



# GLUFOSINATE-AMMONIUM 200 NON-SELECTIVE HERBICIDE

ACTIVE CONSTITUENT: 200 g/L GLUFOSINATE-AMMONIUM

**GROUP N HERBICIDE**

For non-residual control of broadleaf and grass weeds in various situations as specified in the Directions for Use table.

**IMPORTANT: READ THIS LEAFLET BEFORE USE**

**4 Farmers Pty. Ltd**

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Batch Number:

Date of Manufacture:

APVMA Approval No: 65235/50488

## DIRECTIONS FOR USE

### 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, and frosty or diseased conditions

DO NOT apply under hot dry conditions (temperatures above 33°C with a relative humidity Below 50%).

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 (1000 g/L) may be added at a rate of 25 mL/100 L or equivalent.
Avocado Banana Feijoa, Guava, Kiwifruit, Litchee, Mango, Pawpaw, Passionfruit, Pineapple, Rambutan Plantations	See list 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 a directed or shielded spray. Refer to the label section <b>Application Equipment</b> for specific information on application methods. Controlled Droplet application equipment must not be used for application in cherry orchards.  <b>Warnings:</b> 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 <b>Application Equipment</b> and <b>PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS</b> . 4Farmers Glufosinate-Ammonium may be used around trees/vines less than 2 years old provided they are effectively shielded from spray and spray drift.  <b>The recommended rate of use is determined by the following criteria:</b> <b>WEED SPECIES</b> <b>WEED STAGE OF GROWTH</b> <b>WEED DENSITY</b> <b>CLIMATIC CONDITIONS</b>
Citrus Orchards		All States		21 Days (H)	
Olive Plantations				Nil	
Pome and Stone Fruit Orchards				Nil	
Tree Nut Plantations				Nil	
Vineyards				Nil	
Strawberries. Caneberry 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 drift to contact the crop, including strawberry runners. Refer to the <b>GENERAL INSTRUCTIONS</b> for warnings concerning plastic mulch and fumigated/sterilized soil. Determine the recommended rate of use by considering the criteria <b>WEED SPECIES, WEED STAGE OF GROWTH, WEED DENSITY</b> and <b>CLIMATIC CONDITIONS</b> , as described above.
Tomatoes (inter-row)					
Commercial & Industrial Areas, Rights-of-Way and other Non-Agricultural Areas	See lists of weeds controlled in Tables 1 and 2.	All States	1.0 to 6.0 L/ha	–	Determine the recommended rate of use by considering the criteria <b>WEED SPECIES, WEED STAGE OF GROWTH, WEED DENSITY</b> and <b>CLIMATIC CONDITIONS</b> as described above.  <b>Warnings:</b> Do not allow spray or spray drift to contact desirable plants. To avoid potential crop damage, refer to the label sections on <b>Application Equipment</b> and <b>PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS</b> .

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

## WITHHOLDING PERIODS (WHP):

### Harvest (H)

**Avocado, banana, blackberry, boysenberry, citrus fruit, feijoa, grapes, guava, kiwifruit, litchee, 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**

TABLE 1: RECOMMENDED 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
<b>ANNUAL WEEDS</b>				
Amaranthus spp	<i>Amaranthus</i> spp.	2.0 to 5.0	500	75
Apple of Peru	<i>Nicandra physalodes</i>	1.5 to 3.0	300	45
Argentine Peppergrass	<i>Lepidium bonariense</i>	2.0 to 3.0	300	45
Awnless Barnyard Grass	<i>Echinochloa colona</i>	2.5 to 3.5	350	53
Barley Grass	<i>Hordeum Leporinum</i>	2.0 to 3.0	300	45
Barnyard Grass	<i>Echinochloa crus galli</i>	2.0 to 5.0	500	75
Billy Goat Weed	<i>Ageratum conyzoides</i>	2.0 to 5.0	500	75
Bitter Cress	<i>Cardamine hirsute</i>	2.0 to 5.0	500	75
Black Bindweed (Buckwheat) (refer Note 2)	<i>Fallopia convolvulus</i>	1.8 to 5.0	500	75
Bladder Ketmia	<i>Hibiscus trionum</i>	3.0 to 5.0	500	75
Bordered Panic	<i>Entolasia marginata</i>	2.0 to 4.0	400	60
Brome Grass (refer Note 1)	<i>Bromus</i> spp.	2.0 to 3.0	300	45
Calopo	<i>Calopogonium mucunoides</i>	2.0 to 5.0	500	75
Caltrop Burr (refer also Table 2)	<i>Tribulus terrestris</i>	3.0 to 5.0	500	75
Cape Weed	<i>Arctotheca calendula</i>	1.5 to 5.0	500	75
Clover (subterranean)	<i>Trifolium subterraneum</i>	1.8 to 3.0	300	45
Cobbler's Peg	<i>Bidens pilosa</i>	2.0 to 5.0	500	75
Common Storks Bill	<i>Erodium cicutarium</i>	1.5 to 4.0	400	60
Crows Foot Grass	<i>Eleusine indica</i>	3.0 to 5.0	500	75
Dead Nettle (refer also Table 2)	<i>Lamium amplexicaule</i>	2.0 to 5.0	500	75
Dwarf Crumb Weed	<i>Chenopodium pumilo</i>	3.0 to 5.0	500	75
Fat Hen	<i>Chenopodium album</i>	3.0 to 5.0	500	75
Fumitory	<i>Fumaria officinalis</i>	1.8 to 5.0	500	75
Green Crumb Weed	<i>Chenopodium carinatum</i>	2.0 to 5.0	500	75
Lesser Canary Grass (refer also Table 2)	<i>Phalaris minor</i>	3.0 to 5.0	500	75
Liver Seed Grass (refer also Table 2)	<i>Urochloa panicoides</i>	1.5 to 5.0	500	75
Medics (annual)	<i>Medicago</i> spp	1.0 to 5.0	500	75
Milk Thistle	<i>Sonchus oleraceus</i>	2.0 to 5.0	500	75
Mint Weed	<i>Salvia reflexa</i>	3.0 to 5.0	500	75
New Zealand Spinach	<i>Tetragonia tetragoniodes</i>	2.0 to 5.0	500	75
Patterson's Curse	<i>Echium plantagineum</i>	1.0 to 3.0	300	45
Peanuts	<i>Arachis hypogaea</i>	1.5 to 3.0	300	45
Pigweed	<i>Portulaca oleracea</i>	3.0 to 5.0	500	75
Pink Burr	<i>Urena lobata</i>	2.0 to 5.0	500	75
Potato Weed	<i>Galinsoga parviflora</i>	2.0 to 5.0	500	75
Prairie Grass (refer Note 1)	<i>Bromus unioloides</i>	4.0 to 5.0	500	75
Prickly Lettuce	<i>Lactuca serriola</i>	3.0 to 5.0	500	75
Red Natal Grass	<i>Rhynchelytrum repens</i>	2.0 to 5.0	500	75
Ryegrass (annual)	<i>Lolium rigidum</i>	2.0 to 5.0	500	75
Saffron Thistle	<i>Carthamus lanatus</i>	1.5 to 5.0	500	75
St Barnabys Thistle	<i>Centaurea solstitialis</i>	1.5 to 5.0	500	75
Sago Weed	<i>Plantago cunninghami</i>	2.0 to 3.0	300	45
Scarlet Pimpernel	<i>Anagallis arvensis</i>	2.0 to 5.0	500	75
Setaria	<i>Setaria italica</i>	2.0 to 5.0	500	75
Sheep Thistle	<i>Carduus tenuiflorus</i>	2.0 to 5.0	500	75
Silver Grass	<i>Vulpia myuros</i>	2.0 to 5.0	500	75
Sorghum/Sudax	<i>Sorghum bicolor</i>	2.0 to 5.0	500	75
Square Weed	<i>Spermacocoe latifolia</i>	2.0 to 5.0	500	75
Stagger Weed	<i>Stachys arvensis</i>	2.0 to 5.0	500	75
Star of Bethlehem	<i>Ipomoea quamoclit</i>	2.0 to 5.0	500	75
Summer Grass	<i>Digitaria ciliaris</i>	2.0 to 5.0	500	75
Thickhead	<i>Crassocephalum crepidioides</i>	3.0 to 5.0	500	75
Three Cornered Jack	<i>Emex australis</i>	2.0 to 5.0	500	75
Tomato	<i>Lycopersicon esculentum</i>	2.0 to 5.0	500	75

**TABLE 1: RECOMMENDED FOR WEED CONTROL (EXCEPT WHEN REFERRED TO TABLE 2) continued**

COMMON NAME	SCIENTIFIC NAME	APPLICATION RATE		
		Boom or directed sprayer L/ha	Handgun mL/100 L	Knapsack mL/15 L
<b>ANNUAL WEEDS</b> continued				
Townsville Stylo	<i>Stylosanthes humilis</i>	1.0 to 3.0	300	45
Turnip Weed	<i>Rapistrum rugosum</i>	3.0 to 5.0	500	75
Variegated Thistle (refer also Table 2)	<i>Silybum marianum</i>	2.5 to 5.0	500	75
Wheat	<i>Triticum aestivum</i>	4.0 to 5.0	500	75
Wild Carrot	<i>Daucus glochidiatus</i>	2.0 to 5.0	500	75
Wild Gooseberry	<i>Physalis minima</i>	2.0 to 5.0	500	75
Wild Mustard	<i>Sisymbrium orientale</i>	2.0 to 5.0	500	75
Wild Oats (refer to Table 2)	<i>Avena</i> spp.	3.0 to 5.0	500	75
Wild Radish	<i>Raphanus raphanistrum</i>	5.0	500	75
Wire Weed (refer also Table 2)	<i>Polygonum aviculare</i>	1.5 to 5.0	500	75
<b>PERENNIAL WEEDS</b>				
Blady Grass	<i>Imperata cylindrical</i>	3.0 to 4.0	400	60
Cape Tulip	<i>Homeria</i> spp.	2.0 to 3.0	300	45
Centro	<i>Centrosema pubescens</i>	1.0 to 5.0	500	75
Clover Glycine	<i>Glycine latrobeana</i>	1.0 to 3.0	300	45
Couch Grass	<i>Cynodon dactylon</i>	2.5 to 5.0	500	75
Cow Pea	<i>Vigna unguiculata</i>	1.0 to 3.0	300	45
Giant Sensitive Plant	<i>Mimosa invisa</i>	2.0 to 5.0	500	75
Greenleaf Desmodium	<i>Desmodium intortum</i>	1.0 to 3.0	300	45
Johnson Grass	<i>Sorghum halepense</i>	3.0 to 5.0	500	75
Panicum spp.	<i>Panicum</i> spp.	2.0 to 5.0	500	75
Paspalum spp.	<i>Paspalum</i> spp.	3.0 to 5.0	500	75
Perennial Bindweed	<i>Convolvulus arvensis</i>	2.0 to 3.0	300	45
Shamrock	<i>Oxalis corymbosa</i>	3.0	300	45
Sida Weed (refer also Table 2)	<i>Sida retusa</i>	3.0 to 5.0	500	75
Silver Leaf Desmodium	<i>Desmodium uncinatum</i>	4.0 to 5.0	500	75
Sitatro	<i>Macroptilium atropurpureum</i>	1.0 to 3.0	300	45
Stink Grass	<i>Eragrostis cilianensis</i>	3.0 to 5.0	500	75
White Clover	<i>Trifolium repens</i>	3.0 to 5.0	500	75
White Eye	<i>Richardia brasiliensis</i>	3.0 to 5.0	500	75
Willow Herb	<i>Epilobium</i> spp.	4.0 to 5.0	500	75

**Notes:**

- 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.
- Good control will be achieved on small and medium sized plants only in non-crop situation

**TABLE 2: GOOD 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
<b>ANNUAL WEEDS</b>				
Caltrop Burr	<i>Tribulus terrestris</i>	4.0 to 5.0	500	75
Dead Nettle	<i>Lamium amplexicaule</i>	6.0	600	90
Lesser Canary Grass	<i>Phalaris minor</i>	4.0 to 6.0	600	90
Liverseed Grass	<i>Urochloa panicoides</i>	1.5	150	23
Variegated Thistle	<i>Silybum marianum</i>	6.0	600	90
Wild Oats	<i>Avena</i> spp.	5.0 to 6.0	600	90
Wire Weed	<i>Polygonum aviculare</i>	2.0 to 5.0	500	75
<b>PERENNIAL WEEDS</b>				
Sida Weed	<i>Sida retusa</i>	4.0 to 5.0	500	75

### GENERAL INSTRUCTIONS

4Farmers Glufosinate-Ammonium is a non-volatile herbicide with non-selective activity against many annual and perennial broadleaf weeds and grass. 4Farmers Glufosinate-Ammonium is absorbed by plant foliage and green stems, it is not significantly translocated as an active herbicide throughout the plant, and will therefore only kill that part of a green plant that is contacted by spray. 4Farmers Glufosinate-Ammonium 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/sterilization

4Farmers Glufosinate-Ammonium is metabolized (broken down) by microorganisms in the soil to become inactive. Soil fumigation or sterilization will reduce the number of microorganisms present, thus slowing the breakdown of 4Farmers Glufosinate-Ammonium. As damage to transplants or seedlings may occur, it is not advisable to apply 4Farmers Glufosinate-Ammonium in conjunction with soil fumigation or sterilization.

#### Plastic mulches

4Farmers Glufosinate-Ammonium will remain active on inert surfaces such as plastic. Special care should be taken when applying 4Farmers Glufosinate-Ammonium over plastic mulches, as plant contact with the mulch after spraying may result in crop damage.

#### Resistant Weeds Warning

## GROUP N HERBICIDE

4Farmers Glufosinate-Ammonium Non-Selective Herbicide is a member of the phosphinic acid group of herbicides. 4Farmers Glufosinate-Ammonium is an inhibitor of glutamine synthetase. For weed resistance management 4Farmers Glufosinate-Ammonium is a Group N herbicide. Some naturally occurring weed biotypes resistant to 4Farmers Glufosinate-Ammonium and other Group N herbicides may exist through normal generic 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 4Farmers Glufosinate-Ammonium or other Group N herbicides. Since occurrence of resistant weeds is difficult to detect prior to use, 4Farmers Pty Ltd accept no liability for any loss that may result from the failure of 4Farmers Glufosinate-Ammonium to control resistant weeds.

#### Export of Treated Produce

Growers should note that suitable MRLs or import tolerances may not be established in all markets for produce treated with 4Farmers Glufosinate-Ammonium Non-Selective Herbicide. If you are growing produce for export, please check with 4Farmers Pty. Ltd. for the latest information on MRLs and import tolerances BEFORE using 4Farmers Glufosinate-Ammonium Non-Selective Herbicide.

#### Compatibility

4Farmers Glufosinate-Ammonium is compatible with most residual herbicides e.g. Simazine, Diuron, Oxyfluorfen (Goal), Norfluazuron (Solicam), and with Glyphosate and Metsulfuron. The addition of a wetting agent or other adjuvant is generally not considered necessary, with the exception of the required addition of an adjuvant to assist in control of *Pinus* spp. (refer to the Directions for Use table). However, benefit has been obtained using a wetting agent or adjuvant 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. For information on compatible wetting agents and adjuvant, contact your local 4Farmers representative.

#### Mixing

4Farmers Glufosinate-Ammonium mixes easily with water. Clean water should always be used for mixing with 4Farmers Glufosinate-Ammonium. Ensure that the spray tank is free of any residues left from previous spray materials. Two-thirds fill the spray tank with clean water, and with agitator operating add the required amount of 4Farmers Glufosinate-Ammonium. 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.

#### Boom or Directed Spray Equipment

4Farmers Glufosinate-Ammonium 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 condition.

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.

#### Knapsack and Handgun Equipment

4Farmers Glufosinate-Ammonium 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 100 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

4Farmers Glufosinate-Ammonium may be applied through CDA row-spraying equipment filled with 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 4Farmers Glufosinate-Ammonium when using CDA equipment.

**Warning:** Because the spray solution is highly concentrated particular care must be taken when using 4Farmers Glufosinate-Ammonium through CDA equipment to avoid contact of the spray solution with any part of the crop trunk or canopy.

DO NOT apply 4Farmers Glufosinate-Ammonium through equipment fitted with bristle skirts. Particular care should be taken when using CDA equipment around green 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.

### 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.

### 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 desirable plants, trees or vines, as damage will occur.

DO NOT allow product to contact green or uncalloused bark (such as desirable young trees and vines) or cut, cracked, damaged or wounded tissue, where the affected surface is not adequately healed. 4Farmers Glufosinate-Ammonium may be used around desirable tress/vines less than 2 years old provided they are effectively shielded from spray and spray drift.

DO NOT allow desirable plant foliage to contact inert surfaces, such as plastic mulches, which have been treated with 4Farmers Glufosinate-Ammonium.

DO NOT apply 4Farmers Glufosinate-Ammonium to recently fumigated or sterilized soil.