POISON

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

SPIROSEC 240 SC

INSECTICIDE

ACTIVE CONSTITUENT: 240 g/L SPIROTETRAMAT

GROUP 23 INSECTICIDE

For the control of various insect pests in certain fruit and vegetable crops as per the Directions for Use

7 WORLDS AG
7worlds.com.au | for all enquiries 1800 777 068

DIRECTIONS FOR USE: ALL STATES

RESTRAINTS

SPRAY DRIFT RESTRAINTS

Specific definitions for terms used in this section of the label can be found at www.apvma.gov.au/spraydrift
DO NOT allow for 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. The buffer zones in the buffer zone tables below provide guidance but may not be sufficient in all situations. 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 one or two hours before sunset and persist until one to two hours after sunrise.

DO NOT apply by a boom sprayer unless the following requirements are met:
- Spray droplets not smaller than a MEDIUM spray droplet size category.
- Minimum distances between the application site and downwind sensitive areas (see 'Mandatory buffer zones" section of the following table titled 'Buffer zones for boom sprayers') are observed.

Buffer zones for Boom Sprayers

Application rate	Mandatory Downwind Buffer Zones
	Livestock Areas
Up to maximum label rate	10 m

DO NOT apply by a vertical sprayer unless the following requirements are met:
- Spray is not directed above the target canopy.
- The outside of the sprayer is turned off when turning at the end of rows and when spraying the outer row on each side of the application site.
- For dilute rates up to the maximum listed for each type of canopy specified, minimum distances between the application site and downwind sensitive areas (see 'Mandatory buffer zones' section of the following table titled 'Buffer Zones for Vertical Sprayers") are observed.

Buffer zones for Vertical Sprayers

Application rate	Mandatory Downwind Buffer Zones	
	Vegetation Areas	Livestock Areas
Up to maximum label rate	20 m	80 m

DO NOT apply by aircraft unless the following requirements are met:

- Spray droplets not smaller than a MEDIUM spray droplet size category.
- For maximum release heights above the target canopy of 3m or 25% of wingspan or 25% of rotor diameter whichever is the greatest minimum distances between the application site and downwind sensitive areas (see 'Mandatory buffer zones' section of the following table titled 'Buffer zones for aircraft' are observed.

Buffer Zones for Aircraft

Type of aircraft	Wind Speed	Mandatory Downwind Buffer Zones
		Livestock Areas
Fixed wing	3 to 8 kilometres per hour	200 m
	9 to 20 kilometres per hour	250 m
Helicopter	3 to 8 kilometres per hour	120 m
	9 to 20 kilometres per hour	180 m

VEGETABLE CROPS

CROP	PEST	RATE	WHP	CRITICAL COMMENTS
Beans, peas (green) Including snow peas and sugar snap peas	Green peach aphid *(Myzus persicae)*	200 mL/ha + adjuvant*	H, G 7 days For snow peas and sugar snap peas only H, G 3 days	Monitor crops and commence applications once local thresholds are reached. Where applicable, use the higher rate when periods of high pest pressure or rapid crop growth are evident or when longer residual control is desired or when crops are advanced. Continue to monitor crops and make a subsequent application as necessary. DO not re-apply within 7 days of a previous SpiroSec 240 SC spray. **Do not apply more than a total of 2 applications per crop.** Ensure thorough coverage of the target crop – refer "Application" section in GENERAL INSTRUCTIONS. ***Always add a specified spray adjuvant – refer "Adjuvant" section in GENERAL INSTRUCTIONS.** **Note:** This use is subject to a Croplife resistance management strategy. Refer to www.croplife.org.au for more information.
Beans (green)	Western flower thrips *(Frankliniella occidentalis)*, Tomato thrips *(Frankliniella schultzei)*	300 - 400 mL/ha + adjuvant*	H, G 7 days	Commence applications at the flower budding stage. Use the higher rate when periods of high pest pressure or rapid crop growth are evident or when longer residual control is desired. Continue to monitor crops and make a subsequent application as necessary. DO not re-apply within 7 days of a previous SpiroSec 240 SC spray. **Do not apply more than a total of 2 applications per crop.** SpiroSec 240 SC is not highly effective against the adult stage of thrips, however a decline in the total thrips population will occur over time as the juvenile stages are controlled. Ensure thorough coverage of the target crop – refer "Application" section in GENERAL INSTRUCTIONS. ***Always add a specified spray adjuvant – refer "Adjuvant" section in GENERAL INSTRUCTIONS.**

CROP	PEST	RATE	WHP	CRITICAL COMMENTS
Brassica vegetables (broccoli, Broccolini, Brussels sprouts, cabbage, cauliflower, kohlrabi)	Green peach aphid *(Myzus persicae)*	200 mL/ha + adjuvant* OR **Dilute spraying** 20 mL/100L + adjuvant*	H 3 days	Monitor crops and commence applications once local thresholds are reached. Where applicable, use the higher rate when periods of high pest pressure or rapid crop growth are evident or when longer residual control is desired or when crops are dense or large (e.g. from the commencement of head formation). Continue to monitor crops and make a subsequent application as necessary. DO not re-apply within 7 days of a previous SpiroSec 240 SC spray. **Do not apply more than a total of 3 applications per crop.** Ensure thorough coverage of the target crop. For dilute spraying apply to the point of run-off, using application volumes of up to 1000 L/ha - refer "Application" section in GENERAL INSTRUCTIONS. ***Always add a specified spray adjuvant – refer "Adjuvant" section in GENERAL INSTRUCTIONS** **Note:** The green peach aphid use is subject to Croplife resistance management strategies. Refer to www.croplife.org.au for more information.
	Grey cabbage aphid *(Brevicoryne brassicae)*	200 – 300 mL/ha + adjuvant* OR **Dilute spraying** 20 – 30 mL/100L + adjuvant*		
Brassica leafy vegetables Including bok choy, Chinese broccoli (gai lum/ gai lan/kai lan), Chinese cabbage (pet sai/wombok/ haksukai), choy sum, gai choy/am soy/kai choy, kale, mibuna, mustard (leafy) including Indian mustard and mustard spinach (komatsuma), pak choy, tat soy (field and protected cropping systems)	Green peach aphid *(Myzus persicae)*	200 mL/ha + adjuvant*	H 3 days	Monitor crops and commence applications once local thresholds are reached. Where applicable, use the higher rate when periods of high pest pressure or rapid crop growth are evident or when longer residual control is desired or when crops are dense or large. Continue to monitor crops and make subsequent applications as necessary. DO not re-apply within 7 days of a previous SpiroSec 240 SC spray. **Do not apply more than a total of 2 applications per crop.** Ensure thorough coverage of the target crop - refer "Application" section in GENERAL INSTRUCTIONS. ***Always add a specified spray adjuvant – refer "Adjuvant" section in GENERAL INSTRUCTIONS** **Note:** The green peach aphid use is subject to Croplife resistance management strategies. Refer to www.croplife.org.au for more information.
	Grey cabbage aphid *(Brevicoryne brassicae)*	200 – 300 mL/ha + adjuvant*		

CROP	PEST	RATE	WHP	CRITICAL COMMENTS
Celery and rhubarb	Green peach aphid *(Myzus persicae)*	200 mL/ha + adjuvant*	H 3 days	Monitor crops and commence applications once local thresholds are reached. Where applicable use the higher rate when periods of high pest pressure or rapid crop growth are evident or when longer residual control is desired. Continue to monitor crops and make a subsequent application as necessary. DO not re-apply within 7 days of a previous SpiroSec 240 SC spray. **Do not apply more than a total of 2 applications per crop.** SpiroSec 240 SC is not highly effective against the adult stage of thrips, however a decline in the total thrips population will occur over time as the juvenile stages are controlled. Ensure thorough coverage of the target crop – refer "Application" section in GENERAL INSTRUCTIONS. ***Always add a specified spray adjuvant – refer "Adjuvant" section in GENERAL INSTRUCTIONS.** **Note:** The green peach aphid and cotton aphid uses are subject to a Croplife resistance management strategies. Refer to www.croplife.org.au for more information.
	Cotton aphid *(Aphis gossypii)*	200 – 300 mL/ ha + adjuvant*		
	Western flower thrips *(Frankliniella occidentalis)*, Tomato thrips *(Frankliniella schultzei)*, Plague thrips *(Thrips imaginis)*	300 – 400 mL/ ha + adjuvant*		
Cucurbits (field and protected cropping systems)	Cotton Aphid *(Aphis gossypii)*	200 – 300 mL/ ha + adjuvant* OR **Dilute spraying** 20 - 30 mL/100L + adjuvant	H 1 day	Monitor crops and commence applications once local thresholds are reached. Where applicable, use the higher rate when periods of high pest pressure or rapid crop growth are evident or when longer residual control is desired or when crops are dense or large. Continue to monitor crops and make a subsequent application as necessary. DO not re-apply within 7 days of a previous SpiroSec 240 SC spray. **Do not apply more than a total of 3 applications per crop.** Dilute spraying is recommended for trellised crops (e.g. glasshouse crops). Ensure thorough spray coverage of the target crop. For dilute spraying apply to the point of run-off, using application volumes of up to 1000 L/ha - refer "Application" section in GENERAL INSTRUCTIONS. ***Always add a specified spray adjuvant – refer "Adjuvant" section in GENERAL INSTRUCTIONS** **Note:** These uses are subject to Croplife resistance management strategies. Refer to www.croplife.org.au for more information.
	Green peach aphid *(Myzus persicae)*	200 mL/ha + adjuvant* OR **Dilute spraying** 20 mL/100L + adjuvant*		

CROP	PEST	RATE	WHP	CRITICAL COMMENTS
Eggplant, Peppers (capsicum and chilli), Tomatoes (field and protected cropping systems)	Green peach aphid *(Myzus persicae)*	200 mL/ha + adjuvant* OR **Dilute spraying** 20 mL/100L + adjuvant* OR **Concentrate spraying** – refer "Application" section in **GENERAL INSTRUCTIONS**	H 1 day	Monitor crops and commence applications once local thresholds are reached. Where applicable, use the higher rate when periods of high pest pressure or rapid crop growth are evident or when longer residual control is desired or when crops are dense or large. Continue to monitor crops and make a subsequent application as necessary. DO not re-apply within 7 days of a previous SpiroSec 240 SC spray. **Do not apply more than a total of 3 applications per crop.** SpiroSec 240 SC is not highly effective against the adult stage of western flower thrips, however a decline in the total thrips population will occur over time as the juvenile stages are controlled. Dilute or concentrate spraying is recommended for trellised crops (e.g. glasshouse crops). Ensure thorough spray coverage of the target crop. For dilute spraying apply to the point of run-off, using application volumes of up to 1000 L/ha - refer "Application" section in GENERAL INSTRUCTIONS. ***Always add a specified spray adjuvant – refer "Adjuvant" section in GENERAL INSTRUCTIONS** **Note:** The green peach aphid use is subject to Croplife resistance management strategies. Refer to www.croplife.org.au for more information.
	Western flower thrips *(Frankliniella occidentalis)*	300 – 400 mL/ha + adjuvant* OR **Dilute spraying** 30 – 40 mL/100L + adjuvant* OR **Concentrate spraying** – refer "Application" section in **GENERAL INSTRUCTIONS**		
Herbs (field and protected cropping systems)	Green peach aphid *(Myzus persicae)*	200 mL/ha + adjuvant*	H 3 days	Monitor crops and commence applications once local thresholds are reached. Where applicable, use the higher rate when periods of high pest pressure or rapid crop growth are evident or when longer residual control is desired. Continue to monitor crops and make a subsequent application as necessary. DO not re-apply within 7 days of a previous SpiroSec 240 SC spray. **Do not apply more than a total of 3 applications per crop.** SpiroSec 240 SC is not highly effective against the adult stage of thrips, however a decline in the total thrips population will occur over time as the juvenile stages are controlled. Ensure thorough coverage of the target crop – refer "Application" section in GENERAL INSTRUCTIONS. ***Always add a specified spray adjuvant – refer "Adjuvant" section in GENERAL INSTRUCTIONS.** **Note:** The green peach aphid and cotton aphid uses are subject to Croplife resistance management strategies. Refer to www.croplife.org.au for more information.
	Cotton Aphid *(Aphis gossypii)*	200 – 300 mL/ha + adjuvant*		
	Western flower thrips *(Frankliniella occidentalis)*, Tomato thrips *(Frankliniella schultzei)*, Plague thrips *(Thrips imaginis)*	300 – 400 mL/ha + adjuvant*		

CROP	PEST	RATE	WHP	CRITICAL COMMENTS
Leafy Vegetables (except lettuce) Including chard, cress, rocket, silver-beet, spinach (field and protected cropping systems)	Green peach aphid *(Myzus persicae)*	200 mL/ha + adjuvant*	H 3 days	Monitor crops and commence applications once local thresholds are reached. Continue to monitor crops and make a subsequent application as necessary. DO not re-apply within 7 days of a previous SpiroSec 240 SC spray. **Do not apply more than a total of 3 applications per crop.** Ensure thorough coverage of the target crop – refer "Application" section in GENERAL INSTRUCTIONS. ***Always add a specified spray adjuvant – refer "Adjuvant" section in GENERAL INSTRUCTIONS.** **Note:** This use is subject to a Croplife resistance management strategy. Refer to www.croplife.org.au for more information.
Lettuce (head lettuce and leafy lettuce) (field and protected cropping systems)	Brown sowthistle aphid *(Uroleucon sonchi)*, Currant lettuce aphid *(Nasonovia ribisnigri)*, Green peach aphid *(Myzus persicae)*	200 mL/ha + adjuvant*	H 1 day	Monitor crops and commence applications once local thresholds are reached. Continue to monitor crops and make a subsequent application as necessary. DO not re-apply within 7 days of a previous SpiroSec 240 SC spray. **Do not apply more than a total of 3 applications per crop.** SpiroSec 240 SC is not highly effective against the adult stage of thrips, however a decline in the total thrips population will occur over time as the juvenile stages are controlled. Ensure thorough coverage of the target crop – refer "Application" section in GENERAL INSTRUCTIONS. ***Always add a specified spray adjuvant – refer "Adjuvant" section in GENERAL INSTRUCTIONS.** **Note:** The green peach aphid use is subject to a Croplife resistance management strategy. Refer to www.croplife.org.au for more information.
	Western flower thrips *(Frankliniella occidentalis)*	300 – 400 mL/ ha + adjuvant*		
Chicory, Endive, radicchio (field and protected cropping systems)	Brown sowthistle aphid *(Uroleucon sonchi)*, Currant lettuce aphid *(Nasonovia ribisnigri)*, Green peach aphid *(Myzus persicae)*	200 mL/ha + adjuvant*	H 3 days	

CROP	PEST	RATE	WHP	CRITICAL COMMENTS
Onions, bulb	Onion thrips *(Thrips tabaci)*	200 mL/ha + adjuvant*	H 7 days	Monitor crops and commence applications once local thresholds are reached.
Bulb vegetables excluding onions, bulb	Onion thrips *(Thrips tabaci)*	200 mL/ha + adjuvant*	H 7 days	Continue to monitor crops and make a subsequent application as necessary. DO not re-apply within 14 days of a previous SpiroSec 240 SC spray (onions, bulb). DO not re-apply within 7 days of a previous SpiroSec 240 SC spray (bulb vegetables excluding onions, bulb). **Do not apply more than a total of 2 applications per crop.** SpiroSec 240 SC is not highly effective against the adult stage of thrips, however a decline in the total thrips population will occur over time as the juvenile stages are controlled. There are certain conditions where SpiroSec 240 SC plus adjuvant may cause a minor tip burn on leaves in bulb vegetables. Before treating large areas, a small area should be tested to determine whether crop phytotoxicity is likely. Ensure thorough coverage of the target crop – refer "Application" section in GENERAL INSTRUCTIONS. ***Always add a specified spray adjuvant – refer "Adjuvant" section in GENERAL INSTRUCTIONS.**
	Western flower thrips *(Frankliniella occidentalis)*, Tomato thrips *(Frankliniella schultzei)*, Plague thrips *(Thrips imaginis)*	300 – 400 mL/ ha + adjuvant*		
Potatoes, Sweet potatoes	Green peach aphid *(Myzus persicae)*	200 mL/ha + adjuvant*	H 7 days	Monitor crops and commence applications once local thresholds are reached. Where applicable, use the higher rate when periods of high pest pressure or rapid crop growth are evident or when longer residual control is desired or when crops are dense or large. Continue to monitor crops and make a subsequent application as necessary. DO not re-apply within 7 days of a previous SpiroSec 240 SC spray. **Do not apply more than a total of 3 applications per crop.** Ensure thorough coverage of the target crop - refer "Application" section in GENERAL INSTRUCTIONS. ***Always add a specified spray adjuvant – refer "Adjuvant" section in GENERAL INSTRUCTIONS** **Note:** These uses are subject to Croplife resistance management strategies. Refer to www.croplife.org.au for more information.
Sweet corn	Corn aphid *(Rhopalosiphum maidis)*	200 – 300 mL/ ha + adjuvant*	H, G 7 days	Monitor crops and commence applications once local thresholds are reached. **DO NOT apply prior to tassel emergence.** Use the higher rate when periods of high pest pressure or rapid crop growth are evident (e.g. during silking) or when longer residual control is desired or when crop (e.g. corn cob) is advanced. Continue to monitor crops and make a subsequent application as necessary. DO not re-apply within 7 days of a previous SpiroSec 240 SC spray. **Do not apply more than a total of 2 applications per crop.** Ensure thorough coverage of the target crop - refer "Application" section in GENERAL INSTRUCTIONS. ***Always add a specified spray adjuvant – refer "Adjuvant" section in GENERAL INSTRUCTIONS.**

CROP	PEST	RATE	WHP	CRITICAL COMMENTS
FRUIT CROPS				
Citrus	Red scale, mussel scale, White louse scale, (citrus snow scale)	**Dilute spraying** 20 – 30 mL/ 100L water plus adjuvant*	H 3 weeks	Monitor crops and commence applications after flowering at the onset of crawler emergence or when pest numbers reach economic threshold. Continue to monitor crops and apply a second application 21 – 35 days after the first application if required. Applications to an established pest population where mature adults are present and dominate the population will be ineffective. Where applicable, use the higher rate under high pest pressure or to provide longer residual control. For red scale the higher the rate will provide control where crawlers have settled, and whitecaps are visible. **DO NOT exceed 4.0 L of SpiroSec 240 SC per hectare.** A total of three applications can be made in citrus in a twelve-month period, however no more than two applications should be made within 90 days of harvest. Apply thoroughly to ensure complete coverage using dilute spraying equipment in up to 10,000 L/ha water (concentrate spraying is not appropriate for this use) - refer "Application" section in GENERAL INSTRUCTIONS. ***Always add a specified spray adjuvant – refer "Adjuvant" section in GENERAL INSTRUCTIONS.**
	Soft brown scale	**Dilute spraying** 30 mL/100L water plus adjuvant*		
	Pink wax scale, Citrus mealy bug (suppression only)	**Dilute spraying** 30 – 40 mL/100L water plus adjuvant*		
	Kelly's citrus thrips			Monitor crops from flowering onwards for the presence of Kelly's citrus thrips. Apply SpiroSec 240 SC, after flowering, once local pest thresholds are reached. A single application may be suitable where thrips pressure is low. Continue to monitor crops and where thrips pressure is moderate to high apply a second application, no less than 14 days after the first, and prior to calyx closure. Use the higher rate under high pest pressure or to provide longer residual control. **DO NOT exceed 4.0 L of SpiroSec 240 SC per hectare.** Overlapping cropping situations e.g. lemons' Valencia oranges: If any maturing fruit is present on the tree and is within six weeks of harvest, a second application for control of Kelly's citrus thrips should be at least 21 days after the first and ideally prior to calyx closure. A total of three applications can be made in citrus in a twelve-month period, however no more than two applications should be made within 90 days of harvest. Apply thoroughly to ensure complete coverage using dilute spraying equipment in up to 10,000 L/ha water (concentrate spraying is not appropriate for this use) - refer "Application" section in GENERAL INSTRUCTIONS. ***Always add a specified spray adjuvant – refer "Adjuvant" section in GENERAL INSTRUCTIONS.**

CROP	PEST	RATE	WHP	CRITICAL COMMENTS
Grapes	Longtailed mealybug *(Pseudococcus longispinus)*, Tuber mealybug *(Pseudococcus virburni)*, Grapevine scale *(Parthenolecanium persicae)* (suppression only) Plague thrips *(Thrips imaginis)* (suppresiion only), Northern plague thrips *(Thrips safrus)* (suppression only)	**Dilute spraying** 40 mL/100L plus adjuvant* **Concentrate spraying** Refer to the Application section. Add adjuvant as recommended *	H 4 weeks**	Monitor crops following bud burst. Commence applications at the onset of crawler emergence or when pest numbers reach an economic threshold. To ensure there is sufficient foliage for product uptake **do not apply prior to 6 leaf stage (EL 13)** **Mealybug and grapevine scale** Continue to monitor crops and apply a second application 21 to 28 days after the first application. **Thrips** The peak time for thrips damage in grape vines is during flowering and berry set. To obtain optimum thrips suppression, a second application should be applied prior to the anticipated peak thrips activity. The second application should be made no less than 14 days after the initial application. Do not exceed a 28-day interval. At this longer interval, an application of a product from an alternative chemical group will be required between SpiroSec 240 SC applications to provide continual thrips protection. **All pests** For all pests' applications to an established pest population where mature adults are present and dominate the population will be ineffective. Do not apply more than 2 applications per crop with a minimum 14 days between applications. Apply thoroughly to ensure complete coverage. Apply by dilute or concentrate spraying equipment. Apply the same total amount of product to the target crop whether applying this product by dilute or concentrate spraying methods. For concentrate spraying, do not use at rates greater than two times the dilute spraying rate (i.e. at a concentration factor greater than 2X) – refer "Application" section in GENERAL INSTRUCTIONS. ***Always add a specified spray adjuvant – refer "Adjuvant" section in GENERAL INSTRUCTIONS** ****Note:** If grapes are likely to be exported as wine, fresh or dried fruit also refer to advice under **Export of treated produce** heading.

CROP	PEST	RATE	WHP	CRITICAL COMMENTS
Mangoes (Post flowering applications)	White mango scale, Citrus mealybug (Suppression only)	**Fruit less than 50 mm diameter Dilute Spraying** 30-40 mL/100L water plus adjuvant* Or 40 mL/100L water without adjuvant** **Fruit greater than 50mm diameter Dilute Spraying** 40 mL/100L water without adjuvant**	H 14 days	Monitor crops and commence applications from immediately after flowering coinciding with crawler emergence. Continue to monitor crops and apply a second application 21 – 35 days after the first application if required. Use the higher rate under high pressure or to provide longer residual control. Do not apply more than two applications of SpiroSec 240 SC post-flowering (i.e. between fruit set and harvest). ***Where indicated add a specified spray adjuvant – refer "Adjuvant" section in GENERAL INSTRUCTIONS.** Refer to **Warning: Safety to Fruit,** below, for advice on when adjuvant should NOT be used with SpiroSec 240 SC. **When SpiroSec 240 SC is applied without an adjuvant for the control of white mango scale or suppression of citrus mealybug, lower levels of control may be evident. Apply thoroughly to ensure complete coverage using dilute spraying equipment (concentrate spraying is not appropriate for this use) - refer "Application" section in GENERAL INSTRUCTIONS. **Warning: Safety to fruit** SpiroSec 240 SC can cause damage (drip point injury) to mango fruit under some circumstances. To reduce the risk of such damage when fruit is present on trees; * Do not spray to excessive run-off * Do not use wetting agent type adjuvants * Do not mix SpiroSec 240 SC with any other product, except the specified adjuvant when recommended * Do not mix SpiroSec 240 SC with any other product, including any adjuvant if any fruit exceeds 50 mm diameter (width) Fruit of the variety Honey Gold has been found to be particularly sensitive to SpiroSec 240 SC, and for some varieties fruit sensitivity may be unknown, hence the following additional precaution applies: * Do not mix SpiroSec 240 SC with any other product, including any adjuvant, when applying to fruiting crops of Honey Gold variety or other varieties where fruit safety of SpiroSec 240 SC plus adjuvant is unknown. Even when these precautions are followed, some fruit damage has occasionally been noted in the Honey Gold variety.
	Pink wax scale	**Fruit less than 50 mm diameter Dilute Spraying** 30-40 mL/100L water plus adjuvant* **Fruit greater than 50mm** Not Recommended		

CROP	PEST	RATE	WHP	CRITICAL COMMENTS
Mangoes (Post harvest applications – no fruit)	White mango scale, Pink wax scale	**Dilute spraying** 30 – 40 mL/100L water + adjuvant* **Concentrate spraying** Refer to the Application section Add adjuvant as recommended*	-	Apply after harvest and after tree pruning (if performed) to ensure good scale control on new growth. Use the higher rate under high pest pressure or to provide longer residual control. Do not apply within two weeks before the beginning of flowering. Apply thoroughly to ensure complete coverage. Apply by dilute or concentrate spraying equipment. Apply the same total amount of product to the target crop whether applying this product by dilute or concentrate spraying methods. For concentrate spraying, do not use at rates greater than two time the dilute spraying rate (i.e. at a concentration factor greater than 2X) – refer "Application" section in GENERAL INSTRUCTIONS *Where indicated add a specified spray adjuvant – refer "Adjuvant" section in GENERAL INSTRUCTIONS.
Passionfruit	Red scale	**Dilute spraying** 20 – 30 mL/100L water + adjuvant*	H 3 days	Monitor crops and commence applications immediately after peak flowering coinciding with the onset of crawler emergence or when pest numbers reach economic threshold. Continue to monitor crops and apply a second application no less than 21 days after the first application if required. Where applicable, use the higher rate under high pest pressure or to provide longer residual control or when crops are dense. For red scale the higher rate will provide control of an established population of the pest. A total of two applications can be made in passionfruit in a twelve-month period. Apply thoroughly to ensure complete coverage using dilute spraying equipment up to 1000 L/ha (concentrate spraying is not appropriate for this use) – refer "Application" section in GENERAL INSTRUCTIONS. ***Always add a specified spray adjuvant – refer "Adjuvant" section in GENERAL INSTRUCTIONS.**
	Citrus mealybug (suppression only)	**Dilute spraying** 40 mL/100L water + adjuvant*		

CROP	PEST	RATE	WHP	CRITICAL COMMENTS
Pome fruit	Longtailed mealybug *(Pseudococcus longispinus)*, Tuber mealybug *(Pseudococcus virburni)*, Woolly apple aphid *(Eriosoma lanigerum)* (suppression only)	**Dilute spraying** 40 mL/100L plus adjuvant* **Concentrate spraying** Refer to the Application section. Add adjuvant as recommended *	H 3 weeks	Monitor crops following flowering. Commence application at the onset of crawler emergence or when pest numbers reach economic threshold. To ensure there is sufficient foliage for product uptake; **For apples, do not apply prior to petal fall.** **For pears, do not apply prior to fruitlets reaching 10 mm in diameter.** **Mealybug and woolly apple aphid:** Continue to monitor crops and apply a second application 14 – 28 days after the first application. **San Jose scale:** Continue monitoring and apply further applications when new generations emerge. Do not re-apply within 14 days of a previous SpiroSec 240 SC application. **All pests:** For all pests, applications to an established pest population where mature adults are present and dominate the population will be ineffective. Do not apply more than 3 applications per crop with a minimum 14 days between applications. Apply thoroughly to ensure complete coverage. Apply by dilute or concentrate spraying equipment. Apply the same total amount of product to the target crop whether applying this product by dilute or concentrate spraying methods. For concentrate spraying, do not use at rates greater than two times the dilute spraying rate (i.e. at a concentration factor greater than 2X) - refer "Application" section in GENERAL INSTRUCTIONS. ***Always add a specified spray adjuvant – refer "Adjuvant" section in GENERAL INSTRUCTIONS.**
	San Jose scale *(Quadraspidiotus perniciosus)*	**Dilute spraying** 30 mL/100L plus adjuvant* **Concentrate spraying** Refer to the Application section. Add adjuvant as recommended *		

CROP	PEST	RATE	WHP	CRITICAL COMMENTS
Stone fruit	Longtailed mealybug *(Pseudococcus longispinus)*, Tuber mealybug *(Pseudococcus virburni)*	**Dilute spraying** 40 mL/100L plus adjuvant* **Concentrate spraying** Refer to the Application section. Add adjuvant as recommended *	H 3 weeks	Monitor crops following petal fall. Commence application at the onset of crawler emergence or when pest numbers reach economic threshold. To ensure there is sufficient foliage for product uptake do not apply prior to shuck fall. **Mealybug:** Continue to monitor crops and apply a second application 14 – 28 days after the first application. **Aphids:** Continue to monitor crops and apply a second application 14 – 21 days after the first application if required. **San Jose scale:** Continue monitoring and apply further applications when new generations emerge. Do not re-apply within 14 days of a previous SpiroSec 240 SC application. **All pests:** For all pests, applications to an established pest population where mature adults are present and dominate the population will be ineffective. **Cherries:** Do not apply more than 2 applications per crop for cherries with a minimum 14 days between applications. **Stone fruit other than cherries:** Do not apply more than 3 applications per crop, with no more than 2 applications made later than 21 days after shuck fall and with a minimum 14 days between applications. Do not apply more than 3 applications per crop with a minimum 14 days between applications. Apply thoroughly to ensure complete coverage. Apply by dilute or concentrate spraying equipment. Apply the same total amount of product to the target crop whether applying this product by dilute or concentrate spraying methods. For concentrate spraying, do not use at rates greater than two times the dilute spraying rate (i.e. at a concentration factor greater than 2X) - refer "Application" section in GENERAL INSTRUCTIONS. ***Always add a specified spray adjuvant – refer "Adjuvant" section in GENERAL INSTRUCTIONS.**
	Black cherry aphid *(Myzus cerasi)*, Black peach aphid *(Brachycaudus persicae)*, San Jose scale *(Quadraspidiotus pernicosus)*	**Dilute spraying** 30 mL/100L plus adjuvant* **Concentrate spraying** Refer to the Application section. Add adjuvant as recommended *		

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

WITHHOLDING PERIODS

Harvest (H)
Eggplant, pepper (capsicums and chilli), tomatoes, cucurbits, lettuce:
DO NOT HARVEST FOR 1 DAY AFTER APPLICATION

Brassica vegetables, brassica leafy vegetables, celery, chicory, endive herbs, leafy vegetables (except lettuce), passionfruit, radiccio, rhubarb, snow peas, sugar snap peas:
DO NOT HARVEST FOR 3 DAYS AFTER APPLICATION
Beans, bulb vegetables (except onions, bulb), onions (bulb), peas (except snow peas and sugar snap peas), potatoes, sweet corn, sweet potatoes:
DO NOT HARVEST FOR 7 DAYS AFTER APPLICATION
Mangoes: DO NOT HARVEST FOR 14 DAYS AFTER APPLICATION
Citrus, pome fruit, stone fruit: DO NOT HARVEST FOR 3 WEEKS AFTER APPLICATION
Grapes: DO NOT HARVEST FOR 4 WEEKS AFTER APPLICATION
Note: If grapes are likely to be exported as wine, fresh or dried fruit also refer to advice under Export of treated produce heading.

Grazing (G)
Brassica vegetables (including brassica leafy vegetables), chicory:
DO NOT GRAZE TREATED BRASSICA OR CHICORY CROPS
Snow peas and sugar snap peas:
DO NOT GRAZE OR CUT FOR STOCKFEED FOR 3 DAYS AFTER APPLICATION
Beans, peas (except snow peas and sugar snap peas), sweet corn:
DO NOT GRAZE OR CUT FOR STOCKFEED FOR 7 DAYS AFTER APPLICATION

LIVESTOCK DESTINED FOR EXPORT MARKET
The grazing withholding period only applies to stock slaughtered for the domestic market. Some export markets apply different standards. To meet these standards, ensure that in addition to complying with the grazing withholding period, the Export Slaughter Interval is observed before stock are sold or slaughtered.

EXPORT SLAUGHTER INTERVALS (ESI) – 3 DAYS
LIVESTOCK THAT HAS BEEN GRAZED ON OR FED TREATED CROPS SHOULD BE PLACED ON CLEAN FEED FOR 3 DAYS PRIOR TO SLAUGHTER.

Export of treated produce
Growers should note that suitable MRLs or import tolerances do not exist in all markets for produce treated with SpiroSec 240 SC Insecticide. In some situations, export requirements may be met by limiting application number and/or imposing a longer withholding period than specified above. If you are growing produce for export, please check with Anovitech Pty Ltd or your industry body for the latest information on any potential trade issue and their management before using SpiroSec 240 SC Insecticide. Grapes for wine intended for export: suitable MRLs or import tolerances are established in most, but not all, wine export destinations to allow use up until the stated withholding period for grapes. For the latest information consult with Anovitech, your winery or the Australian Wine research Institute (AWRI) before using Spirotetramat in grapes which may be used to make wine for export.

GENERAL INSTRUCTIONS

Adjuvant
Vegetables and herbs (except bulb vegetables, onions, bulb): For both dilute and concentrate (where applicable) spraying methods, apply SpiroSec 240 SC Insecticide with a registered non-ionic surfactant* *. Generally, apply non-ionic surfactant* at 0.5 – 1.0L/ha or 300mL/100L spray mixture up to a maximum of 1.0Lha where application volumes exceed 500L/ha.

Citrus, grapes, passionfruit, pome fruit, stone fruit: Apply SpiroSec 240 SC Insecticide with a registered non-ionic surfactant* at 50mL/100L of spray mixture.

Mangoes: For both dilute and concentrate (where applicable) spraying methods, apply SpiroSec 240 SC Insecticide with a registered non-ionic surfactant* at 50mL/100L of spray mixture only when addition of adjuvant is specified in the rate column of the directions for use table. For fruiting mangoes, refer to the Directions for Use table Warning: Safety to Fruit as to when adjuvant should NOT be used with SpiroSec 240 SC Insecticide.

Bulb vegetables and onions, bulb: Apply SpiroSec 240 SC Insecticide with a registered non-ionic surfactant* at 0.5 - 1.0L/100L of spray mixture.

Mixing

Shake the container well before using. Partially fill the spray tank with clean water and add the required volume of product to the water whilst agitating. Top up the tank with clean water to the required volume. Add the required amount of adjuvant. SpiroSec 240 SC should be applied as soon after mixing as possible.

Ground application

Vegetable and herb crops

Thorough coverage of the target area is essential. Apply in sufficient water. Use suitable application parameters (nozzles, pressure, boom height, speed, etc.) to ensure thorough and even coverage. Use only MEDIUM spray droplets.

Application using rate per hectare in vegetables and herbs

Thorough coverage of the target area is essential. Adjust water volumes according to the crop growth stage.
Sweet corn: Where a standard "over the top" boom spray is used, the use of droppers will help improve spray coverage to the target area i.e. silks and cobs.

Application using rate per 100 L (dilute spraying) in vegetables (brassica vegetables, cucurbits, eggplant, peppers, tomatoes)

- Use a sprayer designed to apply high volumes of water up to the point of run-off and matched to the crop being sprayed.
- Set up and operate the sprayer to achieve even coverage throughout the crop canopy. Apply sufficient water to cover the crop to the point of run-off. Avoid 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 run-off, to a maximum of 1000 L/ha for vegetable crops.
- The required dilute spray volume will change and the sprayer set up and operation may also need to be changed, as the crop grows.

Application using concentrate spraying in vegetables (eggplant, peppers, tomatoes)

- 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 (e.g. air assisted sprayer).
- Set up and operate the sprayer to achieve even coverage throughout the crop canopy using your chosen water volume.
- Determine an appropriate dilute spray volume (See Dilute spraying above) for the crop canopy. This is needed to calculate the concentrate mixing rate.
- The mixing rate for concentrate spraying can then be calculated in the following way:

EXAMPLE ONLY

1. Dilute spray volume as determined above: For example 1500 L/ha
2. Your chosen concentrate spray volume: For example 500 L/ha
3. The concentration factor in this example is: 3X (i.e. 1500 L ÷ 500 L = 3)
4. If the dilute label rate is 40 mL/100 L, then the concentrate rate becomes 3 x 40 mL/100 L, that is 120 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.
- Do not use at a concentration factor greater than 3X (e.g. at a rate higher than 120 mL/100 L where a dilute spraying rate of 40 mL/100 L is specified).

- Note that the concentrate mixing rate is applicable only to SpiroSec 240. The adjuvant rate remains unchanged (i.e. no concentrate factor applies). Refer to the Adjuvant section. For further information on concentrate spraying, users are advised to consult relevant industry guidelines, undertake appropriate competency training and follow industry Best Practices.

Special instructions for tree and vine crops (citrus, mangoes, pome fruit, stone fruit, grapes and passionfruit)
Dilute spraying

- Use a sprayer designed to apply high spray volumes, up to the point of run-off and matched to the crop being sprayed.
- Set up and operate the sprayer to achieve even coverage throughout the crop canopy. Apply sufficient water to cover the crop to the point of run-off. Avoid excessive run-off.
- The required spray volume may be determined by applying different test volumes, using different settings on the sprayer, or from industry guidelines or expert advice.
- Add the amount of product specified in the Direction for Use table for each 100 L of water. Spray to the point of run-off, to a maximum of 1,000 L/ha for passionfruit and 10,000 L/ha for citrus crops.
- 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 (grapes, mangoes: post-harvest only, pome fruit, stone fruit)

- Use a sprayer designed and set up for concentrate spraying (that is a sprayer which applies spray 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 spray 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 1500 L/ha
2. Your chosen concentrate spray volume: For example 750 L/ha
3. The concentration factor in this example is 2X (i.e. 1500 L ÷ 750 L = 2)
4. If the dilute label rate is 30 mL/100 L, then the concentrate rate becomes 2 x 30, that is, 60 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.
- Do not use at a concentration factor greater than 2X (e.g. at a rate higher than 80 mL/100 L where a dilute spraying rate of 40 mL/100 L is specified).
- Note that the concentrate mixing rate is applicable only to SpiroSec 240. The adjuvant rate remains unchanged (i.e. no concentrate factor applies). Refer to the Adjuvant section.

For further information on concentrate spraying, users are advised to consult relevant industry guidelines, undertake appropriate competency training and follow industry best practice.

Aerial application (beans, cucurbits, peas, potatoes, sweet corn, tomatoes only)
SpiroSec 240 must only be applied by aircraft (fixed-wing or helicopter) fitted with accurately calibrated equipment. Apply a minimum total spray volume of 30 L/ha (preferably 50 L/ha for sweet corn) with nozzles (e.g. Micronaire rotary atomisers, CP nozzles or conventional hydraulic nozzles) set to MEDIUM spray quality according to nozzle manufacturer specifications. A spray drift minimisation strategy should be employed at all times when applying this product. DO NOT apply SpiroSec 240 using Ultra Low Volume (ULV) methods.

Sweet corn: It is advisable that spray applications commence no later than early tasselling to ensure there is adequate early control of corn aphid infestations prior to silking. Further enhancement of aircraft application can be achieved through modification of spray patterns (e.g. reduced swath width), increased water volume (e.g. from 30 L/ha to 50 L/ha), and the use of Global Positioning Systems (GPS) as an aid during spray applications.

Compatibility
Do not mix SpiroSec 240 SC Insecticide with Azoxystrobins or Trisiloxane ethoxylates.

Do not mix SpiroSec 240 SC Insecticide with any other product, except the specified adjuvant when recommended, when applying to fruiting mango crops.

Contact Grochem Australia on any further advice on compatibility of SpiroSec 240 SC Insecticide with other products.

IPM Compatibility
SpiroSec 240 SC Insecticide may have an adverse effect on predatory mites where IPM is practiced.

INSECTICIDE RESISTANCE WARNING

GROUP	23	INSECTICIDE

For insecticide resistance management SpiroSec 240 SC Insecticide is a Group 23 insecticide.
Some naturally occurring insect biotypes resistant to SpiroSec 240 SC Insecticide and other Group 23 insecticides may exist through normal genetic variability in any insect population. The resistant individuals can eventually dominate the insect population if SpiroSec 240 SC Insecticide or other Group 23 insecticides are used repeatedly. The effectiveness of SpiroSec 240 SC Insecticide on resistant individuals could be significantly reduced. Since occurrence of resistant individuals is difficult to detect prior to use, Anovitech Pty Ltd accepts no liability for any losses that may result from the failure of SpiroSec 240 SC Insecticide to control resistant insects.
SpiroSec 240 SC Insecticide may be subject to specific resistance management strategies. For further information contact your local supplier, Anovitech representative or local agricultural department agronomist.

PRECAUTIONS

Re-entry or Re-handling

Do not allow entry into 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.
CITRUS – where spray application volumes exceed 7,500 L/ha.
DO NOT perform medium or high exposure activities such as hand thinning or pruning in citrus for 3 days after application, 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.
Low exposure activities such as scouting, weed control and irrigation can be performed once spray has dried.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

Toxic to aquatic organisms. DO NOT contaminate streams, rivers, or watercourses with the chemical or used containers.

PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS

Application of SpiroSec 240 SC Insecticide to crops/plants other than those specified on this label may cause symptoms of phytotoxicity.
Caution: Phytotoxic symptoms have occasionally been observed when SpiroSec 240 SC Insecticide is applied to crops in protected cropping environments. This may be exacerbated when applied in tank mixtures.

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-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.

This container can be recycled if it is clean, dry, free of visible residues and has the drumMUSTER logo visible. Triple-rinse container for disposal. Dispose of rinsate by adding it to the spray tank. Do not dispose of undiluted chemical 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 program site. The cap should not be replaced, but may be taken separately.

SAFETY DIRECTIONS
May irritate the eyes. Repeated exposure may cause allergic disorders. Avoid contact with eyes and skin. When opening the container, preparing spray, and using the prepared spray, wear cotton overalls buttoned to the neck and wrist (or equivalent clothing) and elbow length chemical resistant gloves. If product on the skin immediately wash area with soap and water. If product is in eyes wash it out immediately with water. 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.

SAFETY DATA SHEET
Additional information is listed in the Safety Data Sheet which can be obtained from the supplier.

LIMIT OF LIABILITY
1. Grochem Australia accepts responsibility for the consistent quality of the product.
2. Grochem Australia accepts no responsibility whatsoever for any damage, injury or loss following purchase and use of this product.
3. The extent of liability of Grochem Australia is limited to the replacement of goods or a refund on the price paid. This being conditional upon a claim being made in writing and within 30 days of delivery/receipt of product.
4. This product must also be used in strict accordance with the directions as detailed on this label. The buyer accepts and uses this material with an understanding of the above conditions.

May cause an allergic skin reaction. Suspected of damaging fertility or the unborn child. May cause respiratory irritation.
Do not handle until all safety precautions have been read and understood. Avoid breathing mist/ spray. Wear protective gloves/ protective clothing. IF ON SKIN: Wash with plenty of water/ soap. If skin irritation or rash occurs: Get medical advice/attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor/physician if you feel unwell. IF exposed or concerned: Get medical advice/ attention. Take off contaminated clothing and wash it before reuse. Store locked up. Dispose of contents/container in accordance with local regulation.

IN A TRANSPORT EMERGENCY DIAL 000 POLICE OR FIRE BRIGADE	SPECIALIST ADVICE IN AN EMERGENCY DIAL 1800 033 111 ALL HOURS - AUSTRALIA WIDE

7 WORLDS AG

DISTRIBUTED BY:
7 Worlds Ag – Grochem Australia Pty Ltd
Suite 1, Level 3, 262 Lorimer Street
Port Melbourne VIC 3207
Phone: 1800 777 068