RLP
APPROVED

Company Name: AUSTRALIS CROP PROTECTION PTY LTD
Product Name: ACP GLUFOSINATE 200 HERBICIDE

APVMA Approval No: 81459/103154

Label Name:	ACP GLUFOSINATE 200 HERBICIDE

Signal Headings:	CAUTION KEEP OUT OF REACH OF CHILDREN READ SAFETY DIRECTIONS BEFORE OPENING OR USING

Constituent Statements:	200 g/L GLUFOSINATE AMMONIUM

Mode of Action:	**GROUP** **N** **HERBICIDE**

Statement of Claims:	For non-residual control of broadleaf and grass weeds in various situations as specified in the directions for use table.

Net Contents:	5L - 1000L

Restraints:	DO NOT apply by aircraft. DO NOT apply when rain is expected within 6 hours. DO NOT apply to weeds under stress due to, for example, very dry, very wet, frosty or diseased conditions. DO NOT apply under hot dry conditions (temperatures above 33oC with a relative humidity below 50%)

Directions for Use:	This section contains file attachment. **File Name:** GLUFOSINATE 200 RLP - DFU.pdf **File Size:** 202388 bytes

Other Limitations:	

Withholidng Periods:	Harvest (H) Avocado, banana, blackberry, boysenberry, citrus fruit, feijoa, grapes, guava, kiwifruit, litchi, loganberry, mango, olives, passionfruit, pawpaw, pineapple, Rambutan, raspberry, strawberries, tomatoes, tree nuts: NOT REQUIRED WHEN USED AS DIRECTED. Pome and stone fruit: DO NOT HARVEST FOR 21 DAYS AFTER APPLICATION. Grazing (G) DO NOT GRAZE OR CUT TREATED AREAS FOR STOCK FOOD FOR 8 WEEKS AFTER APPLICATION.

Trade Advice:	Export of Treated Produce Growers should note that suitable MRLs or import tolerances may not be established in all markets for product treated with ACP Glufosinate 200 Herbicide. If you are growing product for export, please check with Australis Crop Protection Pty Ltd for the latest information on MRLs and import tolerances BEFORE using the product.

General Instructions:	This section contains file attachment. **File Name:** GLUFOSINATE 200 RLP - GEN INST.pdf **File Size:** 56842 bytes

Resistance Warning:	GROUP N HERBICIDE ACP Glufosinate 200 Herbicide is a member of the glycine group of herbicides. The product is an inhibitor of glutamine synthetise. For weed resistance management the product is a Group N Herbicide. Some naturally occurring weed biotypes resistant to the product and other Group N 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 the product or other Group N herbicides. Since occurrence of resistant weeds is difficult to detect prior to use, Australis Crop Protection Pty Ltd accepts no liability for any losses that may result from the failure of ACP Glufosinate 200 Herbicide to control resistant weeds.

Precautions:	Re-entry Period Do not allow entry into treated areas until the spray has dried. When 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

Protections:	PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT DO NOT contaminate streams, rivers or waterways with this product or the used container. PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS DO NOT apply under weather conditions, or from spraying equipment, that may cause spray to drift onto nearby susceptible plants/crops, cropping lands or pastures. DO NOT apply on desirable foliage or allow spray to drift onto the foliage of plants, trees or vines, as damage will occur. DO NOT allow product to contact green or uncalloused bark (such as on young trees and vines) or cut, cracked, damaged or wounded tissue, where the affected surface is not adequately healed. ACP Glufosinate 200 Herbicide may be used around trees/vines less than two years old provided they are effectively shielded from spray and spray drift. DO NOT allow desirable plant foliage to contact any inert surface, such as plastic mulches, which have been treated with ACP Glufosinate 200 Herbicide. DO NOT apply the product to recently fumigated or sterilised soil.

Storage and Disposal:	Store in the closed, original container in a dry, 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, triple rinse, break, crush or puncture and deliver empty packaging or appropriate disposal at 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. Empty containers and product must not be burnt.

Safety Directions:	Harmful if absorbed by skin contact or swallowed. Will irritate the eyes and skin. Avoid contact with the 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 a washable hat, elbow length PVC or nitrile gloves and face shield or goggles. If product on skin, immediately wash area with soap and water. If product in eyes, wash out immediately with water. Wash hands after use. After each day's use, wash gloves and face shield or goggles and contaminated clothing.

First Aid Instructions:	If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 13 11 26.

First Aid Warnings:	

CROP/ SITUATION	WEEDS	STATE	RATE	WHP	CRITICAL COMMENTS
Blackberry, Boysenberry, Loganberry, Raspberry	Primocane and sucker control	NSW, ACT, Vic, Tas only	500 mL / 100 L water	Nil	Apply as a directed spray to suckers and primocanes. Contact with flowers, developing fruit or desirable foliage will cause damage. Ensure complete coverage of primocanes/suckers by spraying to the point of runoff, preferably when they are less than 15 cm high. A non-ionic wetting agent (1000g/L) may be added at a rate of 25 mL/100 L or equivalent.
Avocado, Banana, Feijoa, Guava, Kiwifruit, Litchi, Mango, Pawpaw, Passionfruit, Pineapple, Rambutan plantations	See lists of weeds controlled in Tables 1 and 2.	Qld, NSW, ACT, Vic, SA, WA, NT only	1.0 to 5.0 L/ha	Nil	Apply as directed or shielded spray. Refer to the label section **Application Equipment** for specific information on application methods. Controlled Droplet Application equipment must not be used for application in cherry orchards. **Warnings:** Do not allow spray or spray drift to contact desirable foliage or green (uncalloused) bark. To avoid potential crop damage, refer to the label sections on **Application Equipment** and **PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS.** ACP Glufosinate-Ammonium Herbicide may be used around trees/vines less than two years old provided they are effectively shielded from spray and spray drift. **The recommended rate of use is determined by the following criteria:** **WEED SPECIES** **WEED STAGE OF GROWTH** **WEED DENSITY** **CLIMATIC CONDITIONS** **<u>WEED SPECIES</u>** Apply the appropriate rate to control the least susceptible weed present as per the lists of weeds controlled in the accompanying tables. **<u>WEED STAGE OF GROWTH</u>** Use the lower rate when weeds are young and succulent (grasses; pre-tillering; broadleaves; cotyledons to 4-leaf) or the population is very sparse. A median rate should be used for medium sized plants (grasses; tillering; broadleaves, 4 leaf to advances vegetative) and the high rate should be used when weeds are mature (grasses; nodding to flowering; broadleaves, budding to flowering). **<u>WEED DENSITY</u>** Use the higher rates when the weed population is dense. **Thorough coverage of weeds is essential for good control.** **<u>CLIMATIC CONDITIONS</u>** **Best results are achieved when applied under warm humid conditions.** Control will be reduced and/or slower under cold conditions and/or overcast conditions. Good results will be achieved under most other conditions, however poor results may occur under hot, dry conditions (temperatures above 33^{o}C with a relative humidity below 50%). Weeds that have been hardened or stunted in growth due to stressed conditions should be treated at the maximum rate. **<u>COVERAGE</u>** Complete coverage of weeds is essential for good control. Poor coverage may result in re-growth. **<u>PERENNIAL WEEDS</u>** Apply when weeds are actively growing. Follow up treatments will be necessary to control re-growth of perennial weeds in most cases.
Citrus orchards		All States			
Olive plantations					
Pome and stone fruit orchards				21 days (H)	
Tree nut plantations				Nil	
Vineyards					

Strawberries, Cane berry fruits (inter-row)	See lists of weeds controlled in Tables 1 and 2.	All States	1.0 to 5.0 L/ha	Nil	Apply as a directed or shielded spray to the inter-row area. Take care not to allow spray or spray drift to contact the crop, including strawberry runners. Refer to GENERAL INSTRUCTIONS for warnings concerning plastic mulch and fumigated/sterilised soil. Determine the recommended rate of use by considering the criteria WEED SPECIES, WEED STAGE OF GROWTH, WEED DENSITY and CLIMATIC CONDITIONS, as described above.
Tomatoes (inter-row)					
Commercial & Industrial areas, rights-of-way and other non-agricultural areas.			1.0 to 6.0 L/ha		Determine the recommended rate of use by considering the criteria WEED SPECIES, WEED STAGE OF GROWTH, WEED DENSITY and CLIMATIC CONDITIONS as described above. Warnings: Do not allow spray or spray drift to contact desirable plants. To avoid potential crop damage, refer to the label sections on Application Equipment and PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS.
Line-marking on sports grounds	Turf grasses and other weeds	All States	250 to 500 mL / 100 L water		Refer to General Instructions. ACP Glufosinate-Ammonium Herbicide is a non-selective, non-residual herbicide with limited translocation potential. It is therefore ideally suited for line-marking on sports fields where precise weed control is required. Apply at 6 – 8 week intervals depending on growth of turf. Apply using single boom or hand wand.

"Not to be used…"	**NOT TO BE USED FOR ANY PURPOSE, OR IN ANY MANNER, CONTRARY TO THIS LABEL UNLESS AUTHORISED UNDER APPROPRIATE LEGISLATION.**

Table 1: Recommendations for weed control (except when referred to Table 2).

COMMON NAME	SCIENTIFIC NAME	APPLICATION RATE		
		Boom or directed sprayer L/ha	Handgun mL/100 L	Knapsack mL/15 L
ANNUAL WEEDS				
Amaranthus spp.	*Amaranthus* spp.	2.0 to 5.0	500	75
Apple of Peru	*Nicandra physalodes*	1.5 to 3.0	300	45
Argentine Peppercress	*Lepidium bonariense*	2.0 to 3.0	300	45
Awnless barnyard grass	*Echinochloa colona*	2.5 to 3.5	350	53
Barley Grass	*Hordeum leporium*	2.0 to 3.0	300	45
Barnyard Grass	*Echinochloa crus galli*	2.0 to 5.0	500	75
Billy goat weed	*Ageratum conyzoides*	2.0 to 5.0	500	75
Bitter cress	*Cardamine hirsute*	2.0 to 5.0	500	75
Black bindweed (buckwheat) [refer note 2]	*Fallopia convolvulus*	1.8 to 5.0	500	75
Bladder ketmia	*Hibiscus trionum*	3.0 to 5.0	500	75
Bordered panic	*Entolasia marginate*	2.0 to 4.0	400	60
Brome grasses (refer Note 1)	*Bromus* spp.	2.0 to 3.0	300	45
Calopo	*Calopogonium mucunoides*	2.0 to 5.0	500	75
Caltrop burr (refer also Table 2)	*Tribulus terrestris*	3.0 to 5.0	500	75
Cape weed	*Arctotheca calendula*	1.5 to 5.0	500	75
Clover (subterranean)	*Trifolium subterraneum*	1.8 to 3.0	300	45

Cobbler's peg	*Bidens pilosa*	2.0 to 5.0	500	75
Common Storksbill	*Erodium cicutarium*	1.5 to 4.0	400	60
Crowsfoot grass	*Eleusine indica*	3.0 to 5.0	500	75
Dead nettle (refer to Table 2)	*Lamium amplexicaule*	2.0 to 5.0	500	75
Dwarf crumbweed	*Chemopodium pumilo*	3.0 to 5.0	500	75
Fat hen	*Chenopodium album*	3.0 to 5.0	500	75
Fumitory	*Fumaria officinalis*	1.8 to 5.0	500	75
Green crumbweed	*Chenopodium carinatum*	2.0 to 5.0	500	75
Lesser canary grass (refer also Table 2)	*Phalaris minoe*	3.0 to 5.0	500	75
Liverseed grass (refer also Table 2)	*Urochloa panicoides*	1.5 to 5.0	500	75
Medics (annual)	*Medicago* spp.	1.0 to 5.0	500	75
Milk thistle	*Sonchus oleraceus*	2.0 to 5.0	500	75
Mint weed	*Salvia reflexa*	3.0 to 5.0	500	75
New Zealand spinach	*Tetragonia tetragoniodes*	2.0 to 5.0	500	75
Paterson's Curse	*Echium plantagineum*	1.0 to 3.0	300	45
Peanuts	*Arachis hypogaea*	1.5 to 3.0	300	45
Pigweed	*Portulaca oleracea*	3.0 to 5.0	500	75
Pinkburr	*Urena lobata*	2.0 to 5.0	500	75
Potato weed	*Galinsoga parviflora*	2.0 to 5.0	500	75
Prairie grass (refer Note 1)	*Bromus unioloides 1*	4.0 to 5.0	500	75
Prickly lettuce	*Lactuca serriola*	3.0 to 5.0	500	75
Red natal grass	*Rhynchelytrum repens*	2.0 to 5.0	500	75
Ryegrass (annual)	*Lolium rigidum*	2.0 to 5.0	500	75
Saffron thistle	*Carthamus lanatus*	1.5 to 5.0	500	75
St. Barnaby's thistle	*Centaurea solstitialis*	1.5 to 5.0	500	75
Sago weed	*Plantago cuninghamii*	2.0 to 3.0	300	45
Scarlet pimpernel	*Anagallis arvensis*	2.0 to 5.0	500	75
Setaria	*Setaria italic*	2.0 to 5.0	500	75
Sheep thistle	*Carduus tenuiflorus*	2.5 to 5.0	500	75
Silver grass	*Vulpia myuros*	2.0 to 5.0	500	75
Sorghum/sudax	*Sorghum bicolour*	2.0 to 5.0	500	75
Square weed	*Spermacoce latifolia*	2.0 to 5.0	500	75
Stagger weed	*Stachys arvensis*	2.0 to 5.0	500	75
Star of Bethlehem	*Ipomoea quamoclit*	2.0 to 5.0	500	75
Summer grass	*Digitaria ciliaris*	2.0 to 5.0	500	75
Thickhead	*Crassocephalum crepidioides*	3.0 to 5.0	500	75

Three cornered jack	*Emex australis*	2.0 to 5.0	500	75
Tomato	*Lycopersicon esculentum*	2.0 to 5.0	500	75
Townsville stylo	*Stylosanthes humilis*	1.0 to 3.0	300	45
Turnip weed	*Rapistrum rugosum*	3.0 to 5.0	500	75
Variegated thistle (refer also Table 2)	*Silybum marianum*	2.5 to 5.0	500	75
Wheat	*Triticum aestivum*	4.0 to 5.0	500	75
Wild carrot	*Daucus glochidiatus*	2.0 to 5.0	500	75
Wild gooseberry	*Physalis minima*	2.0 to 5.0	500	75
Wild mustard	*Sysimbrium orientale*	2.0 to 5.0	500	75
Wild oats (refer also Table 2)	*Avena* spp.	3.0 to 5.0	500	75
Wild radish	*Raphanus raphistrum*	5.0	500	75
Wire weed (refer also Table 2)	*Polygonum aviculare*	1.5 to 5.0	500	75
PERENNIAL WEEDS				
Blady grass	*Imperata cylindrical*	3.0 to 4.0	400	60
Cape tulip	*Homeria* spp.	2.0 to 3.0	300	45
Centro	*Centrosema pubescens*	1.0 to 5.0	500	75
Clover glycine	*Glycine latrobeana*	1.0 to 3.0	300	45
Couch grass	*Cynodon dactylon*	2.5 to 5.0	500	75
Cow pea	*Vigna unguiculate*	1.0 to 3.0	300	45
Giant sensitive plant	*Mimosa invisa*	2.0 to 5.0	500	75
Greenleaf desmodium	*Desmodium intortum*	1.0 to 3.0	300	45
Johnson grass	*Sorghum halepense*	3.0 to 5.0	500	75
Panicum spp.	*Panicum* spp.	2.0 to 5.0	500	75
Paspalum spp	*Paspalum* spp.	3.0 to 5.0	500	75
Perennial bindweed	*Convolvulus arvensis*	2.0 to 3.0	300	45
Shamrock	*Oxalis corymbosa*	3.0	300	45
Sida weed (refer also Table 2)	*Sida retusa*	3.0 to 5.0	500	75
Silver leaf desmodium	*Desmodium uncinatum*	4.0 to 5.0	500	75
Siratro	*Macroptilium atropurpureum*	1.0 to 3.0	300	45
Stink grass	*Eragrostis cilianensis*	3.0 to 5.0	500	75
White clover	*Trifolium repens*	3.0 to 5.0	500	75
White eye	*Richardia brasiliensis*	3.0 to 5.0	500	75
Willow herb	*Epilobium* spp.	4.0 to 5.0	500	75

Notes:

1. Well-established clumps of Prairie grass and Brome grasses may only be suppressed at these rates. Follow-up treatments may be necessary to control regrowth.
2. Good control will be achieved on small and medium sized plants only in non-crop situation.

Table 2: For control of weeds in commercial and industrial areas, rights of way and other non-agricultural areas (when referred from Table 1).

COMMON NAME	SCIENTIFIC NAME	APPLICATION RATE		
		Boom or directed Sprayer L/ha	Handgun mL/100 L	Knapsack mL/15 L
ANNUAL WEEDS				
Caltrop burr	*Tribulus terrestris*	4.0 to 5.0	500	75
Dead nettle	*Lamium amplexicaule*	6.0	600	90
Lesser canary grass	*Phalaris minor*	4.0 to 6.0	600	90
Liverseed grass	*Urochloa panicoides*	1.5	150	23
Variegated thistle	*Silybum marianum*	6.0	600	90
Wild oats	*Avena* spp.	5.0 to 6.0	600	90
Wire weed	*Polygonum aviculare*	2.0 to 5.0	500	75
PERENNIAL WEEDS				
Sida weed	Sida retusa	4.0 to 5.0	500	75

General instructions	ACP Glufosinate 200 Herbicide is a non-volatile herbicide with non-selective activity against many annual and perennial broadleaf weeds and grasses. The product is absorbed by plant foliage and green stems. It is not significantly translocated as an active herbicide throughout the plant, and therefore will only kill that part of a green plant that is contacted by spray. ACP Glufosinate 200 Herbicide does not provide residual weed control. Visible symptoms of control appear in 3 to 7 days, but complete desiccation may take 20 to 30 days under cool conditions. Best results are achieved when application is made under good growing conditions. Application to weeds under stress (e.g. due to continuous severe frosts, dry or waterlogged conditions) should be avoided. **Soil fumigation / sterilisation** ACP Glufosinate 200 Herbicide is metabolised (broken down) by microorganisms in the soil to become inactive. Soil fumigation or sterilisation will reduce the number of microorganisms present, thus slowing the breakdown of the product. As damage to transplants or seedings may occur, it is not advisable to apply ACP Glufosinate 200 Herbicide in conjunction with soil fumigation or sterilisation. **Plastic mulches** ACP Glufosinate 200 Herbicide will remain active on inert surfaces such as plastic. Special care should be taken when applying the product over plastic mulches, as plant contact with the mulch after spraying may result in crop damage. **Compatibility** ACP Glufosinate 200 Herbicide is compatible with most residual herbicides e.g. Simazine, diuron, oxyfluorfen, norfluazuron and Oryzalin. The addition of a wetting agent or other adjuvant is generally not considered necessary. However, benefit has been obtained using a wetting agent on hard-to-wet weeds when using water rates in excess of 500 L/ha. The rate is 25 mL/100 L of a 1000 g/L non-ionic wetting agent, or equivalent. **Mixing** ACP Glufosinate 200 Herbicide mixes easily with water. Clean water should always be used for mixing with the product. Ensure that the spray tank is free of any residues of previous spray materials. Two thirds fill the spray tank with clean water, and with agitator operating add the required amount of ACP Glufosinate 200 Herbicide. Add other relevant compatible products. Top the tank up to the required volume with clean water with agitator running. **Application Equipment** ***Ground Sprayers*** Aim to apply a thorough and even coverage of spray to the target plant. Dense stands of weeds should be thoroughly wetted with spray. Incomplete coverage may result in poor control. Equipment should be such that adequate coverage, penetration and volume of spray liquid can be achieved. <u>Boom or Directed Sprayer Equipment</u> ACP Glufosinate 200 Herbicide should be applied at label rates (refer to specific column in the lists of weeds controlled) in sufficient water to give thorough coverage of weeds. It has been found that 300 to 500 L/ha has given good results under most weed conditions. Special care must be taken when using sprayer/slasher combination units not to cause dust and turbulence, which can carry spray into non-target areas. <u>Knapsack and Handgun Equipment</u> ACP Glufosinate 200 Herbicide should be applied at label rates (refer to specific columns in the lists of weeds controlled) in adequate water to thoroughly wet the weeds being sprayed, i.e. 500 to 1000 L/ha. Dense stands will require up to 1000 L/ha of spray mixture, whereas less dense stands will require less water. High volume application using hollow-cone nozzles for hand spraying is recommended.

	Controlled Droplet Application (CDA) Equipment ACP Glufosinate 200 Herbicide may be applied through CDA row spraying equipment fitted with a solid (impermeable) shroud or skirt, at rates as recommended for boom or directed sprayers (Refer to specific column in the lists of weeds controlled), provided thorough spray coverage of weeds can be achieved. Apply preferably when weeds are less than 15 cm in height, with the equipment set up so that the spray dome only just touches the tops of the weeds. A total spray volume of 20 to 30 L/ha has been found to give good results. Do not mix residual herbicides or any spray adjuvants with ACP Glufosinate 200 Herbicide when using CDA equipment. **Warning:** Because the spray solution is highly concentrated particular care must be taken when using ACP Glufosinate 200 Herbicide through CDA equipment to avoid contact of the spray solution with any part of the crop trunk or canopy. DO NOT apply the product through equipment fitted with bristle skirts. Particular care should be taken when using CDA equipment around green or uncalloused bark. **Please refer to PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS.** CDA equipment must **not** be used for application in cherry orchards. ***Sprayer cleanup*** Clean all equipment after use by thoroughly flushing with water. ***Aircraft*** Do not apply by aircraft.