



WARNING

KEEP OUT OF REACH OF CHILDREN

READ SAFETY DIRECTIONS BEFORE OPENING OR USING



GLYPHOSATE 450 Herbicide

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.

NET 20 / 120 / 200 / 1000 Litres

4FARMERS PTY LTD

ACN 067 443 485
Unit 1 / 70 McDowell St
Welshpool, WA 6106
AUSTRALIA

Phone: (08) 9356 3445
Fax: (08) 9356 3447
NRA Approval No.: 48552/03

This information is adapted from the 4Farmers Glyphosate 450 label.

Please consult the label on the pack before use.



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DIRECTIONS FOR USE

GENERAL INSTRUCTIONS

4Farmers Glyphosate 450 is a non-volatile, non-selective water-soluble herbicide that 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 deactivated 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 morning.

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.

RESISTANT WEEDS WARNING

4Farmers Glyphosate 450 is a member of the glycine group of herbicides. 4Farmers Glyphosate 450 has the inhibitor of EPSP



synthase 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 inhibitors of EPSP synthase 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 4Farmers Glyphosate 450 or other inhibitors of EPSP synthase herbicides.

Since the occurrence of resistant weeds is difficult to detect prior to use, 4Farmers 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 seedbeds.

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 weed control may be assisted by cultivation to leave trash on the surface.

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.

MIXING

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.

Spray solution should be used within a maximum of five days to avoid loss of activity.

Ensure the spray tank is free of any residue from previous spray products.

Fill spray tank with half required volume of clean, fresh water and then add measured amount of 4Farmers Glyphosate 450 as per Directions for Use (rate).

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.

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.

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.

Flowable Simazine: For knockdown and residual control of annual weeds, addition of ammonium sulphate is required to overcome antagonism. (See note below)

2,4-D Ester: For improved control of certain broadleaf weeds, observe regional restrictions.

Dicamba (Banvel®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.

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 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
 Azinphos-methyl (Gusathion A®3)
 Phosmet (Imidan®4)
 Chlorpyrifos
 Demeton-S-methyl (Metasystox®3)

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 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.

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 that 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.

PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS

DO NOT apply under meteorological conditions or from spraying equipment that



could be expected to cause spray drift onto nearby susceptible plants, adjacent crops, croplands or pastures.

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 bodies of water.

STORAGE AND DISPOSAL

Store in the closed original container in a well-ventilated area.

Avoid prolonged storage in direct sunlight.

DO NOT contaminate seed, feed or foodstuff.

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.

Triple rinse empty containers before disposal. Add rinsings to tank mix or dispose of rinsate in a disposal pit. This pit must be away from aquatic areas and in a suitable area specifically marked and set up for the purpose.

DO NOT dispose of undiluted chemicals on-site.

Destroy empty containers by breaking, crushing or puncturing them. Dispose of the containers at a local authority landfill that does not burn its refuse.

If there is no local authority landfill readily available in your area, bury the containers at a depth of 500mm or more at a licensed/approved disposal site. In some States, wastes can only be buried at a licensed landfill.

DO NOT burn empty containers or product.

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.

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.

When using controlled droplet applicator, wear protective waterproof clothing and impervious footwear.

FIRST AID

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

For further information, please refer to the Material Safety Data Sheet.

CONDITIONS OF SALE

The use of 4Farmers Glyphosate 450 being beyond the control of the manufacturer, no warranty expressed or implied is given by 4Farmers 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 4Farmers 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 RAIL

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

Registered trademark of Stauffer Chemical Company, USA

CLAIMS FOR USE

(For detailed Directions for Use Table, see attached booklet)

SITUATION	WEEDS
Crop or Pasture Establishment	Many annual and perennial grasses and broadleaf weeds as per Directions for Use table in attached booklet
Fallow establishment	
Pasture topping and renovation	
Tussock infested pasture	
Rice (when direct drilling)	
Sorghum pre and post harvest control	
Sugar cane (Ratoon spray out)	Sugar cane (<i>Saccharum officinale</i>)

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



DIRECTIONS FOR USE TABLE:

CONSERVATION TILLAGE

CROP/ SITUATION	WEEDS CONTROLLED	STATE (S)	RATE/ha	CRITICAL COMMENTS
Winter crop or pasture, prior to disturbance by cultivation and/or	Barley grass (<i>Amaranthus spp.</i>)	Southern WA SA VIC NSW ONLY	400-800mL + 800mL –1L	Apply to actively growing weeds at least 6-8 cm high. Apply pre-tillering (low rate) and again post tillering (high rate). Use higher rates if heavily grazed or late in the season or under cold/overcast conditions or when doublegee or capeweed are more than 8 cm diameter.
	Brome grass (<i>Bromus spp</i>)			
Sowing with tyned equipment.	Capeweed (<i>Arctotheca calendula</i>)			
	Doublegee (<i>Emex australis</i>)			
Sowing with tyned equipment.	Volunteer cereals			
	Wild oats (<i>Avena spp</i>)			
Sowing with tyned equipment.	Annual phalaris (<i>Phalaris spp</i>)		800mL –1L + 1 - 1.2L	If not cultivated or sown within 21 days, re-treatment may be necessary, but do not sow until a satisfactory seedbed is established. (Refer to “Crop Establishment” under General Instructions).
	Annual ryegrass (<i>Lolium rigidum</i>)			
Sowing with tyned equipment.	Dock (seeding) (<i>Rumex spp</i>)			
	Silver grass (<i>Vulpia spp</i>)			
Sowing with tyned equipment.	Winter grass (<i>Poa annua</i>)			
	Amsinckia (<i>Amsinckia spp</i>)			Apply to actively growing weeds at least 6-8 cm high. Apply pre-tillering (low rate) and again post tillering (high rate).
Sowing with tyned equipment.	Fumitory (<i>Fumaria spp</i>)			
	Paterson’s curse (<i>Echium plantagineum</i>)			Use high rate if these weeds are more than 12-cm diameter.
Sowing with tyned equipment.	Saffron thistle (<i>Carthamus lanatus</i>)			If not cultivated or sown within 21 days, re-treatment may be necessary, but do not sow until a satisfactory seedbed is established. (Refer to “Crop Establishment” under General Instructions).
	Scotch thistle (<i>Onopordum acanthium</i>)			
Sowing with tyned equipment.	Spear thistle (<i>Cirsium vulgare</i>)			
	Variiegated Thistle (<i>Silybum marianum</i>)			
Sowing with tyned equipment.	Volunteer lupins			
	Wild turnip (<i>Brassica tournefortii</i>)			
		TAS ONLY	1.2 – 2.4L	



CROP/ SITUATION	WEEDS CONTROLLED	STATE (S)	RATE/ha	CRITICAL COMMENTS
As above	Seasonal suppression of Perennial Phalaris Skeleton weed (<i>Chondrilla juncea</i>)- fully emerged rosettes (NSW only) Sorrel (<i>Rumex acetosella</i>) Soursob (<i>Oxalis pes-caprae</i>) Sub-clover (<i>Trifolium subterraneum</i>)	Southern WA SA VIC NSW ONLY	1.2L	
Fallow or prior to sowing as a summer crop		TAS ONLY	1.2 – 2.4L	In Tasmania, use low rate on annual weeds and high rate on perennials.
Late winter/spring treatment	Barley grass (<i>Hordeum leporinum</i>) Volunteer cereals Wild oats (<i>Avena spp</i>)	Southern WA SA VIC	800mL –1.2L	Apply to actively growing weeds at least 6- 8 cm high. Apply pre-tillering (low rate) and again post-tillering (high rate)
	Hoary cress (<i>Cardaria draba</i>) Soursob (<i>Oxalis pes-caprae</i>)	NSW ONLY	1.2L	Use higher rates if heavily grazed or late in the season or under cold/overcast conditions or when capeweed is more than 8cm diameter. If not cultivated or sown within 21 days, re- treatment may be necessary, but do not sow until a satisfactory seedbed is established. Refer to “Crop Establishment” under General Instructions). Apply late rosette to early flower. Apply at tuber exhaustion. Add wetter.
As above	Annual ryegrass (<i>Lolium rigidum</i>) Broome grass (<i>Bromus spp</i>) Capeweed (<i>Arctotheca calendula</i>) Paterson’s curse (rosette) (<i>Echium plantagineum</i>) Saffron thistle (<i>Carthamus lanatus</i>) Scotch thistle (<i>Onopordum acanthium</i>) Silver grass (<i>Vulpia spp</i>) Spear thistle (<i>Cirsium vulgare</i>) Wild radish (<i>Raphanus raphanistrum</i>) Wild mustard (<i>Sisymbrium officinale</i>)	Southern WA SA VIC NSW ONLY As above	1.2 – 1.6L As above	



CROP/ SITUATION	WEEDS CONTROLLED	STATE (S)	RATE/ha	CRITICAL COMMENTS
	Wild turnip (<i>Brassica tournefortii</i>)			
Fallow or prior to sowing winter or summer crops	Annual Phalaris (<i>Phalaris spp</i>) Barley grass (<i>Hordeum leporinum</i>) Volunteer cereals Wild oats (<i>Avena spp</i>)	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 at recommended rates may be preferred.
Fallow or prior to sowing winter or summer crops	Amaranth (<i>Amaranthus spp</i>) Australian bluebell (<i>Wahlenbergia stricta</i>)- (QLD only) Barnyard grass (<i>Echinochloa spp</i>) Cudweed (<i>Gnaphalium spp</i>)			
Fallow or prior to sowing winter or summer crops	Fumitory (<i>fumaria spp</i>) Liverseed grass (<i>Urochloa panicoides</i>) Mexican poppy (<i>Argemone mexicana</i>) Mint weed (<i>Salvia reflexa</i>) New Zealand spinach (<i>Tetragonia tetragonoides</i>) Noogoora burr (<i>Xanthium pungens</i>) Saffron thistle (<i>Carthamus lanatus</i>) Spear thistle (<i>Cirsium vulgare</i>) Spurge (<i>Euphorbia spp</i>) Stinkgrass (Lovegrass) <i>Eragrostis cilianensis</i>) Stinking goosefoot (<i>Chenopodium vulvaria</i>) Sweet summer grass Variegated thistle (<i>Silybum marianum</i>) Volunteer sorghum Volunteer sunflower Yellow vine (Caltrop) (<i>Tribulus terrestris</i>)			
Fallow or prior to sowing winter or summer crops	Annual ground cherry (Gooseberry) (<i>Physalis angulata</i>) Bladder ketmia (<i>Hibiscus trionum</i>)			Apply prior to stem elongation or budding.



CROP/ SITUATION	WEEDS CONTROLLED	STATE (S)	RATE/ha	CRITICAL COMMENTS
	(<i>Hibiscus trionum</i>) Camel melon (<i>Citrullus lanatus</i>)			
Fallow or prior to sowing winter or summer crops	Sowthistle (Milk thistle) (<i>Sonchus oleraceus</i>) Turnip weed (<i>Rapistrum rugosum</i>) Wild lettuce (<i>Lactuca saligna</i>) Wild Turnip (<i>Brassica tournefortii</i>)	QLD Northern NSW ONLY	400 – 800 mL	As Above
	Boggabri weed (<i>Amaranthus macrocarpus, A. mitchellii</i>) Indian hedge mustard (<i>Sisymbrium orientale</i>) African turnip (<i>Sisymbrium thellungii</i>) Native millet (<i>panicum decompositum</i>)		400- 800mL	Apply to actively growing weeds up to 5 true leaves or 3 cm 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 3 cm in diameter or height.
Pasture manipulation	Carpet grass (<i>Axonopus spp</i>) Kikuyu (<i>Pennisetum clandestinum</i>) Paspalum (<i>Paspalum dilatatum</i>)	QLD NSW 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 (<i>Poa labillardieri</i>)	QLD NSW 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 rigidum</i>) Barley grass (<i>Hordeum leporinum</i>) Broome grass (<i>Bromus spp</i>) Capeweed (<i>Arctotheca calendula</i>)	NSW VIC SA WAS ONLY	240 – 360 mL	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.



CROP/ SITUATION	WEEDS CONTROLLED	STATE (S)	RATE/ha	CRITICAL COMMENTS
	Silver grass (<i>Vulpia spp</i>)			
Pasture – Bent grass infestations	Most annual weeds Bent grass (<i>Agrostis capillaris</i>)	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 tined equipment follow with a summer crop, then re-seed pasture or crop next autumn
Rice – direct drill	Annual phalaris (Canary grass) Annual ryegrass (<i>Lolium rigidum</i>) Barley grass (<i>Hordeum leporinum</i>) Burr media (<i>Medicago spp</i>) Sub-clover (<i>Trifolium subterraneum</i>) Winter grass (<i>poa annua</i>)	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 varieties or those sensitive to lodging)	Grain sorghum (Sorghum bicolor) – pre harvest	QLD NSW ONLY	1.2 – 1.6L	Use high rate for ratoon regrowth.
Sorghum stubble	Sorghum stubble – post harvest		800mL – 1.6L	Use this rate for regrowth from slashed stubble and for fresh spring regrowth.
			1.2 – 1.6L	Use this rate for standing stubble if sufficiently green
Sugar Cane	Ratoon control	QLD NSW ONLY	3.2 – 7.2L	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.