

#### STORAGE AND DISPOSAL

Store in the closed, original container in a cool, well-ventilated area. DO NOT store for prolonged periods in direct sunlight.

Triple or preferably pressure rinse containers before disposal. Add rinsings to spray tank. DO NOT dispose of undiluted chemicals on site. Break, crush, puncture or bury empty container below 500 mm 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.

For refillable containers: Empty contents fully into application equipment. Close all valves and return to point of supply for refill or storage.

#### SAFETY DIRECTIONS

Poisonous if swallowed. Attacks eyes. Will irritate the skin. Avoid contact with eyes and skin. Do not inhale vapour and spray mist. When preparing spray wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length PVC gloves and goggles. If product in eyes, wash it out immediately with water. Wash hands after use. After each day's use, wash gloves, face shield or goggles and contaminated clothing.

#### FIRST AID

If poisoning occurs, contact a doctor or Poisons Information Centre (Phone 13 11 26). If swallowed, DO NOT induce vomiting. Give a glass of water.

#### MATERIAL SAFETY DATA SHEET

For further information refer to the Material Safety Data Sheet (MSDS).

#### CONDITIONS OF SALE

"Kenso Corporation (M) Sdn Bhd" ('Kenso') shall not be liable for any loss injury damage or death whether consequential or otherwise whatsoever or howsoever arising whether through negligence or otherwise in connection with the sale supply use or application of this product. The supply of this product is on the express condition that the purchaser does not rely on Kenso's skill or judgment in purchasing or using the same and every person dealing with this product does so at his own risk absolutely. No representative of Kenso has any authority to add to or alter these conditions.

In a Transport Emergency Dial 000 Police or Fire Brigade

Batch No:

Date of Manufacture:



Kenso Corporation (M) Sdn. Bhd. Kirkland Corner H/177 Old Cleveland Rd. Coorparoo 4151

# POISON

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

# Kenso Agcare Tal-Ken 100

### **Insecticide/ Miticide**

ACTIVE CONSTITUENT: 100 g/L BIFENTHRIN SOLVENT: 763 g/L LIQUID HYDROCARBON

# GROUP **3A** INSECTICIDE

For the control of helicoverpa Spp. In cotton, tomatoes, Lucerne seed crops, navy beans; certain species of mites in bananas, cotton and tomatoes; long tailed mealy bug in pears; banana weevil borer and banana rust thrips in bananas; mirids in cotton; whitefly in tomatoes; and red legged earth mite, blue oat mite, bryobia mite, webworm and brown pasture looper in faba beans, subterranean clover, clover, canola, wheat, barley, field peas, lupins and Lucerne; and certain species or wireworms in cotton and sugarcane; fig longicorn in grapes and citrus leaf eating weevil in citrus as per the directions for use.

### READ THIS LEAFLET BEFORE USE

### APVMA Approval No.: 59097/20/1004

Kenso Corporation (M) Sdn Bhd Kirkland Corner H/177 Old Cleveland Rd. Coorparoo 4151 Phone 07 3847 4288

#### DIRECTIONS FOR USE:

DO NOT use as a foliar spray in banana plantations and orchards where mite predators are established and providing effective mite control or other pest control.

DO NOT apply as a foliar treatment if rainfall is expected before spray deposits dry on leaf surfaces. DO NOT apply to bananas by aircraft.

CROP	PEST	STATE	RATE	WHP	CRITICAL COMMENTS
Banana	Banana weevil	Qld,	Seasonal	1 day	Seasonal Program
	borer	NSW,	<u>Program</u>		Twice per year timing: Apply in October/November
	(Cosmopolites	WA, NT	Stool Treatment		(spring/early summer) and March/April (summer/
	sordidus)	only	Method		autumn). Use the higher rate (concentrate) when borer
			250-		pressure or damage is high.
			330mL/100L		Once per year timing: Apply in October/November or
	Banana rust		twice per year		March/April.
	thrips		OR		Monitoring Program: Monitor weevil borer population
	(Choetanaphothri		660mL/100L		carefully by traps counts and/or corm damage ratings
	ps signipennis)		once per year		beginning in September when pest activity is on the
					increase and continue until April. Apply treatments
					when banana weevil borers reach or exceed
			Band Treatment		acceptable threshold levels. Monitor borer control after
			<u>Method</u>		application and re-treat as required.
			250mL/100L		Banana weevil borer: Application should be made
			twice per year		after rain or irrigation during periods of high adult borer activity.
			<u>Monitoring</u>		Banana rust thrips: Application against banana
			Program		weevil borer will give coincident rust thrips control
			Stool Treatment		particularly when application is made when thrips
					activity is on the increase usually beginning
			330mL/100L		September and into the summer months.
			Dond Trootmont		Application Method. Stool Treatment Application.
			Danu Treatment		Remove trash from the base of the stools and apply
			250ml (100		source and a spray solution to each stool, depending
			25011L/100L		well as the soil in a 20cm hand around each steel
					ensuring thorough treatment of both butt (s) and
					followers (s) Lise the lower spray volume of 500ml on
					small stools less than 50cm across the entire base
					<b>Band Treatment Application</b> . Apply as a band
					application with a side delivery boom and offset
					nozzles on both sides of the row with the spray pattern
					positioned to spray 30cm of soil on either side of the
					row and 30cm in height. Aim to apply a total spray
					volume of 1/L stool area. For single sucker row
					configurations apply 28L of solution per 100 metres of
					row in a band 0.5m wide on each side of the row
					overlapping in the center.
					For double sucker row configurations apply 56L of
					solutions per 100 metres of row in a band 1m wide on
					each side of the double row with spray pattern
					overlapping between the rows.
	Strawberry	Qld &	40mL/100L	8 days	Monitor mite population on old leaves particularly
	spider mite	WA only			during hot dry conditions. Apply Tal-Ken 100 as a
	(Terranychus				preventative rather than a curative treatment before
	lambi)				damage occurs and before mite numbers build up to
					damaging levels. Follow up applications may be
					required at 10-14 days intervals. Thorough coverage
					of the lower leaf surface is essential to ensure good
					control. Use a total spray volume of 300-500L/ha.

CROP	PEST	STATE	RATE	WHP	CRITICAL COMMENTS
Cotton	Native budworm (Helicoverpa pungivera) Cotton bollworm (Helicoverpa armigera) Two spotted mite (Tetranychus urtcoe) Green Mirid (Creontiodes dilutus) Apple dimpling bug (Carnpylomma liebknechti)	Qld, NSW & WA only	600-800 mL/ha	14 days (H) Do not graze or cut for stockfe ed. Do not feed cotton trash to livestoc k.	Apply as indicated by field checks. Use the higher rate when pest pressure is high, conditions favour pest development and when increased residual protection is required. <b>Budworm and Bollworm</b> : Applications should be timed to coincide with egg hatch and when small larve up to 5mm are present. Do not apply this product to Helicoverpa (= Heliothis) amigera larvae larger than 5mm in length. <b>Two spotted mite</b> : Application against Helicoverpa spp. Will give good control of coincident two spotted mite, particularly when applied in low mite populations around 10% leaf infestation. If conditions continue to favour mite development a second application may be required 14-20 days later. <b>Green Mirid &amp; Apple dimpling bug</b> : Apply at recommended threshold levels as indicated by field checks. Use the higher rate for increased pest pressure and longer residual protection.
	False wireworm ( <i>Pteronlaeus</i> <i>alternaus</i> ) Sugarcane wireworm ( <i>Agrypnus</i> <i>variabilis</i> )		375 mL/ha or 38 mL/100m of row		Wireworm: Apply as a spray into the furrow at planting. Use a spray nozzle which will deliver a coarse spray in a total volume of 60-100L/ha in a 10cm band over the seed before soil is brought in behind covering tyres in front of the press wheel. The rate is based on a 1mm row spacing if row spacing varies from 1m then apply at the use rate according to mL/100m of row.
Faba beans, Subterranen clover, Clover, Barley, Canola, Field	Redlegged earth mite ( <i>Halotydeus</i> <i>destructor</i> ) Brown pasture looper ( <i>Ciampa</i> <i>arietaria</i> )	All States	50-100mL/ha	4 weeks (grazin g)	Apply as a broadcast ground rig application in a tota water volume of 50-200L/ha or by air in a minimur total water volume of 20L/ha. Apply to bare soil after conventional cultivation and sowing or onto wel grazed or sprayed pasture after direct drilling. Treat infested paddocks after sowing. Use the higher
Lucerne & wheat	Blue oat mite ( <i>Penthaleus</i> <i>major</i> ) Pasture webworm ( <i>Hednota</i> spp.)		100mL/ha		protection. Tal-Ken 100 is compatible with some herbicides. See compatibility statement for details.
	( <i>Bryobia</i> spp.)		2001112/11a		
Citrus	Leafeating weevils ( <i>Eutinophoea</i> <i>briscristata</i> )	All states	Pre- emergence program 125 or 25mL/tree <u>Post- emergence</u> Monitoring program 6mL/tree	-	Apply as a high volume band application in a 1.5 to 2 metres swath to the ground, both sides of the row, under each tree. Aim to apply a total spray volume of 5 to 10L/tree (eg At 250 trees/ha = 1250 to 2500 L/ha) <b>Pre-emergence program</b> : Apply just prior to, or at the first sign of major beetle emergence in mid-October. Use the higher rate in blocks with a history of high beetle numbers or when longer residual control is required. <b>Post-emergence monitoring program</b> : Apply at peak beetle emergence in October/November as indicated by field monitoring. (Refer to monitoring statement on label) Follow up treatment maybe necessary based on a threshold of 25 beetle per 10 sites per orchard in consecutive counts 1-2 weeks apart

CROP	PEST	STATE	RATE	WHP	CRITICAL COMMENTS
Grapes	Fig longicorn (Acalolepta vastator)	NSW & WA only	1000mL/100L	-	The application MUST be made at late dormancy after pruning and before bud burst. Apply a single high volume spray, with nozzles directing the spray solution to the trunk and cordons (arms) of grapevines to achieve thorough wetting of the bark. Total spray volume should be about 500mL/vine achieved by hard application.
Luceme seed crops	Native budworm ( <i>Helicoverpa</i> <i>punctigera</i> )	All states	400-600mL/ha	-	Do not treat Lucerne seed crops for alfalfa sprout production. Apply as indicated by field checks after the commencement of flowering. Use the higher rate. When pest pressure is high conditions favour pest development and when increased residual protection is required. <b>Native budworm:</b> Application should be timed to coincide with egg hatch when small larvae up to 5mm are present.
Navy beans	Native budworm ( <i>Helicoverpa</i> <i>punctigera</i> ) Corn earworm ( <i>Helicoverpa</i> <i>armgera</i> )	All states	600-800 mL/ha	14 days harves t and grazin g	Apply as indicated by field checks from flowering onwards. Use the higher rate when pest pressure is high, conditions favour pest development and when increased residual protection is required. <b>Budworm and Earworm</b> : Applications should be timed to coincide with egg hatch and when small larvae up to 5mm are present. Do not apply this product to Helicoverpa (=Heliothis) armigera larvae larger than 5mm in length.
Pears	Longtailed mealy bug ( <i>Pseudococcus</i> <i>longipinus</i> )	Vic & WA only	25mL/100L plus Spray oil at 1L/100L	14 days	Examine wood for presence of over wintering longtailed mealy bugs but do not spray until large numbers of young emerge in spring. Apply this mixture to near the point of run-off to all above ground parts of the tree between green tip to commencement of flowering. Do not spray after flowering has commenced.
Sugar cane	Sugarcane wireworm ( <i>Agrypnus</i> spp.)	Qld, NSW & WA only	375mL/ha or 5.6mL/100m of row	-	Apply as a spray into the furrow at planting. Use a spray nozzle which will deliver a coarse spray in a total volume of 60-100L/ha in a band 20-30cm wide over the base of the furrow on top of the setts and before covering soil is brought in by tynes. The rate is based on a 1.5m row spacing. If row spacing varies from 1.5m then apply at the use rate according to mL/100m of row.
Tomatoes	Native budworm ( <i>Heliocoverpa</i> <i>pungera</i> ) Corn earworm ( <i>Heliocoverpa</i> <i>armigera</i> ) Two spotted mite ( <i>Tetranychus</i> <i>urticae</i> ) Tomato russet mite ( <i>Aculops</i> <i>lycopersia</i> )	All states	High Volume 40-60mL/100L or Low volume 600mL/ha	1 day	Do not use low volume ground or air application on trellis tomatoes. <b>Crop Monitoring Program</b> : <b>Helicoverpa spp</b> .: Apply as indicated by field checks. Applications should be timed to coincide with egg hatch and when small larvae up to 5mm are present. Do not apply this product to Helicoverpa (=Heliothis) armigera larvae larger than 5mm in length. <b>Mites</b> : Applications against Helicoverpa spp. Will give good control of coincident mites particularly when applied on low mite populations. If conditions continue to favour mite development. A second application may be required 14-20 days later. <b>Schedule Spray Program</b> : If fields are not checked during pest infestation periods apply on a 7-10 day alternating program with a non pyrethroid insecticide. Use the higher rate (high volume application) and shorter interval when pest infestation is more severe and when increased residual protection is required. Do not apply this product to Helicoverpa armigera larvae larger than 5mm in length.

Whitefly ( <i>Trialeurudos</i> vaporariorum)	30mL/100L water	Apply as indicated by pest incidence and repeat as necessary. Use a total spray volume of 2500
vaporanorarrij		

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

#### WITHHOLDING PERIODS:

**BANANAS:** 

For Ground Application – DO NOT HARVEST FOR 1 DAY AFTER APPLICATION. For Foliar Application – DO NOT HARVEST FOR 8 DAYS AFTER APPLICATION. COTTON: DO NOT HARVEST FOR 14 DAYS AFTER APPLICATION. DO NOT GRAZE OR CUT FOR STOCK FEED. DO NOT FEED COTTON TRASH TO LIVESTOCK. NAVY BEANS, PEARS: DO NOT HARVEST FOR 14 DAYS AFTER APPLICATION. TOMATOES: DO NOT HARVEST FOR 1 DAY AFTER APPLICATION. SUBTERRANEAN CLOVER, CLOVER, FIELD PEAS, FABA BEANS, WHEAT, BARLEY, LUCERNE, CANOLA AND LUPINS: DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 4 WEEKS AFTER APPLICATION.

CITRUS, GRAPES: NOT REQUIRED WHEN USED AS DIRECTED.

#### GENERAL INSTRUCTIONS

Tal-Ken 100 Insecticide/ Miticide is a contact and residual insecticide/miticide. It can be used as a protective treatment when applied at regular intervals or as a knockdown treatment to control existing pests. Best results are obtained when Tal-Ken 100 is applied before pest populations build up to damaging levels. This product is not suitable for use in Pest Management (IPM) programs where mite or other insect predators or parasites are established and providing effective mite and other insect control.

#### RESISTANT WEEDS WARNING

#### GROUP 3A INSECTICIDE

For insecticide resistance management Tal-Ken 100 is a Group 3A insecticide. Some naturally occurring insect biotypes resistant to Tal-Ken 100 and other Group 3A insecticides may exist through normal genetic variability in any insect population. The resistant individuals can eventually dominate the insect population if these insecticides are used repeatedly. The effectiveness of Tal-Ken 100 ion resistant individuals could be significantly reduced. Since the occurrence of resistant individuals is difficult to detect prior to use. Kenso Corporation accepts no liability for any loss that may result from the failure of Tal-Ken 100 to control resistant insects.

Tal-Ken 100 may be subject to specific resistance management strategies.

#### \* NOTICE \*

Helicoverpa (=Heliothis) armigera resustance in Northern NSW and Qld. To help contain pyrethroid resistance in H.armigera. The Summer Crop Insecticide strategy as developed by the Qld Department of Primary Industries and NSW Agriculture should be adhered to. Failure to observe the strategy may result in widespread resistance affecting the future viability of summer cropping.

#### Application

Tal-Ken 100 may be applied by either ground rig or aircraft. Thorough coverage is essential to ensure adequate control. Do not apply as a fog or mist.

#### 1. Tree and Vine Crops

#### Mixing/ Application

#### **DILUTE SPRAYING**

Use a sprayer designed to apply high volumes of water up to the point of runoff and matched to the crop being sprayed. Set up and operate the sprayer to achieve even coverage throughout the crop canopy. Apply sufficient water to cover the crop to the point of run-off. Avoid 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 Direction for Use table for each 100L water. Spray to the point of run-off. The required dilute spray volume will change and the sprayer set up and operation may also need to be changed as the crop grows.

#### CONCENTRATE SPRAYING

Use a sprayer designed and set up for concentrate spraying (that is a sprayer which applies water volumes less than those required to reach the point of runoff) and matched to the crop being sprayed. Set up and operate the sprayer to achieve even coverage throughout the crop canopy using the chosen water volume. Determine an appropriate dilute spray volume (See Dilute Spraying above) for the crop canopy. This is needed to calculate the concentrate mixing rate. The mixing rate for concentrate spraying can then be calculated in the following way.

#### EXAMPLE ONLY

- 1. Dilute spray volume as determined above: for example 1500L/ha.
- 2. Your chosen concentrate volume: for example 500L/ha.
- 3. The concentration factor in this example is 3 x (ie 1500L/500L=3)
- 4. If the dilute label rate is 10mL/100L, then the concentrate rate becomes 3 x 10, that is 30mL/100L of concentrate spray.

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

#### OTHER CROPS

**Ground application:** Application should be made as a fine spray preferably using hollow cone nozzles and a droplet size of 150 to 200 microns. The application volume will depend on the type of crop to be treated. The following are suggested:

Low volume broadacre application to e.g cereals, canola, grain legumes, Lucerne, subterranean clover: 50-200L/ha. Low volume row crops application to cotton, tomatoes, navy beans 50-200L/ha.

High volume application to row crops- e.g trellised tomatoes: 200-1000L/ha except as noted in critical comments. Use 200L/ha from transplanting increasing to 1000L/ha at maturity.

#### High volume directed spray:

Grapes: Apply by hand application using a high volume coarse spray of 500mL/vine. (e.g at approx. 2500 vines/ha = 1250L/ha)

#### Soil Applied Sprays:

High volume application

#### Bananas:

Stool treatment. Apply as a coarse spray at 500-750mL per stool.

Band treatment. Apply as a band application with a side delivery boom and offset nozzles - 1L of spray solution per stool.

**Citrus:** Apply as a high volume, directed spray to the ground under each tree. For optimum control apply to both sides of the tree. Total spray volume should be 5 to 10L/tree (e.g at 250 trees/ha = 1250 to 2500 L/ha)

#### In furrow applications:

Cotton and sugarcane: Use a coarse spray 60 to 100L/ha as a band over the seed or sett before covering with soil – refer to critical comments for details.

#### Aerial Application:

Use at least 20L/ha of total spray solution. Spray during the cooler parts of the day or night. To reduce possibility of drift avoid spraying in calm conditions or when wind is light and variable. Preferably spray in a crosswind. Use suitable application equipment and/or nozzles to deliver a fine spray with a droplet size of 150 to 200 microns.

A spray drift minimization strategy should be employed at all times when aerially applying sprays to or near sensitive areas. The strategy envisaged is best exemplified by the cotton industry's Best Management Practice manual.

#### Monitoring

Post-emergence monitoring of citrus leaf-eating weevil population. At first sign of major beetle emergence in mid October commence monitoring at 1 to 2 weeks intervals. Place polystyrene fruit box (330 x 480mm) under tree, shake branches vigorously, repeat on ten randomly selected trees throughout the orchard. If 25 beetles or more are recorded in consecutive counts treatment is required.

#### Mixing

Add the required quantity of Tal-Ken 100 to water in the spray tank and mix thoroughly. Maintain agitation during mixing and application.

#### Compatibility

Tal-Ken 100 is compatible with commonly used fungicides such as Dithane M-45, Antracol, Check-out 500, Para-ken 250, Broadstrike, Spinnaker, Metoken 720, Ken-chlor 750, Ken-gran 750, Pendi 330.

#### Surfactants

Tal-Ken 100 contains a surfactant. Additional surfactant may only be necessary on hard to wet plants and in high volume situations.

#### **RE-ENTRY TO TREATED FIELDS/CROPS**

Do not re-enter treated field/crop until spray deposits have dried, unless wearing suitable protective clothing (i.e waterproof hat, overalls, boots and gloves).

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

Dangerous to fish and aquatic organisms. Do not contaminate dams, streams, waterways or drain with product or the used container. Tail drains which flow from treated areas should be prevented from entering river systems.

#### PROTECTION OF LIVESTOCK

Dangerous to bees. DO NOT spray plants in flower when bees are foraging. Spray in the early morning when bees are not actively foraging.

#### STORAGE AND DISPOSAL

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#### SAFETY DIRECTIONS

Poisonous if swallowed. Attacks eyes. Will irritate the skin. Avoid contact with eyes and skin. Do not inhale vapour and spray mist. When preparing spray wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length PVC gloves and goggles. If product in eyes, wash it out immediately with water. Wash hands after use. After each day's use, wash gloves, face shield or goggles and contaminated clothing.

#### FIRST AID

If poisoning occurs, contact a doctor or Poisons Information Centre (Phone 13 11 26). If swallowed, DO NOT induce vomiting. Give a glass of water.

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