

DANGEROUS POISON

KEEP OUT OF REACH OF CHILDREN

CAN KILL IF SWALLOWED

DO NOT PUT IN DRINK BOTTLES

KEEP LOCKED UP

READ SAFETY DIRECTIONS BEFORE OPENING OR USING



ACTIVE CONSTITUENTS: 300 g/L ALPHA-CYPERMETHRIN
SOLVENTS: 424 g/L N-METHYL-2-PYRROLIDONE
244 g/L LIQUID HYDROCARBON

GROUP 3A INSECTICIDE

Controls insect pests of Cereals, Cotton, Grain Legumes, Oilseeds, Pastures, Pome and Stone Fruit, Trees and Ornamentals, Tobacco and Vegetables as specified in the Directions for Use Table
IMPORTANT: READ THE ATTACHED LEAFLET BEFORE USE

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DIRECTIONS FOR USE

Restraints:

DO NOT APPLY IF RAINFALL EXPECTED WITHIN 6 HOURS OF APPLICATION.

NOTE: This product is ineffective against synthetic pyrethroid resistant *Helicoverpa armigera* larvae longer than 5 mm. All *Helicoverpa armigera* in NSW and QLD should be treated as resistant to synthetic pyrethroids. Refer to RESISTANCE MANAGEMENT under GENERAL INSTRUCTIONS. This product is ineffective against synthetic pyrethroid resistant *Plutella xylostella*.

CROP	PEST	STATE	RATE	WITHHOLD- ING PERIOD	CRITICAL COMMENTS
Broccoli, Brussels Sprouts, Cabbages, Cauliflowers, Chinese Cabbage, Kale, Kohl Rabi, Turnips	Cabbage White Butterfly Moth, (<i>Pieris rapae</i>), Cabbage Moth (<i>Plutella xylostella</i>), <i>Helicoverpa</i> spp.	All States	Low Volume 130 mL/ha High Volume 17 mL/100 L Ultra Low Volume 130 mL/ha	1 day (Har- vest)	Apply when pest populations indicate. When reinfestation is continuous, treatment every 7-10 days may be required. Add a non-ionic surfactant at its label rates. LOW VOLUME: When applying by ground equipment use a fine spray with droplet size of 100 to 200 microns. Applying 100 to 600 L water/ha. For aerial application, apply in 20 to 60 L/ha water/ha with droplet size of 100 to 150 microns. HIGH VOLUME: Use a medium spray with a droplet size of 200 to 400 microns. Apply 600 L spray mixture per hectare just after transplanting and increase gradually to 1000 L/ha toward maturity. ULTRA LOW VOLUME: See ULV application section in this label. <i>Helicoverpa armigera</i> in Qld and NSW - follow the application directions for the pest above. Apply as required for pest incidence. Thorough and frequent crop checks are essential. Preferably apply to eggs. Apply to larvae only if they are less than 5 mm long.
	Cluster Caterpillar (<i>Spodoptera litura</i>)	NSW, Vic, WA & ACT			

CROP	PEST	STATE	RATE	WITHHOLD- ING PERIOD	CRITICAL COMMENTS
Canola	Native Budworm (<i>Helicoverpa punctigera</i>)	NSW, Vic, Tas, SA & WA only	70 or 100 mL/ ha	21 days (cutting for Harvest or Stock Feed or Grazing)	DO NOT use more than a total of 130 mL/ha per season. For ULTRA LOW VOLUME use, see ULV application in this label. Inspect the crop regularly during the immediately after flowering. Apply when damaging pest numbers first appear on the crop. For aerial application, use a total volume of 30-35 L/ha and apply in the cooler part of the day. Use the higher rate if larvae larger than 10 mm are present.
	Tobacco Looper (<i>Chrysodeixis argenteifera</i>)	NSW, Tas, SA & Vic only			
	Vegetable Weevil (<i>Listroderes diffilis</i>)	NSW, ACT, Vic, TAS, SA & WA only	130 mL/ha		Crops should be inspected as they emerge. Border sprays are required to control invading adults. Apply when cotyledons and leaves are being eaten or the plant lopped. Repeat as necessary.
	Cabbage White Butterfly (<i>Pieris rapae</i>), Cabbage Moth (<i>Plutella xylostella</i>)				Apply according to pest incidence.
	Redlegged Earth Mite (<i>Halotydeus destructor</i>)	All States except NT & Qld	35 mL/ha		Pre-emergence: Apply by ground rig only. Treat infested paddocks after sowing but prior to crop emergence when soil is moist. Monitor Redlegged Earth Mite numbers and re-treat if necessary. DO NOT apply as a ULV application.
	Redlegged Earth Mite (<i>Halotydeus destructor</i>), Blue Oat Mite (<i>Penthaleus major</i>)		17 mL/ha		Apply when mite numbers reach damaging levels. DO NOT apply as a pre-emergence treatment. DO NOT apply as a ULV application.
Cotton	Native Budworm (<i>Helicoverpa punctigera</i>)	Qld, NSW, WA & NT only		14 days (Har- vest)	For ULTRA LOW VOLUME use, see ULV application in this label. Apply as indicated by field checks using rates appropriate for the infestation level determined. Application should be timed to coincide with egg hatching and before larvae are in protected feeding sites.
			100 mL/ha		Apply when there are up to 75 eggs and/or up to 5 larvae less than 5 mm long per 100 terminals.
			130 mL/ha		Apply when there are up to 150 eggs and/or up to 10 larvae less than 5 mm long per 100 terminals and/or when larvae between 5 and 10 mm are present.
			170 mL/ha		Apply when there are up to 150 eggs and/or more than 10 larvae less than 5 mm long per 100 terminals and/or when larvae between 5 and 10 mm are present.
	Cotton Bollworm (<i>Helicoverpa armigera</i>)	Qld, NSW, WA & NT only			Preferably apply to eggs. Apply to larvae only if they are less than 5 mm long.
			100 mL/ha		Apply when there are up to 75 eggs and/or up to 5 larvae less than 5 mm long per 100 terminals.
			130 mL/ha		Apply when there are up to 150 eggs and/or up to 10 larvae less than 5 mm long per 100 terminals.
			170 mL/ha		Apply when there are up to 150 eggs and/or more than 10 larvae less than 5 mm long per 100 terminals.
	Rough Bollworm (<i>Earias huegell</i>)	NSW, NT, Qld, WA only	100 or 130 mL/ha		Apply when an average of 2 or more larvae are present per 100 bolls. It is essential to detect and treat infestations in the early stages before larvae are established or concealed in bolls deep in the canopy. Use the higher rate if larvae greater than 10 mm are present. Best results are obtained by applying at egg hatch.

CROP	PEST	STATE	RATE	WITHHOLD- ING PERIOD	CRITICAL COMMENTS
Field Peas	Native Budworm (<i>Helicoverpa punctigera</i>)	WA only	53 mL/ha	4 weeks (Harvest)	For ULTRA LOW VOLUME use, see ULV application in this label. Apply to open, less dense crops when damaging numbers of newly hatched larvae first appear on the crop and repeat if necessary.
		NSW, ACT, Tas, Vic, SA & WA only	70 or 100 mL/ha		Apply when damaging pest numbers first appear on the crop and repeat if necessary. Use the higher rate if larvae longer than 10 mm are present. Best results are obtained by applying at egg hatch.
	Pea Weevil (<i>Brachus pisorum</i>)	NSW, ACT, VIC, SA & WA only	53 or 70 mL/ha		Apply during flowering prior to egg laying when adult weevil population reaches 1 or more per 25 sweeps of a sweep net. Use the higher rate for longer residual control.
	Cutworm (<i>Agrotis spp.</i>)		25 mL/ha		Check emerging and established crop in the late afternoon and evening for caterpillars crawling on the soil surface and feeding on the seedlings. Apply product in late afternoon or evening.
	Redlegged Earth Mite (<i>Halotydeus destructor</i>)	NSW, Vic, Tas, SA & WA only	35 mL/ha		Pre-emergence: Apply by ground rig only. Treat infested paddocks after sowing but prior to crop emergence when soil is moist. Monitor Redlegged Earth Mite populations and re-treat as necessary. DO NOT use as a ULV application.
	Redlegged Earth Mite (<i>Halotydeus destructor</i>), Blue Oat Mite (<i>Penthaleus major</i>)		17 mL/ha		Apply when mites reach damaging levels. DO NOT apply as a pre-emergence treatment. DO NOT use as a ULV application.
Grapevines (non-bearing)	Pink Cutworm (<i>Agrotis munda</i>), Apple Weevil (Curculio beetle) (<i>Otiorhynchus cribricollis</i>), Garden Weevil (<i>Phlyctinus callosus</i>)	NSW, Vic, Tas, SA & WA only	35 mL/100 L	-	Monitor young vines during spring and early Summer and apply at the first sign of leaf damage. Spray the leaves, canes and the soil around each vine to a diameter of 30 cm. 70-80 mL of dilute spray should be sufficient for each vine. If pest infestation persists, a second application may be required after three weeks.
Lettuce	<i>Helicoverpa</i> spp.	All States	Low Volume 130 mL/ha High Volume 17 mL/100 L	3 days (Harvest)	Thoroughly and regularly check the crop. Apply at first sign of pest activity. Preferably apply to eggs. Apply to <i>H. armigera</i> ONLY if larvae are less than 5 mm long. Repeat according to pest incidence.
Linola	Native Budworm (<i>Helicoverpa punctigera</i>)	WA only	53 or 70 mL/ha	12 weeks (Harvest)	DO NOT apply more than a total of 130 mL/ha per season to any one crop. For ULTRA LOW VOLUME use, see ULV application in this label. Inspect the crop regularly during and immediately after flowering. Apply when damaging pest numbers first appear on the crop. For AERIAL APPLICATION , apply during the cooler part of the day in a total volume of 30-35 L/ha. Use the higher rate if larvae longer than 10 mm are present. Refer to application section for water rates.
Linseed	Native Budworm (<i>Helicoverpa punctigera</i>)	WA, NSW, Tas, SA & Vic	70 or 100 mL/ha	14 days (Harvest)	For ULTRA LOW VOLUME use, see ULV application in this label. Inspect crop regularly during and immediately after flowering. Apply when damaging pest numbers first appear on the crop and repeat if necessary. Use the higher rate if larvae larger than 10 mm are present. Best results will be obtained by spraying at egg hatch. Refer to application section for water rates.
	Cutworms (<i>Agrotis spp.</i>)	NSW, ACT, SA & Tas only	25 mL/ha		Check emerging and establishing crops in the late afternoon and evening for caterpillars crawling on the soil surface and feeding on the seedlings. Apply product in late afternoon or evening.

CROP	PEST	STATE	RATE	WITHHOLD- ING PERIOD	CRITICAL COMMENTS
Lucerne (Seed and Forage Crops)	Native Budworm (<i>Helicoverpa punctigera</i>)	NSW, Vic, Tas, SA & WA only	53 mL/ha	14 days (Grazing or cutting for Stock Feed)	For ULTRA LOW VOLUME use, see ULV applicaiton in this label. DO NOT apply more than one application per cut or grazing for animal feed. Apply when pest populations reach economically damaging levels. Apply to larvae less than 5 mm in length.
	Green Mirid (<i>Creontiades dilutes</i>)				DO NOT apply more than one application per cut or grazing for animal feed. Apply when pest populations reach economically damaging levels.
Lupins	Native Budworm (<i>Helicoverpa punctigera</i>)	NSW, ACT, Vic, SA only	70 or 100 mL/ha	4 weeks (Harvest)	DO NOT apply more than a total of 200 mL/ha per seasons to any one lupin crop. For ULTRA LOW VOLUME use, see ULV application in this label. Apply when damaging pest numbers first appear on the crop and repeat if necessary. Use the higher rate if larvae longer than 10 mm are present. Best results are obtained by spraying at egg hatch.
		WA only	40 mL or 70 mL/ha		Spraying should be timed to precede the first visible damage to the pods. Use the higher rate when the infestation is severe, or when residual activity is required.
	Cutworm (<i>Agrotis spp.</i>)	NSW, ACT, Vic, Tas, SA & WA only	25 mL/ha		Check emerging and establishing crops in the late afternoon and evening for caterpillars crawling on the soil surface and feeding on the seedlings. Spray in the late afternoon or evening.
	Common Armyworm (<i>Mythimna convecta</i>), Southern Armyworm (<i>Persectania ewingii</i>)	NSW & ACT only	80 mL/ha		Spray in the cool of the day (late afternoon) when larvae are most active.
	Redlegged Earth Mite (<i>Halotydeus destructor</i>)	NSW, Vic, Tas, SA & WA only	35 mL/ha		Pre-emergence: Apply by ground rig only. Treat infested paddocks after sowing but prior to crop emergence when soil is moist. Monitor Redlegged Earth Mite numbers and re-treat if necessary. DO NOT apply as a ULV application.
	Redlegged Earth Mite (<i>Halotydeus destructor</i>), Blue Oat Mite (<i>Penthaleus major</i>)		17 mL/ha		Apply when mite numbers reach damaging levels. DO NOT apply as a pre-emergence treatment. DO NOT use as a ULV application.
Maize	Corn Earworm (<i>Helicoverpa armigera</i>)	Qld, NSW, ACT, Vic, NT only	100 or 130 mL/ha	7 days (Harvest)	For ULTRA LOW VOLUME use, see ULV application in this label. Thoroughly and regularly check the crop. Apply from early silking according to pest incidence. Use the higher rate if larvae longer than 10 mm are present. In Qld, NSW and NT preferably apply to eggs or apply to larvae only if they are less than 5 mm long.
	Native Budworm (<i>Helicoverpa punctigera</i>)	All States			Thoroughly and regularly check the crop. Apply when the infestation reaches economically damaging levels and repeat as required. Best results will be obtained by applying at egg hatch. Use the higher rate if larvae longer than 10 mm are present.



CROP	PEST	STATE	RATE	WITHHOLD- ING PERIOD	CRITICAL COMMENTS
Beans (Mung and Navy)	Native Budworm (<i>Helicoverpa punctigera</i>)	Qld, NSW, ACT & NT only	100 or 130 mL/ha	7 days (Harvest)	For ULTRA LOW VOLUME use, see ULV application in this label. Thoroughly and regularly check the crop. Small larvae are easier to kill than large larvae. Apply when the number of larvae feeding on flowers or pods reaches 1 to 2 per metres of row. Repeat as required. Best results will be obtained by applying at egg hatch. Use the higher rate if larvae longer than 10 mm are present or when canopy is dense.
	Corn Earworm (<i>Helicoverpa armigera</i>)				Thoroughly and regularly check the crop. Apply when the infestation reaches economically damaging levels and repeat as required. Preferably apply to eggs. In NSW and Qld, apply to larvae only if they are less than 5 mm long. Use the higher rate when pest pressure is high.
Pastures (both Legume & Grass-based pastures)	Wingless Grasshopper (<i>Phaulacridium vittatum</i>)	All States	53 mL/ha	3 days (Grazing) 14 days (cut for Stock Feed)	DO NOT use more than a total of 107 mL/ha per season. For ULTRA LOW VOLUME use, see ULV application in this label. Apply to infested areas and repeat as necessary. Spraying is most effective on newly emerged hoppers before they begin dispersing. Spray in the warmer parts of the day when hoppers are exposed. Later sprays should be applied before the start of egg laying. Good coverage is essential.
	Brown Pasture Looper (<i>Ciampa arietara</i>)	Vic, SA, Tas, WA, NSW only	17 mL/ha		Apply when pest populations reach economically damaging levels.
	Blackheaded Pasture Cockchafer (<i>Aphodius tasmaniae</i>)	Vic, SA, Tas, WA & NSW only	35 mL/ha		Spraying is most effective when larvae are detected and treated early. Suspect paddocks should be dug after the first substantial rain in April/May and inspected to ensure grubs are present in sufficient numbers to warrant treatment. Spraying after June will give poorer results.
	Redlegged Earth Mite (<i>Halotydeus destructor</i>)	NSW, ACT, SA, WA, Vic, Tas only	35 mL/ha		Pre-emergence: Apply by ground rig only. Treat infested paddocks after sowing but prior to crop emergence when soil is moist. Monitor Redlegged Earth Mite numbers and re-treat if necessary. DO NOT apply as a ULV application.
	Redlegged Earth Mite (<i>Halotydeus destructor</i>), Blue Oat Mite (<i>Penthaleus major</i>)		17 mL/ha		Apply when mite numbers reach damaging levels. DO NOT use as a ULV application. Autumn/Winter: Apply 4 to 7 weeks after the opening rains in late Autumn / early Winter when RLEM are present (2-3 weeks after egg hatch occurs). KELPIE® ALPHA-C 300 EC INSECTICIDE is rainfast after spray deposits have dried on the leaf surface. KELPIE® ALPHA-C 300 EC INSECTICIDE can be mixed with herbicides used in the winter cleaning of Sub-Clover pastures. See 'COMPATIBILITY' section of this label. Spring: If RLEM/BOM mite numbers increase in the Spring, spray when damage is observed and again before diapause egg production begins. This product can be mixed with herbicides used for spray topping pastures. See 'COMPATIBILITY' section of this label. DO NOT apply as a pre-emergence treatment.
Pome Fruit: Apples Pears	Apple Weevil (<i>Otiorhynchus cribricollis</i>), Garden Weevil (<i>Phlyctinus callosus</i>)	NSW, Vic, SA & WA only	35 mL/100 L water	14 days (Harvest)	Spray approximately 1-2 litres of solution onto the crotch, trunk and the soil at the base of each tree at peak weevil emergence. This is usually late October-late November for Garden Weevil and late November-mid December for Apple Weevil. Monitor Weevil emergence using a single sided cardboard trunk band. Continue monitoring after spraying as a second spray 3-4 weeks later may be needed.

CROP	PEST	STATE	RATE	WITHHOLD- ING PERIOD	CRITICAL COMMENTS
Rice (both aerial and drill sown rice)	Common Armyworm (<i>Mythimna convecta</i>)	NSW only	70 mL/ha	7 days	<p>DO NOT apply more than 130 mL/ha per season to any one crop.</p> <p>Inspect crop regularly for presence of grubs from flowering onwards.</p> <p>Apply when rice-damaging pest numbers first appear.</p> <p>Apply by aircraft in 20-30 L water/ha to drained fields only. Spray in the cool of the day (early morning or late afternoon) when larvae are active. Monitor crops closely and re-treat if necessary.</p> <p>Poor control may occur in crops that have lodged.</p> <p>See application section for correct water rates.</p>
Soybeans	Native Budworm (<i>Helicoverpa punctigera</i>)	QLD, NSW, ACT, WA & NT only	100 or 130 mL/ha	7 days	<p>For ULTRA LOW VOLUME use, see ULV application in this label.</p> <p>Thoroughly and regularly check the crop. Apply when flower or pod feeding numbers reach 1-2 per metre of row. Repeat as required. Use the higher rate if larvae longer than 10 mm are present.</p> <p>Best results are obtained by applying at egg hatch.</p>
	Corn Earworm (<i>Helicoverpa armigera</i>)				<p>Thoroughly and regularly check the crop. Apply when the numbers are sufficient to cause economic damage.</p> <p>Preferably apply to eggs.</p> <p>In NSW & QLD, apply to larvae only if they are less than 5 mm long. Repeat as required. Use the higher rate when pest pressure is high.</p>
Sorghum	Corn Earworm (<i>Helicoverpa armigera</i>), Native Budworm (<i>Helicoverpa punctigera</i>)	Qld, NSW, ACT & NT only	100 or 130 mL/ha	7 days (Harvest)	<p>For ULTRA LOW VOLUME use, see ULV application in this label.</p> <p>Crop checking should commence when the head emerges from the boot and continue at daily intervals until the end of flowering for midge and at weekly intervals until maturity for <i>H. armigera</i>.</p> <p>DO NOT apply to tight head varieties. Apply when there are 2 or more actively feeding larvae per head, or when numbers are sufficient to cause economic damage. Use the higher rate if longer residual control is required.</p> <p>Preferably apply to eggs. Apply to <i>H. armigera</i> larvae only if they are less than 5 mm long. Repeat as required.</p>
	Sorghum Midge (<i>Contarinia sorghicola</i>)		35 or 70 mL/ha		<p>Apply when midge numbers reach 1-2 per head, from emergence to completion of flowering.</p> <p>Repeat as required. Use the higher rate for increased residual protection.</p>
Stone Fruit: Apricots Nectarines Peaches Plums	Apple Weevil (<i>Otiorhynchus cribricollis</i>), Garden Weevil (<i>Phlyctinus callosus</i>)	WA only	35 mL/100 L water	14 days (Harvest)	<p>Spray approximately 1-2 litres of solution onto the crotch, trunk and the soil at the base of each tree at peak weevil emergence.</p> <p>This is usually late October-late November for Garden Weevil and late November-mid December for Apple Weevil.</p> <p>Monitor Weevil emergence using a single sided cardboard trunk band.</p> <p>Continue monitoring after spraying as a second spray 3-4 weeks later may be needed.</p>
Sunflowers	Native Budworm (<i>Helicoverpa punctigera</i>)	Qld, NSW, NT, Vic & ACT only	100 or 130 mL/ha	21 days (Harvest)	<p>TO PROTECT BEES and ensure adequate pollination, application during flowering should be avoided. If application is necessary at flowering, apply early morning or late afternoon when bees are not actively foraging.</p> <p>For Ultra Low Volume use, see ULV application section of this label. Crop checking should be aimed to detect larvae as they hatch.</p> <p>Small larvae are easier to kill than large larvae. Apply when an average of 2-3 larvae are present per head or when economic damage is occurring. Repeat as required. Apply before the heads turn downwards to ensure adequate coverage.</p> <p>Use the higher rate when larvae longer than 10 mm are present. Best results will be obtained by applying at egg hatch.</p>



CROP	PEST	STATE	RATE	WITHHOLD- ING PERIOD	CRITICAL COMMENTS
Sunflowers (continued)	Corn Earworm (<i>Helicoverpa armigera</i>)	Qld, NSW, NT, Vic & ACT only	100 or 130 mL/ha	21 days (Harvest)	Thoroughly and regularly check the crop. Apply when numbers are sufficient to cause economic damage. Preferably apply to eggs. In NSW and Qld apply to larvae only if they are less than 5 mm long, repeat as required. Use the higher rate under heavy pest pressure.
	Grey Cluster Bug (<i>Nysius cleavelandensis</i>), Rutherglen Bug (<i>Nysius vinitor</i>)	QLD, NSW, NT, Vic & ACT only	100 or 130 mL/ha	21 days (Harvest)	Apply from budding when adult numbers per plant reach 10 to 15 in dry-land crops, and 20-25 in irrigated crops. After flowering, apply when adult numbers on the face of the head reach 20 to 25. Repeat as required. The higher rate should be used when the numbers are very high.
	Rutherglen Bug (<i>Nysius vinitor</i>)	Vic, Tas, WA only	83 mL/ha		Apply from budding when adult numbers per plant reach 10 to 15 in dry-land crops, and 20-25 in irrigated crops. After flowering, apply when adult numbers on the face of the head reach 20 to 25. Repeat as required.
Sweet Corn	Corn Earworm (<i>Helicoverpa armigera</i>)	All States	100 or 130 mL/ha	7 days (Harvest)	For ULTRA LOW VOLUME use, see ULV application in this label. Thoroughly and regularly check the crop. Cob damage tolerated is variable according to market requirements. For fresh market corn, spray at tassel emergence, then at intervals of 5 to 8 days until silks wither. For processing corn and maize apply at early silking. Larvae in protected feeding sites within the cob are not effectively controlled. Apply before this situation occurs. Best results will be obtained by applying at egg hatch. Use the higher rate if larvae longer than 10 mm are present. To help contain pyrethroid resistance in <i>Helicoverpa armigera</i> in summer crops, DO NOT apply to Corn Earworm longer than 5 mm.
Tobacco	Native Budworm (<i>Helicoverpa punctigera</i>), Tobacco Budworm (<i>Helicoverpa armigera</i>)	Vic & WA only	10 or 13 mL/100 L	7 days (Harvest)	Apply from just after transplanting on a 7 to 10 day schedule, according to pest incidence. Apply as a medium to fine spray using hollow and/or solid cone nozzles. The spray volume should be gradually increased as the plants grow, from 200 L/ha just after transplanting to 1000 L/ha at maturity. Use the higher rate when larvae longer than 10 mm are present or when egg laying is intense.
Tomatoes (Bush and Trellis)	Native Budworm (<i>Helicoverpa punctigera</i>)	All States	ULTRA LOW VOLUME: 100 or 130 mL/ha	1 day (Harvest)	DO NOT apply to trellis tomatoes by aircraft. Apply on a 7 day schedule while pests are active. Use the middle rate when pest activity is high and/or larvae between 10 and 20 mm in length are present. Use the highest rate when larvae longer than 20 mm are present and/or when interruption of the schedule enables a very severe infestation to develop. ULTRA LOW VOLUME: see ULV application section of this label. LOW VOLUME: By Ground Rig: apply in 100 to 400 L of water per hectare as a fine spray. By Aircraft: apply in a minimum of 10 L of water per hectare as a fine spray of 100 to 150 microns VMD. HIGH VOLUME: Apply as a medium to fine spray. Gradually increase the spray volume as the plant grows, from 200 L/ha just after transplanting establishment to 1000 L/ha at maturity.
	Tomato Grub (<i>Helicoverpa armigera</i>)	Vic, Tas, SA, WA only	LOW VOLUME: 70, 100 or 130 mL/ha		
	Cluster Caterpillar (<i>Spodoptera litura</i>)	Qld, NSW, WA, ACT & NT only	HIGH VOLUME: 7, 10 or 17 mL/100 L		



CROP	PEST	STATE	RATE	WITHHOLD- ING PERIOD	CRITICAL COMMENTS
Tomatoes (Bush and Trellis)	Tomato Grub (<i>Helicoverpa armigera</i>)	Qld, NT, NSW only	ULTRA LOW VOLUME: 100 mL/ha LOW VOLUME: 100 mL/ha HIGH VOLUME: 10 mL/100 L	1 day (Harvest)	Thoroughly check the crop at 2-3 day intervals from transplanting/emergence. Apply according to incidence. Preferably apply to eggs. Apply to larvae only if they are less than 5 mm long. Apply using the methods described for native budworm above.
	Plague Thrips (<i>Thrips imagines</i>)	Qld, NSW, Vic, Tas, WA, ACT & NT only	ULTRA LOW VOLUME: 45 mL/ha LOW VOLUME: 45 mL/ha HIGH VOLUME: 6 mL/100 L		The crop should be frequently checked when it is flowering for the presence of the pest. Apply when the infestation reaches an economically damaging level using the application methods as described above.
Winter Cereals	Cutworms (<i>Agrotis spp.</i>)	NSW, ACT, Vic, SA & WA only	25 mL/ha	7 days (Harvest) 14 days (Stubble Grazing)	DO NOT apply more than a total of 180 mL/ha per season to any one crop. For ULTRA LOW VOLUME use, see ULV application section in this label. Check emerging and establishing crops in the late afternoon and evening for caterpillars crawling on the soil surface and feeding on the seedlings. Spray in the late afternoon or evening.
		Qld only	25 or 50 mL/ha		In Qld, use the higher rate when the infestation is severe, or when there are larvae longer than 10 mm, or when longer residual activity is required.
	Pasture Webworm (<i>Hednota spp.</i>)	NSW, Vic, SA & WA only	25 mL/ha		DO NOT apply as a ULV application. Pre-planting: May be applied pre-planting with knockdown herbicides. Apply from the last week of May when larvae have emerged. DO NOT apply to dense pasture. All pasture should be closely grazed prior to application to ensure adequate spray penetration. Apply in a minimum of 100 L of water per hectare. Apply at first sign of pest infestation. Repeat as necessary. Post crop emergence: Inspect crop regularly from emergence and spray at first sign of pest activity. Repeat as required.
	Redlegged Earth Mite (<i>Halotydeus destructor</i>)	NSW, ACT, Vic, SA, Tas & WA only	35 mL/ha		Pre-emergence: Apply by ground rig only. Treat infested paddocks after sowing but prior to crop emergence when soil is moist. Monitor Redlegged Earth Mite numbers and re-treat if necessary. DO NOT apply as a ULV application.
	Redlegged Earth Mite (<i>Halotydeus destructor</i>), Blue Oat Mite (<i>Penthaleus major</i>)				
	Aphids (<i>Rhopalosiphum spp.</i>)(Barley Yellow Dwarf virus vectors)		42 mL/ha		To control aphids, spray should be applied at 3 and 7 weeks after emergence to reduce aphid colonisation and spread of Barley Yellow Dwarf virus. This will also reduce the effect of feeding aphid damage.
	Common Armyworm (<i>Mythimna convecta</i>), Southern Armyworm (<i>Persectania ewingii</i>)	All States	80 mL/ha		Apply before 'head topping' occurs when larval numbers exceed two or more per square metre. Spray in the cool of the day (late afternoon) when larvae are most active. Spray to achieve good crop penetration. This rate is effective against larvae up to 20 mm in length. Monitor crops regularly and re-treat if necessary. Poor control may occur in crops that have lodged. See application section for correct water rates.

CROP	PEST	STATE	RATE	WITHHOLD- ING PERIOD	CRITICAL COMMENTS
Eucalypts	Adults and larvae of Eucalyptus Leaf Beetle (<i>Chrysophtharta bimaculata</i>)	Tas only	83 mL/ha	-	Apply by fixed wing aircraft or by helicopter using hydraulic nozzles or micron-air equipment to the crowns of Eucalypt trees. Micron-air application in 5 L of water/ha has proved effective. Apply before insect damage causes severe defoliation. Treatment will control small and large larvae as well as adult beetles. For ULTRA LOW VOLUME use, see ULV application in this label.
Banksias Ornamentals	Banksia Moth (<i>Danimia banksiae</i>)	WA only	7 mL/100 L	-	Apply on a regular program at 2 week intervals at early flower development. Commence spraying when blooms are immature and continue until flowers are fully developed.

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

WITHHOLDING PERIODS (WHP)

Broccoli, Brussels Sprouts, Cabbages, Cauliflowers, Chinese Cabbage, Kale, Kohlrabi, Tomatoes, Turnips: **DO NOT HARVEST FOR 1 DAY AFTER APPLICATION.**

Canola: **DO NOT CUT AND WINDROW FOR HARVEST FOR 21 DAYS AFTER APPLICATION. DO NOT GRAZE OR CUT FOR STOCKFEED FOR 21 DAYS AFTER APPLICATION.**

Cotton, Linseed, Stone and Pome Fruit: **DO NOT HARVEST FOR 14 DAYS AFTER APPLICATION.**

Field Peas and Lupins: **DO NOT HARVEST FOR 4 WEEKS AFTER APPLICATION.**

Lettuce: **DO NOT HARVEST FOR 3 DAYS AFTER APPLICATION.**

Linola: **DO NOT HARVEST FOR 12 WEEKS AFTER APPLICATION.**

Lucerne (Seed and Forage Crops): **DO NOT GRAZE OR CUT FOR STOCK FEED FOR 14 DAYS AFTER APPLICATION.**

Pastures (both Legume & Grass-Based Pastures): **DO NOT GRAZE FOR 3 DAYS AFTER APPLICATION. DO NOT CUT FOR STOCK FEED FOR 14 DAYS AFTER APPLICATION.**

Sorghum, Soybeans, Mung Beans, Navy Beans, Sweet Corn, Maize, Rice and Tobacco: **DO NOT HARVEST FOR 7 DAYS AFTER APPLICATION.**

Winter Cereals: **DO NOT HARVEST FOR 7 DAYS AFTER APPLICATION. DO NOT GRAZE TREATED STUBBLE FOR 14 DAYS AFTER APPLICATION.**

Grapevines (non-bearing), Eucalypts and Banksia Ornamentals: **NOT REQUIRED WHEN USED AS DIRECTED.**

GENERAL INSTRUCTIONS

KELPIE® ALPHA-C 300 EC INSECTICIDE is a contact and residual insecticide. It can be used as a protective treatment when applied at regular intervals or as a knockdown treatment to control existing larvae. Best results will be obtained by spraying at egg hatch. Thorough coverage is essential to ensure adequate control. Apply during the cooler parts of the day or night.

KELPIE® ALPHA-C 300 EC INSECTICIDE can be applied mixed either with water carrier or oil based bulking agents or compatible ULV Products.

Crop Safety

KELPIE® ALPHA-C 300 EC INSECTICIDE has demonstrated good crop safety, however, has not been tested on all plant cultivars. Before application it is recommended to undertake a test application to a small area before applying on a broad scale basis.

Mixing

Low Volume and High Volume applications by ground rig or aircraft when KELPIE® ALPHA-C 300 EC INSECTICIDE is applied with water carrier: Add the required quantity of KELPIE® ALPHA-C 300 EC INSECTICIDE to water in the spray tank and mix thoroughly. Maintain agitation during mixing and application.

Ultra Low Volume (ULV) applications by aircraft when KELPIE® ALPHA-C 300 EC INSECTICIDE is applied with oil based bulking agents (see COMPATIBILITY section). First add the mixing partner to the spray tank and then, with the agitator in motion, add the required quantity of KELPIE® ALPHA-C 300 EC INSECTICIDE direct to the spray tank. DO NOT mix with water and ensure that no water is in the spraying system.

Application

Low Volume and High Volume applications by ground rig or aircraft when KELPIE® ALPHA-C 300 EC INSECTICIDE is applied with water carrier: KELPIE® ALPHA-C 300 EC INSECTICIDE can be applied by ground or aircraft with a water carrier. Thorough coverage is essential to ensure adequate control. Always apply with a non-ionic surfactant unless detailed on the label of a tank mix partner. Apply during the cooler parts of the day or night.

Ground Application (water carrier): For low volume spraying of field crops with ground rigs, use a total volume of 50-200 L/ha except for sweet corn, tomatoes and tobacco where higher volumes should be used. Drop arms should be used on ground rigs in row crops taller than 300 mm. The application should be made as a fine spray, preferably using hollow cone nozzles and a droplet size of 150-200 microns.

Aerial Application (water carrier): DO NOT apply to trellis tomatoes by aircraft. Use a minimum spray volume of 20 L/ha. For spring/early summer application to cereals, linola, canola, rice and to other dense crops, apply in a total spray volume of 30 to 35 L/ha. If possible, spray in a crosswind. Avoid spraying in calm conditions or when wind is light and variable direction. Apply as a spray of 100-150 microns VMD.

Ultra Low Volume (ULV) Application by aircraft: KELPIE® ALPHA-C 300 EC INSECTICIDE mixed with compatible products should be applied in a minimum total spray volume of 1.5 L/ha. It should only be applied by aircraft with suitable equipment to provide a droplet size of approximately 80-100 microns VMD. Applications should be made during the cooler parts of the day or at night. Avoid application in calm or very windy conditions. Preferably apply in light to moderate crosswinds.

COMPATIBILITY

Low Volume and High Volume Application by ground rig or aircraft when KELPIE® ALPHA-C 300 EC INSECTICIDE is applied with water as a carrier.

KELPIE® ALPHA-C 300 EC INSECTICIDE is compatible with most pesticides used for the stipulated applications, including most organophosphate insecticides and fungicides when mixed in the spray tank and used promptly. As formulations of other manufacturers' products are beyond the control of Sinochem International Australia Pty Ltd, all mixtures should be tested prior to mixing commercial quantities.

DO NOT mix concentrates together but add each to the spray tank separately. Follow any regional restrictions and all directions and restrictions on the label, of any chemical mixed with KELPIE® ALPHA-C 300 EC INSECTICIDE.

DO NOT mix KELPIE® ALPHA-C 300 EC INSECTICIDE with wettable powders and water dispersible granules BEFORE addition to the spray tank.

Ultra Low Volume by Aircraft

KELPIE® ALPHA-C 300 EC INSECTICIDE should only be mixed with specific ULV formulations or other insecticides e.g. PBO synergists, when mixed according to the directions on the PBO synergist labels.

INSECTICIDE RESISTANCE WARNING

GROUP 3A INSECTICIDE

For insecticide resistance management KELPIE® ALPHA-C 300 EC INSECTICIDE is a Group 3A Insecticide. Some naturally occurring insect biotypes resistant to KELPIE® ALPHA-C 300 EC INSECTICIDE and other Group 3A Insecticide may exist through normal genetic variability in any insect population. The resistant individuals can eventually dominate the insect population if KELPIE® ALPHA-C 300 EC INSECTICIDE or other Group 3A Insecticide are used repeatedly. The effectiveness of KELPIE® ALPHA-C 300 EC INSECTICIDE on resistant individuals could be significantly reduced.

Since occurrence of resistant individuals is difficult to detect prior to use, KELPIE® ALPHA-C 300 EC INSECTICIDE accepts no liability for any losses that may result from the failure of KELPIE® ALPHA-C 300 EC INSECTICIDE to control resistant insects. KELPIE® ALPHA-C 300 EC INSECTICIDE may be subject to specific resistance strategies. For further information, contact your local supplier, Sinochem International Australia Pty Ltd representative or local agricultural department of agriculture agronomist.

In NSW and Qld, application of this product to *Helicoverpa armigera* larvae longer than 5 mm may not only be ineffective but it may increase the level of synthetic pyrethroid resistance. This product should NOT be used to treat infestations that were not controlled by an earlier application of it or another synthetic pyrethroid. Infestations not controlled by this product should be treated with another insecticide from another chemical group such as Nudrin* will assist with the management of synthetic pyrethroid resistant *Helicoverpa armigera*.

PROTECTION OF LIVESTOCK

Dangerous to bees. DO NOT spray on any plants in flower while bees are foraging. KELPIE® ALPHA-C 300 EC INSECTICIDE is known to have a deterrent effect on foraging bees for a short period of time after spraying. Risk to bees is reduced by spraying in early morning and late evening while bees are not foraging.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

Dangerous to fish and aquatic invertebrates such as yabbies.

DO NOT contaminate dams, rivers, drains or streams with the chemical or used containers. Drift and run-off from treated areas may be hazardous to fish in adjacent sites.

STORAGE AND DISPOSAL

The method of disposal of the container depends on the container type. Read the Storage and Disposal instructions on the label that is attached to the container.

Store in the closed, original container in a dry, cool, well-ventilated area out of direct sunlight. Store this tightly closed container in a safe and secure place away from children, animals, food, feedstuffs, seed and fertilisers. 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 then the integrity of this product cannot be assured. If this occurs the supplier should be advised immediately.

All non-refillable containers (unless otherwise specified)

Triple rinse containers before disposal. Add rinsings to spray tank. DO NOT dispose of undiluted chemical 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 500 mm below the surface in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots, in compliance with relevant Local, State or Territory government regulations. Empty containers and product should not be burnt. DO NOT re-use empty container for any other purpose.

Envirodrum (110L only)

DO NOT tamper with the Micro Matic valve or the security seal. DO NOT contaminate the Envirodrum with water or any foreign matter. After each use of the product, please ensure that the Micro Matic coupler, delivery system and hoses are disconnected, triple rinsed with clean water and drained accordingly. When the contents of the Envirodrum have been used, please return the empty Envirodrum to the point of purchase.

Refillable containers (1000L only)

Empty contents fully into application equipment. DO NOT rinse empty container. No other liquid, solid or pesticide product should be put into it. Close all valves and return to point of sale for refill or storage.

May cause respiratory irritation.

May cause damage to organs through prolonged or repeated exposure.

Very toxic to aquatic life with long lasting effects.

May damage fertility or the unborn child.

May be fatal if swallowed and enters airways.

Combustible liquid. Keep away from heat, sparks, open flames and hot surfaces.

No smoking. In case of fire, use alcohol resistant foam.

Do not breathe fumes, mists, vapours or spray. Do not eat, drink or smoke when using this product.

Use only outdoors or in a well-ventilated area. Store locked up.

IF SWALLOWED: Immediately call a POISON CENTRE or doctor. Rinse mouth. Do NOT induce vomiting.

IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention.

IF INHALED: Remove person/victim to fresh air and keep at rest in a position comfortable for breathing.

IF EXPOSED OR CONCERNED: Get medical advice/attention if you feel unwell.

Refer to Safety Data Sheet before use. Do not handle until all safety precautions have been read and understood.

SAFETY DIRECTIONS

Harmful if swallowed or inhaled. Will irritate the eyes and skin. Facial skin contact may cause temporary facial numbness. Do not inhale vapour or spray mist. Avoid contact with the eyes and skin. When opening the container and preparing product for use wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length chemical resistant gloves and a face shield or goggles. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash gloves, face shield or goggles and contaminated clothing.

SAFETY DATA SHEET

For further information refer to the Safety Data Sheet (SDS), which can be obtained from your supplier or from the Sinochem Australia website at: www.sinochem.com.au

FIRST AID

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

IN A TRANSPORT EMERGENCY
DIAL 000
POLICE OR FIRE BRIGADE

FOR SPECIALIST ADVICE
IN AN EMERGENCY DIAL
1800 033 111
24 HOURS AUSTRALIA WIDE

LIMITATION OF LIABILITY

With the express exception of liabilities created by the Competition and Consumer Act 2010 (Cth)(including the Australian Consumer Law) or relevant State legislation which cannot be excluded, restricted or modified, none of Sinochem International Australia Pty Ltd or any of its affiliates ("Sinochem") or any manufacturer of any component of the product shall be liable for any loss or damage (including consequential loss or damage), injury or death connected with, or arising out of, the product, regardless of the way in which it arises (including by way of negligence).

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