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



# Pirimicarb 500 WG

# **APHICIDE**

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

# GROUP 1A INSECTICIDE

For the control of certain aphids on crops and pastures as specified in the Directions for Use table.

IMPORTANT: Read this booklet before use.

APVMA Approval No: 68400/58288

# AIRR APPARENT PTY LTD

15/16 Princes Street, Newport NSW 2106

P 03 5820 8400 | E enquiries@apparentag.com.au | www.apparentag.com.au

# DIRECTIONS FOR USE

Restraints: DO NOT apply from the air when the crosswind is less than 3 km/hr.

DO NOT apply by equipment carried on the back of the user.

#### 1. FRUIT CROPS - TREE AND VINE CROPS

# RATE

In the following table:

"Fruit Crops – Tree and Vine Crops" all rates given are for dilute spraying.

CROP	PEST	STATE	RATE	
			Per 100 L	Per ha
Apples	Woolly Aphid	NSW, ACT, Vic, Tas, SA, WA, only	50 g	1.1 - 1.7 kg
Citrus	Citrus Aphid	NSW, ACT, Vic, Tas, SA, WA, only	50 g	1.1 kg
	Aphid	Qld, WA only	2.5 g	-
Stone Fruit	Black Peach Aphid, Green Peach Aphid, Cherry Aphid	All States	50 g	1.1 kg

#### 2. FRUIT CROPS - NON TREE AND VINE CROPS

CROP	PEST	STATE	RATE	
			Per 100 L	Per ha
Blueberries	Aphids	Qld, WA only	50 g	-
Pepinos				
Strawberries		Qld, NSW, ACT, WA, only	35 g	

#### 3 VEGETABLES

CROP	PEST	STATE	RATE	
			Per 100 L	Per ha
Artichokes (globe)	Aphids	All States	50 g	-
Asparagus				
Beetroot	Green Peach Aphid		-	1 kg
Beans	Cowpea Aphid (Aphis craccivora)	Vic, Tas, WA only		500 g
Broad beans, Lima beans	Aphids	All States	50 g	-
Broccoli, Brussels Sprouts, Cabbages,	Cabbage Aphid	All States	100 - 200 g	500 g or 1 kg
Cauliflowers	Green Peach Aphid	All States	100 - 200 g	500 g - 1 kg
Chinese cabbage	Cabbage Aphid, Green Peach Aphid	All States		
Capsicums	Aphids	All States		
Cucurbits	Aphids	All States	100 - 200 g	500 g - 1 kg
Endive, Garden Cress		All States	50 g	-

# CRITICAL COMMENTS

For all uses in this table "Fruit Crops" – Tree and Vine Crops": 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.

WHP	CRITICAL COMMENTS
2 days	Use the higher rate when less than 2200 L of spray per ha. Add 18 mL Wetspray 6001 per 100 L.
	Apply when aphids appear. Use at least 2200 L spray per ha.
	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.
	Apply at pink bud or when aphids appear. Use at least 1100 L spray/ha.

WHP	CRITICAL COMMENTS
2 days	-
	Thorough coverage is necessary. If used in conjunction with predatory mites, apply before release or only after mites have fully established within the crop.

WHP	CRITICAL COMMENTS
2 days	-
	Use at least 500 L spray/ha plus 18 mL/100 L Wetspray 6001.
	Apply as beans emerge and thereafter whilst aphid attack continues, Spray thoroughly.
	Apply every 10 - 14 days commencing 1 week after planting. Use 500 L spray per ha. Add 18 mL Wetspray 600¹ per 100 L. If lower
	spray volumes per ha are used, increase the rate per 100 L to maintain the equivalent rate of product per ha. Use the higher rate if
	temperature falls below 20°C.
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2 days	Apply every 10 - 14 days commencing 1 week after planting. Use 500 L spray per ha. Add 18 mL Wetspray 6001 per 100 L. If lower
	spray volumes per ha are used, increase the rate per 100 L to maintain the equivalent rate of product per ha. Use the higher rate if
	temperature falls below 20°C.
	Spray when aphids are detected and repeat if necessary. Use the higher rates if applied in conditions below 20°C.
2 days	Apply every 5 - 10 days during periods of rapid plant growth to delay virus buildup. Use the higher rates if applied in conditions
,	below 20°C.
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CROP (cont)	PEST	STATE	RATE	
			Per 100 L	Per ha
Kale	Cabbage Aphid, Green Peach	All States	100 - 200 g	500 g - 1 kg
	Aphid			
Kiwano	Aphids	All States		
Leeks			50 g	-
Lettuce		All States	100 - 200 g	500 g - 1 kg
Okra		All States	50 g	-
Peas	Aphids	All States	100 - 200 g	500 g - 1 kg
		NSW only		
Potatoes	Potato Aphid	All States	250 - 500 g	500 g or 1 kg
Radishes	Cabbage Aphid, Green Peach Aphid	All States	100 - 200 g	500 g - 1 kg
Shallots, Spinach	Aphids		50 g	-
Swedes, Turnips	Cabbage Aphid, Green Peach Aphid	All States	100 - 200 g	500 g - 1 kg
Tomatoes	Aphids	All States		
Watercress	Aphids	All States	50 g	-

# 4. ORNAMENTALS

CROP	PEST	STATE	RATE	
			Per 100 L	Per ha
Rose, Chrysanthemums	Rose Aphid, Chrysanthemum Aphid	All States	50 g	8 g / 15 L Knapsack
Ornamentals	Aphids	NSW, ACT, WA only	1	-
		Qld, WA only	35 g	-

# 5. BROADACRE CROPS

CROP PEST STATE		RA	RATE	
			Per 100 L	Per ha
Canola	Cabbage Aphid ( <i>Brevicoryne</i> brassicae), Green Peach Aphid ( <i>Myzus persicae</i> )	All States	-	500 g or 1 kg

WHP	CRITICAL COMMENTS
2 days	Apply every 10 - 14 days commencing 1 week after planting. Use 500 L spray per ha. Add 18 mL Wetspray 600¹ per 100 L. If lower spray volumes per ha are used, increase the rate per 100 L to maintain the equivalent rate of product per ha. Use the higher rate if temperatures fall below 20°C.
	Apply every 5 - 10 days during periods of rapid plant growth to delay virus buildup.
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	Spray when aphids are detected and repeat if necessary. Use the higher rate if applied in conditions below 20°C.
	For use in IPM programmes where Helicoverpa resistance strategy is being practiced.
2 days	-
	Spray when aphids are detected and repeat if necessary. Use the higher rate if applied in conditions below 20°C.
	Apply in 200 L spray per ha when aphids first appear.
	If higher spray volumes per ha are used, decrease the rate per 100 L to maintain the equivalent rate of product per ha.
	Use the higher rate if temperature falls below 20°C.
	Apply every 10 - 14 days commencing 1 week after planting. Use 500 L spray per ha. Add 18 mL Wetspray 600 <sup>1</sup> per 100 L.
	If lower spray volumes per ha are used, increase the rate per 100 L to maintain the equivalent rate of product per ha. Use the higher rate if temperature falls below 20°C.
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	Apply every 10 - 14 days commencing 1 week after planting. Use 500 L spray per ha. Add 18 mL Wetspray 600° per 100 L. If lower spray volumes per ha are used, increase the rate per 100 L to maintain the equivalent rate of product per ha. Use the higher rate if temperature falls below 20°C.
	Spray when aphids are detected and repeat as necessary. Use the higher rates if applied in conditions below 20°C.
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WHP	CRITICAL COMMENTS
-	Apply when aphids appear. Spray to give complete coverage of plants.
-	If applied in conjunction with predatory mites ( <i>Phytoseiulus persimilis</i> ) apply before release or only after mites have become fully established.
	<b>DO NOT</b> apply more than two (2) sprays in quick succession where IPM is practiced. Where roses are grown in dense hedges and IPM is used, spray on 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 Apparent Pirimicarb 500 WG Aphicide should <b>NOT</b> be mixed with a fungicide which requires very careful coverage.
	<b>Note:</b> 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.

WHP	CRITICAL COMMENTS
14 days harvest/ grazing	Apply when aphids first appear using 30 - 100 L water/ha (ground rig) or 20 - 50 L/ha (aerial).  Use higher rate if temperature falls below 20°C. Add 18 mL Wetspray 600¹ per 100 L spray.

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CROP (cont)	PEST	STATE	RATE	
			Per 100 L	Per ha
Cotton	Cotton Aphid ( <i>Aphis gossypii</i> ), Green Peach Aphid ( <i>Myzus</i>	NSW, Qld, WA only	-	500 g or 750 g
	persicae)			Aerial Application
				Spray volume of 30 - 50 L/ha
				Ground Application
				Spray volume of 100 L/ha minimum
Duboisia	Aphids	Qld, WA only	50 g	1.1 kg
Lucerne, Medic pastures	Spotted Alfalfa Aphid, Blue Green Aphid	All States	-	100 -150 g in 200 - 300 L water
Lucerne	Pea Aphid	Vic, WA only	-	100 - 150 g
Lupins	Green Peach Aphid	NSW, ACT, Vic, WA only	_	250 g
	Cowpea Aphid	NSW, ACT, Vic, WA only		
	Green Peach Aphid	WA only		300 g
Winter Cereals	Aphids ( <i>Rhopalosiphum maidis</i> )	All States	-	150 g
	Aphids (R.maidis, R.paddi)	WA only		250 - 300 g

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 STOCKFOOD FOR 14 DAYS AFTER APPLICATION.

Cotton: DO NOT HARVEST, GRAZE OR CUT FOR STOCKFOOD FOR 21 DAYS AFTER APPLICATION.

WHP	CRITICAL COMMENTS
21 days harvest/ grazing	Thorough spray coverage is essential to produce best results.  Stage 1: Apply when aphids exceed 90% of plants infested.  Stage 2: Apply when aphids exceed 95% of plants infested.  Stage 3: Apply when aphids exceed 95% of 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 phase should be reduced by half to determine the need to spray for aphids, eg. 50% becomes 25% of plants infested. Use Apparent Pirimicarb 500 WG Aphicide no more than twice per season. Adhere to the resistance management strategy and rotate chemistry.  DO NOT use Apparent Pirimicarb 500 WG Aphicide as consecutive sprays.
_	Apply when population warrants.
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 (Old 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 - 40 aphids per stem. Spotted Alfalfa Aphid (SA, NSW, WA and Tas 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 - 2 aphids per plant are present. Established lucerne and medics (Spring and Summer) - spray when there are 20 - 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 Apparent Primicarb 500 WG Aphicide at the recommended rate should be applied in 200 - 300 L of water per ha. Complete coverage and benefitation 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 Apparent Pirimicarb 500 WG Aphicide will not give satisfactory control. However, apparent tolerance should not be confused with poor application. Consult your local AIRR Apparent Pty Ltd or Department of Agriculture representative for local information.
3 days grazing	Apply when aphids begin to build up on stems. Repeat as necessary. Use 200 - 300 L per ha. Use the higher rate when there is a high aphid population density or dense crop or when temperature falls below 20°C.
6 weeks	Apply when aphids first appear using 20 - 100 L/ha (ground rig) or 4 - 15 L/ha (aerial).
harvest/ grazing	Repeat as necessary. If low relative humidity conditions prevail add 1% or 10% Summer Spray Oil (DC-Tron¹ or Caltex¹) to spray solution for ground and aerial application respectively.
	<b>Note:</b> For best coverage and hence best results with aerial application, apply when a slight crosswind with a minimum speed of 3 km/hr is present.
	Apply when aphids first appear. Good coverage of the infested area is essential. Apply in 30 - 100 L/ha for aerial application.  Repeat as necessary. If low relative humidity conditions prevail add Summer Spray Oil to the mix.
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 - 100 L/ha (ground rig) or 4 - 15 L/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.

Lucerne, Medic Pastures: DO NOT HARVEST, GRAZE OR CUT FOR STOCKFOOD OR FEED TO POULTRY FOR 3 DAYS AFTER APPLICATION.

Lupins, Winter Cereals: DO NOT HARVEST, GRAZE OR CUT FOR STOCKFOOD OR FEED TO POULTRY FOR 6 WEEKS AFTER APPLICATION.

#### GENERAL INSTRUCTIONS

#### Mixina

Fill tank 50 to 75% full then start agitation. Slowly pour granules into tank and maintain agitation throughout spraying. DO NOT premix Apparent Pirimicarb 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 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. 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 the 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 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:  $3 \times (ie 1500 \text{ L} \div 500 \text{ L} = 3)$ .
- 4. If the dilute label rate is 10 mL/100 L, then the concentrate rate becomes 3 x10, that is, 30 mL/100 L of concentrate spraying. 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. For further information on concentrate spraying, users are advised to consult relevant industry guidelines, undertake appropriate competency training and follow industry Best Practices.

#### COMPATIBILITY

Apparent Pirimicarb 500 WG Aphicide may be mixed in the spray vat with any one of the following products: Apparent Wetter and Omite!. A mixture of Apparent Pirimicarb 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.

#### INSECTICIDE RESISTANCE WARNING

# GROUP 1A INSECTICIDE

For insecticide resistance management Apparent Pirimicarb 500 WG Aphicide is a Group 1A Insecticide. Some naturally occurring insect biotypes resistant to Apparent Pirimicarb 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 Apparent Pirimicarb 500 WG Aphicide or other Group 1A Insecticides are used repeatedly. The effectiveness of Apparent Pirimicarb 500 WG Aphicide on resistant individuals could be significantly reduced.

Since occurrence of resistant individuals is difficult to detect prior to use AIRR Apparent Pty Ltd accepts no liability for any losses that may result from the failure of Apparent Pirimicarb 500 WG Aphicide to control insects. Apparent Pirimicarb 500 WG Aphicide may be subject to specific resistance management strategies. For further information contact your local supplier, AIRR Apparent Pty Ltd representative or local agricultural department agronomist.

#### RESISTANCE MANAGEMENT FOR GREEN PEACH APHID CONTROL

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

# 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 this product or used containers. DO NOT apply under meteorological conditions (eg. crosswinds less than 3 km/hr) or from spraying equipment which could be expected to cause spray to drift onto adiacent areas, particularly wetlands, water bodies 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. Single rinse before disposal. Add rinsings to spray tank. DO NOT dispose of undituted chemicals on-site. Puncture and bury empty containers in a local authority landfill. If no landfill is available, bury the containers below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt.

#### SAFFTY 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 war cotton overalls, over normal clothing, buttoned to neck and wrist and a washable hat, elbow length chemical resistant gloves, googles and a half face piece respirator with dust cartridge or canister. If clothing becomes contaminated with product or wet

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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 deteroent and warm water) and contaminated clothing.

# SAFETY DATA SHEETS

Additional information is listed in the Safety Data Sheet (SDS), which is available from the supplier.

# CONDITIONS OF SALE

The use of Apparent Pirimicarb 500 WG Aphicide being beyond the control of the manufacturer, no warranty expressed or implied is given by AIRR Apparent Pty Ltd regarding its suitability, fitness or efficiency for any purpose for which it is used by the buyer, whether in accordance with the directions or not and AIRR Apparent Pty Ltd accepts no responsibility for any consequence whatsoever from the use of this product.

<sup>1</sup>Not a trademark of AIRR Apparent Pty Ltd