



# CAUTION

KEEP OUT OF REACH OF CHILDREN  
READ SAFETY DIRECTIONS BEFORE OPENING OR USING




Sinochem Australia

## KELPIE® RICO 450 GLY

HERBICIDE

ACTIVE CONSTITUENT: 450 g/L GLYPHOSATE  
present as the isopropylamine salt

### GROUP M HERBICIDE

Water soluble herbicide for non-selective control of many annual and perennial weeds in conservation tillage situations.  
**IMPORTANT: READ THIS LEAFLET BEFORE USE**

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V7.0

## DIRECTIONS FOR USE

### RESTRAINTS:

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.

SITUATION	STATE	WEEDS CONTROLLED	RATE (vol/ha)	CRITICAL COMMENTS
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 only	Barley Grass, Brome Grass, Volunteer Cereals, Wild Oats	400-800 mL pre tillering 800 mL-1.0 L post tillering	Treat only actively growing weeds not under stress from low moisture, frost, cold, disease or waterlogging. If heavy grazing has occurred allow regrowth to 6-8 cm before spraying and use the higher rate.
		Annual Phalaris (Canary Grass), Annual Ryegrass, Silvergrass, Winter Grass	800 mL-1.0 L pre tillering 1.0-1.2 L post tillering	<b>RATE SELECTION</b> Increase to <b>higher rates</b> late in the season or when treating under cold/overcast conditions.
		Calomba Daisy, Capeweed, Doublegee/Spiny Emex	400-800 mL less than 8cm diameter/height 800 mL-1.2 L greater than 8 cm dia/height	<b>FULL DISTURBANCE</b> with a cultivation or sowing with a tyned implement may start one day after treatment (7 days if Dock, Phalaris, Skeleton Weed, Soursob, or Sorrel are present) and should occur within 21 days after treatment. When treating light infestations or seedling annual grasses (pre-tillering) and annual broadleaved weeds (less than 8 cm diameter/height), cultivation or sowing may start 6 hours after treatment and should occur within 21 days.
		Amsinckia, Fumitory, Paterson's Curse, Saffron Thistle, Scotch Thistle, Spear Thistle, Variegated Thistle, Volunteer Lupins, Wild Turnip	800 mL-1.0 L less than 12cm diameter 1.0-1.2 L greater than 12 cm diameter	<b>CROP ESTABLISHMENT</b> Sowing should not proceed until conditions allow the formation of a satisfactory seedbed. See <b>GENERAL INSTRUCTIONS - CROP ESTABLISHMENT</b> for directions.
		Dock (seedling)	800 mL-1.2 L	<b>ANNUAL RYEGRASS, SILVERGRASS AND PERENNIAL GRASSES</b> Addition of Wetter TX 200 mL/100 L spray solution, may improve control. When treating dense infestations of Silvergrass, nozzles designed to give MEDIUM to COARSE spray quality (ASAE S572) and a spray volume of 70 L/ha or more is recommended to improve spray coverage. Good coverage of Silvergrass is critical for control.
			Perennial Phalaris, Skeleton Weed fully emerged rosettes (NSW only), Sorrel, Soursob, Sub. Clover	1.2 L
	TAS only	All the above weeds	1.2-2.4 L	<b>PERENNIAL WEEDS</b> For Perennial phalaris, Soursob, Skeleton weed and Sorrel, KELPIE® RICO 450® GLY HERBICIDE will provide knockdown, seasonal suppression and reduction in treated plant numbers. <b>TASMANIA</b> Use 1.2 L/ha on annual weeds. Increase to 2.4 L/ha where perennial weeds are being treated. To control White clover and improve control of Sorrel and Dock, add 400 mL/ha Kamba® 500. Observe Kamba® 500 label directions and plant-back periods.



SITUATION	STATE	WEEDS CONTROLLED	RATE (vol/ha)	CRITICAL COMMENTS
SOUTHERN AUSTRALIA Prior to establishing a crop or pasture with an implement that gives minimal or no soil disturbance	NSW, VIC, SA, WA only	Barley Grass, Volunteer Cereals, Wild Oats	800 mL-1.2 L	Treat only actively growing weeds not under stress from low moisture, frost, cold, disease or waterlogging. If heavy grazing has occurred allow regrowth to 6-8 cm before spraying and use the higher rate.
		Brome Grass, Canary Grass, Capeweed, Variegated Thistle, Winter Grass	1.0-1.6 L	<b>RATE SELECTION</b> Use the <b>lower</b> rate on young weeds; increase to <b>higher rate</b> 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.
		Annual Ryegrass, Paterson's Curse, Saffron Thistle, Scotch Thistle, Silvergrass, Spear Thistle, Wild Mustard, Wild Radish, Wild Turnip	1.2-1.6 L	<b>AERIAL APPLICATION</b> Use the higher rates. See <b>AERIAL EQUIPMENT</b> . <b>ANNUAL RYEGRASS, SILVERGRASS AND PERENNIAL GRASSES</b> Add Wetter TX, 200 mL/100 L spray solution. When treating dense infestation of Silvergrass, nozzles designed to give MEDIUM to COARSE spray quality (ASAE S572) and a spray volume of 70 L/ha or more is recommended to improve plant spray coverage. Good coverage of Silvergrass is critical for control.
		Erodium, Perennial Phalaris, Plantain, Sorrel, Sub Clover, Yorkshire Fog	1.5-2.0 L	<b>TANK MIXTURES</b> For improved control of Dock, Sorrel, and Sub Clover add 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/COMPATIBILITY</b> for directions. Addition of ammonium sulphate at 2 L/100 L may improve control when treating under adverse environmental conditions.
		Dock, Flatweed	2.0 L	<b>PASTURE OR CROP ESTABLISHMENT</b> DO NOT 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 three 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>GENERAL INSTRUCTIONS – CROP ESTABLISHMENT</b> . <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 fertiliser and insecticides and follow-up management is undertaken as required.
		TAS only	All the above weeds	1.2-2.4 L
	SOUTHERN AUSTRALIA To commence a fallow	NSW, VIC, SA, WA only	Barley Grass, Volunteer Cereals, Wild Oats	800 mL-1.2 L
Annual Ryegrass, Brome Grass, Capeweed, Paterson's Curse, Saffron Thistle, Scotch Thistle, Silvergrass, Spear Thistle, Wild Mustard, Wild Radish, Wild Turnip			1.2-1.6 L	<b>ANNUAL RYEGRASS, SILVERGRASS AND PERENNIAL GRASSES</b> . Addition of Wetter TX at 200 mL/100 L spray solution may improve control. When treating dense infestation of Silvergrass, nozzles designed to give MEDIUM to COARSE spray quality (ASAE S572) and a spray volume of 70 L/ha or more is recommended to improve plant spray coverage. Good coverage of Silvergrass is critical for control.
Bathurst Burr			1.5-2.4 L	<b>BATHURST BURR</b> For mature weeds use the higher rate. <b>HOARY CRESS</b> Treat from late rosette to early flowering.
Hoary Cress, Soursob			1.2 L	<b>SOURSOB</b> Treat at tuber exhaustion. <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 <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.
Couch			1.2-2.4 L	
TAS only		All the above weeds	1.2-2.4 L	<b>TASMANIA</b> Use 1.2 L/ha on annual weeds. Increase to 2.4 L/ha where perennial weeds are being treated. To control White Clover and improve control of Sorrel and Dock, add 400 mL/ha dicamba. Observe dicamba label directions and plant-back periods.
PASTURE TOPPING For annual grass, Capeweed and Calomba Daisy seed-set reduction	WA, SA VIC, TAS NSW only	Barley Grass, Brome Grass, Capeweed, Silvergrass	240-360 mL	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 of treatment. DO NOT apply to clover or medic crops intended for seed or hay.
		Annual Ryegrass Calomba Daisy	360 mL	



SITUATION	STATE	WEEDS CONTROLLED	RATE (vol/ha)	CRITICAL COMMENTS
SEED-HEAD SUPPRESSION OF PERENNIAL GRASSES	VIC, TAS, NSW, WA, SA only	Bentgrass	300-500 mL	<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	2.0 L	<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 tyned implement should follow 10-21 days after spraying. Then follow with a Summer crop, and/or re-seeded pasture or crop the following Autumn.
PASTURE MANIPULATION For suppression or control of pastures species prior to drilling improved pasture, forage species, Soybeans or Leucaena. <b>BAND SPRAYING:</b> May also be applied as a band or strip spray	NSW, VIC, WA only	Carpet Grass, Kikuyu, Paspalum	1.1-4.8 L	<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 coulter/tyne/press wheel assembly of the band seeder. Adjust to spray 0.5 to 1.0 m strips. Ensure minimal disturbance of the pasture. Excessive dust created in the seedling operation may reduce herbicide activity. Pasture seed must be drilled at the appropriate depth and covered by soil. <b>LEUCAENA (QLD ONLY)</b> Apply 2 L/ha through a single taper fan nozzle LFI-80 mounted at the rear of the single row planter providing a 1 m swath. Planting rows to be 4 m apart.
	QLD only	Carpet Grass, Paspalum	1.1-4.8 L	
		Kikuyu	500 mL-4.8 L	
		Barbed Wire Grass, Black Speargrass, Love Grasses, Red Natal Grass, Wire Grasses	2.4 L	
POA TUSSOCK INFESTED PASTURE For reduction of ground cover allowing pasture renovation	NSW, TAS, VIC, QLD only	Most annual weeds and suppression of Poa Tussock	2.4-3.2 L	<b>TIMING</b> Graze heavily, then remove 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 each treatment. Spot treatment will limit re-infestation.
NORTHERN AUSTRALIA In fallows or prior to sowing a crop	QLD, NSW only	Annual Phalaris (Canary Grass), Barley Grass, Volunteer Cereals, Wild Oats	400-800 mL	<b>TREATMENT</b> Treat only actively growing weeds not under stress from low moisture, frost, cold, disease or waterlogging. If heavy grazing has occurred allow regrowth to 6-8 cm before spraying. 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 Deadnettle 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 2,4-D. Use 2,4-D isopropylamine salt for summer fallow weed control. 2,4-D ester should only be tank-mixed in cooler conditions e.g. prior to sowing a Winter crop. <b>CROP ESTABLISHMENT</b> Sowing should not proceed until conditions allow the formation of a satisfactory seed bed. See <b>GENERAL INSTRUCTIONS – 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. DO NOT tank mix with atrazine when spraying Barnyard Grass or Liverseed Grass. <b>AERIAL APPLICATION</b> For instructions on aerial application, under hot conditions, see <b>AERIAL EQUIPMENT</b> . Do not apply by aircraft when temperature is above 30°C.
		Barnyard Grass, Bathurst Burr, Button Grass, Columbus Grass (seedling), Liverseed Grass, Native Millet, Stinkgrass (Lovegrass), Volunteer Sorghum	800 mL-1.6 L	
		Australian Bluebell (QLD only), Cudweed, Fumitory, Mexican Poppy, New Zealand Spinach, Saffron Thistle, Spear Thistle, Spurge, Stinking Goosefoot	800-1.2 L	
		Black (Giant) Pigweed, Boggabri Weed, Caltrop (Yellowvine), Indian Hedge Mustard, Mintweed, Summer Grass	400-800 mL up to 5 true leaves or 3 cm diameter/height 800 mL-1.2 L greater than 5 true leaves or 3 cm diameter/height	
		African Turnip Weed, Deadnettle, Sweet Summer Grass, Variegated Thistle, Volunteer Sunflower	600-800 mL up to 5 true leaves or 3 cm diameter/height 800 mL-1.6L greater than 3 cm diameter/height	
		Annual Ground Cherry (Gooseberry), Bladder Ketmia, Camel Melon, False Castor Oil Plant/ Thomapple, Noogoora Burr, Turnip Weed, Wild Lettuce, Wild Turnip, Wireweed	800 mL-1.2 L prior to stem elongation/budding After stem elongation/budding use 400 mL-1.2 L plus 1.1-1.7 L 475 g/L 2,4-D isopropylamine or 1.2-1.6 L of KELPIE® RICO 450® GLY HERBICIDE alone.	



SITUATION	STATE	WEEDS CONTROLLED	RATE (vol/ha)	CRITICAL COMMENTS
NORTHERN AUSTRALIA In fallows or prior to sowing a crop ( <i>cont.</i> )	QLD, NSW only	Pigweed	<b>800-1.6 L</b> up to 20 cm 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 Metsulfuron Methyl (Ally®). Observe re-cropping intervals.
		Prickly Paddy Melon	<b>770 mL-1.6 L</b> plus 80 mL of Garlon 600	DO NOT add crop oil.
		Sowthistle/Milkthistle	<b>600-800 mL</b> rosettes up to 3 cm diameter <b>800 mL-1.6 L</b> greater than 3 cm diameter	Previously grazed plants may be difficult to control without allowing full recovery.
		Couch	<b>1.2-2.4 L</b>	Use the higher rate for 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.
NORTHERN AUSTRALIA In fallows or prior to sowing a crop.	QLD, NSW only	Johnson Grass	<b>1.6-2.4 L</b>	Use the higher rate on plants approaching seedhead stage. Apply to plants with a minimum of 30 cm new growth. Sequential treatments will be required for long term control.
		Nutgrass	<b>2.4 + 2.4 L</b>	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.  <b>NOTE</b> Follow up treatments should be made as part of a Nutgrass control program.
SORGHUM CONTROL Pre-harvest	QLD, NSW only	Sorghum, Grain Sorghum  DO NOT apply to varieties intended for seed production or varieties prone to lodging	<b>1.2 or 1.6 L</b>	DO NOT apply if crop is under stress from low moisture, frost, cold or waterlogging.  <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 should commence at least 7 days after application provided 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 only	Sorghum Stubble, Grain Sorghum	<b>800—1.2 L</b> for fresh regrowth from slashed stubble <b>1.2—1.6 L</b> for standing stubble if sufficiently green and for fresh Spring regrowth	APPLY UNDER GOOD GROWING CONDITIONS ONLY. DO NOT apply if plants are under stress from low moisture, frost, cold or waterlogging.  <b>SLASHED STUBBLE AND SPRING REGROWTH</b> Apply when fresh regrowth is at least 20 cm high.  <b>STANDING STUBBLE</b> Apply only if sufficient green leaf is present. If grazing has occurred allow regrowth to 20 cm 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 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	<b>4.8—7.2 L</b>	APPLY UNDER GOOD GROWING CONDITIONS ONLY to actively growing rations 60-120 cm tall.  DO NOT apply if plants are under stress from low moisture or waterlogging. Use the lower rate for suppression or where cultivation is to follow. Use higher rate for control.
RICE Direct drilling	NSW only	Annual Ryegrass, Annual Phalaris, Canary Grass, Barley Grass, Burr Medic, Sub Clover, Winter Grass	<b>800 mL—1.0 L</b>	KELPIE® RICO 450® GLY HERBICIDE is less effective on drought-stressed plants. In drought conditions a prewatering prior to spraying is recommended. In grazed situations, if heavy grazing has occurred allow regrowth to 6-8 cm before spraying.  <b>ANNUAL RYEGRASS</b> Add Wetter TX at 200 mL/100 L of spray solutions and where dominant use the higher rate.  <b>SOWING</b> Direct drilling may take place 1-14 days after spraying. KELPIE® RICO 450® GLY HERBICIDE does not provide residual weed control. Permanent water and approved selective herbicides should be used to provide continuing control of weeds.



SITUATION	STATE	WEEDS CONTROLLED	RATE (vol/ha)	CRITICAL COMMENTS
Cotton pre-harvest Do not use on crops intended for seed production	NSW, QLD only	Bathurst Burr, Noogoora Burr, Winter annual weeds including Sowthistle/Milkthistle	1-2 L	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 best results under these conditions, delay application until canopy re-opens following initial conditioning treatment.  Where control of Nutgrass or Noogoora Burr is required treatments should be applied prior the onset of frosts. When tank mixed defoliant, a slightly higher proportion of cotton leaf may be retained, particularly where the higher rate is used. Read and follow all label direction for the tank mix products.
		Nutgrass (seasonal suppression only)	2 L	
Cotton: Shielded sprayers	NSW, QLD only	Refer to <b>Weeds Controlled section Northern Australia:</b> In fallows or prior to sowing a crop		Apply KELPIE® RICO 450® GLY HERBICIDE to weeds growing between crop rows using a shielded sprayer. DO NOT apply in crops less than 20 cm high. DO NOT allow spray or spray drift to contact any part of the cotton plant as severe injury or destruction may result.
TREE AND VINE CROPS 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, Deadnettle, Doublegee, Liverseed Grass, Mintweed, Paterson's Curse, Pigweed, Ryegrass, Silvergrass, Spear Thistle, Thornapple, Wild Mustard, Wild Oats, Wild Turnip, Winter Grass, Variegated Thistle	Boom: 1.6-2.4 L/ha Handgun: 400-600 mL per 100 L Knapsack: 60-80 mL per 15 L	Apply as a directed or shielded spray or using wiper equipment. DO NOT apply as a spray near trees or vines less than 3 years old unless they are effectively shielded from spray and spray drift. DO NOT allow wiper surface to contact any part of the tree, vine or plant.  <b>Citrus fruit, Nuts, Olives, Pome fruit &amp; Vineyards</b> DO NOT 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 3.2 L/ha by shielded boom or directed off-centre nozzle or 0.4 L/100 L by directed hand-gun or knapsack to avoid application to the crop.  <b>All other crops</b> DO NOT allow spray or spray drift to contact any part of the plant including the trunk.  <b>CAUTION</b> 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 15 cm tall.

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

**OTHER USES: NOT REQUIRED WHEN USED AS DIRECTED.**

**WITHHOLDING PERIOD:**

**PRE-HARVEST SORGHUM: DO NOT HARVEST FOR 7 DAYS.**

#### GENERAL INSTRUCTIONS

KELPIE® RICO 450® GLY HERBICIDE is a non-volatile, non-selective, water soluble liquid herbicide with nonselective herbicidal activity. It is absorbed by plant foliage and green stems and moves through the plant from the point of contact to and into the root system. Effects may not be apparent for 3–7 days (annual weeds) or 2-3 weeks (perennial weeds) or longer under cool, cloudy conditions.

KELPIE® RICO 450® GLY HERBICIDE will control emerged weeds only, and provides no residual weed control. Apply treatments to weeds which have at least one true leaf (broadleaf weeds) or two leaves (grasses) to provide an adequate surface area for herbicide uptake.

KELPIE® RICO 450® GLY HERBICIDE may be used prior to sowing any crop (edible or non edible) but not prior to transplanting tomato seedlings.

A withholding period for grazing 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 of perennial weeds are present, to ensure absorption of KELPIE® RICO 450® GLY HERBICIDE. Certain plants (e.g. Soursob, variegated thistle) may be naturally toxic to stock. Where known toxic plants are present, do not allow stock to graze until complete browning of treated plants has occurred.

Weeds should be actively growing at the time of treatment. 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.

Rainfall occurring up to 6 hours after application may reduce effectiveness. Rainfastness or general efficacy may be reduced if weeds are not actively growing, are under stress or conditions of low light intensity/darkness. Heavy rainfall within 2 hours after 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 run off when plants are disturbed. Avoid contact with foliage, green stems or fruit of crops, desirable plants and trees, since severe injury or destruction may result.

#### CROP ESTABLISHMENT

KELPIE® RICO 450® GLY HERBICIDE is recommended for control of emerged weeds prior to crop establishment. Suitable cultivation and/or sowing operations are required to provide seed bed conditions satisfactory for crop germination and development. Spraying early to control young weeds will favour preparation of suitable seed beds. On friable soils and where there is only light cover of young weeds, sowing may proceed satisfactorily from one day after spraying.

In situations of heavy weed growth sowing should be delayed until weed decay and soil conditions allow formation of a satisfactory seed bed. Incorporation of green or decaying vegetation and roots into the seedbed by cultivation or sowing may cause retarded crop emergence, particularly in cold and/or wet conditions. Vegetation may be reduced by grazing and weed decay may be assisted by cultivation to leave trash on the surface. In marginal seedbed conditions take care to achieve correct seeding depth, and avoid use of pre-emergence herbicides where label directions advise of risk of retarded crop emergence.

## MIXING

KELPIE® RICO 450® GLY HERBICIDE mixes readily with water. **NOTE:** Reduced results may occur if water containing soil is used, e.g. Water from ponds and unlined ditches, or if hard water containing calcium salts is used.

DO NOT mix, store or apply this product or spray solutions of this product in galvanised steel or unlined steel containers or spray tanks, since a highly flammable gas mixture may be formed. Use stainless steel, aluminium, brass, copper, fibre glass, plastic or plastic lined containers or spray tanks. Ensure the sprayer is free of any residue of previous spray materials. Use spray solutions promptly and certainly within 5 days since a gradual loss of activity will occur. Fill the spray tank with one half the required amount of clean water and add the proper amount of KELPIE® RICO 450® GLY HERBICIDE. Mix well before adding the remaining portion of water. Add surfactant near the end of the filling process to minimise foaming. Placing the filling hose below the surface of the spray solution will prevent excessive foaming. Removing hose from tank immediately after the filling will prevent back siphoning into water source. Do not use mechanical agitators as these may cause excessive foaming. Spray tanks, pumps, lines and nozzles should be thoroughly rinsed with clean water following application to prevent corrosion.

## TANK MIXTURES/COMPATIBILITY

KELPIE® RICO 450® GLY HERBICIDE may be tank-mixed with the following herbicides, insecticides and additives. Read and follow all label directions, restraints, plant-back periods, withholding periods, regional use restrictions and safety directions for the tank mix products.

## MIXING INSTRUCTIONS FOR ALL TANK MIXTURES

1. Fill the spray tank 1/3 to 1/2 full with clean water and start agitation.
2. Add liquid or crystalline ammonium sulphate where required.
3. Add recommended herbicide/insecticide/additive to the spray tank and mix thoroughly.
4. Add KELPIE® RICO 450® GLY HERBICIDE and the remaining water. Mix thoroughly.
5. Add surfactant, if required, near the end of the filling process to minimise foaming.
6. Always maintain adequate agitation during application and use the tank mix promptly.

## TANK MIXTURES – HERBICIDES

Ally®, Archer®, Associate®, Avadex® Xtra, Atrazine (DO NOT apply this tank mix for control of Barnyard Grass or Liverseed Grass), Comet® 400, 2,4-D Ester, 2,4-D isopropylamine, dicamba, Express®, Flame®, Garlon® 600, Glean®, Goal®, Hammer®, Lusta®, Logran® 750WG, Logran® B Power (ensure fully dispersed prior to addition of KELPIE® RICO 450® GLY HERBICIDE), Lontrel®, LVE Agritone®, MONZA®, Rifle®, Sharpen WG® Simazine, Starane® 200, Stomp®, Striker, and Trifluralin. Not all brands or formulations have been tested. Users should conduct a small scale test before mixing commercial quantities.

Ammonium sulphate may improve the performance of tank mixtures of KELPIE® RICO 450® GLY HERBICIDE and atrazine or simazine. See directions below.

**GOAL® or STRIKER** The addition of Goal® or Striker at 75 mL/ha to recommended rates of KELPIE® RICO 450® GLY HERBICIDE prior to planting Wheat or Barley or prior to planting cotton will improve knockdown and increase the speed at which treated weeds develop visible symptoms of phytotoxicity.

## TANK MIXTURES - INSECTICIDES

KELPIE® RICO 450® GLY HERBICIDE is compatible with the following insecticides: Imidan®, Le-Mat®, Lorsban® 500, chlorpyrifos, Karate®, Sumithion® ULV, Talstar® and emulsifiable concentrates of dimethoate and fenitrothion. Other insecticides have not been tested.

## TANK MIXTURES - ADDITIVES

**Ammonium Sulphate. Only use spray quality formulations of ammonium sulphate.**

**RATE:** 2 L per 100 L spray solution (417 g/L ammonium sulphate liquid).

Ammonium sulphate may be used as an adjuvant to alleviate the adverse effects of high levels of calcium, magnesium and bicarbonate ions in water. The addition of ammonium sulphate to KELPIE® RICO 450® GLY HERBICIDE, when used to control annual weeds, MAY improve the performance of KELPIE® RICO 450® GLY HERBICIDE under adverse environmental conditions such as cool cloudy weather. Ammonium sulphate may also improve the performance of tank mixtures of KELPIE® RICO 450® GLY HERBICIDE and atrazine or simazine. Ammonium sulphate may be corrosive to metal parts of the sprayer. Thoroughly flush tanks, pumps and nozzles with water after use.

Solubility and impurity profiles of some forms of ammonium sulphate can vary and may reduce the performance of KELPIE® RICO 450® GLY HERBICIDE or tank mixtures.

## SURFACTANT ADDITION

**Non-ionic surfactant (1000 g/L)**

**RATE:** 200 mL per 100 L

The addition of a high quality non-ionic surfactant MAY improve weed control. The use of non-ionic surfactants may increase the proportion of FINE or VERY FINE droplets. For more information refer to the "BOOM EQUIPMENT" section on this label.

## Wetter TX Surfactant

**RATE:** 200 mL /100L spray solution. Add when treating Annual Ryegrass, Silvergrass and Perennial Grasses. Wetter TX is NOT a general purpose surfactant and should be used only where recommended.

DO NOT use spray oils, adjuvants or surfactants other than those recommended on this label.

## APPLICATION

KELPIE® RICO 450® GLY 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. Clean all equipment after use by thoroughly washing with water.

## BOOM EQUIPMENT

Application of KELPIE® RICO 450® GLY HERBICIDE in spray volumes of 25-100 L/ha is recommended for broadacre uses and 200 L/ha or less for treeline and vineyard spraying in orchards and vineyards. KELPIE® RICO 450® GLY HERBICIDE performs optimally when it is present at a higher concentration in the spray solution provided sufficient coverage of the target is achieved. Nozzles and pressure settings should be selected to deliver a COARSE to VERY COARSE spray quality (as defined by ASAE S572 Standard) at the target. The use of nozzles and/or pressure settings that produce VERY FINE or FINE spray quality should be avoided as these are prone to loss or drift. Environmental conditions, including delta T, wind speed and direction, and the size and density of the target weeds, should be taken into consideration when selecting nozzles. To minimise off-target drift, apply with the lowest boom height to achieve double overlap of the spray pattern at the top of the target.

## SHIELDED EQUIPMENT

For shielded applications a spray volume of 80 L/sprayed ha is recommended using nozzle types and pressure settings to deliver a COARSE (as defined by ASAE S572 Standard) spray quality at the target. Crop damage may result if spray drift occurs through incorrect nozzle and/or pressure selection, inadequate shielding and/or wind strength, high evaporation rates or excessive ground speed.

**AERIAL EQUIPMENT**

Aerial equipment may be used to apply KELPIE® RICO 450® GLY HERBICIDE only in pasture or fallow situations prior to establishment of field crops, fodder crops, or new pasture, and for pre-harvest application to sorghum crops. DO NOT use in intensive horticultural cropping areas. Use recommended rates of KELPIE® RICO 450® GLY HERBICIDE specified in this label up to a maximum rate of 3.1 L/ha. DO NOT apply treatments by aircraft in situations where drift onto sensitive crops and pastures is likely to occur. Apply treatments using boom or Micronair equipment using a spray volume not less than 20 L/ha and using settings to produce a minimum COARSE spray quality (as defined by ASAE S572 Standard) at the target. In multiple product tank mixes a minimum water volume of 50 L/ha is recommended and local advice should be sought. Correct mixing order is important. Swath width should be set to take into account aircraft type, wind conditions, target height and density. Swath width will need to be reduced to avoid striping under light wind conditions and/or application to tall, dense targets e.g. pre-harvest application, treatments in heavy crop stubble. DO NOT apply KELPIE® RICO 450® GLY HERBICIDE by aircraft in temperatures above 30°C and increase spray output to at least 30 L/ha if temperatures rise above 25°C.

Avoid application when relative humidity falls below 35%. Thoroughly wash aircraft, especially landing gear, after each day of spraying to remove herbicide residues.

**Application on hilly terrain**

Spraying height may vary. Increase water volume to 30 80 L/ha and use nozzles that produce a COARSE to VERY COARSE spray quality (as defined by ASAE S572 Standard) at the target.

**Application under hot conditions**

High temperatures and/or low relative humidity cause excessive evaporation of spray droplets, which may reduce results. When temperature reaches 25°C, increase water volume to at least 30 L/ha, and use nozzles that produce a COARSE to VERY COARSE spray quality at the target (as defined by ASAE S572 Standard). DO NOT apply KELPIE® RICO 450® GLY HERBICIDE by aircraft when temperature is above 30°C.

**RESISTANCE WARNING****GROUP M HERBICIDE**

KELPIE® RICO 450® GLY Herbicide is a member of the Glycines group of herbicides. KELPIE® RICO 450® GLY Herbicide has the inhibition of EPSP synthase mode of action. For weed resistance management KELPIE® RICO 450® GLY Herbicide is a Group M herbicide.

Some naturally occurring weed biotypes resistant to KELPIE® RICO 450® GLY Herbicide and other Group M 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 KELPIE® RICO 450® GLY Herbicide or other Group M Herbicides. Since the occurrence of resistant weeds is difficult to detect prior to use, Sinochem International Australia Pty Ltd accepts no liability for any losses that may result from the failure of KELPIE® RICO 450® GLY Herbicide to control resistant weeds.

**PROTECTION OF CROP, NATIVE AND OTHER NON-TARGET PLANTS**

Avoid contact with foliage, green stems or fruit of crops, desirable plants and trees, since 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.

**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 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 containers in a local authority landfill. If no landfill is available, bury the containers below 500 mm 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.

**For REFILLABLE containers:** Empty contents fully into application equipment. Close all valves and return to point of supply for refill or storage.

**SAFETY DIRECTIONS**

Product will irritate the 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.

**SAFETY DATA SHEET**

For further information refer to the Safety Data Sheet (SDS), which can be obtained from your supplier or from the Sinochem Australia website at: [www.sinochem.com.au](http://www.sinochem.com.au)

**FIRST AID**

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

IN A TRANSPORT EMERGENCY  
**DIAL 000**  
POLICE OR FIRE BRIGADE

FOR SPECIALIST ADVICE  
IN AN EMERGENCY DIAL  
**1800 033 111**  
24 HOURS AUSTRALIA WIDE

**Toxic to aquatic life with long lasting effects.**

**Causes serious eye damage.**

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Refer to the Safety Data Sheet before use.

**LIMITATION OF LIABILITY**

With the express exception of liabilities created by the Competition and Consumer Act 2010 (Cth)(including the Australian Consumer Law) or relevant State legislation which cannot be excluded, restricted or modified, none of Sinochem International Australia Pty Ltd or any of its affiliates ("Sinochem") or any manufacturer of any component of the product shall be liable for any loss or damage (including consequential loss or damage), injury or death connected with, or arising out of, the product, regardless of the way in which it arises (including by way of negligence).

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