

**READ SAFETY DIRECTIONS BEFORE OPENING OR USING**

# **Agricrop Prolan 500 Herbicide**

**ACTIVE CONSTITUENT: 500 g/L ORYZALIN**

<b>GROUP</b>	<b>D</b>	<b>HERBICIDE</b>
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**For pre-emergent control of certain annual grasses and broadleaf weeds in non-bearing and bearing fruit and nut orchards, vineyards, nursery stock, ornamentals, amenity plantings, established and newly planted turf and industrial areas and rights of way as specified in the Directions for Use table.**

*Label:*

**IMPORTANT: READ THIS LEAFLET BEFORE USING THIS PRODUCT**

*Leaflet:*

**IMPORTANT: THIS LEAFLET IS PART OF THE LABEL ATTACHED TO THE CONTAINER. READ THOROUGHLY BEFORE OPENING OR USING THIS PRODUCT.**

APVMA Approval No: 60335/58307

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**DIRECTIONS FOR USE IN ALL STATES****RESTRAINTS**

DO NOT use on newly seeded turf areas.

DO NOT use on turf under stress.

DO NOT use on Bent grass or Wintergrass.

DO NOT use on golf greens or bowling greens.

DO NOT apply if forecast heavy rain or storms are likely to cause runoff.

DO NOT irrigate to the point of runoff.

**SPRAY DRIFT RESTRAINTS**

DO NOT apply Prolan 500 Herbicide by fixed wing aircraft unless wind speed is more than 3 kilometres per hour and less than 15 km/hr as measured at the application site and/or the air temperature is above 30°C, or when the wind is blowing towards susceptible crops.

Aquatic environment

**DO NOT** apply if there are aquatic and wetland areas including aquacultural ponds downwind from the application area and within the **mandatory no-spray zones** shown in Table A below.

<b>Table A- No-Spray Zones for Protection of the Aquatic Environment</b>		
<b>FOR AERIAL APPLICATION</b>		
<b>Wind Speed Range at Time of Application</b>	<b>Downwind Mandatory No-Spray Zone</b>	
	<b>Fixed-Wing</b>	<b>Helicopter</b>
from 3 to 8 kilometres per hour	400 m	250 m
from 8 to 14 kilometres per hour	650 m	350 m
from 14 to 20 kilometres per hour	*	450 m

\*Not permitted for fixed wing as this is beyond the model capability to model downwind spray zone of >800 m at the highest wind speed.

Terrestrial environment

DO NOT apply if there are non-target vegetation or animal habitat downwind from the application area and within the **mandatory no-spray zones** shown in Table B below.

Table B – No-Spray Zones for Protection of the Terrestrial Environment		
FOR AERIAL APPLICATION		
Wind Speed Range at time of Application	Downwind Mandatory No-Spray Zone	
	Fixed-Wing	Helicopter
from 3 to 8 kilometres per hour	400 m	250 m
from 8 to 14 kilometres per hour	600 m	350 m
from 14 to 20 kilometres per hour	*	400 m

\*Not permitted for fixed wing as this is beyond the model capability to model downwind spray zone of >800 m at the highest wind speed.

Crop Group				Weeds Controlled	Rate /ha	Critical Comments
Banana <sup>1</sup>				<b>Grasses:</b> Barnyard Guinea grass Love grass Paradoxa grass Pigeon grass Spiny burr grass (Gentle Annie / Innocent Weed) Summer grass (Crabgrass <sup>3</sup> )	Short term control (up to 4 months) 4.5L	See GENERAL INSTRUCTIONS DO NOT apply by aircraft or through any type of irrigation equipment.  <sup>1</sup> DO NOT use as a pre-emergent at the time of planting with tissue culture banana planting material.
Grape <sup>2</sup>						
Pome Fruit	Apple	Pear	(see also non- bearing fruits)			
Stonefruit	Apricot	Peach	Nectarine			
	Cherry	Plum & prune				
Citrus	Grapefruit	Orange	(see also non- bearing fruits)			
Nuts	Almonds	Pecan	Walnut		Long term control (6-8 months) 6.8L	<sup>2</sup> <b>Western Australia only:</b> Vineyards on medium loam or heavier soil types, heavily infested with crabgrass may be sprayed with up to 9.9L/ha of Agricrop Prolan 500 and together with pome fruit and all Prunus species on these soils spraying
Non-bearing berryfruits	Blackberry	Currant	Raspberry	<b>Broadleaf Weeds:</b>		
	Blueberry	Gooseberry				
	Boysenberry	Loganberry				

Crop Group				Weeds Controlled	Rate /ha	Critical Comments
Non-bearing – fruits including nursery stock of the following:	Avocado	Lemon	Olive	Deadnettle		can be immediately after transplanting from nurseries providing buds are still dormant and no functional leaves are present.  <sup>3</sup> <b>Western Australia only:</b> Apply early in summer for crabgrass ( <i>Digitaria sanguinalis</i> ) control and incorporation with overhead irrigation.  <sup>4</sup> Control of these weeds may range from poor to excellent depending upon soil temperature, time of germination, depth of weed seed in the soil and amount and timing of soil moisture.
	Custard apple	Litchi	Passionfruit	Fathen		
	Feijoa	Mandarin	Pawpaw	Fumitory		
	Guava	Mango	Persimmon	Portulaca (Pigweed)		
	Kiwifruit	Nashi	Rambutan	Sowthistle		
Nursery stock and / or seedling stage conifers including species of the following genus:	<i>Abies</i> (fir trees)	<i>Picea</i> (Spruces)	<i>Pseudotsuga menziessii</i> (Douglas fir or Oregon pine)	Wireweed (Hogweed)		
	<i>Chamaecyparis</i> (Lawson and False cypress)	<i>Pinus</i> (pine)	<i>Sequoia sempervirens</i> (Coastal redwood)	<b>Brassica species:</b> <sup>4</sup>		
	<i>Cryptomeria cupressus</i> (cypress)	<i>Platycladus orientalis</i> (oriental arborvitae)	<i>Taxus cuspidata</i> (Japanese yew)	Blackberry nightshade		
	<i>Juniperus</i> (Junipers)	<i>Podocarpus</i>	<i>Thuja</i>	Caltrop		
				Paddy melon		
			Silverleaf nightshade			



Crop Group				Weeds Controlled	Rate /ha	Critical Comments
Nursery stock, ornamentals and amenity plantings comprising of the following:	<b>Exotic species of the genus:</b> <i>Abelia</i> <i>Fuschia</i> <i>Parahebe</i> <i>Acalypha</i> <i>Felicia</i> <i>Philadelphus</i> <i>Acer</i> (maples) <i>Gardenia</i> <i>Philodendron</i> <i>Arctostaphylos</i> <i>Gingko</i> <i>Phoenix</i> <i>Ardisia</i> <i>Hibiscus</i> <i>Photinia</i> <i>Azalea</i> <i>Ilex</i> <i>Pieris</i> <i>Baccharis</i> (groundsel bush) <i>Jasminum</i> <i>Pittosporum</i> <i>Bauhinia</i> <i>Justicia</i> <i>Populus</i> (poplar) <i>Berberis</i> (barberry) <i>Kalmia</i> <i>Prunus</i> <i>Betula</i> (birch tree) <i>Koelreuteria</i> <i>Pseudopanax</i> <i>Bignonia</i> <i>Lagenaria</i> <i>Pyracantha</i> <i>Buxus</i> (box) <i>Lagerstroemia</i> <i>Quercus</i> <i>Calluna</i> <i>Lantana</i> <i>Raphiolepis</i> <i>Camellia</i> <i>Lavendula</i> (lavender) <i>Rhododendron</i> <i>Ceanothus</i> <i>Leucodendron</i> <i>Rosa</i> (roses) <i>Cistus</i> <i>Leucothoe</i> <i>Rosemarinus</i> (rosemary) <i>Clyostoma</i> <i>Ligustrum</i> <i>Russelia</i> <i>Coleonema</i> <i>Liquidambar</i> <i>Spiraea</i> <i>Coprosma</i> <i>Liriope</i> <i>Syringa</i> <i>Cotoneaster</i> <i>Lonicera</i> (honeysuckle) <i>Syzygium</i> <i>Cuphea</i> <i>Magnolia</i> <i>Taxus</i> <i>Cytisus</i> (broom) <i>Mahonia</i> <i>Trachelospermum</i> ( <i>Rhymncospermum</i> ) <i>Dodonea</i> (hopbush) <i>Malus</i> <i>Umbellularia</i> <i>Erica</i> (heath) <i>Metrosideros</i> <i>Viburnum</i> <i>Escallonia</i> <i>Monstera</i> <i>Washingtonia</i> <i>Euonymus</i> <i>Myrtus</i> <i>Weigela</i> <i>Eutaxia</i> <i>Nandina</i> <i>Xylosma</i> <i>Fatsyhedera</i> <i>Nerium</i> (oleander) <i>Yucca</i> <i>Osmanthus</i>			<b>Grasses:</b> Barnyard Guinea grass Love grass Paradoxa grass Spiny burr grass (Gentle Annie / Innocent Weed) Summer grass (Crabgrass <sup>3</sup> )  <b>Broadleaf Weeds:</b> Deadnettle Fathen Fumitory Portulaca (Pigweed) Sowthistle Wireweed (Hogweed)  <b>Brassica species: <sup>4</sup></b> Blackberry nightshade Caltrop Paddy melon Silverleaf nightshade	Short term control (up to 4 months) 4.5L  Long term control (6-8 months) 6.8L	See GENERAL INSTRUCTIONS DO NOT apply by aircraft or through any type of irrigation equipment.  <sup>3</sup> <b>Western Australia only:</b> Apply early in summer for crabgrass ( <i>Digitaria sanguinalis</i> ) control and incorporation with overhead irrigation.  <sup>4</sup> Control of these weeds may range from poor to excellent depending upon soil temperature, time of germination, depth of weed seed in the soil and amount and timing of soil moisture.

Crop Group		Weeds Controlled	Rate /ha	Critical Comments
Tea-Tree Oil plantations <sup>5</sup>	Tea-Tree ( <i>Melaleuca alternifolia</i> )		6.8L	<p><sup>5</sup> Apply at time of planting and soon after harvesting. For Ground Application: Apply in 200-450 L water /ha.</p> <p>For Aerial Application: Apply in 30-50L water/ha. Use only closed mixing/loading systems.</p> <p>See GENERAL INSTRUCTIONS for further instructions.</p>
Turf Established Common couch Hybrid couch Kikuyu		Wintergrass ( <i>Poa annua</i> ) Annual ryegrass ( <i>Lolium</i> spp.)	4L	<p>Apply prior to germination of the weeds (usually from late summer to mid autumn, February to May).</p> <p>Apply every 16 weeks from early February to the end of August.</p> <p>The product should be incorporated by 10 – 15 mm of spray irrigation or rainfall as soon as possible, at least within one day of application.</p> <p>Allow at least 18 weeks between last application and overseeding/oversowing.</p> <p><b>DO NOT</b> apply by aircraft or through any type of irrigation equipment.</p>
		Crabgrass Chickweed		<p>Apply prior to germination of the weeds (usually from early spring, September to December)</p> <p>Apply every 16 weeks from early September to the end of February.</p> <p>The product should be incorporated by 10 – 15 mm of spray irrigation or rainfall as soon as possible, at least within one day of application.</p> <p>Allow at least 18 weeks between last application and overseeding/oversowing.</p> <p><b>DO NOT</b> apply by aircraft or through any type of irrigation equipment.</p>

Crop Group		Weeds Controlled	Rate /ha	Critical Comments
Turf Newly planted (i.e. line planted or sprigged) common couch, hybrid couch and kikuyu.		Wintergrass ( <i>Poa            annua</i> ) Annual ryegrass ( <i>Lolium</i> spp.) Crabgrass Chickweed	2.4L	Apply within the first 24 to 48 hours of the stolons being planted. The product should be incorporated by 10 – 15 mm of spray irrigation or rainfall as soon as possible, at least within one day of application. Apply every 8 weeks from planting; a maximum of 3 applications can be made from planting. Allow at least 10 weeks between last application and overseeding/oversowing. Note: the area that is being line planted or sprigged with stolons should be sprayed out with a non selective herbicide prior to planting. DO NOT apply by aircraft or through any type of irrigation equipment.



Crop Group		Weeds Controlled	Rate /ha	Critical Comments
Industrial areas and Rights of way		<p><b>Grasses:</b>            Barnyard Grass            Guinea grass            Love grass            Pigeon grass            Paradoxa grass            Spiny burr grass (Gentle Annie / Innocent Weed)            Summer grass (Crabgrass <sup>3</sup>)            Wintergrass (<i>Poa annua</i>)            Annual Rye Grass (<i>Lolium</i> Spp)</p> <p><b>Broadleaf Weeds:</b>            Deadnettle            Fathen            Fumitory            Portulaca (Pigweed)            Sowthistle            Wireweed (Hogweed)            Chick weed</p> <p><b>Brassica species:</b> <sup>4</sup>            Blackberry nightshade            Caltrop            Paddy melon            Silverleaf nightshade</p>	<p>Short term control (up to 4 months) 4.5L</p> <p>Long term control (6-8 months) 6.8L</p>	<p>See GENERAL INSTRUCTIONS for further instructions. Apply using boomspray equipment.            DO NOT apply by aircraft or through any type of irrigation equipment.            For adequate incorporation a rainfall event of at least 15mm is required to move Prolan 500 Herbicide into the soil.</p> <p><sup>3</sup> <b>Western Australia only:</b>            Apply early in summer for crabgrass (<i>Digitaria sanguinalis</i>) control and incorporation with overhead irrigation.</p> <p><sup>4</sup>Control of these weeds may range from poor to excellent depending upon soil temperature, time of germination, depth of weed seed in the soil and amount and timing of soil moisture.</p>

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

**WITHHOLDING PERIOD: NOT REQUIRED WHEN USED AS DIRECTED**

**TURF: DO NOT graze treated turf/lawn or feed turf/grass clippings from any treated area to poultry or livestock.**

## GENERAL INSTRUCTIONS

Agricrop Prolan 500 Herbicide is a pre-emergent surface applied herbicide, which will control the specified annual grasses and broadleaf weeds in the situations listed.

**Soil Preparation:** Areas to be treated should be free of established weeds. Remove or thoroughly mix trash (weed residue, prunings etc.) into the soil before applying the product.

**Soil Activation:** Moisture in the form of rain or sprinkler irrigation (10-15mm) is required within 21 days of application to activate the product otherwise efficacy may be reduced. If moisture is not received within the period, incorporate the product into the top 2.5cm of soil(excluding established turf and newly planted turf).

**Turf:** Mechanical incorporation is not possible. Moisture in the form of rain or sprinkler irrigation (10-15mm) is therefore required within 21 days of application to activate the product otherwise efficacy may be reduced.

## MIXING

The required amount of Agricrop Prolan 500 Herbicide should be added to half-full spray tank and agitated well during completion of filling. Do not leave spray solutions to stand over night.

## APPLICATION

**Ground Application/Boomspray:** Apply Agricrop Prolan 500 Herbicide in 200 to 450 litres water per hectare. Apply uniformly, especially within the dripline of trees and shrubs, so that application above label rates does not occur. Use a properly calibrated low pressure (170 to 340 kPa) herbicide sprayer. Provide good by-pass or other agitation of the spray suspension in the tank before and during application. Soil treated with this product may be shallow cultivated without loss of herbicidal activity.

**Turf: Ground Application:** Spray nozzles should be uniformly spaced and of the same size, and should provide accurate and uniform application. Use spray nozzles that produce a MEDIUM spray quality. To ensure accuracy, calibrate sprayer before use and calibrate frequently. Apply at a volume of 200 to 450 L of water per hectare. Higher volumes should be used for severe weed infestations to ensure adequate spray coverage.

Good even coverage with the spray is essential for optimum weed control. Observe sprayer nozzles frequently during the spraying operation to ensure that the spray pattern is uniform. Avoid overlapping of spray runs. Avoid application under conditions when uniform coverage cannot be obtained or when spray drift may occur.

DO NOT apply aerially(except Tea-Tree plantations) or through any type of irrigation system or equipment.

When spraying avoid overlapping, and shut off spray booms while starting, turning slowing and when stopped. Neglecting these procedures will cause higher rates of application resulting in crop damage. Delay spraying if heavy rain is expected within a few hours.

**Tea-Tree: Aerial Application:** Apply by fixed wing aircraft or helicopter using only closed mixing/loading systems. Use accurately calibrated equipment to deliver 30-50L water/ha. DO NOT apply with smaller than coarse spray droplets according to the ASABE S572 definition for standard nozzles.

## INSTRUCTIONS TO AVOID SPRAY DRIFT

DO NOT allow spray to drift onto adjacent turf sites or ornamental plants as even small amounts may injure sensitive plants. When drift may be a problem, take steps to reduce spray drift including:

DO NOT spray if wind is greater than 10 km/hr or if winds are gusting.

Use extreme caution when conditions are favourable for drift, i.e. high temperatures and low relative humidity, especially when sensitive plants are located nearby. All plants not listed as turf species, under Crop section on this label should be considered as sensitive plants.

If sensitive plants are downwind, extreme caution must be used under all conditions. Drift from applications of this herbicide is likely to result in damage to sensitive plants adjacent to the treatment site.

Ground Application:

- DO NOT apply unless there is a 30 metre downwind buffer distance between the treated areas and native vegetation.
- DO NOT apply unless there is a 10 metre downwind buffer distance between the area being sprayed and natural water bodies.

**COMPATIBILITY**

Agricrop Prolan 500 Herbicide is compatible with paraquat, glyphosate, oxyfluorfen and simazine.

**RESISTANT WEEDS WARNING**

<b>GROUP</b>	<b>D</b>	<b>HERBICIDE</b>
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Agricrop Prolan 500 Herbicide is a member of the dinitroaniline group of herbicides. Agricrop Prolan 500 Herbicide has the inhibition of tubulin formation mode of action. For weed resistance management, Agricrop Prolan 500 Herbicide is a Group D herbicide.

Some naturally occurring weed biotypes resistant to the product Herbicide and other Group D herbicides may exist through normal genetic variability in any weed population. The resistant individuals can eventually dominate the weed population if these herbicides are used repeatedly. These resistant weeds will not be controlled by Agricrop Prolan 500 Herbicide or other Group D herbicides.

Since the occurrence of resistant weeds is difficult to detect prior to use, Agricrop Pty. Ltd accepts no liability for any losses that may result from the failure of Agricrop Prolan 500 Herbicide to control resistant weeds.

Strategies to minimise the risk of herbicide resistance are available. Contact your farm chemical supplier, consultant, local Department of Agriculture or Agricrop representative.

**PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS**

When applying spray, avoid contact with leaves and other parts of trees and vines.

Do not apply under weather conditions or from spraying equipment that may result in chemical movement by spray drift or storm run-off drift onto nearby susceptible plants/crops, cropping lands or pastures.

**PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT**

Do NOT contaminate dams, rivers, drains or streams with chemical or used container.

**STORAGE AND DISPOSAL**

Keep out of reach of children.

Store in the closed, original container in a cool, well-ventilated area. Do not store for prolonged periods in direct sunlight.

Triple or preferably pressure 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 for appropriate disposal 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 relevant local, State or Territory government regulations. DO NOT burn empty container or product.

**SAFETY DIRECTIONS**

Avoid contact with eyes and skin. Do not inhale spray mist.

**FIRST AID**

If poisoning occurs, contact a doctor or Poisons Information Centre (Phone Australia: 13 11 26).

**MSDS**

Additional information is listed in the Material Safety Data Sheet that can be obtained from the supplier.

**CONDITIONS OF SALE**

The use of Agricrop Prolan 500 Herbicide being beyond the control of the manufacturer, no warranty expressed or implied is given by Agricrop 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 Agricrop Pty Ltd accepts with no responsibility for any consequences whatsoever resulting from the use of this product.

**In an Emergency Dial 000 Police or Fire Brigade**

Batch Number:

Date of Manufacture: