

CAUTION

GLYPHOSATE 450

ACTIVE CONSTITUENT: 450g/L GLYPHOSATE PRESENT AS THE ISOPROPYLAMINE SALT

GROUP M HERBICIDE

A non-selective foliar herbicide for the control of a wide range of annual and perennial grasses and broadleaved weeds as per the Directions for Use Table.

READ THIS INFORMATION THOROUGHLY BEFORE USING THIS

4 FARMERS AUSTRALIA PTY LTD

A.B.N. 51 160 092 428 I / 70 MCDOWELL STREET, WELSHPOOL, WA 6106 TEL: (08) 9356 3445 www.4farmers.com.au

APVMA Approval No.: 48552/0704

GENERAL INSTRUCTIONS

- 4Farmers Glyphosate 450 is a non-volatile, non-selective water soluble herbicide which is absorbed by plant foliage and green stems and is translocated through the plant from point of contact and into the root system. The effects of the herbicide may not be visible for 3-7 days for annual weeds or 2-3 weeks for perennial weeds depending on water quality, weather conditions, weed species and rate used.
- 4Farmers Glyphosate 450 will control emerged weeds only and does not provide residual weed control.
- Ideally, weeds should be healthy and actively growing and, to obtain optimum results, should not have been recently sprayed with another herbicide.
- 4Farmers Glyphosate 450 can be de-activated by soil particles and hard water containing calcium salts. Use only clean, fresh water for making up spray solutions, preferably rainwater or local authority water.
- DO NOT apply 4Farmers Glyphosate 450 to wet plants or if heavy rainfall is expected within 6 hours. Avoid spraying at night if rain is expected the next
- 4Farmers Glyphosate 450 is recommended for control of emerged weeds prior to crop establishment as part of a conservation tillage operation.
- With heavy weed growth, sowing should be delayed until weed decay and soil conditions allow formation of a satisfactory seedbed.

GROUP M HERBICIDE

RESISTANT WEEDS WARNING

- 4Farmers Glyphosate 450 is a member of the glycine group of herbicides. 4Farmers Glyphosate 450 has the inhibitors of EPSP synthase herbicides mode of action. For weed resistance management 4Farmers Glyphosate 450 is a group "M" herbicide.
- Some naturally occurring weed biotypes resistant to 4Farmers Glyphosate 450 and other group "M" 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 4Farmers Glyphosate 450 or other group "M" herbicides.
- Since the occurrence of resistant weeds is difficult to detect prior to use, $4\ Farmers\ Australia\ Pty\ Ltd$ accepts no liability for any losses that may result from the failure of $4Farmers\ Glyphosate\ 450\ to\ control\ resistant\ weeds.$
- . DO NOT however assume resistance without first reviewing the method of application, timing, water quality and weather conditions

CROP ESTABLISHMENT

- 4Farmers Glyphosate 450 is recommended for the control of emerged weeds prior to crop establishment. However, suitable cultivation and/or sowing procedures are required to provide seedbed conditions favourable for crop germination and development
- Early spraying to control young weeds will favour preparation of suitable
- On friable soils, where there is only a light cover of young weeds, sowing may proceed 1 day after spraying. However, in situations of heavy weed growth, sowing should be delayed until weed decay and soil conditions allow formation of a suitable seedbed.
- Incorporation or trashing of green or decaying vegetation and roots into seedbeds by cultivation/sowing may cause retarded crop emergence especially in cold and/or wet conditions
- · Vegetation may be reduced by grazing and/or cultivation but leaving trash on the
- Avoid use of pre-emergence herbicides where label directions advise a risk of retarded crop emergence and in marginal seedbed conditions pay particular attention to correct seeding depth.

- · 4Farmers Glyphosate 450 readily mixes with clean water.
- · Use only clean, fresh water free from soil particles or calcium/magnesium salts (hard water).
- · If water is acidic use a recognised buffering agent.
- When adding compatible pesticides/additives add these first in a half full tank with agitation and then add 4Farmers Glyphosate 450 with the remaining water volume and, finally, surfactant as above, mixing thoroughly.
- · Sprav solution should be used within a maximum of five days to avoid loss of
- · Ensure the spray tank is free of any residue from previous spray products.
- · Agitate well and fill with balance of water adding surfactant near end of filling with hose below surface to prevent excessive foaming. Remove hose when desired volume is reached to avoid siphoning.
- DO NOT use mechanical agitators as these may cause excessive foaming.
- DO NOT mix with spraying oils, agricultural chemicals or any other material except as directed on the label.

TANK MIXTURES/COMPATIBILITY

• 4Farmers Glyphosate 450 may be tank mixed with the following pesticides and additives with attention to their labels for specific restraints, withholding periods and directions for use requirements to be observed.

Herbicides:

- Flowable Atrazine For knockdown and residual weed control, addition of ammonium sulphate is required to overcome antagonism. (See note below) DO NOT use this tankmix on BARNYARD GRASS.
- DO NOT apply this mix by aerial application.
- **DO NOT** use in non-crop situations unless stated on the Atrazine label. · Flowable Simazine For knockdown and residual control of annual weeds, addition of ammonium sulphate is required to overcome antagonism. (See note
- 2,4-D Ester For improved control of certain broadleaf weeds, observe regional restrictions.
- Dicamba (Banvel 200 ®¹) For improved control of clover, medics and sorrel as per label directions.
- Chlorsulfuron For knockdown and residual weed control in fallow/crop. Observe plant back periods as per label.

DIRECTIONS FOR USE

RESTRAINTS

DO NOT apply to weeds under stress.

DO NOT apply if rain is expected within 6 hours.

DO NOT disturb treated areas in any way for 1 day after application to annual weeds or for 7 days after treatment of perennial weeds.

DO NOT graze areas were plants toxic to stock are present until weeds are completely brown.

SITUATION/ CROP	WEEDS CONTROLLED	STATE (S)	RATE/Ha	CRITICAL COMMENTS
Winter crop	Barley grass (<i>Amaranthus</i> spp.) Brome grass (Bromus spp)	Southern WA	400 - 800mL	Apply to actively growing weeds at least 6-8 cm high.
or pasture, prior to disturbance by cultivation and/or sowing with tined equipment	Brome grass (Bromus spp) Capeweed (Arctotheca calendula) Doublegee (Ermex australis) Volunteer cereals Wild oats (Avena spp)	SA VIC NSW & ACT ONLY	or 800mL - 1L	Use the low rate range pre-tillering OR the high rate range post tillering or when doublegee or capeweed are more than 8 cm diameter. Use higher rates if heavily grazed or late in the season or under cold/overcast conditions.
	Annual phalaris (<i>Phalaris</i> spp) Annual ryegrass (<i>Lolium rigidum</i>) Dock (seeding) (<i>Rum</i> ex spp) Silver grass (<i>Vulpia</i> spp) Winter grass (<i>Poa annua</i>)		800mL - 1L or 1 - 1.2L	If not cultivated or sown within 21 days, re-treatment may be necessary, but do not sow until a satisfactory seed bed is established. (Refer to "Crop Establishment" under General Instructions).
	Amsinckia (Amsinckia spp) Fumitory (Fumaria spp) Paterson's curse (Echium plantagineum) Saffron thistle (Carthamus lanatus) Scotch thistle (Cinopordum acanthium) Spear thistle (Cirsium vulgare) Variegated Thistle (Silybum marianum) Volunteer lupins Wild turnip (Brassica tournefortii)			Apply to actively growing weeds at least 6-8 cm high. Use the low rate range pre-tillering OR the high rate range post tillering or when weeds are more than 8 cm diameter. Use higher rates if heavily grazed or late in the season or under cold/overcast conditions. If not cultivated or sown within 21 days, re-treatment may be
	Seasonal suppression of Perennial Phalaris Skeleton weed (Chondrilla juncea)-fully emerged rosettes (NSW & ACT only) Sorrel (Rumex acetosella) Soursob (Oxalis pes-caprae) Sub-clover (Trifolium subterraneum)		1.2L	necessary, but do not sow until a satisfactory seed bed is established. (Refer to "Crop Establishment" under General Instructions).
	All weeds listed above	TAS ONLY	1.2 - 2.4L	In Tasmania use low rate on annual weeds and high rate on perennials
Fallow or prior to sowing as a summer crop Late winter/spring treatment.	Barley grass (<i>Hordeum leporinum</i>) Volunteer cereals Wild oats (<i>Avena</i> spp)	Southern WA SA VIC NSW & ACT - ONLY	800mL - 1.2L	Apply to actively growing weeds at least 6-8 cm high. Use higher rates if heavily grazed or late in the season or under
	Soursob (Oxalis pes-caprae)¹ Hoary cress (Cardaria draba)²		1.2L	cold/overcast conditions or when capeweed is more than 8cm diameter.
	Annual ryegrass (lolium regidum) Broome gras (Bromus spp) Capeweed (Arctotheca calendula) Paterson's curse (rosette) (Echium plantagineum) Saffron thistle (Carthamus lanatus) Scotch thistle (Onopordum acanthium) Silver grass (Vulpia ssp) Spear thistle (Cirsium vulgare) Wild radish (Raphanus raphanistrum) Wild mustard (Sisymbrium officinale) Wild turnip (Brassica tournefortii)		1.2 - 1.6L	¹ Apply at tuber exhaustion. Add wetter. ² Apply late rosette to early flower.
Fallow or prior to sowing winter or summer crops	Annual Phalaris (<i>Phalaris</i> spp) Barley grass (<i>Hordeum leporinum</i>) Volunteer cereals Wild oats (<i>Avena</i> spp)	QLD Northern NSW ONLY	400 - 800 mL	Apply to actively growing weeds at least 6-8 cm high. Note that barnyard and liverseed grasses are particularly prone to moisture stress. Use high rate on more advanced weeds, eg when grasses are fully tillered, and broad leaf weeds reach stem elongation or budding. At that stage the addition of 2,4-D Ester
	Amaranth (Amaranthus spp) Australian bluebell (Wahlenbergia stricta)- (QLD only) Barnyard grass (Echinochloa spp) Cudweed (Gnaphalium spp) Fumitory (Fumaria spp) Liverseed grass (Urochloa panicoides) Mexican poppy (Argemone mexicana) Mint weed (Salvia reflexa) New Zealand spinach (Tetragonia tetragonoides) Noogoora burr (Xanithium pungens) ³ Saffron thistle (Carthamus lanatus) Spear thistle (Cirsium vulgare) Spurge (Euphorbia spp) Stinkgrass (Lovegrass) Eragrostis cilianensis) Stinking goosefoot (Chenopodium vulvaria) Sweet summer grass Variegated thistle (Silybum marianum) Volunteer sorghum Volunteer sunflower Yellowvine (Caltrop) (Thribulus terrestis)			at recommended rates may be preferred.
	(Physalis angulata) ³ Bladder ketmia (Hibiscus trionum) ³ Camel melon (Citrullus lanatus) ³ Sowthistle (Milk thistle) (Sonchus oleraceus) ³ Turnip weed (Rapistrum rugosum) ³ Wild lettuce (lactuca saligna) ³ Wild Turnip (Brassica tournfortii) ³			³ Apply prior to stem elongation or budding.
Fallow or prior to sowing winter or summer crops	Boggabri weed (Amaranthus macrocarpus, A.mitchellii) Indian hedge mustard (Sisymbrium orlentale) African turnip (Sisymbrium thellungii) Native millet (panicum decompositum)	QLD Northern NSW ONLY	400 - 800 mL	Apply to actively growing weeds up to 5 true leaves or 3cm in diameter or height
	Suppression of; Black bindweed (<i>Polygonum convolvulus</i>) Wireweed (<i>Polygonum aviculare</i>)		800mL - 1.2L	Apply to weeds with more than 5 true leaves or larger than 3cm in diameter or height.
Pasture manipulation	Carpet grass (<i>Axonopus</i> spp) Kikuyu (<i>Pennisetum clandestinum</i>) Paspalum (<i>Paspalum dilaatatum</i>)	QLD NSW & ACT VIC WA ONLY	1.1 - 4.8L	Use for suppression or control of these grasses to drilling forage species or soybeans. Higher rates give greater control.
Pasture Renovation Poa tussock infestations	Most annual weeds and suppression of Poa (Poa labilladieri)	QLD NSW & ACT VIC TAS ONLY	2.4 - 3.2L	Graze heavily then allow 14 days for strong regrowth. Apply after the autumn break, but before heavy frosts –March to May. Higher rates give greater control. Sowing may commence 14 days after treatment. Ensure proper follow up pasture establishment and management after treatment.
Pasture topping	Annual ryegrass (<i>Lolium regidum</i>) Barley grass (<i>Hordeum leporinum</i>) Broome grass (<i>Bromu</i> s spp) Capeweed (<i>Arctotheca calendula</i>) Silver grass (<i>Vulpia</i> spp)	NSW & ACT VIC SA WA ONLY	240 - 360mL	Use higher rate for severe infestation and for annual ryegrass. Apply to capeweed and annual ryegrass at flowering. Apply to other grasses from head to milky dough stage, before signs of haying-off. Use 50/ha water, or less. If using more water add a non-ionic surfactant at recommended rates.
Pasture – Bent grass infestations	Most annual weeds Bent grass (Agrostis capillaris)	VIC TAS ONLY	2L	Remove stock to ensure strong leaf growth. Apply to actively growing weeds with some seed head development, in late spring. Disturb 10-21 days after treatment with tyned equipment. Follow with a summer crop, then re-seed pasture or crop next autumn.
Rice – direct drill	Annual phalaris (Canary grass) Annual ryegrass (Lolium rigidum) Barley grass (Hordeum leporinum) Burr media (Medicago spp) Sub-clover (Trifolium subterraneum) Winter grass (poa annua)	NSW ONLY	800mL - 2.4L	Apply to actively growing weeds and at least 6-8 cm high. Use high rate for severe infestations of ryegrass and add wetter. Direct drilling may commence 1-14 days after treatment. For residual weed control permanent water and selective herbicide treatments will be required.
Sorghum (NOT seed	Grain sorghum (Sorghum bicolor) – pre harvest	QLD NSW & ACT ONLY	1.2 - 1.6L	Use high rate for ratoon regrowth.
varieties or those sensitive to lodging)	Sorghum stubble – post harvest		800mL - 1.6L	Use this rate for regrowth from slashed stubble and for fresh spring regrowth.
Sugar Cane	Ratoon control	QLD NSW ONLY	1.2 - 1.6L 3.2 - 7.2L	Use this rate for standing stubble if sufficiently green. Apply to actively growing ratoons 60-100 cm high. Use low rate for suppression or where cultivation will follow. Use higher rate for control Apply with properly calibrated boom spray at correct height to allow overlap of spray pattern at top of crop canopy. DO NOT apply if plants are under stress.

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.

- **Metsulfuron-methyl** For knockdown weed control in fallows and prior to planting certain winter cereals. Observe crop safety/crop rotation recommendations.
- Oxyfluorfen (Goal CT®²) Mixture requires a specific compatibility agent, seek advice from labels.
- Note: Addition of crystalline (not prilled or granular) ammonium sulphate at the
 rate of 2kg/100L spray solution is required to overcome antagonism. This mixture
 is also useful for improving the performance of 4Farmers Glyphosate 450 under
 adverse environmental conditions such as cool cloudy weather. Ammonium
 sulphate may be corrosive to metal parts of the sprayer.

Insecticides:

- Dimethoate, Omethoate, Fenitrothion, Phosmet (Imidan®4), Chlorpyrifos
- Other insecticides have not been compatibility tested

APPLICATION INFORMATION

- 4Farmers Glyphosate Herbicide is a non-selective, translocated herbicide.
- Direct contact, or even drift, may cause severe injury or destruction to any growing crop or other desirable plants including trees.

Boom equipment:

- Application of this product in low spray volumes (25-100L/ha) is recommended.
- Fan nozzle equipment is recommended, using pressures in the range 240-280kPa.
 Boom height must be set to ensure double overlap of nozzle patterns at the top of
- Boom height must be set to ensure double overlap of nozzle patterns at the top of the weed canopy.

Aerial Equipment:

- Aerial application should only be in pasture or fallow crop situations prior to establishment of field or fodder crops or new pasture and for pre harvest application for sorghum crops.
- DO NOT use in intensive cropping situations.
- Use registered rates up to a maximum of 3.2L/ha and for Micronair and boom equipment apply in a minimum spray volume of at least 15L/ha.
- Average droplet size should be 250-350 micron diameter with a swath width of 15-17 metres.
- DO NOT apply by aircraft in temperatures above 35°C.
- Thoroughly wash aircraft, especially landing gear, after each day of spraying, to remove herbicide.

Application on hilly terrain:

Increase water volume to 30-80L/ha with droplet size to at least 300 micron VMD on hilly terrain.

Application under hot conditions:

- When applying in temperatures above 25∞C, increase water volume to at least 30L/ha and droplet size to at least 300 micron VMD.
- Avoid conditions which may result in drift such as wind over 8km/h and inversion conditions or equipment producing droplets of 150 micron or less.

MAINTENANCE AND CLEANING

 Thoroughly flush tanks, pumps and nozzles with clean fresh water after each day's spraying.

PRECAUTION

 DO NOT mix, store or apply this product or spray solutions of this product in galvanised or unlined steel containers or spray tanks, since a highly flammable gas may be formed. Use stainless steel, aluminium, brass, copper, fibreglass, plastic or plastic-lined containers or spray tanks.

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
- DO NOT apply prior to transplanting tomato seedlings.

PROTECTION OF WILDLIFE, FISH, CRUSTACEA AND

ENVIRONMENT

- DO NOT contaminate dams, rivers or streams with the product or used container.
 DO NOT apply to weeds growing in or over water. DO NOT spray across open
- DO NOT apply to weeds growing in or over water. DO NOT spray across ope bodies of water.

PROTECTION OF LIVESTOCKDO NOT graze or cultivate for one day

- DO NOT graze or cultivate for one day after application (annual weeds) or 7 days (perennial weeds) to ensure herbicide absorption.
- There is no withholding period for grazing stock. However, it is recommended that grazing of treated plants be delayed as above. Certain plants, eg, Soursob, St John's wort, Bracken, may be toxic to stock. Grazing should be delayed until complete browning of these plants has occurred.

STORAGE AND DISPOSAL (20L)

- 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 bury empty containers in a local authority landfill. If no landfill is 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. Empty containers and product should not be burnt.

STORAGE AND DISPOSAL (110L)

- Store in the closed, original container in a cool, well-ventilated area. Do not store for prolonged periods in direct sunlight.
- Store this tightly closed minibulk container in a safe and secure place away from children, animals, food and feedstuffs. Storage must be secure so that contents cannot be tampered with. All locks and/or seals must be in order. If locks or seals are broken prior to initial use then the integrity of this product cannot be assured. If this occurs 4 Farmers Australia Pty Ltd should be advised immediately. This minibulk container is reusable and remains the property of 4 Farmers Australia Pty Ltd.
- DO NOT rinse empty container. Empty contents fully into application equipment. Close all valves and return to the point of supply for refill or storage. No other liquid, solid or pesticide product should be put into it. When empty return to 4Farmers Pty Ltd for cleaning, relabelling and refilling.

SAFETY DIRECTIONS

- Product will irritate eyes and skin
- Avoid contact with eyes and skin.
- When preparing product for use, wear elbow-length PVC gloves and face shield (or goggles).
- When using controlled droplet applicator, wear protective waterproof clothing and impervious footwear.
- After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water.
- After each day's use wash contaminated clothing, gloves and face shield or goggles.

FIRST AID

 If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 131126.

SAFETY DATA SHEET

For further information please refer to the Safety Data Sheet which can be obtained from www.4farmers.com.au

CONDITIONS OF SALE

The use of 4Farmers Glyphosate 450 being beyond the control of the manufacturer, no warranty expressed or implied is given by 4 Farmers Australia Pty Ltd regarding its suitability, fitness or efficacy for any purpose for which it is used by the buyer, whether in accordance with the directions or not and 4 Farmers Australia Pty Ltd accepts no responsibility for any consequences whatsoever resulting from the use of this product.

NOT CLASSIFIED AS DANGEROUS GOODS FOR TRANSPORT BY ROAD AND RAII

- ¹ Registered trademark of Velsicol Chemical Corp., USA
- ² Registered trademark of Rohm and Haas Co., USA
- ³ Registered trademark Bayer, Germany
- ⁴ Registered trademark of Stauffer Chemical Company, USA

In a Transport Emergency
Dial **000**Police or Fire Brigade

Special Poisons Advice:

13 11 26