</i>)	NT, WA & Qld only	100mL	1L	1 day	NIL	Apply when pests appear. Repeat depending on infestation. Ensure adequate spray penetration to obtain effective control of the pests.
		Vic, NSW, Tas, WA & SA only	-	1 to 2L			
	Native budworm (<i>H. punctigera</i>)	Qld, NSW, NT, WA, SA & Tas only		1.5 to 2L			Apply when pests appear. Repeat depending on infestation. Ensure adequate spray penetration to obtain effective control of the pests
	Cabbage centre grub (<i>Hellula hydralis</i>)	Qld, NT, NSW, WA & SA only		1.5L			
	Cluster caterpillar (<i>Spodoptera litura</i>)	NT, WA & Qld only		1L			
	Loopers (<i>Chrysodeixis subsidens</i>)	NSW, Qld, Tas, WA, Vic & NT only		1.5L			
Canola, Rapeseed	Native budworm (<i>H. punctigera</i>)	WA only	-	1L	7 days	Nil	Apply when pests appear. Repeat depending on infestation.
		NSW, Vic, Tas & SA only		1.5 to 2L			
		NSW only		500mL to 1L			
	Cabbage moth	WA only		1L			OVICIDE/LARVICIDE: Refer to Ovicidal/Larvicidal application instructions. Apply when pests first appear. Repeat depending on infestation. Use higher rate on heavier infestation.
Capsicums (sweet peppers)	Budworm (<i>Helicoverpa</i> spp.)	Qld, WA & NT only	150 to 200mL	1.5 to 2L	1 day	Nil	Apply when pests first appear. Repeat throughout the growing season depending on infestation. For optimum results the spray interval should not exceed 7 days. Increase spray volume as plants grow larger to ensure coverage.
<i>Centrosema pascuorum</i> seed crops	Green vegetable bug (<i>Nezara viridula</i>), <i>Piezodorus</i> spp., <i>Helicoverpa</i> spp., <i>Riptortus</i> spp.	NT & WA only	-	1.5 to 2L	1 day	Nil	Apply through boom spray with hollow cone nozzles in 250L/ha water.

CROP	PEST	STATE	RATE		WITHHOLDING PERIOD		CRITICAL COMMENTS
			per 100L	per ha	harvest	grazing	
Citrus	Long-tailed mealybug (<i>Pseudococcus longispinus</i>)	SA & WA only	200mL	2L	2 days	Nil	Apply in August or late November - early December when fruit is absent and mealybug crawlers are present. Treatment will prevent mealybug attacking under the new fruit calyx.
	Light brown apple moth (<i>Epiphyas postvittana</i>)	NSW, WA & SA only					Apply in late November - early December when fruit is absent to prevent Light brown apple moth attacking under the new fruit calyx.
	Spined citrus bug (<i>Biprorulus bibax</i>), Bronze orange bug (<i>Musgraveia sulciventris</i>)	Qld, Vic, WA & SA only	25mL	250mL			Apply as populations indicate and before bugs reach the adult winged stage.
	Budworm (<i>Helicoverpa</i> spp.)		200mL	2L			Spray only if heavy infestations occur on young foliage and fruit.
	Larger citrus butterfly (<i>Papilio aegeus</i>), Smaller citrus butterfly (<i>Papilio anactus</i>)						Apply to cover unhardened leaves from recent growth flushes when infestations are noted in young trees only.
Cotton	Cotton bollworm (<i>H. armigera</i>), Native budworm (<i>H. punctigera</i>)	Qld, WA & NSW only	-	500 mL to 1L	Nil	DO NOT graze or feed treated crops to animals	OVICIDE/LARVICIDE: Crops should be checked every 2-3 days for eggs and larval numbers. PRE-SQUARING: Initiate sprays when significant numbers of eggs are present, ie. 75 eggs per 100 plants. Continue at 4-5 day intervals while egg numbers are above these levels and larval control is adequate. Add an effective larvicide at recommended rates if significant numbers of small larvae (20 per 100 plants) are present. SQUARING: Boll Maturity: Continue above schedule when 50 eggs or more per 100 plant terminals are found. Add effective larvicide at registered rate if significant numbers of small larvae (10 per 100 plant terminals) are present. If large larvae survive use higher rates as recommended below or add other effective larvicides. Refer to appropriate larvicide label for directions for use. Use higher rate at peak egg laying and when 1st-2nd instar larvae predominate. Good spray coverage is essential to obtain good ovicidal activity. USE OF WETTING AGENTS: For optimum results, it is essential to add to the spray solution a non-ionic agricultural wetting agent at a rate of 0.025% of active material. This is 25 mL per 100L for most wetting agents.
	Cotton bollworm (<i>H. armigera</i>), Native budworm (<i>H. punctigera</i>)			1.8 to 2.4L			LARVICIDE: Apply as an occasional treatment in a spray program based on alternative insecticides. DO NOT use more often than every 14 days during active growth stages of the crop or alternatively apply up to 3 treatments at a minimum of 3 day intervals between treatments after the boll load is set. DO NOT use during periods of plant stress. NOTE: Use may redden cotton foliage. If reddening is excessive, discontinue use and use other insecticides.
	Loopers	Qld & WA only					

CROP	PEST	STATE	RATE		WITHHOLDING PERIOD		CRITICAL COMMENTS
			per 100L	per ha	harvest	grazing	
Duboisia	Cluster caterpillar (<i>Spodoptera litura</i>)	Qld & WA only	100mL	1L	Nil	Nil	Apply when pests appear. Repeat depending on infestations.
Ginger	Budworm (<i>Helicoverpa</i> spp.)	Qld & WA only	15mL	1.5L	Nil	Nil	Apply when pest populations are evident or damage is noticed to young shoots at ground level during early growth.
Grapes	Light brown apple moth (<i>Epiphyas postvittana</i>)	All States	150mL	-	7 days	Nil	Apply during early shoot growth/flowering if populations indicate and then just before bunches close if light brown apple moth is noted. Control at later stages of bunching is difficult.
	Vine moth (<i>Theretra oldenlandiae</i>)						Apply when populations indicate a need.
Guar	Green vegetable bug, Podsucking bug (<i>Riptortus serripes</i>)	Qld & WA only	-	2L	7days	Nil	Apply when significant populations are noted.
Hops	Native budworm (<i>H. punctigera</i>)	Vic, WA & Tas only	-	2L	14 days	DO NOT graze treated crops	Apply when pests appear. Repeat depending on infestations. For high volume spraying, use at least 1000 L/ha of spray mixture. DO NOT use chemicals from the same group for consecutive sprays.
Lentils	<i>Helicoverpa</i> spp.	Qld, NSW & WA only	-	1.5 to 2L	1 day	Nil	Examine crops at least twice weekly during flowering to podding for larvae and their damage. Use the higher rate if the infestation is higher.
Lettuce: Field grown head and leafy lettuce (not hydroponic lettuce)	<i>Helicoverpa</i> spp. Larvae	All States	200mL	2L	7 days	Nil	Apply when pests first appear. Repeat depending on infestation. For high volume spraying, use at least 1000L/ha of spray mixture. DO NOT apply more than 4 applications per crop. There MUST be at least a 3-day interval between consecutive applications. Observe the Western Flower Thrips insecticide resistance management strategy (available from http://www.dpi.nsw.gov.au/agriculture/horticulture/pests-diseases-hort/multiple/thrips/wft-resistance)
	<i>Helicoverpa</i> spp. Ova		100mL	1L			
	Cluster caterpillar		200mL	2L			
	Western flower thrips		200mL				
Linseed	Budworm (<i>Helicoverpa</i> spp.)	Qld & WA only	-	1.5 to 2L	7 days	Nil	Apply sprays from early flowering. Repeat depending on infestation. Larvae completely enclosed inside bolls at time of spraying may not be controlled.
Lucerne: Grazing, hay and seed	Native budworm (<i>H. punctigera</i>)	WA only	-	1 to 2L	Nil	3 days	Apply when pests appear. Repeat depending on infestations.
		Qld, NSW, WA, Vic, SA, NT & Tas only	-	1.5 to 2L			
Lupins	Native budworm (<i>H. punctigera</i>)	Vic & Tas only	-	1.5L	7 days	Nil	Apply when pests first appear. Repeat depending on infestations.
		WA, NSW & Qld only		1.5 to 2L			

CROP	PEST	STATE	RATE		WITHHOLDING PERIOD		CRITICAL COMMENTS
			per 100L	per ha	harvest	grazing	
Maize	Corn earworm (<i>Helicoverpa armigera</i>)	Qld, WA, NSW & NT only	150 to 200mL	1.5 to 2L	14 days	14 days	<p>LARVICIDAL: Apply initial spray at early silking or when eggs are first observed on silks. Repeat at 2-3 day intervals during silking if infestation continues. Use sufficient spray volume to thoroughly cover young developing cobs.</p> <p>MAIZE (NSW only): Control at tasselling stage may also be necessary. Application when 80% of the cobs are at early silking stage is very important.</p>
			100mL	1L			
	Armyworms (<i>Spodoptera</i> spp.)	NSW, WA, Qld, NT & SA only	-	1.5L	<p>Apply when pests appear. Repeat depending on infestation. NOTE: As all armyworms except the Dayfeeding armyworm feed mainly during the evening, spraying at dusk is recommended.</p>		
Mint	Native budworm (<i>H. punctigera</i>)	Tas & WA only	-	1.5 to 2L	14 days	Nil	Apply when pests first appear. Repeat depending on infestations.
Mung beans - seed production	Budworm (<i>Helicoverpa</i> spp.)	Qld, NT, WA & NSW only	-	1.5 to 2L	7 days	Nil	<p>LARVICIDE: Apply when pests first appear. Repeat depending on infestation.</p>
		Qld & WA only	500mL to 1L	<p>OVICIDE/LARVICIDE: Refer to Ovicidal/Larvicidal Application instructions for more detail.</p>			
	Green vegetable bug (<i>Nezara viridula</i>)	Qld, NSW, WA & NT only	-	1.5L	<p>Apply when pests appear. Repeat depending on infestations.</p>		
	Bean pod borer (<i>Maruca testulalis</i>)	Qld, WA & NT only	-	1.5 to 2L	7days	Nil	
Native pastures Improved pastures - alone or with legumes	Common armyworm (<i>Mythimna convecta</i>)	Vic & WA only	-	1.5 to 2L	Nil	3 days	Apply when pests appear. Repeat depending on infestation. NOTE: As all armyworms except the Dayfeeding armyworm feed mainly during the evening, spraying at dusk is recommended.
	Armyworms (<i>Spodoptera</i> spp.)	NSW, SA, WA & Qld only	-	1.5 to 2L			
	Southern armyworm (<i>Persectania ewingii</i>)	Tas & WA only	-	1.5 to 2L	<p>Apply when pests appear (when webbing is just visible) and repeat if necessary. Ensure thorough spray penetration to obtain effective control of the pest.</p>		
	Buffel grass seed caterpillar (<i>Mampava rhodoneura</i>)	Qld & WA only	-	1.75L			
Pasture legume seed crops	Budworm (<i>Helicoverpa</i> spp.), Lucerne blue butterfly (<i>Lampides boeticus</i>)	Qld & WA only	-	1.5 to 2L	Nil	Nil	Apply as infestation indicate during the flowering and pod setting period of crop development.

CROP	PEST	STATE	RATE		WITHHOLDING PERIOD		CRITICAL COMMENTS
			per 100L	per ha	harvest	grazing	
Peanuts	Budworm (<i>Helicoverpa</i> spp.)	NT, WA & Qld only	-	1.5 to 2L	14 days	Nil	Apply when infestations warrant.
Pears	Light brown apple moth (<i>Epiphyas postvittana</i>)	Vic & WA only	150 to 200mL	-	2 days	Nil	Apply at calyx stage from late November onwards and repeat at 14 day intervals or as required depending on infestation.
Peas, Chickpeas, Cowpeas, Field peas, Pigeon peas	Native budworm (<i>H. punctigera</i>), Corn earworm (<i>Helicoverpa armigera</i>)	Qld, SA, NSW, Vic, Tas & WA only	-	1.5 to 2L	Peas, Chickpeas 1 day; Cow-peas, Field peas, Pigeon peas: 7 days	Nil	Apply when pests first appear. Repeat depending on infestation. Spray for good coverage and penetration.
	Looper		-	1.5L			
	Pea thrips (Thrips spp.)		100mL	1L			
	Green vegetable bug	NSW, SA & WA only	-	1.5L			
Poppies	Native budworm (<i>H. punctigera</i>)	Tas & WA only	-	1.5 to 2L	14 days	Nil	Apply when pests appear. Repeat depending on infestation.
Potatoes	Potato moth (<i>Phthorimaea operculella</i>)	All States	-	1.5 to 2L	Nil	Nil	Apply when pests first appear. Repeat depending on infestation.
	Potato looper	Qld & WA only	-	1.5L			
Sesame seed	Corn earworm (<i>H. armigera</i>)	NT, WA & Qld only	-	1.5 to 2L	14 days	Nil	Apply when significant populations are noted (Refer to Larvicidal Application instructions for more detail).
	Green vegetable bug (<i>Nezara viridula</i>)		-	1.5L			
Sorghum	Corn earworm (<i>H. armigera</i>), Native budworm (<i>H. punctigera</i>)	Qld, NSW, NT & WA only	-	1.5L to 2L	14 days	14 days	Apply when the pests first appear. Repeat depending on infestation.
			-	500mL to 1L			OVICIDE/LARVICIDE: Refer to Ovicidal/Larvicidal Application instructions.
	Armyworms (<i>Spodoptera</i> spp.)	Qld, NSW, NT & WA only	-	1.5L			Apply when pests appear. Repeat depending on infestation. NOTE: As all armyworms except the Dayfeeding armyworm feed mainly during the evening, spraying at dusk is recommended.
	Sorghum midge (<i>Contarinia sorghicola</i>)	Qld, WA & NT only	-	1L			Apply when there are 1 or more sorghum midge adults per panicle or according to the threshold recommended by local agricultural authorities.
Soybeans	Green vegetable bug (<i>Nezara viridula</i>)	Qld, NSW, WA & NT only	-	1.5L	7 days	Nil	Apply when pests first appear. Repeat depending on infestation.
	Loopers	NT, WA & Qld only	-	1.5L			LARVICIDE: Apply when infestation reaches an economically damaging level and repeat if necessary.
	Budworm (<i>Helicoverpa</i> spp.)	Qld, NSW, WA & NT only	-	1.5 to 2L 500mL to 1L			OVICIDE/LARVICIDE: Refer to Ovicidal/Larvicidal Application instructions.

CROP	PEST	STATE	RATE		WITHHOLDING PERIOD		CRITICAL COMMENTS
			per 100L	per ha	harvest	grazing	
Stonefruit	Thrips	All States	200mL	-	1 day	Nil	Apply at petal fall. Apply as a high volume spray ensuring adequate spray penetration to obtain effective control of the pests.
	Green peach aphid (<i>Myzus persicae</i>)		100	-			Apply when the pest first appear on the crop and repeat when necessary. DO NOT apply early to peach varieties such as Watts.
	Budworm (<i>Helicoverpa</i> spp.)		150	-			
	Monolepta Beetle		100	-			Apply to blossoms of affected trees where beetles are feeding. Apply from July to September when infestation occurs. For more detail on pollinator protection refer to Livestock protection instructions.
Strawberries	Budworm (<i>Helicoverpa</i> spp.), Cluster caterpillar (<i>S. litura</i>), Loopers	NSW, NT, Qld, Vic, WA & Tas only	150mL	1.5L	Fresh: 3 days Frozen: 10 days	Nil	Apply when pests first appear. Repeat depending on infestation. NOTE: To avoid the possibility of taint in strawberries to be frozen, DO NOT apply later than 10 days before harvest.
	Budworm (<i>Helicoverpa</i> spp.), Light brown apple moth (<i>E. postvittana</i>)	SA & WA only	150 to 200mL				
Sunflowers	Green vegetable bug (<i>Nezara viridula</i>)	NSW & WA only	-	1.5 to 2L	7 days	Nil	Apply when pests first appear. Repeat depending on infestation. NOTE: Spray must be applied before the seed heads turn over, otherwise, insect control will not be achieved.
		Qld only		1.5L			
	NSW & WA only	1.5 to 2L					
	Qld only	1.5L					
	SA only	2L					
Budworm (<i>Helicoverpa</i> spp.)	NSW, Qld, WA & SA only	500mL to 1L				OVICIDE/LARVICIDE: Refer to Ovicidal/Larvicidal Application instructions.	
Sweetcorn	Corn earworm (<i>H. armigera</i>)	All States & NT	150 to 200mL	1.5 to 2L	1 day	3 days	LARVICIDE: Apply initial spray at early silking or when eggs are first observed on silks. Repeat at 2-3 day intervals during silking if infestation continues. Use sufficient spray volume to thoroughly cover young developing cobs. (Refer to Larvicidal Application instructions for more detail).
		Vic, Qld, WA, SA, NT & Tas only	100mL	1L			OVICIDE: Use this rate only where crops are monitored for eggs and larvae. Apply only when egg laying occurs. As soon as any larvae are present, use larvicidal rates as recommended above.
		NSW only	-	500mL to 1L			
	Armyworms (<i>Spodoptera</i> spp.)	Qld, NSW, SA, WA & NT only	-	1.5L			Apply when pests first appear. Repeat depending on infestation. NOTE: All armyworms, except the day feeding armyworm, feed mainly during the evenings, so spraying at dusk is recommended.
Tea Tree (<i>Melaleuca alternifolia</i>)	Xylorectid caterpillar, Psyllid, Leaf hopper, Crysomelid beetle	NSW & WA only	-	1.5 to 2L	Nil	Nil	Apply as a thorough foliar spray.

CROP	PEST	STATE	RATE		WITHHOLDING PERIOD		CRITICAL COMMENTS												
			per 100L	per ha	harvest	grazing													
Tobacco	Tobacco budworm (<i>Helicoverpa armigera</i>)	Vic, Qld, WA & NSW only	50mL	-	3 days	Nil	<p>The following spray chart is offered as a guide. The frequency of sprays will depend on pest occurrences. Apply the following volumes of the spray mixture.</p> <table border="1"> <tr> <td>Plant age</td> <td>Prepared spray/ha</td> </tr> <tr> <td>1-3 weeks</td> <td>250L</td> </tr> <tr> <td>4 weeks</td> <td>300L</td> </tr> <tr> <td>5 weeks</td> <td>450L</td> </tr> <tr> <td>6 weeks</td> <td>550L</td> </tr> <tr> <td>After 6 weeks</td> <td>900-1100L</td> </tr> </table>	Plant age	Prepared spray/ha	1-3 weeks	250L	4 weeks	300L	5 weeks	450L	6 weeks	550L	After 6 weeks	900-1100L
	Plant age	Prepared spray/ha																	
	1-3 weeks	250L																	
	4 weeks	300L																	
	5 weeks	450L																	
	6 weeks	550L																	
	After 6 weeks	900-1100L																	
	Cluster caterpillar (<i>S. litura</i>), Tobacco looper (<i>Chrysodexis argentifera</i>), Tobacco leaf miner (<i>Phthorimaea operculella</i>)	Qld, NSW, WA & Vic only	100mL																
	Tobacco thrip (<i>Hemianiphothrips concinnus</i>), Leafhopper (<i>Cicadellidae</i>), Green vegetable bug (<i>N. viridula</i>)	Qld & WA only																	
	Stubby root nematode (<i>Paratrichodorus</i> spp.)	Vic & WA only	-	20L															
Tobacco stemborer (<i>Scorobipalpa heliopa</i>)	Qld, WA & NSW only	100mL	-																
Cutworm (<i>Agrotis</i> spp.)	Qld & WA only	150mL																	
Wireworms (<i>Elateridae</i>), False wireworms (<i>Tenebrioidae</i>)		200mL																	
Grasshoppers (<i>Acrididae</i>)		-	1.5L																
Seed harvesting ants (seed bed only) (<i>Pheidole</i> spp.)		200mL	-																
Tobacco yellow dwarf (Common brown leaf hopper)	Vic & WA only	Use 45mL/100L intransplant water. Six weeks later apply 450mL/100L as an overall spray																	
Tomatoes	Tomato grub (<i>Helicoverpa armigera</i>)	All States & NT	50 to 100mL	500mL to 1L	1 day	Nil	<p>OVICIDAL (<i>H. armigera</i> only): incorporate into a larvicide program when pesticide pressure dictates. Use higher rate at peak egg lay and when eggs are mainly laid on flowers or fruit.</p> <p>LARVICIDAL: Apply when pests first appear. Repeat throughout the growing season depending on infestation. For optimum results the spray interval should not exceed 7 days. Increase spray volume as plants grow larger to ensure coverage.</p>												
	Tomato grub (<i>Helicoverpa armigera</i>), Native budworm (<i>H. punctigera</i>)	NSW & WA only	200mL																
		Qld, Vic, Tas, SA & WA only	150 to 200mL																
	Tomato leaf miner/Potato moth (<i>Phthorimaea operculella</i>)	Qld, NT, WA & NSW only	150 to 200mL	1.5 to 2L															
	Green vegetable bug (<i>Nezara viridula</i>)	NT, WA, Tas & Qld only	150mL	1.5L															
	Loopers		-	1.5L															
Wheat, oats, barley	Common armyworm (<i>Leucania convecta</i>)	Qld & WA only	-	Aerial spray only 1L	14 days	14 days	Apply when pests appear. Repeat depending on infestation. Where two use rates are recommended use the lower rate against caterpillars up to												

CROP	PEST	STATE	RATE		WITHHOLDING PERIOD		CRITICAL COMMENTS
			per 100L	per ha	harvest	grazing	
	Common armyworm (<i>Leucania convecta</i>), Southern armyworm (<i>Persectania ewingii</i>)	All States		1 to 1.5L			20mm long. Use the higher rate against large caterpillars. Apply when pests or damage first appear. Repeat treatments may be necessary. NOTE: As these armyworms feed mainly during the evening, spraying at dusk is recommended.
	Budworm (<i>Helicoverpa</i> spp.)			1.5 to 2L			Apply when pests appear. Repeat depending on infestation.

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

IN TASMANIA, THIS PRODUCT MUST NOT BE APPLIED BY AIRCRAFT WITHOUT THE SPECIFIC APPROVAL OF THE REGISTRAR OF PESTICIDES

THIS PRODUCT IS TOO HAZARDOUS FOR USE IN THE HOME GARDEN

WITHHOLDING PERIODS:

HARVEST:

Apples, beans, Brassicas, Brussels sprouts, *Centrosema pascuorum* seed crops, Chickpeas, Lentils, Nectarines, Peaches, Peas, Stone Fruit, Sweetcorn, Capsicums, Tomatoes.

DO NOT HARVEST FOR 1 DAY AFTER APPLICATION

Citrus, Pears

DO NOT HARVEST FOR 2 DAYS AFTER APPLICATION

Strawberries (Fresh), Tobacco

DO NOT HARVEST FOR 3 DAYS AFTER APPLICATION

Blueberries

DO NOT HARVEST FOR 5 DAYS AFTER APPLICATION

Adzuki beans, Canola/Rapeseed, Cowpeas, Field Peas, Grapes, Guar, Linseed, Lupins, Mung beans, Pigeon peas, soybeans, Sunflowers

DO NOT HARVEST FOR 7 DAYS AFTER APPLICATION

Strawberries (For Freezing)

DO NOT HARVEST FOR 10 DAYS AFTER APPLICATION

Hops, Maize, Mint, Peanuts, Poppies, Sesame seed, Sorghum, Winter cereals

DO NOT HARVEST FOR 14 DAYS AFTER APPLICATION

STOCKFOOD:

Lucerne, Pastures, Sweetcorn

DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 3 DAYS AFTER APPLICATION.

Maize, sorghum Winter cereals

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

Cotton, Hops and crops not otherwise specified above.

DO NOT GRAZE OR FEED TREATED CROPS TO ANIMALS

GENERAL INSTRUCTIONS

INSECTICIDE RESISTANCE WARNING

GROUP	1A	HERBICIDE
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For insecticide resistance management Lannate L Insecticide is a Group 1A insecticide. Some naturally occurring insect biotypes resistant to Lannate and other Group 1A insecticides may exist through normal genetic variability in any insect population. The resistant individuals can eventually dominate the insect population if Lannate or other Group 1A insecticides are used repeatedly. The effectiveness of Lannate 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 Lannate to control resistant insects.

Lannate may be subject to Nufarm representative or local agricultural department agronomist.

USE OF WETTING AGENT

For optimum results, it is essential to add to the spray solution a non-ionic agricultural wetting agent at a rate of 0.025% of active material. This is 25mL/100L FOR MOST WETTING AGENTS.

SPRAY PREPARATION

Fill spray tank $\frac{1}{4}$ to $\frac{1}{2}$ full of water. Start agitation (use mechanical or hydraulic means; **DO NOT** use air agitation). Add proper amount of Lannate L to the tank and continue filling with water. Add non-ionic agricultural wetting agent as recommended above. Continue agitation for several minutes prior to spraying: agitation is required to fully mix insecticide.

Application**a) Larvicidal**

Apply at the recommended rates when the insects first appear and repeat as needed. Apply the lower rates on small caterpillars and light infestations of insects. Use the higher rates on larger caterpillars and heavier infestations of insects. Best control is obtained when spray schedules are initiated on young insects.

b) Ovicidal/Larvicidal

Use these rates only where crops are regularly monitored for eggs and larvae. Use the lower rate when eggs are present. Use the higher rate when heavy egg lays occur and/or when using the larvicide rates as recommended. This product may be used at ovicidal/larvicidal rates in conjunction with other recommended larvicides used to control other insects.

AVOID SPRAY DRIFT BY APPLYING WHEN WIND VELOCITY IS LOW

spraywisedecisions.com.au is an online weather forecasting program and is recommended for use when planning your pesticide application.

1) Ground application

Apply as a coarse spray with low pressure ground equipment: **DO NOT** apply as a fog or mist. For effective insect control, proper timing and good coverage are essential. Use sufficient water to obtain thorough, uniform coverage.

Special instructions for Trees/Crops/VinesDilute 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 excess 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 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 1,500 L/ha
2. Your chosen spray volume: For example 500 L/ha
3. The concentration factor in this example is: $3 \times$ (i.e. $1,500 \text{ L} / 500 \text{ L} = 3$)
4. If the dilute label rate is 100mL/100L, then the concentrate rate becomes 3×100 , that is 300mL/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.

2) Aircraft application

Cotton, linseed, mung beans, pastures, sorghum, soybeans, sunflowers, winter cereals only: Use sufficient volume of water per hectare to obtain good coverage of the crop. **DO NOT** use less than 22 L/ha and when crop is dense or pests are large and numerous, increase the volume per hectare accordingly. Avoid drift from treated area by applying when wind velocity is low. Turn off spray boom while passing over creeks or dams.

PRECAUTION

Keep unprotected persons and animals out of operational areas during treatment and while there is a danger of drift. Avoid contact with spray residues.

RE-ENTRY PERIOD

DO NOT allow entry into treated areas for at least 24 hours after treatment. When prior entry is necessary, wear cotton overalls buttoned to the neck and wrist (or equivalent clothing), a washable hat and elbow-length PVC gloves. Clothing must be laundered after each day's use.

PROTECTION OF LIVESTOCK

Keep animals and unprotected persons out of operational areas during treatment and while there is any danger of drift. **DANGEROUS TO BEES - DO NOT** spray plants in flower while bees are foraging. Ensure beehives are removed from the area to be treated and from adjacent paddocks.

PROTECTION OF WILDLIFE, FISH, CRUSTACEA AND ENVIRONMENT

DANGEROUS TO WILDLIFE, INCLUDING BIRDS AND FISH. **DO NOT** contaminate streams, rivers or waterways with this product or used containers. **DO NOT** re-use empty containers.

STORAGE AND DISPOSAL (5, 20, 200L)

KEEP AWAY FROM HEAT, SPARKS AND OPEN FLAMES. Store in the closed, original container in a cool, well-ventilated area out of direct sunlight. Store in a locked room or place away from children, animals, food, feedstuffs, seed and fertilisers. 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 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 500mm 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.

STORAGE AND DISPOSAL (110L)

KEEP AWAY FROM HEAT, SPARKS AND OPEN FLAMES.

Store in the closed, original container in a cool, dry, well-ventilated locked room or place away from children, animals, food, feedstuffs, seed and fertilisers. **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.

STORAGE AND DISPOSAL (1000L)

KEEP AWAY FROM HEAT, SPARKS AND OPEN FLAMES.

Store this tightly closed minibulk container in a safe and secure place away from children, animals, food and feedstuffs. Storage must be secure so that contents cannot be tampered with. All locks and/or seals must be in order. If locks or seals are broken prior to initial use than the integrity of this product cannot be assured. If this occurs Nufarm Australia Limited should be advised immediately. Store in a cool, dry, well ventilated area away from excessive heat. This minibulk container is reusable and remains the property of Nufarm Australia Limited. No other liquid, solid or pesticide product should be put into it. When empty, return to Nufarm Australia Limited for cleaning, relabelling and refilling.

SAFETY DIRECTIONS

Very dangerous, particularly the concentrate. Product and spray are poisonous if absorbed by skin contact or inhaled or swallowed. Attacks eyes and will irritate the nose, throat and skin. Repeated minor exposure may have a cumulative poisoning effect. Avoid contact with eyes and skin and clothing. **DO NOT** inhale vapour or spray mist. Protect eyes while using. When opening the container and preparing spray, wear elbow-length PVC gloves and face shield. When using the prepared spray, wear cotton overalls buttoned to the neck and wrist and a washable hat and elbow-length PVC gloves and impervious footwear and half facepiece respirator with combined dust and gas cartridge. If clothing becomes contaminated with product or wet with spray, remove clothing immediately. If product or spray on skin, immediately wash area with soap and water. 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 and face shield and respirator (and if rubber wash with detergent and warm water) 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, activated charcoal may be advised. Give atropine if instructed.

Note to Physician:

Methomyl produces effects associated with anticholinesterase activity. Atropine sulfate should be used for treatment. Administer repeated doses 1.2 to 2.0mg intravenously every 10-30 minutes until full atropinization is achieved. **DO NOT** use morphine or 2-PAM. Maintain atropinization until the patient recovers. Artificial respiration or oxygen may be necessary. Allow no further exposure to any anticholinesterase inhibitors until recovery is assured.

ADDITIONAL STATEMENTS (WHS REGULATIONS 2011)

Fatal if swallowed. Causes damage to organs. DO NOT eat, drink or smoke when using this product. Wear protective gloves, clothing, eye and face protection. IF SWALLOWED: Rinse mouth. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

SAFETY DATA SHEET

For further information refer to the Safety Data Sheet (SDS) which can be obtained from your supplier or from the Nufarm website – www.nufarm.com.au

In case of emergency: Phone 1800 033 498 Ask for shift supervisor. Toll free 24 hours.

CONDITIONS OF SALE

"Any provisions or rights under the Competition and Consumer Act 2010 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."

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