

POISON

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

TITAN

ACEPHATE 970 SG INSECTICIDE

ACTIVE CONSTITUENT: 970g/kg ACEPHATE (an anti-cholinesterase compound)

GROUP **1B** INSECTICIDE

For the control certain insect pests on Bananas, Crucifers, Macadamias, Ornamentals, Potatoes, Tomatoes and Tobacco as per the Directions for Use table.

APVMA Approval No.: 69452/60823

Pack Size: 1kg; 5kg



TITAN AG Pty Ltd | ABN 57 122 081 574
15/16 Princes Street, Newport NSW 2106
Tel (02) 9999 6655 | Fax (02) 9999 0483
titanag.com.au

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

CROP	PEST	STATES	RATE For further information refer to the Application Section of the General Instructions		WHP	CRITICAL COMMENTS
			Per 100 Litres water (High volume)	Per hectare (Low volume)		
Bananas (Bell injection and bunch spray only)	Banana Scab Moth (<i>Nacoleia octasema</i>), Banana Flower Thrips (<i>Thrips hawaiiensis</i>)	QLD, NSW, WA, NT only	65 to 130g 6.5 to 13g/10L At 30mL/bell use 130g/100L At 40mL/bell use 97.5g/100L At 60mL/bell use 65g/100L	—	—	Bell injection only Apply 30mL to 60mL of prepared solution to each Banana bell. The volume required per bell should be determined by the average bell size to be treated, prior to making up the solution. Use the highest concentration (13g/10L) when applying 30mL per bell. Use the lowest concentration (6.5g/10L) when applying 60mL per bell. Inject the required volume directly into the upright bell as it emerges from the throat of the banana plant.
	Banana Rust Thrips (<i>Chaetanaphothrips signipennis</i>)		130g (13g/10L water)	Bunch spray only Apply, to the point of run-off, up to 50mL of prepared spray solution to each bunch, ensuring thorough, even spray coverage. Application should be made no later than 2 weeks after bunch emergence.		
Brussels Sprouts	Heliothis (<i>Helicoverpa</i> spp.)	TAS only	100g	1.0kg	3 days (broccoli 14 days)	Spray when infestation occurs and then at 10-14 day intervals or as necessary. Use a non-ionic wetting agent at the rate specified by the manufacturer for use in horticultural crops.
	Cabbage Moth, Cabbage White Butterfly	NSW, VIC, TAS, SA, WA, NT only	100g	1.0kg		
	Cabbage Aphid, Heliothis (<i>Helicoverpa</i> spp.)	QLD, WA, NT only	80g	0.8kg		
Cabbages, Cauliflowers, Broccoli	Cabbage Moth, Cabbage White Butterfly	NSW, VIC, TAS, SA, WA, NT only	100g	1.0kg		
	Cabbage Aphid, Heliothis (<i>Helicoverpa</i> spp.)	QLD, WA, NT only	80g	0.8kg		
Macadamias	Macadamia Nut Borer, Fruitspotting Bug, Leafminer	NSW, WA only	Dilute spraying: 80g/100L Concentrate spraying: Refer to the Application Section in GENERAL INSTRUCTIONS		—	Apply when pest activity first observed and repeat at 14 to 21 day intervals or as necessary. 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. Apply at early flowering if pests evident. One to three sprays may be required depending on time and severity of infestation. Spray when bees are least active. 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.
	Redshouldered Leaf Beetle	QLD, WA, NT only				
	Flower Eating Caterpillar	NSW, WA only	Dilute spraying: 50g/100L Concentrate spraying: Refer to the Application Section in GENERAL INSTRUCTIONS			
	Flower Eating Caterpillar, Fruitspotting Bug, Macadamia Leaf Miner, Banana-Spotting Bug, Flower Thrips	QLD, NT only				
	Flower Thrips, Banana-Spotting Bug, Macadamia Leaf Miner	WA only				
Ornamentals	Aphids	ALL STATES	100g	1.0kg	—	Spray when infestation occurs and then at 14 day intervals. DO NOT spray more than once every 28 days on Carnations and Chrysanthemums. See also warning under Protection of Crops section. DO NOT apply to Carnations less than 6 days before picking.
	Heliothis (<i>Helicoverpa</i> spp.)	VIC, TAS, SA, WA only				
Potatoes	Potato Moth (Tobacco Leafminer)	ALL STATES	50g	0.5kg	3 days	Spray every 14 to 21 days or as necessary.

CROP	PEST	STATES	RATE For further information refer to the Application Section of the General Instructions		WHP	CRITICAL COMMENTS
			Per 100 Litres water (High volume)	Per hectare (Low volume)		
Tobacco	Heliothis (<i>Helicoverpa</i> spp.)	VIC only	80g	0.8kg	14 days	Spray as indicated by crop checking (usually a minimum of 7 days is required). Use high volume application for good coverage ie. 130 to 400L/ha depending on crop stage, paying particular attention to the bud heart.
	Heliothis (<i>Helicoverpa</i> spp.), Tobacco Looper, Whitefly, Cluster Caterpillar, Stem Borer	QLD, WA only				
	Budworm (<i>Helicoverpa armigera</i>)	NSW only				Spray at 7 to 10 day intervals, when the pest is present.
Tomatoes	Aphids	NSW, ACT, VIC, TAS, SA, WA only	80g	0.8kg	3 days	Spray when infestation occurs and then at 7 to 14 day intervals or as necessary (ground application only).
	Potato Moth (Tobacco Leafminer), Heliothis (<i>Helicoverpa</i> spp.)	NSW, VIC, TAS, SA, WA only	100g	1.0kg		
	Potato Moth (Tobacco Leafminer), Heliothis (<i>Helicoverpa</i> spp.), Aphids	QLD, NT only	80g	0.8kg		Apply when infestation occurs and then at 7 day intervals or as necessary.

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

WITHHOLDING PERIODS (WHP):

BRUSSELS SPROUTS, CABBAGE, CAULIFLOWERS, POTATOES, TOMATOES: DO NOT HARVEST FOR 3 DAYS AFTER APPLICATION.

BROCCOLI, TOBACCO: DO NOT HARVEST FOR 14 DAYS AFTER APPLICATION.

BANANAS, MACADAMIAS, ORNAMENTALS: NOT REQUIRED WHEN USED AS DIRECTED.

GENERAL INSTRUCTIONS

MIXING

Add the required amount of TITAN Acephate 970 SG Insecticide to the full volume of water in the spray tank with agitator in operation. Ensure the granules are completely dispersed before spraying.

APPLICATION

Good pest control requires even, thorough coverage of the target area. Application should be made using appropriate spray equipment and sufficient water to provide adequate penetration and coverage. Equipment settings and water volume may need to vary, depending on growth stage of the crop.

Application Instructions for all crops excluding Macadamias and Bananas By Ground: Where spray volume equals or exceeds 1000L/ha use the appropriate Rate per 100L water as specified in the "High Volume" column of the Directions for Use table. Where spray volume is less than 1000L/ha use the appropriate Rate per 100L water as specified in the "Low Volume" column of the Directions for Use table.

Aerial Application: Apply in a minimum of 20L of water per hectare, using the appropriate rate per hectare, as specified in the "Low Volume" column of the Directions for Use table.

Application Instructions for Bananas

Refer to Critical Comments section of Directions for Use Table for full details on method of application.

Special Instructions for Macadamias

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 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.
- This 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 500L/ha
 3. The concentration factor in this example is: $3 \times (i.e. 1500L \div 500L = 3)$
 4. If the dilute label rate is 50g/100L, then the concentrate rate becomes 3×10 , that is 150g/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 further information on concentrate spraying, users are advised to consult relevant industry guidelines, undertake appropriate competency training and follow industry Best Practices.

INSECTICIDE RESISTANCE WARNING

For insecticide resistance management, TITAN Acephate 970 SG Insecticide is a Group 1B insecticide. Some naturally occurring insect biotypes resistant to TITAN Acephate 970 SG Insecticide and other Group 1B insecticides may exist through normal genetic variability in any insect population. The resistant individuals can eventually dominate the insect population if TITAN Acephate 970 SG Insecticide or other Group 1B insecticides are used repeatedly. The effectiveness of TITAN Acephate 970 SG 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 the failure of TITAN Acephate 970 SG Insecticide to control resistant insects.

TITAN Acephate 970 SG Insecticide may be subject to specific resistance management strategies. For further information contact your local supplier, TITAN AG representative or local agricultural department agronomist.

GROUP 1B INSECTICIDE



COMPATIBILITY

TITAN Acephate 970 SG Insecticide may be mixed in the spray vat with copper fungicide. A mixture of TITAN Acephate 970 SG Insecticide with other products may be ineffective or may cause serious damage and hence is NOT recommended.

PRECAUTIONS

Re-Entry Period: DO NOT allow entry into, or perform agronomic practices in, treated areas until the spray deposits have dried. When prior entry is necessary, wear cotton overalls buttoned to the neck and wrist and elbow-length PVC gloves. Clothing must be laundered after each day's use. For glasshouses and other confined areas, do not re-enter until spray deposits have dried and area has been thoroughly ventilated.

PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS

Bananas: Use as a bell injection or bunch spray during the wet season may result in some damage to banana hands.

Ornamentals: TITAN Acephate 970 SG Insecticide may cause foliage damage to certain shrubs and trees, eg. crab apple, cotton wood, Lombardy poplar and American elm. DO NOT spray more than once every 28 days on carnations and chrysanthemums. Certain chrysanthemum varieties, eg. Showoff, Iceberg, Albatross, Bonnie Jean and Statesman have, on occasions, been damaged by TITAN Acephate 970 SG Insecticide.

PROTECTION OF LIVESTOCK

Harmful to bees. DO NOT apply during active foraging of bees and avoid spraying at flowering time. Avoid spray drift from target area. DO NOT contaminate feed or foodstuffs.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

DO NOT contaminate streams, rivers or waterways with this product or the used containers.

DRIFT WARNING

DO NOT apply in weather conditions, or from spraying equipment, which could be expected to cause spray to drift onto adjacent crops, crop lands, pasture or livestock.

EXPORT OF TREATED PRODUCE

Growers should note that MRLs or import tolerances do not exist in all markets for edible produce treated with TITAN Acephate 970 SG Insecticide. If you are growing edible produce for export, please check with TITAN AG for latest information on MRLs and import tolerance BEFORE using TITAN Acephate 970 SG Insecticide.

STORAGE AND DISPOSAL

Store in the closed, original container in a cool, well-ventilated area. DO NOT store for prolonged periods in direct sunlight. Puncture and bury empty containers in a local authority landfill. If no landfill is available, bury the containers below 500mm 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.

SAFETY DIRECTIONS

Poisonous if absorbed by skin contact, inhaled or swallowed. Repeated minor exposure may have a cumulative poisoning effect. Will irritate the eyes. Avoid contact with eyes. DO NOT inhale dust or spray mist. When opening the container and preparing and using spray, wear cotton overalls buttoned to the neck and wrist, a washable hat, elbow-length PVC gloves and face shield. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash gloves, face shield and contaminated clothing.

FIRST AID

If swallowed, splashed on skin or in eyes, or inhaled, contact a Poisons Information Centre. Phone Australia 131126; New Zealand 0800 764 766 or a doctor at once. Remove any contaminated clothing and wash skin thoroughly. If swallowed, activated charcoal may be advised. Give atropine if instructed.

SAFETY DATA SHEET

Additional information is listed in the safety data sheet (SDS). A safety data sheet for TITAN Acephate 970 SG 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: Harmful if swallowed. Precautionary Statements: Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth. Dispose of contents/container in accordance with local/regional/national regulations.

