

POISON

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

TITAN

SPIRANDO 240SC

INSECTICIDE

ACTIVE CONSTITUENT: 240 g/L SPIROTETRAMAT

GROUP 23 INSECTICIDE

For the control of various pests in Cotton and certain Fruit and Vegetable Crops as specified
in the Directions For Use table.

APVMA Approval No.: 94001/141188

Pack Size: 2.5L-200L



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IN A TRANSPORT EMERGENCY

DIAL 000

POLICE OR FIRE BRIGADE

TRANSPORT AND HANDLING
NOT A DANGEROUS GOOD
ACCORDING TO THE AUSTRALIAN
DANGEROUS GOODS (ADG) CODE
FOR TRANSPORT BY ROAD AND RAIL

DIRECTIONS FOR USE

SPRAY DRIFT RESTRAINTS

Specific definitions for terms used in this section of the label can be found at 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 one to 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 Downwind Buffer Zone' section of the following table titled 'Buffer Zone for Boom Sprayers') are observed.

Buffer Zone for Boom Sprayers	
Application Rate	Mandatory Downwind Buffer Zone
	Livestock Areas
Up to maximum label rate	10m

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 Downwind 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 Zone
		Livestock Areas
Fixed Wing	3 to 8 kilometres per hour	200m
	9 to 20 kilometres per hour	250m
Helicopter	3 to 8 kilometres per hour	120m
	9 to 20 kilometres per hour	180m

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.
- Minimum distances between the application site and downwind sensitive areas (see 'Mandatory Downwind Buffer Zone' section of the following table titled 'Buffer Zone for Vertical Sprayers') are observed.

Buffer Zone for Vertical Sprayers	
Application Rate	Mandatory Downwind Buffer Zone
	Livestock Areas
Up to maximum label rate	80m

CROP	PEST	RATE	WHP	CRITICAL COMMENTS
Cotton	Silverleaf Whitefly	300-400mL/ha plus adjuvant*	H 3 weeks G refer to grazing WHP statement below	<p>Monitor crops and commence applications once local thresholds are reached. 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 well advanced. Continue to monitor crops and make subsequent applications as necessary.</p> <p>DO NOT reapply within 14 days of a previous TITAN Spirando 240SC Insecticide spray. DO NOT apply more than 2 applications per crop.</p> <p>TITAN Spirando 240SC Insecticide may not control Silverleaf Whitefly adults and eggs, however a decline in the total Silverleaf Whitefly population will occur over time as the juvenile stages are controlled.</p> <p>Ensure thorough spray coverage of the target crop – refer Application section in General Instructions.</p> <p>Note: These uses are subject to CropLife Resistant Management Strategies. Refer to www.croplife.org.au for more information.</p> <p>* Always add a specified spray adjuvant – refer Adjuvant section in General Instructions.</p>
	Cotton Aphid			

CROP	PEST	RATE	WHP	CRITICAL COMMENTS
Brassica Vegetables (Broccoli, Broccolini, Brussels Sprouts, Cabbage, Cauliflower, Kohlrabi)	Green Peach Aphid	200mL/ha + adjuvant OR Dilute Spraying 20mL/100L + adjuvant*	H 3 days G refer to grazing WHP statement below	<p>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 (eg from the commencement of head formation). Continue to monitor crops and make subsequent applications as necessary.</p> <p>DO NOT re-apply within 7 days of a previous TITAN Spirando 240SC Insecticide spray. DO NOT apply more than 3 applications per crop.</p> <p>Ensure thorough spray coverage of the target crop. For dilute spraying apply to the point of run-off, using application volumes of up to 1000L/ha – refer Application section in General Instructions.</p> <p>* Always add a specified spray adjuvant – refer Adjuvant section in General Instructions.</p> <p>Note: The Green Peach Aphid and Silverleaf Whitefly uses are subject to CropLife Resistant Management Strategies. Refer to www.croplife.org.au for more information.</p>
	Grey Cabbage Aphid	200-300mL/ha + adjuvant OR Dilute Spraying 20-30mL/100L + adjuvant		
	Silverleaf Whitefly	300-400mL/ha + adjuvant OR Dilute Spraying 30-40mL/100L + adjuvant		
Mangoes (Post-flowering applications)	White Mango Scale, Citrus Mealybug (suppression only)	Fruit less than 50mm diameter Dilute Spraying 30-40mL/100L water plus adjuvant* OR 40mL/100L water without adjuvant** Fruit greater than 50mm diameter Dilute Spraying 40mL/100L water without adjuvant**	H 14 days	<p>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 pest pressure or to provide longer residual control.</p> <p>DO NOT apply more than two applications of TITAN Spirando 240SC Insecticide post-flowering (ie between fruit set and harvest).</p> <p>* 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 TITAN Spirando 240SC Insecticide.</p> <p>** When TITAN Spirando 240SC Insecticide is applied without an adjuvant for the control of White Mango Scale or suppression of Citrus Mealybug, lower levels of control may be evident.</p> <p>Apply thoroughly to ensure complete coverage using dilute spraying equipment (concentrate spraying is not appropriate for this use) – refer Application section in General Instructions.</p> <p>Warning – Safety to Fruit TITAN Spirando 240SC Insecticide 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 TITAN Spirando 240SC Insecticide with any other product, except the specified adjuvant when recommended. DO NOT mix TITAN Spirando 240SC Insecticide with any other product including any adjuvant, if any fruit exceeds 50mm diameter (width). Fruit of the variety Honey Gold has been found to be particularly sensitive to spirotetramat and for some varieties fruit sensitivity may be unknown, hence the following additional precaution applies: DO NOT mix TITAN Spirando 240SC Insecticide with any other product, including adjuvant, when applying to fruiting crops of Honey Gold variety or other varieties where fruit safety of TITAN Spirando 240SC Insecticide plus adjuvant is unknown. Even when these precautions are followed, some fruit damage has occasionally been noted in the Honey Gold variety.</p>
	Pink Wax Scale	Fruit less than 50mm diameter Dilute Spraying 30-40mL/100L water plus adjuvant* Fruit greater than 50mm diameter Not recommended		
Mangoes (Post-harvest applications – no fruit)	White Mango Scale, Pink Wax Scale	Dilute Spraying 30-40mL/100L water plus adjuvant* Concentrate Spraying Refer to the application section Add adjuvant as recommended*		<p>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.</p> <p>DO NOT apply within two weeks before the beginning of flowering.</p> <p>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 (ie at a concentration factor greater than 2X) – refer Application section in General Instructions.</p> <p>* Where indicated add a specified spray adjuvant – refer Adjuvant section in General Instructions.</p>

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

WITHHOLDING PERIODS

HARVEST:

Brassica Vegetables: DO NOT HARVEST FOR 3 DAYS AFTER APPLICATION

Cotton: DO NOT HARVEST FOR 3 WEEKS AFTER APPLICATION

Mangoes: DO NOT HARVEST FOR 14 DAYS AFTER APPLICATION

GRAZING:

Brassica Vegetables: DO NOT GRAZE TREATED BRASSICA CROPS

Cotton: DO NOT FEED COTTON FODDER, STUBBLE OR TRASH TO LIVESTOCK

LIVESTOCK DESTINED FOR EXPORT MARKETS

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 INTERVAL (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 TITAN Spirando 240SC 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 TITAN AG Pty Ltd or your industry body for the latest information on any potential trade issues and their management before using TITAN Spirando 240SC Insecticide.

GENERAL INSTRUCTIONS

ADJUVANT

Brassica Crops

For both dilute and concentrate (where applicable) spraying methods, apply TITAN Spirando 240SC Insecticide with Agridex* or Hasten*. Generally, apply Agridex or Hasten at 0.5 to 1.0L/ha. This can be achieved by adding Agridex or Hasten at 200mL/100L of spray mixture, up to a maximum of 1.0L/ha where application volumes exceed 500L/ha.

Mangoes

For both dilute and concentrate (where applicable) spraying methods, apply TITAN Spirando 240SC Insecticide with Agridex or Hasten at 50mL/100L of spray mixture only when the addition of adjuvant is specified in the rate column of the Directions For Use table, and for application when fruit is present on trees, only after referring to **Warning – Safety to Fruit**, in the Critical Comments of the Directions For Use table, for advice on when adjuvant should NOT be used with TITAN Spirando 240SC Insecticide.

Cotton

Apply TITAN Spirando 240SC Insecticide with Agridex or Hasten at 1.0L/ha.

* Or other specified adjuvant – refer to TITAN AG Pty Ltd for further information.

MIXING

Shake the container well before using. Add the required amount of TITAN Spirando 240SC Insecticide to a partly filled spray tank and then add the remainder of the water. Add the required amount of adjuvant. TITAN Spirando 240SC Insecticide should be applied as soon as possible after mixing.

GROUND APPLICATION

Brassica 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.

Application using rate per hectare

Thorough coverage of the target area is essential. Adjust water volumes according to the crop growth stage.

Application using rate per 100L (Dilute Spraying)

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 100L of water. Spray to the point of run-off, to a maximum of 1000L/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.

Mangoes

Dilute Spraying

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 100L of 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 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. 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 spray volume: For example 750L/ha
3. The concentration factor in this example is: 2X (ie $1500L \div 750L = 2$)
4. If the dilute label rate is 30mL/100L, then the concentrate rate becomes 2 x 30, that is 60mL/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.

- DO NOT use at a concentration factor greater than 2X (eg at a rate higher than 80mL/100L where a dilute spraying rate of 40mL/100L is specified).
- Note that the concentrate mixing rate is applicable only to TITAN Spirando 240SC Insecticide. 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.

Cotton

Apply as a blanket spray or banded spray ensuring thorough coverage of the foliage. Apply in a minimum of 80L/ha.

AERIAL APPLICATION (Cotton only)

TITAN Spirando 240SC Insecticide must only be applied by aircraft (fixed-wing or helicopter) fitted with accurately calibrated equipment. Apply a minimum total spray volume of 30L/ha.

DO NOT apply TITAN Spirando 240SC Insecticide using Ultra Low Volume (ULV) methods.

Further enhancement of aircraft application can be achieved through modification of spray patterns (eg reduced swath width), increased water volume (eg from 30L/ha to 50L/ha), and the use of Global Positioning Systems (GPS) as an aid during spray applications.

COMPATIBILITY

DO NOT mix TITAN Spirando 240SC Insecticide with TITAN Azoxystrobin 250 SC Fungicide or Du-Wett*.

DO NOT mix TITAN Spirando 240SC Insecticide with any other product, except the specified adjuvant when recommended, when applying to fruiting Mango crops.

For further information on the compatibility of TITAN Spirando 240SC Insecticide with other products, contact TITAN AG Pty Ltd.

IPM Compatibility

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

INSECTICIDE RESISTANCE WARNING

For insecticide resistance management TITAN Spirando 240SC Insecticide is a Group 23

GROUP **23** INSECTICIDE

insecticide. Some naturally occurring insect biotypes resistant to TITAN Spirando 240SC 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 TITAN Spirando 240SC Insecticide and other Group 23 insecticides are used repeatedly. The effectiveness of TITAN Spirando 240SC Insecticide on resistant individuals could be significantly reduced. Since occurrence of resistant individuals is difficult to detect prior to use TITAN AG Pty Ltd accepts no liability for any

losses that may result from failure of TITAN Spirando 240SC Insecticide to control resistant insects. TITAN Spirando 240SC Insecticide may be subject to specific resistance management strategies. For further information contact your supplier, TITAN AG representative or local agricultural department agronomist.

PRECAUTION

Re-entry: DO NOT enter treated areas until the spray has dried. If prior entry is necessary, wear 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 WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

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

PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS

Application of TITAN Spirando 240SC Insecticide to crops/plants other than those specified on this label may cause symptoms of phytotoxicity.

Caution: Phytotoxic symptoms have occasionally been observed when TITAN Spirando 240SC 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 to an approved waste management facility. If an approved waste management facility is not available, bury the empty packaging 500mm 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 Local, State or Territory government regulations. DO NOT burn empty containers or product.

110L Containers: If tamper evident seals are broken prior to initial use, then the integrity of the contents cannot be assured. Empty container by pumping through dry-break connection system. DO NOT attempt to breach the valve system of the filling point or contaminate the container with water or other products. Ensure that the couple, pump, meter and hoses are disconnected, triple rinsed with clean water and drained after each use. When empty, or contents no longer required, return the container to the point of purchase. This container remains the property of TITAN AG Pty Ltd.

100L, 200L and 1000L Containers: If tamper evident seals are broken prior to initial use, then the integrity of the contents cannot be assured. The container must be vented before discharging contents. To empty, connect a camlock fitted hose to the bottom valve. Remove top cap when discharging for venting purposes. When the container is empty, close all caps and valves and return the container to the point of purchase.

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 skin immediately wash area with soap and water. If product 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 131126; New Zealand 0800 764 766.

SAFETY DATA SHEET

Additional information is listed in the safety data sheet (SDS). A safety data sheet for TITAN Spirando 240SC Insecticide is available from TITAN AG Pty Ltd on request. Call Customer Service on (02) 9999 6655 or visit titanag.com.au

CONDITIONS OF SALE: TITAN AG Pty Ltd 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 TITAN AG'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 TITAN AG Pty Ltd has any authority to add to or alter these conditions.

Additional statements required by Globally Harmonised System of Classification and Labelling of Chemicals (GHS) and Safe Work Australia: Causes serious eye irritation. May cause an allergic skin reaction. Suspected of damaging fertility. Suspected of damaging the unborn child. May cause respiratory irritation. Toxic to aquatic life with long lasting effects.
Precautionary Statements: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing dust/fume/gas/mist/vapours/spray. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN: Wash with plenty of water. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF exposed or concerned: Get medical advice/attention. Call a POISON CENTER/doctor if you feel unwell. Specific treatment (see on this label). Take off contaminated clothing and wash it before reuse. If skin irritation or rash occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Collect spillage. Store in a well-ventilated place. Keep container tightly closed. Store locked up. Dispose of contents/container in accordance with local/regional/national/international regulations.

* Other trademarks

