

POISON

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

TITAN

ATLAS 500 WG

APHICIDE

ACTIVE CONSTITUENT: 500g/kg PIRIMICARB (an anti-cholinesterase compound)

GROUP **1A** INSECTICIDE

For control of certain Aphids on crops and pastures as per directions for use table.

APVMA Approval No.: 61797/115153

Pack Size: 5kg; 10kg



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IN A TRANSPORT EMERGENCY

DIAL 000

POLICE OR FIRE BRIGADE



UN 2757
CARBAMATE PESTICIDE,
SOLID, TOXIC (pirimicarb),
ENVIRONMENTALLY
HAZARDOUS
PG: III Hazchem: 2X

DIRECTIONS FOR USE

Restraints: DO NOT apply from the air when the crosswind is less than 3km/hr.
DO NOT apply by equipment carried on the back of the user.

1. FRUIT CROPS – TREE AND VINE CROPS						
RATE					WHP	CRITICAL COMMENTS
In the following table: “Fruit Crops – Tree and Vine Crops” all rates given are for dilute spraying. For concentrate spraying, refer to the Mixing/Application Section.						
CROPS	PEST	STATE	RATE			
			PER 100L	PER HA		
Apples	Woolly Aphid	NSW, ACT, VIC, TAS, SA, WA only	50g	1.1-1.7kg	2 days	Use the higher rate when less than 2200L of spray per ha. Add 18mL Wetspray 600 per 100L.
Citrus	Citrus Aphid	NSW, ACT, VIC, TAS, SA, WA only	50g	1.1kg	2 days	Apply when aphids appear. Use at least 2200L spray per ha.
	Aphids	QLD, ACT, WA only	2.5g	–		Apply only where pest management is being implemented and only when it is apparent that parasite predators will not control the infestation within a reasonable time.
Stone fruit	Green Peach Aphid, Black Peach Aphid, Cherry Aphid	ALL STATES	50g	1.1kg		Apply at pink bud stage or when aphids appear. Use at least 1100L spray/ha.
2. FRUIT CROPS – NON TREE AND VINE CROPS						
Blueberries	Aphids	QLD, WA only	50g	–	2 days	Use the higher rate when less than 2200L of spray per ha. Add 18mL Wetspray 600 per 100L.
Pepinos						
Strawberries		QLD, NSW, WA only	35g			Thorough coverage is necessary. If used in conjunction with predatory mites, apply before release or only after mites have fully established within the crop.
3. VEGETABLES						
Artichokes (globe)	Aphids	ALL STATES	50g	–	2 days	–
Asparagus						
Beetroot	Green Peach Aphid		–	1kg		Use at least 500L spray/ha plus 18mL/100L Wetspray 600.
Beans	Cowpea Aphid (Aphis craccivora)	VIC, TAS, WA only		500g		Apply as beans emerge and thereafter whilst aphid attack continues. Spray thoroughly.
Broad Beans, Lima Beans	Aphids	ALL STATES	50g	–		As above.
Broccoli, Brussels Sprouts, Cabbages, Cauliflowers	Cabbage Aphid	ALL STATES	100 to 200g	500g or 1kg		Apply every 10 to 14 days commencing 1 week after planting. Use 500L spray per ha. Add 18mL Wetspray 600 per 100L. If lower spray volumes per ha are used, increase the rate per 100L to maintain the equivalent rate of product per ha. Use the higher rate if temperature falls below 20°C.
Brussels Sprouts, Cabbages, Cauliflowers	Green Peach Aphid	ALL STATES	100 to 200g	500g or 1kg		As above.
Chinese Cabbages	Cabbage Aphid, Green Peach Aphid	ALL STATES				
Capsicums	Aphids	ALL STATES				
Cucurbits						Spray when aphids are detected and repeat if necessary. Use the higher rates if applied in conditions below 20°C.
Endive, Garden Cress		ALL STATES	50g	–		–
Kale	Cabbage Aphid, Green Peach Aphid	ALL STATES	100 to 200g	500g or 1kg		Apply every 10 to 14 days commencing 1 week after planting. Use 500 litres spray per ha. Add 18mL Wetspray 600 per 100L. If lower spray volumes per ha are used, increase the rate per 100L to maintain the equivalent rate of product per ha. Use the higher rate if temperature falls below 20°C.
Kiwano	Aphids	ALL STATES	100 to 200g	500g or 1kg		Apply every 5 to 10 days during period of rapid plant growth to delay virus buildup.
Leeks			50g	–		–

3. VEGETABLES – continued						
CROPS	PEST	STATE	RATE		WHP	CRITICAL COMMENTS
			PER 100L	PER HA		
Lettuce	Aphids	ALL STATES	100 to 200g	500g or 1kg	2 days	Spray when aphids are detected and repeat if necessary. Use the higher rates if applied in conditions below 20°C.
Okra		ALL STATES	50g	–		For use in IPM programs where <i>Helicoverpa</i> resistance strategy is being practiced.
Peas		ALL STATES	100 to 200g	500g or 1kg		–
		NSW only				Spray when aphids are detected and repeat if necessary. Use the higher rates if applied in conditions below 20°C.
Potatoes	Potato Aphid	ALL STATES	250 to 500g	500g or 1kg		Apply in 200L spray per ha when aphids first appear. If higher spray volumes per ha are used, decrease the rate per 100L to maintain the equivalent rate of product per ha. Use the higher rate if temperature falls below 20°C.
Radishes	Cabbage Aphid, Green Peach Aphid	ALL STATES	100 to 200g	500g or 1kg		Apply every 10 to 14 days commencing 1 week after planting. Use 500L spray per ha. Add 18mL Wetspray 600 per 100L. If lower spray volumes per ha are used, increase the rate per 100L to maintain the equivalent rate of product per ha. Use the higher rate if temperature falls below 20°C.
Shallots, Spinach						Aphids
Swedes, Turnips	Cabbage Aphid, Green Peach Aphid	ALL STATES	100 to 200g	500g or 1kg		Apply every 10 to 14 days commencing 1 week after planting. Use 500L spray per ha. Add 18mL Wetspray 600 per 100L. If lower spray volumes per ha are used, increase the rate per 100L to maintain the equivalent rate of product per ha. Use the higher rate if temperature falls below 20°C.
Tomatoes					Aphids	ALL STATES
Watercress	Aphids	ALL STATES	50g	–	–	
4. ORNAMENTALS						
Ornamentals	Rose Aphid, Chrysanthemum Aphid	NSW, WA only	50g	–	–	Apply when aphids appear. Spray to give complete coverage of plants.
		QLD, WA only	35g			If applied in conjunction with predatory mites (<i>Phytoseiulus persimilis</i>) apply before release or only after mites have become fully established. DO NOT apply more than 2 sprays in quick succession where IPM is practiced. Where roses are grown in dense hedges and IPM is used, spray only the upper half of the hedge where the aphids are attacking the buds. Allow the lower half of the hedge to serve as a refuge for <i>P. persimilis</i> . In such situations TITAN Atlas 500 WG Aphicide should NOT be mixed with a fungicide which requires very careful coverage. Note: Because of the wide range of crops and pests encompassed under Ornamentals, the phytotoxicity and efficacy of this compound cannot be guaranteed under all uses. Test the chemical for phytotoxicity on a small area of crop before widespread usage.

5. BROADACRE CROPS						
CROPS	PEST	STATE	RATE		WHP	CRITICAL COMMENTS
			PER 100L	PER HA		
Canola	Cabbage Aphid (<i>Brevicoryne brassicae</i>), Green Peach Aphid (<i>Myzus persicae</i>)	ALL STATES	–	500g or 1kg	14 days harvest/ grazing	Apply when aphids first appear using 30 to 100L water/ha (ground rig) or 20 to 50L/ha (aerial). Use higher rate if temperature falls below 20°C. Add 18mL Wetspray 600 per 100L spray.
Cotton	Cotton Aphid (<i>Aphis gossypii</i>), Green Peach Aphid (<i>Myzus persicae</i>)	QLD, NSW, WA only	–	500g or 750g Aerial Application Spray volume of 30 to 50L/ha Ground Application Spray volume of 100L/ha minimum	21 days harvest/ grazing	Thorough spray coverage is essential to produce best results. Stage I - apply when aphids exceed 90% plants infested. Stage II - apply when aphids exceed 95% plants infested. Stage III- apply when aphids exceed 50% plants infested, or - if 1% bolls are open and honeydew is present apply when aphids exceed 10% of plants infested. If a spray is required for another pest, the aphid threshold for each stage should be reduced by half to determine the need to spray for aphids; eg. 50% becomes 25% plants infested. Use TITAN Atlas 500 WG Aphicide no more than twice per season. Adhere to the resistance management strategy and rotate chemistry. DO NOT use TITAN Atlas 500 WG Aphicide as consecutive sprays.
Duboisia	Aphids	QLD, WA only	50g	1.1kg	–	Apply when populations warrant.
Lucerne, Medic pastures	Spotted Alfalfa Aphid, Blue Green Aphid	ALL STATES	–	100 to 150g in 200 to 300L water	3 days grazing	Application: High rate to be used when there is a high aphid population density or with dense crop growth. Complete coverage and penetration of the crop is essential. Timing: QLD only – On seedling lucerne, treatment is necessary when one or two aphids are present per plant. Established lucerne and medics (spring and summer) – spray when there are 20 to 40 aphids per stem. Spotted Alfalfa Aphid (NSW, SA, TAS, WA only): Apply when aphids begin to build up on stems and repeat as necessary. Spotted Alfalfa Aphid and Pea Aphid (VIC only). Seedling lucerne and medics – treat when 1 to 2 aphids per plant are present. Established lucerne and medics (Spring and Summer) – spray when there are 20 to 40 aphids per stem. TAS only – A cold weather adapted species which may be found at most times of the year. Spraying should be carried out when aphids begin to increase and be repeated as necessary. For the control of both the above lucerne and medic pasture pests TITAN Atlas 500 WG Aphicide at the recommended rate should be applied in 200 to 300L of water per ha. Complete coverage and penetration of the crop is essential. Blue Green Aphid: This aphid is cooler weather tolerant and will be found at all times of the year. Spraying should be carried out as aphids are observed. In some areas Spotted Alfalfa Aphid has developed tolerance to pirimicarb and in those areas TITAN Atlas 500 WG Aphicide will not give satisfactory control. However, apparent tolerance should not be confused with poor application. Consult your local Department of Agriculture representative for local information.

5. BROADACRE CROPS – continued

CROPS	PEST	STATE	RATE		WHP	CRITICAL COMMENTS
			PER 100L	PER HA		
Lucerne	Pea Aphid	VIC, WA only	–	100 to 150g	3 days grazing	Apply when aphids begin to build up on stems. Repeat as necessary. Use 200 to 300L per ha. Use the higher rate when there is a high aphid population density or dense crop or when temperature falls below 20°C.
Lupins	Green Peach Aphid	NSW, VIC, WA only	–	250g	6 weeks harvest/ grazing	Apply when aphids first appear using 20 to 100L/ha (ground rig) or 4 to 15L/ha (aerial). Repeat as necessary. If low relative humidity conditions prevail add 1% or 10% Summer Spray Oil (D-C Tron or Caltex) to spray solution for ground and aerial application respectively. Note: For best coverage and hence best results with aerial application; apply when a slight crosswind with a minimum speed of 3km/hr is present.
	Cowpea Aphid	NSW, VIC, WA only				
	Green Peach Aphid	WA only		300g		Apply when aphids first appear. Good coverage of the infested area is essential. Apply in 30 to 100L/ha for aerial application. Repeat as necessary. If low relative humidity conditions prevail add Summer Spray Oil to the mix.
Winter Cereals	Aphids (<i>Rhopalosiphum maidis</i>)	ALL STATES	–	150g	6 weeks harvest/ grazing	Apply when 20 or more aphids are present per tiller and when the crop is between emergence of last leaf and flowering stages. Use 20 to 100L/ha (ground rig) or 4 to 15L/ha (aerial). If low relative humidity conditions prevail add Summer Spray Oil as for lupins. Where there is concern for infection by Barley Yellow Dwarf virus, spraying should be carried out as soon as aphids are located in the crop.
	Aphids (<i>R. maidis</i> , <i>R. paddi</i>)	WA only		250g to 300g		

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

WITHHOLDING PERIODS:

FRUIT, VEGETABLES: DO NOT HARVEST FOR 2 DAYS AFTER APPLICATION.

CANOLA: DO NOT HARVEST, GRAZE OR CUT FOR STOCK FOOD FOR 14 DAYS AFTER APPLICATION.

COTTON: DO NOT HARVEST, GRAZE OR CUT FOR STOCK FOOD FOR 21 DAYS AFTER APPLICATION.

LUCERNE, MEDIC PASTURES: DO NOT GRAZE, CUT FOR STOCK FOOD OR FEED TO POULTRY FOR 3 DAYS AFTER APPLICATION.

LUPINS, WINTER CEREALS: DO NOT HARVEST, GRAZE OR CUT FOR STOCK FOOD OR FEED TO POULTRY FOR 6 WEEKS AFTER APPLICATION.

GENERAL INSTRUCTIONS

MIXING

Fill tank 50 to 75% full then start agitation. Slowly pour granules into tank and maintain agitation throughout spraying. DO NOT pre-mix TITAN Atlas 500 WG Aphicide granules.

APPLICATION

If this product is applied when the temperature is less than 15°C it is essential to have thorough spray coverage for quick and total aphid control.

FRUIT CROPS – TREE AND VINE CROPS

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 runoff. 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 500L/ha.
3. The concentration factor in this example is: $3 \times$ (ie $1500L \div 500L = 3$)
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 following industry Best Practices.

COMPATIBILITY

TITAN Atlas 500 WG Aphicide may be mixed in the spray vat with any one of the following products: Wetspray* and Omite*. A mixture of TITAN Atlas 500 WG Aphicide with more than one of these products or with any other product may be ineffective or may cause serious damage. The use of such a mixture is not recommended and would therefore be entirely at the user's risk.

Resistance Management for Green Peach Aphid control

Some Green Peach Aphids are resistant to all commonly used insecticides including TITAN Atlas 500 WG Aphicide. If resistance is known or suspected, DO NOT use TITAN Atlas 500 WG Aphicide and seek advice on resistance management. If there is no TITAN Atlas 500 WG Aphicide resistance, use a maximum of 2 nonconsecutive aphid sprays per season. If TITAN Atlas 500 WG Aphicide was used as the last aphid spray for the season, do not use it as the first aphid spray next season.



INSECTICIDE RESISTANCE WARNING

For insecticide resistance management TITAN Atlas 500 WG Aphicide is a Group 1A insecticide.

GROUP **1A** INSECTICIDE

Some naturally occurring insect biotypes resistant to TITAN Atlas 500 WG Aphicide and other Group 1A insecticides may exist through normal genetic variability in any insect population. The resistant individuals can eventually dominate the insect population if TITAN Atlas 500 WG Aphicide or other Group 1A insecticides are used repeatedly. The effectiveness of TITAN Atlas 500 WG Aphicide 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 Atlas 500 WG Aphicide to control insects. TITAN Atlas 500 WG Aphicide may be subject to specific resistance management strategies. For further information contact your local supplier, TITAN AG representative or local agricultural department agronomist.

PROTECTION OF LIVESTOCK

Animals and poultry should be kept away from orchards and other treated areas during the horticultural spraying season. Keep animals and poultry away from spray and treated areas for a minimum of 3 days.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

DO NOT contaminate streams, rivers or waterways with the chemical or used containers. DO NOT apply under meteorological conditions (eg. crosswinds less than 3km/hr) or from spraying equipment which could be expected to cause spray to drift onto adjacent areas, particularly wetlands, waterbodies or watercourses.

STORAGE AND DISPOSAL

Store in the closed, original container in a dry, well-ventilated area, as cool as possible out of direct sunlight. Store in a locked room or place away from children, animals, food, feedstuffs, seed and fertilisers. Triple rinse 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 containers to an approved waste management facility. If an approved waste management facility is not 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 in compliance with relevant local, state or territory government regulations. Empty containers and product should not be burnt.

SAFETY DIRECTIONS

Poisonous if absorbed by skin contact or inhaled or swallowed. May irritate the nose and throat and will irritate the eyes. Avoid contact with eyes and skin. DO NOT inhale dust or spray mist. When opening the container and preparing product for use wear cotton overalls, over normal clothing, buttoned to neck and wrist and a washable hat, elbow-length chemical resistant gloves, goggles and half facepiece respirator with dust cartridge or canister. If applying by boomspray equipment wear cotton overalls buttoned to neck and wrist (or equivalent clothing) and elbow-length chemical resistant gloves. If applying by low pressure hand wand or high pressure hand wand wear cotton overalls, over normal clothing, buttoned to neck and wrist and a washable hat, elbow length chemical resistant gloves, goggles and a half face piece respirator with dust cartridge or canister. If clothing becomes contaminated with product, or wet with spray remove clothing immediately. If product or spray on skin, immediately wash area with soap and water. If product or spray in eyes wash it out immediately with water. Wash hands after use. After each day's use, wash gloves, goggles, respirator (if rubber wash with detergent and warm water) 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 Atlas 500 WG Aphicide 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: Toxic if swallowed. Harmful if inhaled. May cause an allergic skin reaction. Suspected of causing cancer. Very 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. Do not eat, drink or smoke when using this product. 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/hearing protection. IF SWALLOWED: Immediately call a POISON CENTER/ doctor. Specific treatment (see on this label). Rinse mouth. IF ON SKIN: Wash with plenty of water. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF exposed or concerned: Get medical advice/attention. Call a POISON CENTER/ doctor if you feel unwell. Take off contaminated clothing and wash it before reuse. If skin irritation or rash occurs: Get medical advice/attention. Collect spillage. Store locked up. Dispose of contents/container in accordance with local/regional/national regulations.

