

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

# **CropSure**

## **Kobus® 480SC Insecticide**

**ACTIVE CONSTITUENT : 480 g/L SPINOSAD**

GROUP	5	INSECTICIDE
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**For the control of certain insect pests in fruit, ornamentals, vegetables and forestry (*Eucalyptus* spp. and Tea Tree) as specified in the Directions for Use.**

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

**CONTENTS: 500 mL - 20 L**

**CropSure Pty Ltd**  
18 Raymond Road  
Laverton North  
Victoria 3026  
ABN: 17 643 829 190  
ACN: 643 829 190  
Phone: 03 9931 2200  
[www.cropsure.com](http://www.cropsure.com)

## STORAGE AND DISPOSAL

Store in the closed, original container in a cool, well-ventilated area. DO NOT store for prolonged periods in direct sunlight. DO NOT store near food, feedstuffs, fertilisers or seed.

Triple-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 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. Do not burn empty containers or product.

### For DrumMuster containers:

This container can be recycled if it is clean, dry, free of visible residues and has the **drumMUSTER** logo visible. Triple rinse containers before disposal. Add rinsings to spray tank. DO NOT dispose of undiluted chemicals on site. Wash outside of the container and the cap. Store cleaned container in a sheltered place with cap removed. It will then be acceptable for recycling at any **drumMUSTER** collection or similar container management site. The cap should not be replaced but may be taken separately.

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. DO NOT burn empty containers or product.

## SPILL AND LEAK MANAGEMENT

Apply absorbent material such as earth, sand, cat litter or clay granules to the spill. Sweep up material for disposal when absorption is completed and contain in a refuse vessel for disposal (see **STORAGE AND DISPOSAL** section). If necessary, wash the spill area with an alkali detergent and water and absorb the wash liquid for disposal as described above.

## SAFETY DIRECTIONS

May irritate the eyes and skin. Avoid contact with eyes and skin. When opening the container and preparing product for use, wear cotton overalls buttoned to the neck and wrist (or equivalent clothing) and elbow-length chemical resistant gloves. Wash hands after use. After each day's use, wash gloves and contaminated clothing.

## FIRST AID

If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 13 11 26, New Zealand 0800 764 766.

## CONDITIONS OF SALE

CropSure Pty Ltd shall not be liable for any loss, injury, damage or death whether consequential or otherwise, whatsoever or whosoever arising whether through negligence or otherwise, in connection with the sale, supply, use or application of this product, except for any provisions or rights under the Australian Consumer Law which cannot be excluded. The supply of this product is on the express condition that the purchaser does not rely on CropSure Pty Ltd skill of judgement in the purchasing or using the same and every person using this product does so at their own risk absolutely. The Buyer and user assume all risk of use and/or handling and/or storage of this material when such use and/or handling and/or storage is

contrary to label instructions. This product is designed to be only used according with the label directions.

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

24HR Medical Emergency Information:  
AU +61 1800 951 288  
NZ +64 800 700 112

APVMA APPROVAL NO: 94943/144275

BATCH NO:

DATE OF MANUFACTURE:

Very toxic to aquatic life with long lasting effects. Avoid release to the environment. Collect spillage. Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation.

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## DIRECTIONS FOR USE

### RESTRAINTS

**DO NOT** make more than four (4) applications to any crop in any one (1) season, except where otherwise indicated in the **CRITICAL COMMENTS** (also see the RESISTANCE statement).

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

The use of CropSure Kobus® 480SC Insecticide in protected cropping is permissible when used in conjunction with a proven Insect Resistance Management Strategy (IRMS). **DO NOT** apply to seedlings of edible crops for transplanting i.e. seedling intended for food production.

**DO NOT** apply to vegetable seedlings in a production nursery system.

### Spray drift restraints

Specific definitions for terms used in this section of the label can be found at [www.apvma.gov.au/spraydrift](http://www.apvma.gov.au/spraydrift).

**DO NOT** allow bystanders to come into contact with the spray cloud.

**DO NOT** apply in a manner that may cause an unacceptable impact to native vegetation, agricultural crops, landscaped gardens and aquaculture production, or cause contamination of plant or livestock commodities, outside the application site from spray drift. Wherever possible, correctly use application equipment designed to reduce spray drift and apply when the wind direction is away from these sensitive areas.

**DO NOT** apply unless the wind speed is between 3 and 20 kilometres per hour at the application site during the time of application.

**DO NOT** apply if there are hazardous surface temperature inversion conditions present at the application site during the time of application. Surface temperature inversion conditions exist most evenings 1 to 2 hours before sunset and persist until 1 to 2 hours after sunrise.

CROP	PEST	RATE	WHP	CRITICAL COMMENTS
<b>FRUIT:</b> <b>Banana</b>	Banana rust thrip, Sugarcane bud moth	10 mL/10 L	Not required	Bunch spray: Apply as a fine spray to point of run-off (50-60 mL of solution) ensuring complete coverage of the bunch. Application should be made no later than two (2) weeks after bunch emergence. Application should be made immediately after placement of the bunch cover. Good coverage of the bunch is essential. Do not make more than two (2) applications per crop
<b>VEGETABLES:</b> Carefully monitor crops for eggs and larvae of pest species by regular field scouting. Target sprays against mature eggs and newly-hatched larvae when numbers exceed spray threshold. Apply repeat applications at 7-14 day intervals as new infestations occur or as specified under <b>CRITICAL COMMENTS</b> . As part of IPM programs for potato moth, heliothis and diamondback moth, it is important to plough crops in immediately after harvest.				

CROP	PEST	RATE	WHP	CRITICAL COMMENTS
<b>Brassica vegetables;</b> including Broccoli, Brussels sprouts, Cabbage, Cauliflower, Brassica leafy vegetables (*see list at end of table), Radish <sup>1</sup> Swede <sup>1</sup> Turnip <sup>1</sup> <sup>1</sup> (See also under Root & Tuber Vegetables below)	Diamondback moth, Cabbage white butterfly, Cabbage cluster caterpillar, Cabbage centre grub, Loopers	100 mL/ha + wetter	3 days	Use a minimum spray volume of 250 L/ha and ensure thorough crop coverage by increasing water volume with plant growth stage.  Add a non-ionic wetting agent at the recommended rate.
	Heliothis	100-200 mL/ha + wetter		Use the lower rate when good coverage can be achieved and the high rate in maturing crops if crop canopies prevent good coverage.
	Western flower thrip	200 mL/ha + wetter		Use this product as part of the <b>Western Flower Thrip (WFT) Resistance Management Strategy</b> (see end of table for details).
<b>Cucurbits;</b> including Cucumber, Melon, Squash, Zucchini	Cucumber moth, Heliothis	100-200 mL/ha	3 days	Use higher rates during periods of high insect pressure or when crop coverage is difficult.
	Western flower thrip	200 mL/ha		Use this product as part of the <b>WFT Resistance Management Strategy</b> (see end of table for details).
<b>Fruiting vegetables; including:</b> Eggplant, Okra, Peppers (Sweet – Capsicum, Chilli), Sweet corn (see also Under separate listing below), Tomato	Potato moth (tomato leaf miner), Heliothis	100-200 mL/ha or dilute 10-20 mL/100 L	<b>Tomato:</b> 1 day  <b>Sweet corn:</b> Not required  <b>All others:</b> 3 days	Use the per hectare rate when applying to bush tomato and sweet corn and the dilute rate (per 100 L) in trellised crops (see the "Dilute Spraying" section in this booklet).  Use the lower rate as part of an IPM program when heliothis is the dominant pest and good crop coverage is possible. Use higher rates during periods of high insect pressure or when crop coverage is difficult.
	Western flower thrip	200 mL/ha or dilute 20 mL/100 L		Use this product as part of the <b>WFT Resistance Management Strategy</b> (see end of table for details).
<b>Leafy vegetables;</b> including Lettuce,	Loopers	100 mL/ha	3 days	See above under <b>"VEGETABLES"</b>
	Heliothis	100-200 mL/ha		

CROP	PEST	RATE	WHP	CRITICAL COMMENTS
Endive, Silverbeet, Spinach and Brassica leafy, vegetables (*see list at end of table)				Use the lower rate as part of an IPM program when heliothis is the dominant pest and good crop coverage is possible. Use higher rates during periods of high insect pressure or when crop coverage is difficult.
	Western flower thrip	200 mL/ha		Use this product as part of the <b>WFT Resistance Management Strategy</b> (see end of table for details).
<b>Legume vegetables (succulent seeds and immature pods only); including Bean pea, Snow pea, Sugar snap pea</b>	Loopers	100 mL/ha	3 days	<b>Do not make more than three (3) applications per crop.</b>  Use higher rates during periods of high insect pressure or when crop coverage is difficult. Note: Entrenched larvae will not be controlled.
	Heliothis	100-200 mL/ha		Use this product as part of the <b>WFT Resistance Management Strategy</b> (see end of table for details).
	Western flower thrip	200 mL/ha		
<b>Root and tuber vegetables;</b> including Beetroot, Carrot, Celeriac, Galangal, Parsnip, Potato, Radish (incl. Daikon), Sweet potato, Swede, Turnip	Lightbrown apple moth, Loopers	100 mL/ha	3 days	See above under " <b>VEGETABLES</b> "
	Heliothis	100-200 mL/ha		Use the lower rate when good coverage can be achieved and the high rate in maturing crops if crop canopies prevent good coverage.
	Potato moth	100-200 mL/ha + wetter		Entrenched larvae will not be controlled. <b>Only target foliar infestations of potato moth.</b> Potato moth larvae within stems or below the soil will not be controlled. Add a non-ionic wetting agent at the recommended rate.
<b>Stalk and Stem vegetables;</b> Celery	Heliothis	200 mL/ha	1 day	See comments under " <b>VEGETABLES</b> "
<b>Sweet corn</b> (see also under <i>Fruiting Vegetables</i> above)	Heliothis	100-200 mL/ha	-	Use higher rates during periods of high insect pressure or when crop coverage is difficult.
<b>Ornamentals</b>	Pear and cherry slug	5 mL/100 L	-	Apply when infestation first identified. Repeat applications at no less than
	Caterpillars	10 mL/100 L		

CROP	PEST	RATE	WHP	CRITICAL COMMENTS
	Western flower thrip	20 mL/100 L		(ten) 10 day intervals. Caterpillars feeding in entrenched sites may not be controlled.  Use this product as part of the <b>WFT Resistance Management Strategy</b> (see end of table for details).
<b>TREE &amp; VINE CROPS:</b>				
In the following table, all rates (except in <b>FORESTRY</b> ) are given for dilute spraying. For concentrate spraying refer to the " <b>Concentrate Spraying</b> " section in this booklet. Apply the same total amount of product to the target crop whether applying this product by dilute or concentrate spraying methods.				
CROP	PEST	RATE	WHP	CRITICAL COMMENTS
	<b>FOR ALL TREE &amp; VINE CROPS:</b> Carefully monitor crops for eggs and larvae of pest species by regular field scouting. Target sprays against mature eggs and newly-hatched larvae when numbers exceed spray threshold. Apply repeat applications at 7-14 day intervals as new infestations occur unless otherwise directed in the <b>CRITICAL COMMENTS</b> .			
<b>Avocado</b> (see also under <i>Tropical and Sub-Tropical Fruit Crops</i> below)	Leafrollers (including Avocado leafroller, Ivy leafroller and Lightbrown apple moth), Loopers (including Ectropis looper)	10 mL/100 L + wetting agent	-	See comments under " <b>FOR ALL TREE &amp; VINE CROPS</b> " above.
<b>Berryfruit;</b> including Blackberry, Blueberry, Boysenberry, Cranberry, Currant, Gooseberry, Raspberry, Strawberry	Loopers	10 mL/100 L	1 day	See comments under " <b>FOR ALL TREE &amp; VINE CROPS</b> " above.
	Lightbrown apple moth, Heliothis	10-20 mL/100 L		Use the higher rate in dense canopies and when larvae have begun webbing leaves and fruit. Use the lower rate under an IPM system or where good coverage is assured.
	Western flower thrip	20 mL/100 L		Use this product as part of the <b>WFT Resistance Management Strategy</b> (see end of table for details).
<b>Citrus Fruits;</b> including Grapefruit, Lemon, Lime, Mandarin, Orange	Citrus leafminer, Lightbrown apple moth	5-10 mL/100 L+ wetting agent	-	For Citrus leafminer the best results will be achieved when horticultural oil is used in place of a wetting agent. Only use oils when applying to non-bearing trees due to the risk of fruit phytotoxicity.
	Heliothis (Corn earworm and native budworm)	10-20 mL/100 L+ wetting agent		For the other pests, use higher rates for heavy infestations.
<b>Coffee</b>	Avocado leafroller	10-20 mL/100 L+	7 days	Use higher rates for heavy infestations.

CROP	PEST	RATE	WHP	CRITICAL COMMENTS
		wetting agent		
<b>Grapes</b>	Lightbrown apple moth	10 mL/100 L	14 days (For wine grapes: Refer to AWRI)	See comments under " <b>FOR ALL TREE &amp; VINE CROPS</b> " above.
	Grapevine moth	3 mL/100 L		
<b>Kiwifruit (see also under Tropical &amp; Sub-Tropical Fruit Crops below)</b>	Lightbrown apple moth	10 mL/100 L	7 days	
<b>Mango (see also under Tropical &amp; Sub-Tropical Fruit Crops below)</b>	Flower-eating caterpillars, Small mango tip borer	10 mL/100 L + wetting agent	-	
	Large mango tip borer	3 mL/100 L + wetting agent		
<b>Pome fruit</b> Including Apple, Pear, Nashi, Loquat, Quince	Lightbrown apple moth, Loopers, Pear slug, Heliothis	10 mL/100 L	3 days	Use this product as part of the <b>WFT Resistance Management Strategy</b> (see end of table for details).
	Western flower thrip	20 mL/100 L		
<b>Stone fruit;</b> including Apricot, Cherry, Nectarine, Peach, Plum	Cherry slug	5 mL/100 L	3 days, except for peaches where the Withholding Period is 7 days	See comments under " <b>FOR ALL TREE &amp; VINE CROPS</b> " above.
	Lightbrown apple moth	10 mL/100 L		
	Western flower thrip	20 mL/100 L		Use this product as part of the <b>WFT Resistance Management Strategy</b> (see end of table for details).
	Oriental fruit moth	20 mL/100 L		In orchards employing mating disruption techniques, CropSure Kobus® 480SC Insecticide should be used in a rotation for management of oriental fruit moth (OFM). Apply CropSure Kobus® 480SC Insecticide to coincide with egg hatch of OFM. Addition of a wetting agent may improve control under less than ideal application conditions.
<b>Tropical and sub-tropical fruit crops (inedible peel); including</b>	Flower-eating caterpillars, Leafrollers and loopers, Yellow peach moth	10 mL/100 L	Not required (except kiwifruit, which has	See comments under " <b>FOR ALL TREE &amp; VINE CROPS</b> " above.

CROP	PEST	RATE	WHP	CRITICAL COMMENTS
Avocado <sup>2</sup> Cherimoya, Custard apple, Durian, Feijoa, Guava, Jackfruit, Kiwifruit <sup>2</sup> , Longan, Lychee, Mango <sup>2</sup> , Mangosteen, Papaya, Passionfruit, Persimmon, Rambutan, Star apple <sup>2</sup> (See separate listings above also for these crops)	Red-banded thrip, Sorghum head caterpillar	20 mL/100 L	a 7 day Withholding Period)	Addition of a non-ionic wetting agent at its recommended rate may improve control on difficult to wet foliage and fruit.
<b>FORESTRY:</b>				
<b>Eucalyptus Plantations</b>	Larvae of Eucalyptus chrysomelid leaf beetle ( <i>Chrysophtharta bimaculata</i> and <i>C. agricola</i> )	13-25 mL/ha + sticker or wetter	-	Use higher concentration for larger larvae and older trees. Larval mortality will not occur for at least four (4) days after spraying. Note that CropSure Kobus® 480SC Insecticide is not effective against adult beetles. Do not spray if rain expected in the following 24 hours. Follow code of practice for aerial spraying for relevant state, including appropriate buffers. Add a non-ionic wetting agent at the recommended rate.
<b>Tea tree (<i>Melaleuca</i> spp.)</b>	Pyrgo beetle ( <i>Paropsistema tigrina</i> )	50-125 mL/ha + wetting agent	-	Closely monitor plantation for egg, larval numbers and age of larvae. Use the higher rate for heavy infestations and for larger tea trees. Apply by ground based application equipment only in a minimum of 100 L/ha water. Use sufficient spray volume to ensure thorough coverage of flush leaf, and adjust spray volumes to stage of crop growth. <b>For 1<sup>st</sup>, 2<sup>nd</sup> instar larvae</b> , apply 100 mL/ha. <b>For 3<sup>rd</sup>, 4<sup>th</sup> instar larvae</b> , apply 100-150 mL/ha. <b>For control of adults</b> apply 150-250 mL/ha. Add a non-ionic wetting agent at the recommended rate.

CROP	PEST	RATE	WHP	CRITICAL COMMENTS
<b>Western Flower Thrip (WFT) Resistance Management Strategy</b>				
Make three (3) consecutive applications at either 3-5 day intervals when temperatures are greater than 20°C or at 6-12 day intervals when temperatures are less than 20°C. For any further sprays required, use an approved product from another chemical group. <b>Do not</b> make more than three (3) consecutive applications of CropSure Kobus® 480SC Insecticide before switching to an approved product from another chemical group.				
<b>*Brassica Leafy Vegetables:</b> Includes Pak choi, Bok choi, Choi sum, Chinese broccoli (Gai lum/Gai lan/Kai lan), Chinese cabbage (Pet sai/Wong bok/Haksukai), Mibuna, Mustard spinach (Komatsuna), Kale, Indian mustard, Kai choi, Gai choi/Am soi, Tat soi and Leafy mustard.				
<b>PEST NAMES:</b> Avocado leafroller: <i>Homona spargotis</i> ; Banana rust thrip: <i>Chaetanaphothrips signipennis</i> ; Cabbage cluster caterpillar: <i>Crocidiolomia pavonana</i> ; Cabbage centre grub: <i>Hellula hydralis</i> ; Cabbage white butterfly: <i>Pieris rapae</i> ; Citrus leafminer: <i>Phyllocnistis citrella</i> ; Cucumber moth: <i>Diaphania indica</i> ; Diamondback moth: <i>Plutella xylostella</i> ; Grapevine moth: <i>Phalaenoides glycinae</i> ; Heliothis caterpillars, corn earworm, native budworm: <i>Helicoverpa</i> spp.; Ivy leafroller: <i>Cryptoptila immersana</i> ; Large mango tip borer: <i>Penicillaria jocosatrix</i> ; Lightbrown apple moth: <i>Epiphyas postvittana</i> ; Loopers: <i>Chrysodeixis</i> spp. and Geometrid loopers, Ectropis looper: <i>Ectropis savulosa</i> ; Oriental fruit moth: <i>Grapholita molesta</i> ; Pear and/or cherry slug: <i>Caliroa cerasi</i> ; Potato moth/tomato leaf miner: <i>Phthorimaea operculella</i> ; Red-banded thrip: <i>Selenothrips rubrocinctus</i> ; Small mango tip borer: <i>Chlumetia euthysticha</i> ; Sorghum head caterpillar: <i>Cryptoblabes adoceta</i> ; Sugarcane bud moth: <i>Opogona glyciphyga</i> ; Western flower thrip: <i>Frankliniella occidentalis</i> ; Yellow peach moth: <i>Conogethes punctiferalis</i> .				

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

**WITHHOLDING PERIODS**

**HARVEST WITHHOLDING PERIODS**

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

NOT REQUIRED WHEN USED AS DIRECTED.

**BERRIES (except Grapes), CELERY and TOMATOES:**

DO NOT HARVEST FOR 1 DAY AFTER APPLICATION.

**BROCCOLI, BRASSICA LEAFY VEGETABLES, BRUSSELS SPROUTS, CABBAGE, CAULIFLOWER, CUCURBITS (Cucumber, Melons, Squash and Zucchini), GREEN BEANS and PEAS (Green, Snow and Sugar snap), LEAFY VEGETABLES (Lettuce and Spinach), EGGPLANT, PEPPERS (Capsicums and Chillies), POME FRUIT (Apples, Pears and Nashis), ROOT & TUBER VEGETABLES (Beetroot, Carrot, Parsnip, Potato, Radish, Swede and Turnip) and STONEFRUIT (except Peaches):**

DO NOT HARVEST FOR 3 DAYS AFTER APPLICATION.

**COFFEE, KIWIFRUIT, PEACHES:**

DO NOT HARVEST FOR 7 DAYS AFTER APPLICATION.

**GRAPES:**

DO NOT HARVEST FOR 14 DAYS AFTER APPLICATION.

**GRAPES FOR EXPORT WINE:**

Refer to AWRI Wine Grid.

**GRAZING WITHHOLDING PERIOD**

**ALL CROPS, ORCHARDS, PLANTATIONS and VINEYARDS:**

**DO NOT** allow livestock to graze crop stubble, or in orchards, plantations or vineyards for **14 DAYS AFTER APPLICATION**.

**TRADE ADVICE**

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

**STOCKFOOD WITHHOLDING PERIOD**

When CropSure Kobus® 480SC Insecticide is used as directed and the above WHPs are observed, harvested crop commodities or their waste material, including processed waste (e.g. cannery waste), can be fed to livestock. Animals fed these treated commodities are considered acceptable to slaughter for export, provided no single crop waste makes up more than 40% of the animals' diet for periods exceeding seven (7) days. If animals are fed exclusively on single crop commodities or waste there could be a risk of animal residues exceeding export requirements. In this situation, it is advisable to transfer stock to untreated feed for at least 14 days before sending to slaughter.

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

**INSECTICIDE RESISTANCE WARNING**

GROUP	5	INSECTICIDE
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For insecticide resistance management CropSure Kobus® 480SC Insecticide is a Group 5 insecticide. Some naturally occurring insect biotypes resistant to CropSure Kobus® 480SC Insecticide and other Group 5 insecticides may exist through normal genetic variability in any insect population. The resistant individuals can eventually dominate the insect population if CropSure Kobus® 480SC Insecticide or other Group 5 insecticides are used repeatedly. The effectiveness of CropSure Kobus® 480SC Insecticide on resistant individuals could be significantly reduced. Since occurrence of resistant individuals is difficult to detect prior to use, CropSure Pty Ltd accepts no liability for any losses that may result from the failure of CropSure Kobus® 480SC Insecticide to control resistant insects.

**GENERAL INSTRUCTIONS**

CropSure Kobus® 480SC Insecticide is formulated as a suspension concentrate that is suitable for application in water by aircraft, ground rig or knapsack. It has a unique mode of action and controls insect pests that are resistant to conventional insecticides. The active constituent is derived from the fermentation of a naturally occurring micro-organism. It has low toxicity to mammals, birds, fish, crustacea and many predatory insect species. CropSure Kobus® 480SC Insecticide may be used in integrated pest management (IPM) and conventional insect control programs.

CropSure Kobus® 480SC Insecticide works by both contact and ingestion. Exposed insects stop feeding almost immediately but may take up to three (3) days to die.

**MIXING**

Agitate or shake the container immediately prior to use.

Half fill the spray tank with water, add the appropriate amount of accurately measured CropSure Kobus® 480SC Insecticide, then complete filling the tank.

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

Use only clean water within the range pH 5-9 to CropSure Kobus® 480SC Insecticide.

## STORAGE OF DILUTED SPRAY MIX

Whenever possible the spray mix should be used immediately after it is prepared. However, if weather conditions or mechanical breakdown prevent immediate use, the spray mix may be stored for up to 72 hours without loss of activity.

The spray mix should be agitated thoroughly by mechanical or hydraulic action at regular intervals during storage to prevent sedimentation. Ensure that the stored spray mix is thoroughly agitated at least once every eight (8) hours.

The spray mix must be stored out of direct sunlight.

## APPLICATION

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

For optimum results follow the application specifications listed below:

**Ground Spraying:** Apply in a minimum of 250 L/ha of water. Increase spray volumes as the crop grows.

**Aerial Spraying:** Apply in a minimum of 30 L/ha of water.

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

### Dilute Spraying

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

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

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

Add the amount of product specified in the Directions for Use table for each 100 L of water. Spray to the point of runoff. If volume to be applied is <1000 L/ha then use the low volume (concentrate) application method for calculation of chemical rate. For volumes > 1000 L/ha use dilute spray rate.

### Concentrate Spraying

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

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

Determine an appropriate dilute spray volume (See **Dilute Spraying** above) for the crop canopy. Consult your local advisor, agronomist or Department of Agriculture to determine this volume. This is needed to calculate the concentrate mixing rate.

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

### Concentrate Spraying Example

1. Dilute spray volume as determined above: e.g. 1000 L/ha
2. Your chosen concentrate spray volume: e.g. 500 L/ha
3. The concentration factor is 2X (1000 / 500)
4. If the dilute label rate is 40 mL/100 L, then the concentrate rate becomes 2 X 40, i.e. 80 mL/100 L of concentrate spray

The chosen spray volume, amount of product per 100 L of water and the sprayer set up and operation may need to be changed as the crop grows. For further information on concentrate spraying, users are advised to consult relevant industry guidelines, undertake appropriate competency training. Always follow Industry Best Practices.

### RAINFALL

Rain can wash CropSure Kobus® 480SC Insecticide from treated plant surfaces and result in reduced insect control. Avoid making spray applications if rain is expected before the spray can dry completely.

### CLEANING SPRAY EQUIPMENT

After using CropSure Kobus® 480SC Insecticide empty the tank and completely drain the system. Rinse the tank, pumps, lines, hoses, filters and nozzles by circulating clean water through the system. Drain and repeat the rinsing procedure twice.

### PRECAUTIONS

#### Re-entry Period

DO NOT enter treated areas until the spray has dried, unless wearing cotton overalls buttoned to the neck and wrist (or equivalent clothing) and chemical resistant gloves. Clothing must be laundered after each day's use.

### PROTECTION OF LIVESTOCK

**Toxic to bees.** Avoid direct application or drift of the spray mix onto beehives.

Once the spray deposit has dried, foraging bees will not be affected.

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

Highly toxic to aquatic invertebrates and algae.

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

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

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

## PROTECTION OF NON-TARGET INSECTS

Beneficial insects contribute to control of pest outbreaks. Applications of CropSure Kobus® 480SC Insecticide are unlikely to affect lacewings (*Chrysopa* spp.), predatory bugs (*Geocoris*, *Orius* and *Nabis* spp.), spiders and most species of ladybird beetles (*Coccinella*, *Diomus* and *Harmonia* spp.). However some species of beneficial insects are sensitive to CropSure Kobus® 480SC Insecticide and its use may temporarily reduce populations of parasitoid wasps (especially *Trichogramma* spp.), ants, some beetles and tachinid flies. This may lead to some disruption of IPM systems based on these species, but generally populations will recover. However, effects on beneficial insects at the highest rate (40 mL/100 L) have not been tested. Therefore, this rate should be used with caution where IPM is practiced.

## STORAGE AND DISPOSAL

Store in the closed, original container in a cool, well-ventilated area. DO NOT store for prolonged periods in direct sunlight. DO NOT store near food, feedstuffs, fertilisers or seed.

Triple-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 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. Do not burn empty containers or product.

### For DrumMuster containers:

This container can be recycled if it is clean, dry, free of visible residues and has the **drumMUSTER** logo visible. Triple rinse containers before disposal. Add rinsings to spray tank. DO NOT dispose of undiluted chemicals on site. Wash outside of the container and the cap. Store cleaned container in a sheltered place with cap removed. It will then be acceptable for recycling at any **drumMUSTER** collection or similar container management site. The cap should not be replaced but may be taken separately.

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. DO NOT burn empty containers or product.

## SPILL AND LEAK MANAGEMENT

Apply absorbent material such as earth, sand, cat litter or clay granules to the spill. Sweep up material for disposal when absorption is completed and contain in a refuse vessel for disposal (see **STORAGE AND DISPOSAL** section). If necessary, wash the spill area with an alkali detergent and water and absorb the wash liquid for disposal as described above.

## SAFETY DIRECTIONS

May irritate the eyes and skin. Avoid contact with eyes and skin. When opening the container and preparing product for use, wear cotton overalls buttoned to the neck and wrist (or equivalent clothing) and elbow-length chemical resistant gloves. Wash hands after use. After each day's use, wash gloves and contaminated clothing.

**FIRST AID**

If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 13 11 26, New Zealand 0800 764 766.

**CONDITIONS OF SALE**

CropSure Pty Ltd shall not be liable for any loss, injury, damage or death whether consequential or otherwise, whatsoever or whosoever arising whether through negligence or otherwise, in connection with the sale, supply, use or application of this product, except for any provisions or rights under the Australian Consumer Law which cannot be excluded. The supply of this product is on the express condition that the purchaser does not rely on CropSure Pty Ltd skill of judgement in the purchasing or using the same and every person using this product does so at their own risk absolutely. The Buyer and user assume all risk of use and/or handling and/or storage of this material when such use and/or handling and/or storage is contrary to label instructions. This product is designed to be only used according with the label directions.