

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



# **LANNATE<sup>â</sup>-L**

## **INSECTICIDE**

Active Constituent: 225 g/L METHOMYL (an anticholinesterase compound)  
Solvent: 472 g/L METHANOL

<b>GROUP</b>	<b>1A</b>	<b>INSECTICIDE</b>
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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.

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

**CONTENTS: 5, 20, 110, 200 &  
1000 LITRES & BULK**

Crop Care Australasia Pty Ltd, 77 Tingira St, Pinkenba Qld 4008

### **STORAGE AND DISPOSAL (10, 20, 200L)**

KEEP AWAY FROM HEAT, SPARKS AND OPEN FLAMES. Store in the closed, original container in a cool well-ventilated area. DO NOT store for prolonged periods in 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 or bury the empty containers in a local authority landfill. If no landfill is available, bury the containers below 500mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt.

### **STORAGE AND DISPOSAL (110 L)**

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)**

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 Crop Care Australasia Pty Ltd 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 Crop Care Australasia Pty Ltd. No other liquid, solid or pesticide product should be put into it. When empty, return to Crop Care Australasia Pty Ltd for cleaning, relabelling and refilling.

### **STORAGE AND DISPOSAL ('BULK' L)**

Empty contents fully into application equipment. Ensure all valves are closed prior to refilling or returning to point of supply for refill or storage.

### **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. Obtain an emergency supply of atropine tablets 0.6mg.

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-face 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 days use, wash gloves and face shield and respirator or face piece and contaminated clothing.

### **FIRST AID**

If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 131126. If swallowed, give one atropine tablet every 5 minutes until dryness of the mouth occurs - if poisoned by skin absorption or through lungs, remove any contaminated clothing, wash skin thoroughly and give atropine tablets as above. Get to a doctor or hospital quickly.

**Additional information is listed in the Material Safety Data Sheet No. 41913**

**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.

**Conditions of sale:**

Crop Care Australasia Pty Ltd will not accept responsibility whatsoever and howsoever arising and whether for consequential loss or otherwise in connection with the supply or use of these goods other than responsibility for the merchantable quality of the goods and such responsibilities mandatorily imposed by Statutes applicable to the sale or supply of these goods. To the extent allowed by such Statues the liability of Crop Care Australasia Pty Ltd is limited to the replacement of the goods or (at the option of Crop Care Australasia Pty Ltd) the refund of the price paid and is conditional upon a claim being made in writing and where possible sufficient part of the goods to enable proper examination being returned to Crop Care Australasia Pty Ltd within thirty days of delivery.

<b>UN No. 2758</b>	<b>CARBAMATE PESTICIDES, LIQUID, FLAMMABLE, TOXIC, N.O.S. (CONTAINS METHOMYL AND METHANOL) MARINE POLLUTANT</b>
In a Transport Emergency Dial <b>000</b> Police or Fire Brigade	SPECIALIST ADVICE IN EMERGENCY ONLY <b>1800 033 111</b> ALL HOURS - AUSTRALIA-WIDE
<b>PG II</b>	<b>HAZCHEM 2XE</b>

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Crop Care Australasia Pty Ltd  
ACN 061 362 347  
77 Tingira Street,  
PINKENBA Qld 4008

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Code

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PRODUCT**

**Crop Care Australasia Pty Ltd, 77 Tingira St, Pinkenba Qld 4008**

**Directions for use:**

Crop	Pest	State	Rate		Withholding Period		Critical Comments	
			per 100L	per ha	Harvest	Grazing		
<b>Apples</b>	Light brown apple moth ( <i>Epiphyas postvittana</i> )	Vic, WA, Tas & SA only	150 to 200 mL	-	1 day	Nil	Apply at calyx stage and repeat at 14 day intervals or as required depending on infestation	
	Light brown apple moth ( <i>Epiphyas postvittana</i> )	NSW & WA only	150 mL				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.	
	Codling moth ( <i>Cydia pomonetta</i> )	NSW, Vic & WA only						
	Budworm ( <i>Helicoverpa spp.</i> )	Tas & WA only	150 to 200 mL					
	Thrips ( <i>Thysanoptera</i> ) Apple dimpling bug ( <i>Campylomma livida</i> )	Qld & WA only	200 mL				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.	
<b>Beans:</b> Broad beans, French beans, Navy beans, Long beans	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						
	Native budworm ( <i>H.punctigera</i> )	Qld, Tas, NT & WA only	100 mL	500mL to 1L	1 day	Nil	OVICIDE/LARVICIDE: Refer to Ovicidal/Larvicidal application instructions.	
	Corn earworm ( <i>H. armigera</i> )	NT, WA & Qld only						
	Loopers ( <i>Chrysodeixis</i> )	Qld, NT, WA & NSW only		1.5L			Apply when pests first appear. Repeat depending on infestation.	

	spp.) Green vegetable bug ( <i>Nezara viridula</i> )						Apply when pests first appear. Repeat depending on infestation. It is especially important to control this pest during and after flowering.
<b>Beans (see above) and legume seed crops</b>	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 spp.</i> , Plague thrip, ( <i>Thrips imaginis</i> )	NSW & WA only	100 mL	-	5 days	Nil	<b>Monolepta beetle:</b> Apply according to pest incidence. <b>Helicoverpa spp.:</b> Apply when the infestation reaches an economically damaging level. <b>Plague thrip:</b> Apply when numerous on flowers.
<b>Brassicas:</b> Brussels sprouts, Cauliflower, Broccoli, Cabbages	Cabbage white butterfly ( <i>Pieris rapae</i> )	NT, WA & Qld only	100 mL	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			Apply at 5 - 7 day intervals during the growth season when caterpillar first appear. Ensure adequate spray penetration to obtain effective control of the pests.
	Native budworm ( <i>H.punctigera</i> )	Qld, NSW, NT, WA & TAS only		1.5 to 2L			Apply when pests first 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	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			OVICIDE/LARVICIDE: Refer to Ovicidal/Larvicidal application instructions.
Capsicums (sweet peppers)	Budworm ( <i>Helicoverpa spp.</i> )	Qld, WA & NT only	150 to 200 mL	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</i>	Green vegetable	NT & WA only	-	1.5 to	1 day	Nil	Apply through boom spray with hollow cone nozzles in 250 L/ha water.

<p><i>pascuorum</i> Seed Crops</p>	<p>bug, (<i>Nezara viridula</i>) <i>Piezodorus spp.</i>, <i>Helicoverpa spp.</i>, <i>Riptortus spp.</i></p>			<p>2L</p>			
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Citrus	Long-tailed mealybug ( <i>Pseudococcus longispinus</i> )	SA & WA only	200 mL	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	25 mL	250 mL			Apply as populations indicate and before bugs reach the adult winged stage.
	Budworm ( <i>Helicoverpa spp</i> )		200 mL	2L			Spray only if heavy infestations occur on young foliage and fruit.
	Larger citrus butterfly ( <i>Papilio aegaeus</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	<b>OVICIDE/LARVICIDE:</b> Crops should be checked every 2 - 3 days for eggs and larval numbers. <b>PRE-SQUARING:</b> 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. <b>SQUARING:</b> 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 1 <sup>st</sup> -2 <sup>nd</sup> instar larvae predominate. Good spray coverage is essential to obtain good ovicidal activity. <b>USE OF WETTING AGENTS:</b> 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			<b>LARVICIDE:</b> 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. <b>NOTE:</b> Use may redden
	Loopers	Qld & WA only					cotton foliage. If reddening is excessive, discontinue use and use other insecticides.

Duboisia	Cluster caterpillar, ( <i>Spodoptera litura</i> )	Qld & WA only	100 mL	1L	Nil	Nil	Apply when pests appear. Repeat depending on infestations
Ginger	Budworm ( <i>Helicoverpa spp</i> )	Qld & WA only	150 mL	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	150 mL	-	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 (Theetra oldenlandiae)						Apply when populations indicate a need.
Guar	Green vegetable bug, podsucking bug ( <i>Riptortus serripes</i> )	Qld & WA only	-	2L	7 days	Nil	Apply when significant populations are noted
<b>Hops</b>	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.
Lentils	<i>Helicoverpa spp.</i>	Qld & WA only	-	1.5 to 2L	7 days	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	Native budworm ( <i>H. punctigera</i> ), Corn earworm ( <i>H. armigera</i> )	ALL STATES	200 mL	2L	1 day	Nil	Apply when pests first appear. Repeat depending on infestations. For high volume spraying, use at least 1000L/ha of spray mixture.
	Cluster caterpillar, ( <i>Spodoptera litura</i> )		100 mL	1L			
Linseed	Budworm ( <i>Helicoverpa spp.</i> )	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.
<b>Lucerne:</b> 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			

Maize	Corn earworm, ( <i>Helicoverpa armigera</i> )	Qld, WA, NSW & NT only	150 to 200 mL	1.5 to 2L	14 days	14 days	<p><b>LARVICIDAL:</b> 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><b>MAIZE (NSW only):</b> Control at tasselling stage may also be necessary. Application when 80% of the cobs are at early silking stage is very important.</p> <p><b>OVICIDAL:</b> 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.</p> <p>Apply when pests appear. Repeat depending on infestation. <b>NOTE:</b> As all armyworms except the Dayfeeding armyworm feed mainly during the evening, spraying at dusk is recommended.</p>
			100 mL	1L			
	Armyworms ( <i>Spodoptera spp.</i> )	NSW, WA, Qld, NT & SA only	-	1.5L			
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 spp.</i> )	Qld, NT, WA & NSW only	-	1.5 to 2L	7 days	Nil	<p><b>LARVICIDE:</b> Apply when pests first appear. Repeat depending on infestation.</p> <p><b>OVICIDE/LARVICIDE:</b> Refer to Ovicidal/Larvicidal Application instruction for more detail.</p>
		Qld & WA only		500mL to 1L			
Mung beans - seed production	Green vegetable bug, ( <i>Nezara viridula</i> )	Qld, NSW, WA & NT only	-	1.5L	7 days	Nil	Apply when pests appear. Repeat depending on infestations.
	Bean pod borer, ( <i>Maruca testulalis</i> )	Qld, WA & NT only		1.5 to 2L			
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. <b>NOTE:</b> As all armyworms except the Dayfeeding armyworm feed mainly during the evening, spraying at dusk is recommended.
	Armyworms, ( <i>Spodoptera spp.</i> )	NSW SA, WA & Qld only					
	Southern armyworm ( <i>Persectania ewingii</i> )	Tas & WA only					
	Buffel grass seed caterpillar ( <i>Mampava rhodoneura</i> )	Qld & WA only		1.75 L			Apply when pests appear (when webbing is just visible) and repeat if necessary. Ensure thorough spray penetration to obtain effective control of the pest.

Pasture legume seed crops	Budworm, ( <i>Helicoverpa spp.</i> ) 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.
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Peaches and Nectarines	Green peach aphid ( <i>Myzus persicae</i> )	All States	100 mL	-	1 day	Nil	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 spp.</i> )	Tas & WA only	150 mL				
Peanuts	Budworm ( <i>Helicoverpa spp.</i> )	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 200 mL	-	2 days	Nil	Apply at calyx stage from late November onwards and repeat at 14 day intervals or as required depending on infestation.
Peas -including Chick-peas and pigeon peas	Native budworm ( <i>H. punctigera</i> ), Corn earworm, ( <i>Helicoverpa armigera</i> )	Qld, SA, NSW, Vic & WA only	-	1.5 to 2L	Peas 1 day; Chickpeas, 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.)		100 mL	1L			
Peas: field	Budworm ( <i>Helicoverpa spp.</i> )	NSW & WA only	-	1.5 to 2L	7 days	Nil	Spray when pests first appear. Repeat depending on infestations.
		Tas , WA & Vic only		1.5L			Apply when pest or damage first appears. Repeat depending on infestations.
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> )	Qld, NSW, NT & WA only	-	1.5L to 2L	14 days	14 days	Apply when the pests first appear. Repeat depending on infestation.
	Native budworm ( <i>H. punctigera</i> )						
	Armyworms, ( <i>Spodoptera spp.</i> )	Qld, NSW, NT & WA only	-	1.5L			Apply when pests appear. Repeat depending on infestation. <b>NOTE:</b> 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.  <b>LARVICIDE:</b> Apply when infestation reaches an economically damaging level and repeat if necessary.  <b>OVICIDE/LARVICIDE:</b> Refer to Ovicidal/Larvicidal Application instructions
	Loopers	NT , WA & Qld only					
	Budworm ( <i>Helicoverpa spp.</i> )	Qld, NSW, WA & NT only		1.5 to 2L 500mL to 1L			
Stonefruit	Thrips	Qld & WA only	200 mL	-	1 day	Nil	Apply at petal fall. Apply as a high volume spray ensuring adequate spray penetration to obtain effective control of the pests.
Strawberries	Budworm, ( <i>Helicoverpa spp.</i> ) Cluster caterpillar, ( <i>S. litura</i> ) loopers	NSW, NT, Qld, Vic, WA & Tas only	150 mL	1.5L	Fresh: 3 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 spp.</i> ), light brown apple moth, ( <i>E. postvittana</i> )	SA & WA only	150 to 200 mL		Frozen: 10 days	Nil	
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.  <b>OVICIDE/LARVICIDE:</b> Refer to Ovicidal/larvicidal Application instructions.
		Qld & WA only		1.5L			
	Budworm ( <i>Helicoverpa spp.</i> )	NSW & WA only		1.5 to 2L			
		Qld & WA only		1.5L			
		SA & WA only		2L			
NSW, Qld, WA & SA only	500mL to 1L						
Sweetcorn	Corn earworm, ( <i>H. armigera</i> )	All States & NT	150 to 200 mL	1.5 to 2L	1 day	3 days	<b>LARVICIDE:</b> 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). <b>OVICIDE:</b> Use this rate only where crops are monitored for eggs and larvae. Apply only when egg laying occurs. As soon as any larvae
		Vic, Qld, WA, SA, NT & Tas only	100 mL	1L			

		NSW only	-	500 mL to 1L			are present, use larvicidal rates as recommended above.
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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												
Tobacco	Tobacco budworm ( <i>Helicoverpa armigera</i> )	Vic, Qld, WA & NSW only	50 mL	-	3 days	Nil	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.												
	Cluster caterpillar, ( <i>S. litura</i> ) Tobacco looper ( <i>Chrysodexis argentifera</i> ), Tobacco leaf miner ( <i>Phthorimaea operculella</i> )	Qld, NSW, WA & Vic only	100 mL				<table border="1"> <thead> <tr> <th>Plant age</th> <th>Prepared spray/ha</th> </tr> </thead> <tbody> <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><u>after 6 weeks</u></td> <td><u>900 - 1100L</u></td> </tr> </tbody> </table>	Plant age	Prepared spray/ha	1 - 3 weeks	250L	4 weeks	300L	5 weeks	450L	6 weeks	550L	<u>after 6 weeks</u>	<u>900 - 1100L</u>
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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 spp.</i> )	Vic & WA only	-	20L			Spray onto soil and incorporate to a depth of 1cm just prior to transplanting.													
Tobacco stemborer ( <i>Scorobipalpa heliopa</i> )	Qld, WA & NSW only	100 mL	-			Apply 10 days after seedlings emerge and repeat at 6 day intervals (7 day intervals in NSW only) until transplanting													
Cutworm ( <i>Agrotis spp.</i> )	Qld & WA only	150 mL				Apply at dusk or late afternoon in seed beds, use on knapsack per 30m length of bed. For field plants, ensure the base of stem of each plant is well covered with spray.													
Wireworms ( <i>Elateridae</i> ), False wireworms ( <i>Tenebrionidae</i> )		200 mL																	

	Grasshoppers ( <i>Acrididae</i> )		-	1.5L			Apply to fully grown plants when pests first appear. Repeat depending on infestation.
	Seed harvesting ants (seed bed only) ( <i>Pheidole spp.</i> )		200 mL	-			Seed Bed only: Apply by pouring directly down the ant hole.
	Tobacco yellow dwarf (Common brown leaf hopper)	Vic. & WA Only	use 45 mL/100L in transplant water. Six weeks later apply 450 mL/100L as an overall spray				
Tomatoes	Tomato grub ( <i>Helicoverpa armigera</i> )	All States & NT only	50 to 100 mL	500 mL to 1L	1 day	Nil	<b>OVICIDAL (<i>H. armigera</i> only):</b> 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. <b>LARVICIDAL:</b> 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.
	Tomato grub ( <i>Helicoverpa armigera</i> ) Native budworm ( <i>H. punctigera</i> )	NSW & WA only	200 mL				
		QLD, Vic & WA only	150 to 200 mL				
	Tomato leaf miner/Potato moth ( <i>Phthorimae operculella</i> )	Qld, NT, WA & NSW only	150 to 200 mL	1.5 to 2L			
	Green vegetable bug ( <i>Nezara viridula.</i> )	NT, WA & Qld only	150 mL	1.5L			
	Looper	Qld, Tas, WA & NT only	-	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 20mm long. Use the higher rate against large caterpillars. Apply when pests or damage first appear. Repeat treatments may be necessary. <b>NOTE:</b> As these armyworms feed mainly during the evening, spraying at dusk is recommended.
	Common armyworm ( <i>Leucania convecta</i> ) Southern armyworm ( <i>Persectania</i> )	NSW, Vic, SA, WA & Tas only		1 to 1.5L			

<i>ewingii.</i>			
Budworm ( <i>Helicoverpa spp.</i> )	Vic, WA & Tas only	1.5L	Apply when pests appear. Repeat depending on infestation.
	NSW, WA and Qld only	1.5 to 2L	

**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

### DO NOT APPLY LATER THAN THE NUMBER OF DAYS SHOWN BEFORE HARVEST:

Apples, Beans, Brassicas, Brussels Sprouts, Leafy Vegetables, Lentils, Lettuce, Nectarines, Peaches, Peas, Stone Fruit, Sweetcorn, Capsicums, Tomatoes	1 day
Citrus, Pears	2 days
Strawberries (Fresh), Tobacco	3 days
Blueberries	5 days
Chickpeas, Field Peas, Grapes, Guar, Linseed, Lupins, Mung Beans, Pigeon Peas, Canola, Soybeans, Sunflowers	7 days
Strawberries (For Freezing)	10 days
Hops, Maize, Mint, Peanuts, Poppies, Sesame Seed, Sorghum, Winter Cereals	14 days

### DO NOT GRAZE OR CUT FOR STOCKFOOD EARLIER THAN THE NUMBER OF DAYS SHOWN AFTER APPLICATION:

Lucerne, Pastures, Sweetcorn	3 days
Sorghum, Winter Cereals	14 days

### DO NOT GRAZE OR FEED TREATED CROPS TO ANIMALS:

Cotton, Hops

## GENERAL INSTRUCTIONS

### Insecticide Resistance Warning

GROUP	1A	INSECTICIDE
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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, Crop care Australasia Pty Ltd accepts no liability for any losses that may result from the failure of Lannate to control resistant insects.

Lannate may be subject to specific resistant management strategies. For further information contact your local supplier, Crop care 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 1/4 to 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**

### **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.

### **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.

## **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, CRUSTACEANS 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. DO NOT store for prolonged periods in 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 or bury the empty containers in a local authority landfill. If no landfill is available, bury the containers below 500mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt.

## **STORAGE AND DISPOSAL (110 L)**

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)**

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 Crop Care Australasia Pty Ltd 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 Crop Care Australasia Pty Ltd. No other liquid, solid or pesticide product should be put into it. When empty, return to Crop Care Australasia Pty Ltd for cleaning, relabelling and refilling.

### **STORAGE AND DISPOSAL ('BULK' L)**

Empty contents fully into application equipment. Ensure all valves are closed prior to refilling or returning to point of supply for refill or storage.

### **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. Obtain an emergency supply of atropine tablets 0.6mg.

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-face 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 days use, wash gloves and face shield and respirator or face piece and contaminated clothing.

### **FIRST AID**

If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 131126. If swallowed, give one atropine tablet every 5 minutes until dryness of the mouth occurs - if poisoned by skin absorption or through lungs, remove any contaminated clothing, wash skin thoroughly and give atropine tablets as above. Get to a doctor or hospital quickly.

**Additional information is listed in the Material Safety Data Sheet No. 41913**

### **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.

### **Conditions of sale:**

Crop Care Australasia Pty Ltd will not accept responsibility whatsoever and howsoever arising and whether for consequential loss or otherwise in connection with the supply or use of these goods other than responsibility for the merchantable quality of the goods and such

responsibilities mandatorily imposed by Statutes applicable to the sale or supply of these goods. To the extent allowed by such Statutes the liability of Crop Care Australasia Pty Ltd is limited to the replacement of the goods or (at the option of Crop Care Australasia Pty Ltd) the refund of the price paid and is conditional upon a claim being made in writing and where possible sufficient part of the goods to enable proper examination being returned to Crop Care Australasia Pty Ltd within thirty days of delivery.

<b>UN No. 2758</b>	<b>CARBAMATE PESTICIDES, LIQUID, FLAMMABLE, TOXIC, N.O.S. (CONTAINS METHOMYL AND METHANOL) MARINE POLLUTANT</b>
In a Transport Emergency Dial <b>000</b> Police or Fire Brigade	SPECIALIST ADVICE IN EMERGENCY ONLY <b>1800 033 111</b> ALL HOURS - AUSTRALIA-WIDE
<b>PG II</b>	<b>HAZCHEM 2XE</b>

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