



Product Name: Nufarm Glyphosate 450 Herbicide  
APVMA Approval No.: 53868/134296

Label Name:	Nufarm Glyphosate 450 Herbicide
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Signal Headings:	CAUTION KEEP OUT OF REACH OF CHILDREN READ SAFETY DIRECTIONS BEFORE OPENING OR USING
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Constituent Statements:	A: 450 g/L GLYPHOSATE PRESENT AS THE ISOPROPYLAMINE SALT 35 g/L POLYEYTHANOXY (15) TALLOW AMINE B: 450 g/L GLYPHOSATE PRESENT AS THE ISOPROPYLAMINE SALT 97 g/L POLYEYTHANOXY (15) TALLOW AMINE C: 450 g/L GLYPHOSATE PRESENT AS THE ISOPROPYLAMINE SALT 21 g/L POLYEYTHANOXY (15) TALLOW AMINE D: 450 g/L GLYPHOSATE PRESENT AS THE ISOPROPYLAMINE SALT
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Mode of Action:	GROUP 9 HERBICIDE
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Statement of Claims:	A non-selective herbicide that will kill most emerged weeds and plants in situations as indicated in the directions for use.
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Net Contents:	5 L - 1000 L
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Restrains:	To ensure herbicide absorption, DO NOT disturb weeds by cultivation, sowing or grazing for 1 day after treatment of annual weeds and 7 days for perennial weeds, except where noted. DO NOT allow bystanders to come into contact with the spray cloud.
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Directions for Use:	This section contains file attachment.
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Other Limitations:	
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Withholding Periods:	PRE-HARVEST SORGHUM: DO NOT HARVEST FOR 7 DAYS OTHER USES: NOT REQUIRED WHEN USED AS DIRECTED.
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Trade Advice:	
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General Instructions:	This section contains file attachment.
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Resistance Warning:	<p><b>RESISTANT WEEDS WARNING</b> <b>GROUP 9 HERBICIDE</b></p> <p>Nufarm Glyphosate 450 Herbicide is a member of the Glycines group of herbicides. Nufarm Glyphosate 450 Herbicide has the inhibition of EPSP Synthase mode of action. For weed resistance management Nufarm Glyphosate 450 Herbicide is a Group 9 Herbicide. Some naturally-occurring weed biotypes resistant to Nufarm Glyphosate 450 Herbicide and other Group 9 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 Nufarm Glyphosate 450 Herbicide or other Group 9 herbicides. Since the occurrence of resistant weeds is difficult to detect prior to use, Nufarm Australia Limited accepts no liability for any losses that may result from the failure of Nufarm Glyphosate 450 Herbicide to control resistant weeds.</p>
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Precautions:	<p><b>Re-entry</b> DO NOT enter treated areas until the spray has dried, unless wearing cotton overalls buttoned to the neck and wrist (or equivalent clothing) and chemical resistant gloves. Clothing must be laundered after each days use.</p>
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Protections:	<p><b>PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS</b> Avoid contact with foliage, green stems or fruit of crops, desirable plants and trees, as severe injury or destruction may result. 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.</p> <p><b>PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT</b> 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.</p>
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Storage and Disposal:	<p><b>STORAGE AND DISPOSAL</b> Store in the closed, original container in a cool, well-ventilated area. DO NOT store for prolonged periods in direct sunlight.</p> <p>For non-returnable containers: Triple-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 to an approved waste management facility. If an approved waste management facility is not available, bury the empty packaging 500 mm 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 containers or product.</p> <p>For RETURNABLE containers:</p>
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Empty contents fully into application equipment. Close all valves and return to point of supply for refill or storage.

Safety Directions:

**SAFETY DIRECTIONS**

Will irritate the eyes and skin. Avoid contact with eyes and skin. When using together with other products, consult their label safety directions. When opening the container and preparing the spray and using the prepared spray, wear cotton overalls buttoned to the neck and wrist (or equivalent clothing) and elbow-length chemical resistant gloves. In addition, wear a face shield or goggles when mixing and loading. When using a controlled droplet applicator, wear protective waterproof clothing and impervious footwear. Wash hands after use. After each day's use, wash gloves, face shield or goggles and contaminated clothing.

First Aid Instructions:

**FIRST AID**

If poisoning occurs, contact a doctor or Poisons Information Centre. Phone: Australia 131126. If skin contact occurs, remove contaminated clothing and wash skin thoroughly. If in eyes, hold eyes open, flood with water for at least 15 minutes and see a doctor.

First Aid Warnings:

**DIRECTIONS FOR USE**

<b>CROP/SITUATION</b>	<b>STATE</b>	<b>WEEDS CONTROLLED</b>	<b>RATE</b>	<b>CRITICAL COMMENTS</b>
SOUTHERN AUSTRALIA Prior to sowing a crop or pasture with full soil disturbance by cultivation or sowing with a tyned implement.	WA, SA, VIC, NSW, ACT only	Barley grass, Brome grass, Volunteer cereals, Wild oats	400-800mL/ha pre tillering 800mL-1L/ha post tillering	Treat actively growing weeds not under stress from low moisture, frost, cold, disease or water logging. If heavy grazing has occurred allow regrowth to 6-8cm before spraying and use the higher rate. <b>RATE SELECTION:</b> Increase to higher rates late in the season or when treating under cold/overcast conditions. <b>FULL DISTURBANCE</b> with cultivation or sowing with a tyned implement may start 1 day after treatment (7 days if Dock, Phalaris, Skeleton weed, Soursob or Sorrel are present) and should occur within 21 days after treatment. Where cultivation or sowing does not occur within 21 days, new weed growth may require further treatment. When treating light infestations of seedling annual grasses (pre-tillering) and annual broadleaved weeds (less than 8cm dia./height) cultivation or sowing may start 6 hours after treatment and should occur within 21 days.
SOUTHERN AUSTRALIA Prior to sowing a crop or pasture with full soil disturbance by cultivation or sowing with a tyned implement.	WA, SA, VIC, NSW, ACT only	Annual phalaris (Canary grass), Annual ryegrass, Silver grass, Winter grass	800mL-1L/ha pre tillering 1-1.2L/ha post tillering	<b>CROP ESTABLISHMENT:</b> Sowing should not proceed until conditions allow the formation of a satisfactory seedbed. See Crop Establishment for directions. <b>ANNUAL RYEGRASS, SILVER GRASS AND PERENNIAL GRASSES:</b> Addition of Wetter TX™, 200mL/100L of spray solution may improve control. When treating dense infestations of Silver grass, nozzles designed to give MEDIUM or COARSE spray droplet size category and a spray volume of 70L/ha or more is recommended to improve plant spray coverage. Good coverage of Silver grass is critical for control. <b>TANK MIXTURES:</b> For improved control of clover add Kamba® 750 (dicamba). Read and follow all label directions, restraints, plant back periods, withholding periods, regional use restrictions and safety directions for the tank mix products. See <b>Tank Mixtures</b> for directions. <b>PERENNIAL WEEDS:</b> For Perennial Phalaris, Soursob, Skeleton weed and Sorrel, this product will provide knockdown, seasonal suppression and reduction in treated plant numbers.
		Calomba daisy, Capeweed, Double gee (Spiny emex)	400-800mL/ha less than 8cm diameter 800mL-1.2L/ha greater than 12cm diameter	
		Amsinckia, Fumitory, Paterson's curse, Saffron thistle, Scotch thistle, Spear thistle, Variegated thistle, Volunteer lupins, Wild turnip	800mL-1L/ha less than 12cm diameter 1-1.2L/ha greater than 12cm diameter	
		Dock (Seedling)	800mL-1.2L/ha	
	Perennial phalaris, Skeleton weed fully emerged rosettes (NSW only), Sorrel, Soursob, Sub. clover	1.2L/ha		
TAS only	All the above weeds	1.2-2.4L/ha	<b>TASMANIA:</b> Use 1.2L/ha on annual weeds. Increase to 2.4L/ha where perennial weeds are being treated. To control White clover and improve control of Sorrel and Dock, add 267mL/ha of Kamba 750 (dicamba). Observe Kamba 750 label directions and plant back periods.	

CROP/SITUATION	STATE	WEEDS CONTROLLED	RATE	CRITICAL COMMENTS
SOUTHERN AUSTRALIA Prior to establishing a crop or pasture with an implement that gives minimal or no soil disturbance.	NSW, ACT, SA, VIC, WA only	Barley grass, Volunteer cereals, Wild oats	800mL-1.2L/ha	<p>Treat actively growing weeds not under stress from low moisture, frost, cold, disease or water logging. If heavy grazing of mature plants has occurred allow regrowth to 6-8cm before spraying and use the higher rate.</p> <p><b>RATE SELECTION:</b> Use the lower rate on young weeds, increase to the higher rate where grasses reach full tillering or where broadleaf weeds reach stem elongation/budding. Increase to higher rates in Spring or when treating under cold/overcast conditions.</p> <p><b>AERIAL APPLICATION:</b> Use the higher rates. See also <b>Aerial Application</b>.</p> <p><b>ANNUAL RYEGRASS, SILVER GRASS AND PERENNIAL GRASSES:</b> Add Wetter TX™, 200mL/100L of spray solution. When treating dense infestations of Silver grass, nozzles designed to give MEDIUM or COURSE spray droplet size category and a spray volume of 70L/ha or more is recommended to improve plant spray coverage. Good coverage of Silver grass is critical for control.</p> <p><b>TANK MIXTURES:</b> For improved control of Dock, Sorrel and Sub. clover add Kamba 750 (dicamba). Read and follow all label directions, restraints, plant back periods, withholding periods, regional use restrictions and safety directions for the tank mix products. See <b>Tank Mixtures</b> for directions. Addition of Nufarm Liase® (ammonium sulphate), 2L/100L, may improve control when treating under adverse environmental conditions.</p> <p><b>PASTURE OR CROP ESTABLISHMENT: DO NOT</b> sow into excessive trash. Trash may be removed by grazing after treatment. Grazing may commence one day after treatment of annual weeds (small) and 7 days for perennial weeds. Delay grazing for 3 days where annual weeds are large. Sowing may proceed when excessive trash is removed, but not sooner than one day after treatment of annual weeds and 7 days for perennial weeds. See also <b>Crop Establishment</b>.</p> <p><b>AERIAL (OR SURFACE) SEEDING:</b> Delay seeding until trash is completely removed by grazing and/or plant decay. When establishing pasture, ensure application of fertilizer and insecticides and follow-up management is undertaken as required.</p>
		Brome grass, Canary grass, Capeweed, Variegated thistle, Winter grass	1-1.6L/ha	
		Annual ryegrass, Paterson's curse, Saffron thistle, Scotch thistle, Silver grass, Spear thistle, Wild mustard, Wild radish, Wild turnip	1.2-1.6L/ha	
		Erodium, Perennial phalaris, Plantain, Sorrel, Sub. clover, Yorkshire fog	1.5-2L/ha	
SOUTHERN AUSTRALIA Prior to establishing a crop or pasture with an implement that gives minimal or no soil disturbance.	NSW, ACT, SA, VIC, WA only	Dock, Flatweed	2L/ha	<p><b>TANK MIXTURES:</b> For improved control of Dock, Sorrel and Sub. clover add Kamba 750 (dicamba). Read and follow all label directions, restraints, plant back periods, withholding periods, regional use restrictions and safety directions for the tank mix products. See <b>Tank Mixtures</b> for directions. Addition of Nufarm Liase® (ammonium sulphate), 2L/100L, may improve control when treating under adverse environmental conditions.</p> <p><b>PASTURE OR CROP ESTABLISHMENT: DO NOT</b> sow into excessive trash. Trash may be removed by grazing after treatment. Grazing may commence one day after treatment of annual weeds (small) and 7 days for perennial weeds. Delay grazing for 3 days where annual weeds are large. Sowing may proceed when excessive trash is removed, but not sooner than one day after treatment of annual weeds and 7 days for perennial weeds. See also <b>Crop Establishment</b>.</p> <p><b>AERIAL (OR SURFACE) SEEDING:</b> Delay seeding until trash is completely removed by grazing and/or plant decay. When establishing pasture, ensure application of fertilizer and insecticides and follow-up management is undertaken as required.</p>
		TAS only	All the above weeds	
SOUTHERN AUSTRALIA To commence a fallow	NSW, ACT, VIC, SA, WA only	Barley grass, Volunteer cereals, Wild oats	800mL-1.2L/ha	<p>Treat actively growing weeds not under stress from low moisture, frost, cold, disease or water logging. If heavy grazing has occurred allow regrowth to 6-8cm before spraying and use the higher rate.</p> <p><b>RATE SELECTION:</b> Use the lower rate on young weeds, or where cultivation is to follow within 21 days, increasing to the higher rate where grasses reach full tillering or where broadleaf weeds reach stem elongation/budding.</p> <p><b>ANNUAL RYEGRASS, SILVERGRASS AND PERENNIAL GRASSES:</b> Add Wetter TX™, 200mL/100L of spray solution. When treating dense infestations of Silver grass, nozzles designed to give MEDIUM or COURSE spray droplet size category and a spray volume of 70L/ha or more is recommended to improve plant spray coverage. Good coverage of Silver grass is critical for control.</p> <p><b>HOARYCRESS:</b> Treat from late rosette to early flowering.</p> <p><b>SOUSBOR:</b> Treat at tuber exhaustion.</p> <p><b>COUCH:</b> Use the higher rate on dense infestations. Apply sequential treatments during Summer and Autumn, with Autumn being most effective. Repeat applications will be required for full control. For improved control use in conjunction with cultivation. The use of Collide® 700 500mL/100L may improve control.</p> <p><b>BATHURST BURR:</b> For mature weeds use the higher rate.</p>
		Annual ryegrass, Brome grass, Capeweed, Paterson's curse (rosette), Saffron thistle, Scotch thistle, Silvergrass, Spear thistle, Wild mustard, Wild radish, Wild turnip	1.2-1.6L/ha	
		Hoary cress, Soursob	1.2L/ha	
		Couch	1.2-2.4L/ha	
		Bathurst burr	1.5-2.4L/ha	

				<p><b>TANK MIXTURES:</b> Read and follow all label directions, restraints, plant back periods, withholding periods, regional use restrictions and safety directions for the tank mix products. See <b>Tank Mixtures</b> for directions.</p>
	TAS only	All the above weeds	1.2-2.4L/ha	<p><b>TASMANIA:</b> Use 1.2L/ha on annual weeds. Increase to 2.4L/ha where perennial weeds are being treated. To control White clover and improve control of Sorrel and Dock, add 267mL/ha of Kamba 750 (dicamba). Observe Kamba 750 label directions and plant back periods.</p>

CROP/SITUATION	STATE	WEEDS CONTROLLED	RATE	CRITICAL COMMENTS
PASTURE TOPPING For Annual grass, Capeweed and Calomba Daisy seed-set reduction	WA, SA, VIC, TAS, NSW, ACT only	Barley grass, Brome grass, Capeweed, Silvergrass	240-360mL/ha	Remove stock prior to treatment to allow even regrowth. Apply to Capeweed and Annual ryegrass at FLOWERING. For other grasses apply from HEAD to MILKY DOUGH stage. Use the higher rate for dense infestations or where Annual ryegrass is present. Apply before signs of plants "haying off". Reduction in pasture legume population may occur as a result. <b>DO NOT</b> apply to clover or medic crops intended for seed or hay.
		Annual ryegrass, Calomba Daisy	360mL/ha	
SEED-HEAD SUPPRESSION OF PERENNIAL GRASSES	VIC, TAS, NSW, ACT, WA, SA only	Bent grass	300-500mL/ha	<b>TIMING:</b> Treat from late October to late November. Apply before seedheads have emerged. Use the higher rate where growth is excessive and renovation is intended the following Autumn. <b>FOLLOW-UP MANAGEMENT:</b> Graze hard after spraying.
BENT GRASS INFESTED PASTURE For control/ suppression prior to establishing crops or improved pasture species	VIC, TAS only	Most annual weeds and Bent grass	2L/ha OR 4mL/ha per litre by handgun or knapsack	<b>TIMING:</b> Apply to actively growing plants in late Spring when they have some seed-head development, but before Summer moisture stress. Remove stock to ensure there is full leaf growth. <b>FOLLOW-UP MANAGEMENT:</b> Full disturbance with a tined implement should follow 10-21 days after spraying. Then follow with a Summer crop, and/or reseeded pasture or crop the following Autumn.
PASTURE MANIPULATION For suppression or control of pasture species prior to drilling, improved pasture, forage species, soybeans or Leucaena BAND SPRAYING: May also be applied as a band or strip spray.	NSW, ACT, VIC, WA only QLD only	Carpet grass, Kikuyu, Paspalum	1.1-4.8L/ha	<b>RATE SELECTION:</b> For suppression apply the low rate. Where complete control is required apply up to the high rate. <b>BAND SPRAYING:</b> Band spraying may be done immediately after the sowing operation. Mount the nozzles behind the coultter/tyne/press wheel assembly of the band seeder. Adjust to spray 0.5-1m strips. Ensure minimal disturbance of the pasture. Excessive dust created in the seeding operation may reduce herbicide activity. Pasture seed must be drilled at the appropriate depth and covered by soil. <b>LEUCAENA (QLD ONLY):</b> Apply 2L/ha through a single taper fan nozzle LF1-80 mounted at the rear of the single row planter providing a 1m swath. Planting rows to be 4m apart.
		Carpet grass, Paspalum	1.1-4.8L/ha	
		Kikuyu	500mL-4.8L/ha	
		Barbed wire grass, Black speargrass, Love grasses, Red natal grass, Wire grasses	2.4L/ha	
POA TUSsock INFESTED PASTURE For reduction of ground cover allowing pasture renovation	NSW, ACT, TAS, VIC, QLD only	Most annual weeds and suppression of Poa tussock	2.4-3.2L/ha	<b>TIMING:</b> Graze heavily, then remove stock at least 14 days before spraying to allow fresh regrowth. Apply to actively growing plants after the Autumn break but before heavy frosts (March-May). <b>APPLICATION:</b> Increasing to the higher rate may give more effective reductions. If aerial spraying see <b>Aerial Equipment</b> . <b>FOLLOW-UP MANAGEMENT:</b> Sowing may start from 14 days after spraying. It is essential that correct follow-up pasture establishment and management occurs after treatment. Spot treatment will limit re-infestations.
NORTHERN AUSTRALIA In fallows or prior to sowing a crop	QLD, NSW, ACT only	Annual phalaris (Canary grass), Barley grass, Volunteer cereals, Wild oats	400-800mL/ha	Treat actively growing weeds not under stress from low moisture, frost, cold, disease or water logging. If heavy grazing has occurred allow regrowth to 6-8cm. NOTE that under Summer (hot) conditions, dense infestations of Barnyard grass and Liverseed grass may require follow-up treatment for complete control. In Winter (cold) conditions, symptoms on Dead nettle may be slow to develop. <b>RATE SELECTION:</b> Use the lower rate on young weeds, increase to the higher rate where grasses reach full tillering or where broadleaf weeds reach stem elongation/budding. At more advanced stages of growth certain broadleaf weeds require a higher rate range or the addition of Estercede® Xtra 680. <b>CROP ESTABLISHMENT:</b> Sowing should not proceed until conditions allow for a formation of a satisfactory seedbed. See <b>Crop Establishment</b> for directions. <b>TANK MIXTURES:</b> Read and follow all label directions, restraints, plant back periods, withholding periods, regional use restrictions and safety directions for the tank mix products. <b>DO NOT</b> tank mix with atrazine when spraying Barnyard grass or Liverseed grass.
		Barnyard grass, Bathurst burr, Button grass, Columbus grass (seedling), Liverseed grass, Native millet, Stinkgrass (Love grass), Volunteer sorghum	800mL-1.6L/ha	
		Australian bluebell (QLD only), Cudweed, Fumitory, Mexican poppy, New Zealand spinach, Saffron thistle, Spear thistle, Spurge, Stinking goosefoot	800mL-1.2L/ha	

CROP/SITUATION	STATE	WEEDS CONTROLLED	RATE	CRITICAL COMMENTS
		Black (giant) pigweed, Boggabri weed, Caltrop (Yellow vine), Indian hedge mustard, Mintweed, Summer grass	400-800mL/ha up to 5 true leaves or 3cm diameter/height800 mL-1.2L/ha greater than 3cm diameter/height	<b>AERIAL APPLICATION:</b> For instructions on Aerial application under hot conditions, see <b>Aerial Application</b> . <b>DO NOT</b> apply by aircraft when temperature is above 30°C.
NORTHERN AUSTRALIA In fallows or prior to sowing a crop	QLD, NSW, ACT only	African turnip weed, Dead nettle, Sweet Summer grass, Variegated thistle, Volunteer sunflower	600-800mL/ha up to 5 true leaves or 3cm diameter/height800 mL-1.6L/ha greater than 3cm diameter/height	As above
		Annual ground cherry (Gooseberry), Bladder ketmia, Camel melon, False castor oilplant/Thornapple, Noogoora burr, Turnip weed, Wild lettuce, Wild turnip, Wireweed	800mL-1.2L/ha prior to stem elongation/ budding. After that use 400mL-1.2L/ha plus 600-820mL/ha Estercide® Xtra 680 OR 1.2-1.6L/ha of this product alone	
		Pigweed	800mL-1.6L/ha up to 20cm diameter	Use a higher rate on larger weeds. Control of Pigweed over a wide range of growth stages can be obtained with the addition of Associate® Herbicide. Observe recropping intervals.
		Prickly paddy melon	770mL-1.6L/ha plus 80mL/ha of a 600 g/L triclopyr product	<b>DO NOT</b> add crop oil.
		Sowthistle/ Milkthistle	600-800mL/ha rosette up to 3cm diameter 800mL-1.6L/ha greater than 3cm diameter	Previously grazed plants may be difficult to control without allowing full recovery.
		Couch	1.2-2.4L/ha	Use the higher rate for dense infestations. Apply sequential treatments during Summer and Autumn, with Autumn being most effective. Repeat applications may be required for full control. For improved control use in conjunction with cultivation. The use of Collide® 700 500mL/100L may improve control.
		Johnson grass	1.6-2.4L/ha	Use the higher rates on plants approaching seedhead stage. Apply to plants with a minimum of 30cm new growth. Sequential treatments will be required for long term control.
		Nutgrass	2.4 + 2.4L/ha	Make first application to actively growing plants when at least 20% have reached the head stage (normally about February). After allowing maximum re-emergence to occur (normally in 6-8 weeks), it is essential to make a second application. NOTE: Follow-up treatments should be made as part of a Nutgrass control program.

CROP/SITUATION	STATE	WEEDS CONTROLLED	RATE	CRITICAL COMMENTS
SORGHUM CONTROL Pre-harvest	QLD, NSW, ACT only	Sorghum, Grain sorghum <b>DO NOT</b> apply to varieties intended for seed production or varieties prone to lodging.	1.2 or 1.6L/ha	<b>DO NOT</b> apply if crop is under stress from low moisture, frost, cold or water logging. <b>RATE SELECTION:</b> Use the lower rate for control of crop and late tillers and suppression of ratoon regrowth. Use the higher rate for improved suppression of ratoon regrowth. <b>TIMING:</b> Apply when grain moisture is less than 25%. Application can be made when moderate browning has occurred. <b>CAUTION:</b> Treatment may increase potential for CROP LODGING, particularly if prior moisture stress has occurred. Harvest as soon as sufficient dry down has occurred to avoid possible lodging. Speed of dry down is dependent on physiological maturity, soil moisture and climatic conditions. <b>CAUTION:</b> Sorghum may be naturally toxic to stock.
SORGHUM CONTROL Post-harvest	QLD, NSW, ACT only	Sorghum stubble, Grain sorghum	800mL-1.2L/ha for fresh regrowth from slashed stubble 1.2-1.6L/ha for standing stubble if sufficiently green and for fresh Spring regrowth	<b>APPLY UNDER GOOD GROWING CONDITIONS ONLY. DO NOT</b> apply if plants are under stress from low moisture, frost, cold or water logging. <b>SLASHED STUBBLE AND SPRING REGROWTH:</b> Apply when fresh regrowth is at least 20cm high. <b>STANDING STUBBLE:</b> Apply only if sufficient green leaf is present. If grazing has occurred allow regrowth to 20cm high before treatment. <b>RATE SELECTION:</b> Use the lower rate for knockdown and regrowth suppression where cultivation is to follow. Increase to the higher rate for improved regrowth control. <b>NOTE:</b> Variable results occur where the crop has been subject to stress or the growing conditions are marginal. <b>CAUTION:</b> Sorghum may be naturally toxic to stock.
SUGAR CANE Ratoon spray out	QLD, NSW only	Sugar cane ratoon regrowth	4.8-7.2L/ha	<b>APPLY UNDER GOOD GROWING CONDITIONS ONLY:</b> To actively growing ratoons 60-120cm tall. <b>DO NOT</b> apply if plants are under stress from low moisture, frost, cold or water logging. Use the lower rate for suppression or where cultivation is to follow. Use the higher rate for control.
RICE Direct Drilling	NSW only	Annual phalaris (Canary grass), Annual ryegrass, Barley grass, Burr medic, Sub-clover, Winter grass	800mL-1L/ha	This product is less effective on drought stressed plants. In drought conditions a pre-watering prior to spraying is recommended. In grazed situations, if heavy grazing has occurred allow regrowth to 6-8cm before spraying. <b>ANNUAL RYEGRASS:</b> Add Wetter TX™ at 200mL/100L spray solution and when dominant use the higher rate. <b>SOWING:</b> Direct drilling may take place 1-14days after spraying. This product does not provide residual weed control. Permanent water and approved selective herbicides should be used to provide continual control of weeds.
COTTON PRE-HARVEST <b>DO NOT</b> use on crops intended for seed production.	QLD, NSW only	Bathurst burr, Noogoora burr, Winter annual weeds including Sow thistle/Milk thistle	1-2L/ha	Use the lower rate on light infestations of small weeds, where the crop canopy allows adequate spray coverage of the weeds. Increase to the higher rate when the crop canopy may limit spray coverage, when treating dense infestations, or when treating larger weeds. Apply alone or in tank mixtures with Dropp* or Harvade*. Apply when at least 60% of bolls are open and immature bolls cannot be easily cut with a sharp knife. Where a leafy canopy limits spray coverage, reduced weed control can be expected. For better results under these conditions, delay application until canopy re-opens following initial conditioning treatment. Where control of Nutgrass or Noogoora burr is required, treatment should be applied prior to the onset of frosts. When tank mixed with defoliant, a slightly higher proportion of cotton leaf may be retained, particularly where the higher rate is used. Read and follow all label directions for tank mix products.
		Nutgrass (seasonal suppression only)	2L/ha	
COTTON Shielded Sprayers		Refer to weeds controlled section Northern Australia in fallows or prior to sowing a crop		Apply this product to weeds growing between crop rows using a shielded sprayer. <b>DO NOT</b> apply in crops less than 20cm high. <b>DO NOT</b> allow spray or spray drift to contact any part of the cotton plants as severe injury or destruction may result.

CROP/SITUATION	STATE	WEEDS CONTROLLED	RATE	CRITICAL COMMENTS
TREE AND VINECROPS Vineyards, Berries and other small fruits (excluding strawberry) Citrus fruits Tropical and Sub-tropical fruits Pome fruits Stone fruits Tree nuts Duboisia Hops Tea	All States	Amaranth, Barley grass, Brome grass, Barnyard grass, Caltrop, Canary grass, Capeweed, Chickweed, Dead nettle, Double gee, Liverseed grass, Mintweed, Paterson's curse, Pigweed, Ryegrass, Silver grass, Spear thistle, Thornapple, Wild mustard, Wild oats, Wild turnip, Winter grass, Variegated thistle	<b>Boom:</b> 1.6-2.4L/ha <b>Handgun:</b> 400-600mL/100L <b>Knapsack:</b> 60-80mL/15L	Apply as a directed or shielded spray or using wiper equipment. <b>DO NOT</b> apply as a spray near trees or vines less than 3 years old unless they are effectively shielded from spray and spray drift. <b>DO NOT</b> allow wiper surface to contact any part of the tree, vine or plant. <b>Citrus fruit, Nuts, Olives, Pome fruit &amp; Vineyards: DO NOT</b> allow spray or spray drift to contact green bark or stems, canes, laterals, suckers, fresh wounds, foliage or fruit. <b>Hops:</b> Apply in Winter, prior to crop emerging from dormancy. <b>Tea:</b> Apply a maximum of 3.2L/ha by shielded boom or directed off-centre nozzle or 0.4L/100L by directed hand-gun or knapsack to avoid application to the crop. <b>All other crops: DO NOT</b> allow spray or spray drift to contact any part of the plant including the trunk. CAUTION Where split bark on Kiwifruit and green stems on Pawpaw occur, extreme care is required. Annual weeds may be sprayed anytime they are actively growing. Use the lower rate on weeds up to 15cm tall.

### General Weed Control - All States

SITUATION	CRITICAL COMMENTS - Read General Application Information before using See Annual, Perennial and Woody weeds sections below for most appropriate rate.
For general weed control in Domestic areas (Home gardens), Commercial, Industrial and Public Service areas. Agricultural buildings and other farms situations. For specific weeds, brush and woody weeds or unwanted trees, refer to the appropriate Weeds Controlled table.	<ul style="list-style-type: none"> <li>- For the control of many grasses and broadleaf weeds <b>Rate: 8mL/L water.</b></li> <li>- Apply when weeds are actively growing</li> <li>- Apply to ensure complete and uniform wetting of foliage</li> <li>- Visible symptoms may take from 3-7 days to develop</li> </ul> When spraying Nufarm Glyphosate 450 in high volumes typical of spot spraying (except where a specific wetter such as Pulse® Penetrant is recommended), the addition of 200mL per 100L of a 1000g/L wetter (or equivalent) such as BS1000 is recommended.
NON-AGRICULTURAL AREAS Around buildings, Commercial and Industrial areas, Domestic and public service areas, Right-of-ways.	Nufarm Glyphosate 450 does not provide residual weed control. For residual control of annual weeds, Nufarm Glyphosate 450 may be tank-mixed with certain residual herbicides. <b>See TANK MIXTURES/COMPATIBILITY</b>
AGRICULTURAL AREAS	Nufarm Glyphosate 450 may be used for control of annual and perennial weeds as directed, in agricultural land prior to sowing of any edible or non-edible crop, but not prior to transplanting tomato seedlings.
DRY DRAINS AND CHANNELS Dry margins of dams, lakes and streams situations	<b>DO NOT</b> apply to weeds growing in or over water. <b>DO NOT</b> spray across open bodies of water and <b>DO NOT</b> allow spray to enter the water. <b>DO NOT</b> allow water to return to dry channels and drains within 4 days of application.
FORESTS	Nufarm Glyphosate 450 may be used prior to establishment of nurseries, for site preparation prior to planting and amongst established trees using a directed or shielded spray, or using selective wiper equipment. <b>DO NOT</b> allow wiper surface to contact any part of the tree. <b>DO NOT</b> allow spray or spray drift to contact foliage or green bark of desirable trees, since severe injury may result.
PEANUTS, COTTON, SOYBEANS, SUGARCANE, NAVY BEANS AND CHICKPEAS Application using selective equipment Qld, NSW only	Wiper Equipment. Apply Nufarm Glyphosate 450 to weeds growing between crop rows or to weeds growing at least 15cm above the crop. <b>DO NOT</b> allow wiper to contact crop and ensure operating conditions <b>DO NOT</b> allow solution to drip from applicator since severe injury may result. Refer to <b>WIPER EQUIPMENT</b> in the <b>APPLICATION</b> section of the label. Shielded Sprayers (Cotton only). Apply Nufarm Glyphosate 450 to weeds growing between crop rows using a shielded sprayer. Refer to the Weeds Controlled tables for rates of application. <b>DO NOT</b> apply in crops less than 20cm high. <b>DO NOT</b> allow spray or spray drift to contact any part of the cotton plant as severe injury or destruction may result.

<b>SITUATION</b>	<b>CRITICAL COMMENTS - Read General Application Information before using</b> See Annual, Perennial and Woody weeds sections below for most appropriate rate.
<b>PASTURE</b>	<b>DIRECTED (SPOT) APPLICATION:</b> Nufarm Glyphosate 450 is non-selective and may damage or kill any plant in the sprayed area. Re-treatment and/or pasture improvement maybe necessary to restrict seedling re-establishment. <b>SELECTIVE APPLICATION: SEE WIPER EQUIPMENT</b> <b>BOOM APPLICATION:</b> Nufarm Glyphosate 450 may be used to suppress or kill existing pasture species prior to re-seeding or establishment of other crops. Where spot application (spray or wiper) is undertaken, grazing stock need not be removed. <b>CAUTION:</b> Certain plants may be naturally toxic to stock. Where known toxic plants are present <b>DO NOT</b> allow stock to graze until complete <b>browning of treated plants has occurred.</b>
<b>ONIONS</b> Post-plant, Pre-emergence application. Tas only	For control of annual weeds and suppression of perennial weeds, including Rope twitch. Apply Nufarm Glyphosate 450 at 800mL-2.4L/ha post-sowing and at least 7 days before crop is due to emerge. <b>DO NOT</b> apply to emerging onion plants as severe injury will result. Use the lower rate on small, actively growing annual weeds. Increase to the higher rate for larger annual weeds (over 15cm tall) and for suppression of perennial weeds.

<b>WEEDS CONTROLLED</b>	<b>RATE</b>	<b>CRITICAL COMMENTS</b>
<b>ANNUAL WEEDS</b> Amaranth, Bathurst burr, Barley grass, Brome grass, Barnyard grass, Caltrop, Canary grass, Capeweed, Chickweed, Cobbler's peg, Dead nettle, Double gee, Fumitory, Ground cherry, Hedge mustard, Lesser swinecress, Liverseed grass, Mintweed, Noogoora burr, Paradoxa grass, Paterson's curse, Pigweed, Potato weed, Ryegrass, Saffron thistle, Silver grass, Sow thistle, Spear thistle, Spiny burrgrass, Spurge, Sub. clover, Thornapple, Wild mustard, Wild oats, Wild turnip, Winter grass, Variegated thistle, Volunteer cereal	<b>Boom:</b> 1.6-2.4L/ha <b>Handgun:</b> 400-560 per 100L <b>Knapsack:</b> 60-80mL/15L	Apply to weeds whenever they are not subject to stress due to drought or frost. Use higher rate on weeds over 15cm in height or diameter or where dense weed cover limits spray coverage. Use higher spot spraying rate when applying less than 5L spray per 100sqm. Nufarm Glyphosate 450 does not provide residual weed control. Repeat treatments may be necessary to control later germinating weeds. For residual control of annual weeds Nufarm Glyphosate 450 may be tank-mixed with certain residual herbicides. See Tank Mixtures in the General Instructions for directions. <b>DO NOT</b> use an atrazine tank-mix for control of barnyard grass or liverseed grass.
<b>PERENNIAL WEEDS</b> Artichoke thistle, African lovegrass, Bent grass, Carpet grass, Cocksfoot, Flatweed, Johnson grass, Kangaroo grass, Kikuyu, Nutgrass ( <i>Cyperus rotundus</i> ), Paspalum, Phalaris, Plantains, Poa tussock, Prairie grass, Qld blue grass, Red-leg grass, Rhodes grass, Rope twitch, Sorrel, Soursob, Yorkshire fog	<b>Boom:</b> 2.4-4.8L/ha <b>Handgun:</b> 565-790/100L <b>Knapsack:</b> 85-120mL/15L	Control of established perennials is best obtained when plants are at the seedhead stage. In general best control of Winter growing perennials is obtained with application during Winter-Spring. Best control of Summer growing perennials is obtained with application late Summer and Autumn. For Nutgrass in cultivated situations apply sequential low rate treatments when Nutgrass has a minimum of 6-8 leaves. Use the higher rate in uncultivated situations. For Rhodes grass, Rope twitch, Prairie grass, Qld blue grass, Johnson grass, Kangaroo grass, Kikuyu, Redleg grass, Paspalum and Sorrel, use the higher rates only.
Blady grass, Bracken, Couch, Guinea grass, *Paragrass, Silverleaf nightshade, *Water couch *Use on Dry Drains and Channels ONLY (see Use Situations critical comments above)	<b>Boom:</b> 7.2L/ha <b>Handgun:</b> 1L or 1.6L/100L <b>Knapsack:</b> 160 or 240mL/15L	For Bracken add Pulse® at 200mL/100L spray mix. Best control of couch in WA and SA is obtained with Spring treatment. Most effective control of couch in eastern states is obtained with Summer and Autumn treatments. In cultivated situations use sequential treatments of 2.3-5.2L/ha for control. Only use higher rate for handgun and knapsack for Silverleaf nightshade.
<b>WOODY WEEDS</b> Bamboo, Bitou bush, Boneseed, Boxthorn, Crofton weed, Gorse, Groundsel bush, Lantana, Mistflower	<b>Handgun:</b> 400-790mL/100L <b>Knapsack:</b> 65-120mL/15L	Apply to actively growing plants. <b>DO NOT</b> apply to drought stressed plants. Further treatment may be necessary to restrict seedling re-establishment. <b>Bamboo</b> , apply when foliage/regrowth is 1-2m tall, use higher rate only. <b>Bitou bush/Boneseed</b> , apply higher rate on bushes greater than 1.5m. Best results are achieved when treated at peak flower during Winter. <b>Boxthorn</b> minimum rate is 565mL for handgun and 85mL for knapsack. <b>Groundsel bush</b> , apply higher rate on bushes greater than 2m. <b>DO NOT</b> apply in Winter. Minimum rate is 565mL for handgun and 65mL for knapsack. <b>Gorse, always add Pulse®</b> at 200mL/100L of spray mix, use higher rate only. <b>Lantana</b> , use higher rate only. Addition of Pulse® (200mL/100L) may improve control. <b>Boxthorn, Gorse, Lantana</b> Removal of bushes (after complete brownout), pasture improvement or further treatment are recommended to control seedlings and/or regrowth.

WEEDS CONTROLLED	RATE	CRITICAL COMMENTS
Blackberry, Chinese scrub, Eucalyptus spp. (seedlings less than 2m), Hawthorn, Pampas grass, Sifton bush, Sweet briar, Willow (less than 2m)	<b>Handgun:</b> 790mL-1.05L/100L <b>Knapsack:</b> 120-170mL/15L	Apply to actively growing plants. Removal of bushes (after complete brownout), pasture improvement or further treatment are recommended to control seedlings and/or regrowth. <b>Blackberry</b> , apply from flowering to leaf fall, use higher rate on old dense infestations greater than 2m high. In Tasmania, <b>DO NOT</b> treat bushes bearing mature fruit. <b>Chinese scrub</b> , use higher rates on bushes greater than 1m. <b>Eucalyptus spp.</b> , add Pulse® at 200mL/100L of spray mix. <b>Hawthorn</b> , apply from flowering to leaf fall, use higher rates on bushes greater than 2m. <b>Pampas grass</b> , allow regrowth to reach 1m, best results-apply after flowering. <b>Sifton bush</b> , use higher rates on bushes greater than 1m. <b>Sweet briar</b> , apply from late flowering to leaf fall, use 1.2-1.6L/100L, and 180-240mL/15L, use higher rates on bushes greater than 1.5m.

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

## GENERAL INSTRUCTIONS

Nufarm Glyphosate 450 Herbicide is a non-selective herbicide that will kill most emerged weeds and plants. It provides no residual weed control and may therefore be used before sowing any crop, but not prior to transplanting tomato seedlings.

If required, Nufarm Glyphosate 450 Herbicide can be mixed with certain other herbicides to achieve both knockdown and residual weed control (see Tank Mixtures).

Nufarm Glyphosate 450 Herbicide is absorbed by foliage and green stems and moves into the root system. Weeds should be actively growing when treated. **DO NOT** treat weeds under poor growing or dormant conditions (such as occur in drought, water logging, disease, insect damage or following frosts), as reduced weed control may result. Reduced results may also occur when treating weeds heavily covered with dust or silt. Prior herbicide application may also induce stress in weeds.

For annual weeds, it may be 3-7 days before the effects of the treatment become apparent; for perennials, it may be as much as 2-3 weeks or more if cool and cloudy.

Nufarm Glyphosate 450 Herbicide is a non-volatile liquid that mixes readily with water. Just mix with the required volume of water, add a non-ionic wetting agent, and spray.

Rain occurring up to 6 hours after application may reduce effectiveness. Heavy rainfall within 2 hours of application may wash the chemical off the foliage and a repeat treatment may be required. Delay treatment of plants wet with dew or rain, if water droplets runoff when plants are disturbed.

Avoid contact with foliage, green stems or fruit of crops, desirable plants and trees, as severe injury or destruction may result.

A withholding period for stock is not required, however, it is recommended that grazing of treated plants be delayed for one day after treatment of annual weeds, or 7 days if perennial weeds are present to ensure absorption of Nufarm Glyphosate 450 Herbicide.

Certain plants (eg. Soursob, variegated thistle) may be naturally toxic to stock. When known toxic plants are present, **DO NOT** allow stock to graze until complete browning of treated plants has occurred.

### Crop Establishment

This product is recommended for control of emerged weeds prior to crop establishment. Suitable cultivation and/or sowing operations are required to produce the most satisfactory seedbed for crop germination and development, proceed as follows:

- Spray Nufarm Glyphosate 450 Herbicide early when the weeds are young.
- If weeds are few and the soil is friable, you can start seeding as early as one day after spraying.
- If the weed density is high, you should delay sowing until the dead weeds are sufficiently decayed, to ensure that crop emergence is not delayed as a result of dead green or decaying weeds being incorporated by cultivation or sowing. This is particularly important in cold or wet weather. Grazing will help to reduce the weed density, and you can assist weed decay by cultivation to leave trash on the surface.
- If seedbed conditions are marginal, be careful to seed at the correct depth. **DO NOT** use pre-emergent herbicides if their labels indicate that they may delay crop emergence.

### Mixing

NOTE: Reduced results may occur if water containing soil is used, eg. water from ponds and unlined ditches; or if hard water containing calcium salts is used. Nufarm Glyphosate 450 Herbicide is a non-volatile liquid that mixes readily with water. **DO NOT** mix or store or apply this product in galvanised steel, unlined steel containers or spray tanks, since a highly flammable gas mixture may be formed. So use only spray tanks and equipment made of plastic or plastic lined, fibre glass, rubber, aluminium, brass, copper, or stainless steel.

1. Make sure the spray tank is completely free of previous spray residues.
2. Half fill the spray tank with clean water. Where possible avoid using turbid water, or hard water containing calcium salts, as this may reduce weed control.
3. If Nufarm Glyphosate 450 Herbicide is being used alone, go to step 5.
4. If Nufarm Glyphosate 450 Herbicide is being used with insecticides, other herbicides or additives (see Tank Mixtures), add these products now according to their label directions. If ammonium sulphate is required, add Nufarm Liase® first using 2L/100L of spray volume.
5. Add the required volume of Nufarm Glyphosate 450 Herbicide, and mix well. Mechanical agitators may cause excessive foaming and should not be used unless required by any tank mix partners.
6. Add the rest of the water. Near the end, add a non-ionic wetting agent, see below. Make sure the filling hose is submerged to avoid excessive foaming, and on completion remove it immediately to avoid back siphoning into the water supply. Use the tank mix promptly. And certainly within 5 days since a gradual loss of activity will occur.

Spray tanks, pumps, lines and nozzles should be thoroughly rinsed with clean water following application to prevent corrosion.

### Surfactant Addition

Always add a non-ionic surfactant. In fallow spraying situations the addition of Collide® 700 at 250mL/100L minimum plus Liase® at 2L/100L is recommended.

#### Spot spraying (handgun/knapsack)

The use of a non-ionic surfactant may improve weed control where water rates are high or product rate is low. Use the following amounts of non-ionic wetting agent per 100L of spray mix:

- 200mL of BS1000
- 300mL of Agral\* Spray Activator Wetting and Spreading Agent

#### Boom spraying

When spraying annual ryegrass, silver grass (Vulpia) or perennial grasses addition of 200mL of BS1000 per 100L of spray mix may improve control. For boom and high volume spraying of certain perennial and brush/woody weeds such as bracken, gorse, lantana, addition of an organosilicone wetter such as Pulse® Penetrant at 200mL per 100L of spray solution may improve control. **DO NOT** add any other agricultural chemicals, spraying oils or other materials except as directed on the label.

### Application

Nufarm Glyphosate 450 Herbicide is a non-selective translocated herbicide. Direct spray contact or even slight drift may cause severe injury or destruction of any growing crop or other desirable plants including trees. Thoroughly flush your mixing and spray equipment with clean water after use.

### Boom Equipment

Use recommended rates of Nufarm Glyphosate 450 in 25-200L of clean water per hectare. When using Nufarm Glyphosate 450 at 400mL-1.2L/ha spray volumes in the range 25-100L/ha are preferred. Use nozzles that produce a MEDIUM or COARSE spray droplet size category. Environmental conditions including delta T and wind speed, and the size and density of the target weed, should be taken into consideration when selecting nozzles. Boom height must be set to ensure double overlap of nozzle patterns at the top of the weed canopy.

### High Volume Application

(eg. Knapsack/Handgun Equipment)

The dilution rate is given as vol/1L eg: 8mL Nufarm Glyphosate 450 per litre of water. This is equal to 120mL Nufarm Glyphosate 450 per 15L of water or 800mL per 100L of water. Adjust equipment to achieve an even spray pattern. Apply to ensure complete and uniform wetting of all foliage. For handgun equipment, select a nozzle configuration and pressure to ensure good coverage with minimal production of fine droplets so as to reduce likelihood of off-target drift.

### Low Volume Application

(eg. Gas Gun or Splatter Gun)

Apply as an even spray to cover all foliage. Refer to Weeds Controlled for the dilution and volume of mixture to be applied. The dilution is specified as "Low volume mixture, Nufarm Glyphosate 450:Water". For example, a 1:9 mixture equals one part Nufarm Glyphosate 450 plus 9 parts water.

### Wiper Equipment

Wiper Equipment (eg. ropewick, canvas, felt or carpet applicators) may be used to apply Nufarm Glyphosate 450 onto weeds growing in oilseed crops, sugarcane, cotton, seed and pod vegetables, tree and vine crops specified in this label, pasture and non-crop areas. Avoid contact with desirable vegetation. Operate wiper equipment a minimum of 10cm above the crop or pasture. Weeds should be at least 15cm above the crop or pasture at time of application. Speed of travel should be no greater than 8km/h. Best results are achieved at lower speeds and where two applications are made in opposite directions (double pass).

Where weeds are of variable height, or occur in dense infestations or clumps, some plants may not be contacted by the herbicide solution. In these cases repeat treatment may be necessary. Mix only enough herbicide solution for immediate requirements. **DO NOT** store mixed solution for more than a few days. Flush out equipment with water after use. RATE: Mix 1L Nufarm Glyphosate 450 with 2.5L of clean water to prepare a 29% solution. Nufarm Glyphosate 450 may be used according to the above directions for suppression or control of many annual and perennial weeds. See Weeds Controlled tables for specific use recommendations.

### Controlled Droplet Application Equipment (CDA)

Use the following table as a guide for achieving the correct application rates using the Micron 10 Herbi or similar equipment. See Weeds Controlled tables for specific rates and use recommendations. For handheld equipment a walking speed of approximately 1m/sec (4km/h) is recommended.

**DO NOT** add oils to Nufarm Glyphosate 450/water mixture, otherwise difficulty in application and reduced weed control may occur.

CAUTION: CDA equipment produces a fine spray pattern, which is not easily visible. Ensure spray pattern or drift does not contact foliage or any other green tissue of desirable plants, since severe injury or destruction may result.

Rate of Nufarm Glyphosate 450 delivered at 1m/sec	2.4L/ha	4.8L/ha	7.2L/ha
Mix ratio (by volume) Nufarm Glyphosate 450:Water	1:4	2:3	9:8
Quantity by volume to make 1L spray solution Nufarm Glyphosate 450 + Water	200mL+800mL	400mL+600mL	530mL+470mL
Micron Herbi, nozzle	Blue	Blue	Yellow

### Aerial Application

Use aerial spraying only in pasture or fallow before establishing new pasture, field crops or fodder crops, or for pre-harvest application to Sorghum. **DO NOT** apply Nufarm Glyphosate 450 Herbicide by air within intensive cropping areas as the consequences of accidental drift damage are too extreme. **DO NOT** exceed 3.2L of Nufarm Glyphosate 450 Herbicide per hectare. For Micron air equipment, apply in a minimum spray volume of at least 20L/h. Use nozzles that produce a MEDIUM or COARSE spray droplet size category at the target are recommended. Swath width may need to be adjusted to take into account aircraft type, wind conditions, target height and density. Avoid application when relative humidity falls below 35%. In multiple product mixes a minimum water volume of 50L/ha is recommended and local advice should be sought. Correct mixing order is important. On hilly terrain, spraying height may vary. Increase the water volume to 30-80L/ha and use nozzles that produce a COARSE spray droplet size category. At 25°C increase the water volume to at least 30L/ha and nozzles that produce a COARSE spray droplet size category to compensate for evaporation. **DO NOT** spray by air at temperatures above 30°C as excessive evaporation may occur that will reduce weed control. Drift is likely when droplet size is 150 microns or less, when wind speed is near zero or over 8km/hr, the air is hot and dry, or there is a temperature inversion. **DO NOT** spray under these conditions. After each day of spraying, thoroughly wash the aircraft and landing gear with clean water to remove herbicide residues.

### Tank Mixtures – Compatibility

Nufarm Glyphosate 450 Herbicide may be tank-mixed with the following. Read and follow all label directions, restraints, plant-back periods, withholding periods, regional use restriction and safety directions for the tank mix product:

**Herbicides:** Amicide® Advance 700, Associate®, Avadex® Xtra, Kamba® 750, Estercide® Xtra 680, Striker®, Atradex® (**DO NOT** apply the tank mix for control of Barnyard grass or Liverseed grass or for non-crop situations) plus Nufarm Liase®, Simazine (flowable or granular) plus Nufarm Liase®, and TriflurX®.

**Insecticides:** Dimethoate, Chlorpyrifos, Imidan , Le-Mat\*

**Additives:** Nufarm Liase® (Ammonium Sulphate), BS1000® (Non Ionic Wetting Agents), Pulse® Penetrant (Organosilicone Penetrants), and Collide® 700 as specified.

### Tank Mixtures - How to Choose

Use the following list of suggestions to determine the appropriate tank mixtures. **Adhere to manufacturers' instructions in all cases.**

- To improve knockdown and give residual weed control Atradox® can be added. Use with Nufarm Liase® to overcome antagonism.
  - **DO NOT** spray by air. This mixture does not control Barnyard grass.
  - **In fallow or in crop.** a 750 g/kg chlorsulfuron product can be added.
  - **Prior to sowing lupins.** Flowable Simazine can be added. Use with Nufarm Liase® to overcome antagonism.
- To improve control of certain hard-to-kill weeds such as Marshmallow and Paterson's curse and accelerate knockdown symptoms on broadleaf weeds prior to planting cereal, pulse or oilseed crops add Terrad'or® 700WG Herbicide, Nail® 600EC or Terrain® 500WG.
- To improve and accelerate knockdown symptoms prior to planting wheat or barley. Add 75mL of Striker® per hectare.
- To improve control of certain broadleaved weeds. Add Estericide® Xtra 680. Observe any regional restrictions on use.
- To improve control of Sorrel, Subterranean clover, Medics, and White clover. Add Kamba® 750 (dicamba). Observe any regional restrictions on use.
- To improve control of Annual ryegrass, Silver grass, and perennial grasses - Add 200mL of Wetter TX™ per 100L of spray mix. Use only if recommended.
- To compensate for adverse growing conditions such as cool or cloudy weather. Control of annual weeds by Nufarm Glyphosate 450 Herbicide alone may possibly be improved by adding 2L of Nufarm Liase® per 100L of spray mix.
- To improve control on Couch. Add 500mL/100L Collide® 700.