



## **DIRECTIONS FOR USE**

## **RESTRAINTS**

DO NOT disturb weeds by cultivation, sowing or grazing for six hours of daylight following treatment of annual weeds and seven days for perennial weeds to ensure herbicide absorption, unless specified otherwise in **CRITICAL COMMENTS**.

## **CONSERVATION TILLAGE**

CROP / SITUATION	WEEDS CONTROLLED	BOOM RATE/HA	CRITICAL COMMENTS
SOUTHERN AUSTRALIA  Prior to sowing a crop or pasture with full soil disturbance by cultivation or sowing with a tyned implement	Barley Grass, Brome Grass Wild Oats, Volunteer Cereals	340—660 mL pre tillering 660—840 mL post tillering	Rate Selection Use higher rates for advanced weed growth or when treating under cold/overcast conditions.  Cultivation or planting may proceed from 1 hour of daylight after application to seedling annual weeds if a satisfactory seedbed can be created for crop germination and seedling establishment.  Silvergrass When treating dense infestations of Silvergrass, add a registered non-ionic surfactant containing 1040 g/L octyl phenol ehoxyl and use water volumes of 70 L/ha or more and small droplets to impro coverage.  Perennial Weeds KELPIE® GLY 540 SL HERBICIDE will provide seasonal control and reduction in plant numbers. Control of Skeleton Weed requires addition of full soil disturbance at planting.  In Tasmania, for perennial weeds use 1—2 L/ha.
	Annual Phalaris, Annual Ryegrass Silvergrass, Winter Grass Colomba Daisy, Capeweed	660—840 mL pre tillering 840 mL —1 L post tillering 340—660 mL less	
	Doublegee/Spiny Emex, Fumitory Volunteer Lupins, Volunteer Peas	than 8 cm diameter/height 660 mL—1 L greater than 8 cm diameter/height	
	Amsinckia Dock (seedling) Paterson's Curse, Saffron Thistle Scotch Thistle, Spear Thistle Variegated Thistle, Wild Turnip	660—840 mL less than 12 cm diameter/height 840 mL—1 L greater than 12 cm diameter/height	
	Perennial Phalaris, Skeleton Weed, Sorrel, Sub Clover	1 L	



CROP / SITUATION	WEEDS CONTROLLED	BOOM RATE/HA	CRITICAL COMMENTS
SOUTHERN AUSTRALIA	Barley Grass, Canary Grass Wild Oats, Volunteer Cereals	660 mL—1 L	Rate Selection Use the lower rate on young weeds; increase to the higher rate where grasses reach full tillering or where broadleaf weeds
To commence a fallow OR Prior to planting a crop or pasture with an implement that gives minimal soil disturbance or prior to surface seeding	Annual Ryegrass, Brome Grass, Capeweed, Hoary Cress, Paterson's Curse, Saffron Thistle, Scotch Thistle, Silvergrass, Soursob, Spear Thistle, Variegated Thistle, Wild Mustard, Wild Radish, Wild Turnip, Winter Grass	1.0—1.3 L	commence stem elongation or budding. Use higher rates in Spring and under cold conditions. In Tasmania use 1—2 L/ha with the higher rate for control of perennial weeds.
			Pasture or Crop Establishment Do not sow into excessive trash.  Excessive plant residues may be removed by grazing after treatment.  Planting may proceed from 1 hour of daylight after application to seedling annual weeds if a satisfactory seedbed can be created for crop germination
	Bentgrass, Bathurst Burr, Couch, Dock, Erodium, Flatweed, Kikuyu, Plantain, Paspalum, Perennial Phalaris, Sorrel, Sub. Clover, Yorkshire Fog	1.25—2 L	and seedling establishment.  Aerial (or Surface) Seeding Delay seeding until trash level is reduced to allow for satisfactory placement of broadcast seed on the soil surface.
of pastures			Bathurst Burr For mature weeds use a higher rate.
			<b>Bentgrass</b> Use a rate of 1.7 L/ha. Apply in late Spring following initiation of seed-head emergence. Follow up with full disturbance with a tyned implement 10—21 days after spraying.
			<b>Couch</b> Use the higher rate on dense infestations. Apply sequential treatments during summer and autumn. Repeat application will be required for full control. For improved control, use in conjunction with cultivation.
			<b>Kikuyu, Paspalum</b> Use the low rate for suppression, the high rate for control.
			Dock, Flatweed Use the maximum rate for full control.
			<b>Hoary cress</b> Use at a rate of 1 L/ha. Treat from late rosette to early flowering.
			<b>Silvergrass</b> When treating dense infestation of Silvergrass, add a registered non-ionic surfactant containing 1040 g/L octyl phenyl ethoxylate and use water volumes of 70 L/ha or more and small droplets to improve coverage.
			Soursob Use at a rate of 1 L/ha. Treat at tuber exhaustion.
	Poa Tussock	2.0—2.7 L	<b>Timing</b> Treat fresh regrowth (at least 14 days after heavy grazing) after Autumn break and before onset of heavy frosts. Sowing may start from 14 days after spraying.
Pasture Topping	Annual Ryegrass	300—680 mL	Remove livestock prior to application to allow even regrowth. Use lower
	Barley Grass, Brome Grass, Capeweed, Silvergrass	200—300 mL	rate if grasses are flowering and higher rate if at the milky dough stage.  Apply to Capeweed and Colomba Daisy at flowering. Do not add a
	Colomba Daisy	300 mL	registered non-ionic surfactant containing 1040 g/L octyl phenol ehoxylate.  Do not apply to Clover or Medic crops intended for seed production.
Seed-Head Suppression	Bentgrass	240—420 mL	Apply treatments late October to late November, before seedheads have emerged. Add Wetter TX Surfactant. Use the higher rate where growth is excessive. Graze hard after spraying.
SOUTHERN AUSTRALIA	Serrated Tussock	2.7—4.0 L	Apply to actively growing and stress free plants. Best results May to October.
NSW, ACT, VIC, TAS only			<b>Application</b> Boom spray volume of 70 L/ha or more is recommended to improve plant coverage. Also see <b>Aerial Equipment</b> .
For control/ suppression prior to establishing crops			<b>Surfactants</b> Addition of 200 mL of a registered non-ionic surfactant containing 1040 g/L octyl phenol ehoxylate to 100 L of spraying solution may improve control of Serrated Tussock.
or improved pasture species			<b>Site Preparation</b> <i>Burning</i> of Serrated Tussock 10-12 months before spraying or <i>slashing / heavy grazing</i> (cell grazing) 2 weeks before spraying is essential for good results. ( <b>Note</b> : Serrated Tussock is almost indigestible and prolonged exposure can lead to starvation and death of stock.)
			Rates Use lower rate on Serrated Tussock regrowth after burning (no residual dead foliage). Use higher rate on Serrated Tussock that has been slashed or grazed (may contain some residual dead foliage).
For prevention of seed head emergence and seed formation	Serrated Tussock	500—840 mL	Apply to actively growing and stress free plants. Best results obtained during mid September – mid October. Apply prior to any seed head emergence. Also see <b>Aerial Equipment</b> .
			<b>Surfactants</b> Addition of 200 mL of a registered non-ionic surfactant containing 1040 g/L octyl phenol ethoxylate to 100 L of spraying solution may improve results
			Rates The lower rates will be less damaging to desirable pasture species. If seed head emergence is imminent, then higher rates will give better results.



CROP / SITUATION	WEEDS CONTROLLED	BOOM RATE/HA	CRITICAL COMMENTS
NORTHERN AUSTRALIA	Paradoxa Grass, Volunteer Cereals, Wild Oats	340—660 mL	Rate Selection Use the lower rates on young weeds and increase to the higher rate where weeds are dense or well developed. Dense infestations
In fallow or prior to planting a crop.	African Turnip Weed, Black Pigweed, Boggabri Weed, Caltrop (Yellow Vine),	500—660 mL up to 5 true leaves or	of some weeds e.g. Barnyard Grass, Liverseed (Urochloa) Grass may need follow up treatments for complete control.
Cotton: Shielded Sprayers	Deadnettle, Mintweed, Milk (Sow) Thistle, Stinkgrass (Lovegrass), Sweet Summer Grass, Variegated Thistle, Volunteer Sorghum	3 cm in diameter/ height 660 mL—1.35 L greater than 5 true leaves or 3 cm in diameter/height	<b>Tank mixtures</b> Read and follow all label directions, restraints, plant-back and withholding periods, regional use restrictions and safety directions for the tank mix products. Tank mixes with atrazine may give unacceptable knockdown control of certain weeds. Do not apply the tank-mix for control of Barnyard Grass, Liverseed Grass or Milk Thistle. Ammonium sulphate may enhance knockdown weed control where tank mixtures of atrazine
	Annual Ground Cherry, Barnyard Grass, Bathurst Burr, Bladder Ketmia, Button Grass, Camel (Afgan) Melon, Caustic Weed, Columbus Grass, Liverseed Grass, Mexican Poppy, Native Millet, New Zealand Spinach, Noogoora Burr, Pigweed (up to 25 cm diameter), Spear Thistle, Stinking Goosefoot, Thornapple (Datura), Turnip Weed, Wild/Prickly Lettuce, Wireweed	660—1.35 L	are used.  Shielded Sprayers Apply KELPIE® GLY 540 SL HERBICIDE to weeds growing between crop rows using a shielded sprayer. Do not apply in Cotton less than 20 cm high. Do not allow spray or spray drift to contact any part of the cotton plant as severe injury may result.  Pasture or crop establishment Do not sow into excessive trash. Excessive plant residues may be removed by grazing after treatment. Planting may proceed from 1 hour of sunlight after application to seedling annual weeds if a satisfactory seedbed can be created for crop germination and seedling establishment.
	Prickly Paddy Melon	<b>640 mL—1.3 L</b> plus <b>80 mL</b> Garlon® 600/ Invader®	DO NOT add crop oil.
	Climbing Buckwheat (less than 12 leaves), Couch, Johnson Grass	1.3—2 L	Use the higher rate on plants at the flowering/seedhead stage. For Johnson Grass apply to plants with a minimum of 30 cm new growth. For long term control of Couch and Johnson Grass, repeat applications will be required.
	Nutgrass	2 L followed by 2 L	Make first application to actively growing plants when the majority of plants have reached at least the 6-8 leaf stage but preferably later. Allow for maximum re-emergence before retreating.
Sugar Cane: Inter-Row Spraying	Annual and Perennial Grasses and Broadleaf Weeds	1.2—5 L	Apply to weeds growing between crop rows using a ground based hooded and shielded sprayer. Apply at early growth stage of crop, before formation of the cane. Apply no more than 3 applications, to a maximum of 12 L/ha per crop. Do not allow spray or spray drift to contact any part of the crop as severe injury may result.
SUGAR CANE Ratoon spray out Qld, NSW only	Sugar Cane Ratoon regrowth	4—6 L	Apply under good growing conditions to actively growing ratoons 60-120 cm tall. Do not apply if plants are under stress from low moisture or water logging. Use the lower rate for suppression or where cultivation is to follow. <b>Use higher rate for control.</b>
Sorghum Control	Grain Sorghum (pre-harvest)	1—1.35 L	DO NOT apply if crop is under stress from low moisture, frost, cold or waterlogging. Apply when grain moisture is less than 25%. Use the higher rate where the crop has produced significant number of late tillers or where following crops will be established without further treatment. Do not apply to crops intended for seed production. Treatment may increase potential for crop lodging.
	Grain Sorghum (post-harvest)	660 mL—1.35 L	Slashed/grazed stubble. Apply when fresh regrowth is at least 20 cm high. Use the higher rate on standing stubble or where regrowth from slashed sorghum has advanced beyond 50 cm in height.
Cotton pre-harvest	Bathurst Burr, Noogoora Burr, Winter Annual Weeds	840 mL—1.7 L	Treatments may be applied alone or in tank mix with Dropp® or Harvade. Apply when at least 60% of bolls are open. When tank mixed with defoliants, a slightly higher proportion of cotton leaf may be retained particularly where higher rates are used and conditions are unfavourable for defoliation.
PRE-HARVEST APPLICATION	Annual Ryegrass	320—680 mL	Use lower rate if Ryegrass is flowering and higher rate if Ryegrass is at milky dough stage.
to reduce viable seed set of weeds in:			Application should be made at or after crop maturity. Application before this time may significantly reduce yields (in practice losses in excess of 25% can occur).
Field Peas, Faba Beans			Apply when the average seed moisture content is below 30%. For Faba Beans, this is indicated by the pods going black, and for Field Peas by the pods going yellow.
			Do not harvest within 7 days after application. Do not use on crops intended for seed or sprouting.
PRE-HARVEST APPLICATION as harvest aid and weed control:	Annual Weeds	900 mL—1.8 L	Apply to mature crop from late dough stage (28% moisture) onwards. The higher rate will be required when crops are heavy and leaf shading effects may occur.
Wheat			Do not harvest within 7 days after application. Do not use on crops intended for seed or sprouting.
			Where wheat is grown in rotation with any herbicide tolerant crops, management should be consistent with implementation of any management plan for herbicide tolerant crops.



CROP /	WEEDS CONTROLLED	BOOM RATE/HA	CRITICAL COMMENTS
SITUATION			
PRE-HARVEST		680 mL—1.8 L	Apply with boom or by air. Use higher rates where crops or weeds are dense and where faster desiccation is required.
APPLICATION			
To desiccate a crop as a harvest aid			Application should be made at or after crop maturity:
and weed control.			<b>Chickpeas and Lentils</b> – apply when physiologically mature and less than 15% green pods.
Adzuki Beans			
Chickpeas			Soybean – apply only after seed pods have lost all green colour and 8 90% of leaves have dropped.
Cowpea			Mungbeans / Adzuki and Cowpea – apply to mature crops when pods
Faba Beans			are brown/black.
Field Peas			
Lentils		Field peas - apply when seeds turn yellow and average seed moisture	
Mungbeans			content is below 30%.
Soybean			<b>Faba Beans</b> – apply when pods turn black and average seed moisture content is below 30%.
(Application to			
crops intended for			Do not harvest within 7 days of application. Speed of crop
seed production or		desiccation is dependent on crop stage, growing conditions and	
for sprouting may			weather conditions during and after application.
reduce germination			
percentage to			
commercially			
unacceptable levels.)			

SITUATION	CRITICAL COMMENTS		
	READ APPLICATION CHECKLIST BEFORE USING.		
	See Annual, Perennial and Woody Weeds section below for most appropriate rate.		
GENERAL WEED CONTROL	For the control of many grasses and broadleaf weeds.		
FOR GENERAL WEED CONTROL IN DOMESTIC AREAS (HOME GARDENS), COMMERCIAL, INDUSTRIAL AND PUBLIC SERVICE AREAS,	RATE: 7 mL per litre of water.		
AGRICULTURAL BUILDINGS AND OTHER FARM SITUATIONS. FOR SPECIFIC WEEDS REFER TO	Apply when weeds are actively growing.		
THE APPROPRIATE WEEDS CONTROLLED TABLE.	Apply to ensure complete and uniform wetting of foliage.		
	Visible symptoms may take from 3 to 7 days to develop.		
AGRICULTURAL AREAS	KELPIE® GLY 540 SL HERBICIDE may be used for control of Annual, Perennial and Woody 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 ONLY	DO NOT apply to weeds growing in or over water. DO NOT spray across open bodies of water, and DO NOT allow spray to enter the water. DO NOT allow water to return to dry channels and drains within 4 days of application.		
FORESTS	KELPIE® GLY 540 SL HERBICIDE 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. DO NOT allow wiper surface to contact any part of the tree. DO NOT allow spray or spray drift to contact foliage or green bark of desirable trees, since severe injury may result.		
NON-AGRICULTURAL AREAS AROUND BUILDINGS, COMMERCIAL AND INDUSTRIAL AREAS, DOMESTIC AND PUBLIC SERVICE AREAS, RIGHT-OF-WAYS.	KELPIE® GLY 540 SL HERBICIDE does not provide residual weed control. For residual control, KELPIE® GLY 540 SL HERBICIDE may be tank mixed with certain residual herbicides. See <b>Tank Mixtures/Compatibility.</b>		
TREE AND VINE CROPS AVOCADO, BANANA, BLUEBERRIES, CITRUS	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		
FRUITS, CUSTARD APPLES, DUBOISIA,	contact any part of the tree, vine or palm.		
FIGS-DESSERT, GUAVA, HOPS, KIWIFRUIT, LITCHI, MANGO, MONSTERA-FRUIT, NUTS	Citrus fruit, Nuts, Olives, Pome fruit & Vineyards DO NOT allow spray or spray drift to contact green bark or stems, canes, laterals, suckers, fresh wounds foliage or fruit.		
(INCLUDING ALMOND, PECAN, MACADAMIA,	Hops Apply in Winter, prior to crop emerging from dormancy.		
PISTACHIO AND WALNUT), OLIVES, PAWPAW, PERSIMMONS, POME FRUIT, RASPBERRIES,	<b>Tea</b> Apply a maximum of 2.7 L/ha by shielded boom or directed off-centre nozzle or 340 mL/100L by directed hand-gun or knapsack to avoid application to the crop.		
STONE FRUIT, TEA, VINEYARDS.	All other crops DO NOT 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.		



WEEDS CONTROLLED	RATE	CRITICAL COMMENTS
ANNUAL WEEDS	Boom:	Apply to weeds whenever they are not subject to stress due to drought or frost.  Use higher rate on weeds over 15 cm in height or diameter or where dense weed
Amaranth, Bathurst Burr, Barley Grass, Brome Grass, Barnyard Grass, Caltrop, Canary Grass, Capeweed, Chickweed, Cobblers Peg, Deadnettle, Doublegee, Fumitory, Ground Cherry, Hedge Mustard,	1.35–2 L/ha <b>Handgun:</b> 330–480 mL per 100 L	cover limits spray coverage. Use higher spot spraying rate when applying less than 5L spray per 100 sqm.
		KELPIE® GLY 540 SL HERBICIDE does not provide residual weed control.  Repeat treatments may be necessary to control later germinating weeds.
Lesser Swinecress, Liverseed Grass, Mintweed, Noogoora Burr, Paradoxa Grass, Paterson's Curse, Pigweed, Potato Weed, Ryegrass, Saffron Thistle, Silvergrass, Sow Thistle, Spear Thistle, Spiny Burrgrass, Spurge, Sub Clover, Thornapple, Wild Mustard, Wild Oats, Wild Turnip, Winter Grass, Variegated Thistle, Volunteer Cereals.	Knapsack: 50-70 mL per 15 L	For residual control of annual weeds, KELPIE® GLY 540 SL HERBICIDE may be tank-mixed with certain residual herbicides. See <b>Tank Mixtures</b> in the <b>General Instructions</b> for directions. Do not use an atrazine tank-mix for control of Barnyard Grass or Liverseed Grass.
PERENNIAL WEEDS Artichoke thistle, African Lovegrass, Bent Grass,	Handgun: 470–660 mL per 100 L	Control of established perennials is best obtained when plants are at the seedhead stage.
Carpet Grass, Cocksfoot, Flatweed, Johnson Grass, Kangaroo Grass, Kikuyu,		In general best control of Winter growing perennials is obtained with application during winter-spring.
Nutgrass ( <i>Cyperus rotundus</i> ), Paspalum, Phalaris, Plantains, Poa Tussock, Prairie Grass, Qld Blue Grass, Red-leg Grass, Rhodes Grass,		Best control of summer growing perennials is obtained with application late summer and autumn.
Rope Twitch, Sorrel, Soursob, Yorkshire Fog.		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,	Boom:	For Bracken add Pulse® Penetrant at 200 mL/100 L spray mix.
Guinea Grass, *Paragrass, Silverleaf Nightshade, *Water Couch	6 L/ha Handgun:	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.
*Use on Dry Drains and Channels ONLY (See Use Situations critical comments above).	870 mL or 1.35 L per 100 L <b>Knapsack:</b> 130 or 200 mL per 15 L	In cultivated situations, use sequential treatments of 1.9–4.3 L/ha for control. Only use higher rate for handgun and knapsack for Silverleaf Nightshade.
WOODY WEEDS Bamboo, Bitou Bush, Boneseed, Boxthorn,	Handgun: 330—660 mL	Apply to actively growing plants. Do not apply to drought stressed plants. Further treatment may be necessary to restrict seedling re-establishment.
Crofton Weed, Gorse, Groundsel Bush, Lantana, Mistflower	per 100 L	Bamboo: Apply when foliage/regrowth is 1-2 m tall, use higher rate only.
cantana, Mistilowei	Knapsack: 50—100 mL per 15 L	<b>Bitou bush/Boneseed</b> : Apply higher rate on bushes greater than 1.5 m. Best results are achieved when treated at peak flower during Winter.
	30—100 III. pci 13 L	Boxthorn: Minimum rate is 470 mL for handgun and 70 mL for knapsack.
		<b>Groundsel Bush</b> : Apply higher rate on bushes greater than 2 m. Do not apply in Winter. Minimum rate is 470 mL for handgun and 70 mL for knapsack.
		Gorse, always at Pulse® Penetrant at 200 mL/100 L of spray mix, use higher rate only.
		Lantana: use higher rate only. Addition of Pulse® Penetrant (200 mL/100 L) 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.
Blackberry, Chinese Scrub, Eucalyptus spp. (seedlings less than 2 m), Hawthorn Bush, Pampas Grass, Sifton Bush, Sweet Briar,	660 mL – 870 mL per 100 L <b>Knapsack:</b> 100–140 mL per 15 L	Apply to actively growing plants. Removal of bushes (after complete brownout), pasture improvement or further treatment are recommended to control seedlings and/or regrowth.
Willow (less than 2 m)		<b>Blackberry:</b> Apply from flowering to leaf fall, use higher rate on old dense infestations greater than 2 m high. In Tasmania, do not treat bushes bearing mature fruit.
		Chinese Scrub: Use higher rates on bushes greater than 1 m.
		Eucalyptus spp: Add Pulse® Penetrant at 200 mL/100 L of spray mix.
		<b>Hawthorn:</b> Apply from flowering to leaf fall, use higher rates on bushes greater than 2 m.
		<b>Pampas Grass:</b> Allow regrowth to reach 1 m, best results – apply after flowering.
		Sifton Bush: Use higher rates on bushes greater than 1 m.
		<b>Sweet Briar:</b> Apply from late flowering to leaf fall, use 1–1.35 L/100 L and 150–200 mL/15 L; use higher rates on bushes greater than 1.5 m.

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



## **GENERAL INSTRUCTIONS**

## **Crop Establishment**

KELPIE® GLY 540 SL HERBICIDE is recommended for control of emerged weeds prior to crop establishment. Cultivation and/or planting operations which provide conditions suitable for crop emergence and establishment are required following herbicide application. Where heavy weed growth is present or soil conditions are unsuitable, planting should be delayed to allow for decay of weeds and/or development of more favourable soil conditions for the formation of a suitable seedbed. Incorporation of green or decaying vegetation may retard crop emergence under cold, wet conditions. Vegetation may be reduced by grazing and weed decay may be assisted by cultivation to leave trash on the surface.

#### Mixino

KELPIE® GLY 540 SL HERBICIDE mixes readily with water. Reduced results may occur if water is used containing suspended clay or organic matter e.g. from dams, streams or irrigation channels, or high levels of calcium, magnesium or bicarbonate ions.

Do not mix, store or apply 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, fibreglass, plastic or plastic lined containers or spray tanks. Spray tanks, pumps, lines and nozzles should be thoroughly rinsed with clean water following application. Ensure that the sprayer is free of any residues of previous spray materials prior to mixing. Use spray solutions promptly as a gradual loss of activity may occur over a period of days following spray preparation.

## **Mixing Instructions**

- 1. Fill the spray tank 1/3 to 1/2 full with clean water and start agitation.
- Where ammonium sulphate is recommended, add Liase Liquid Herbicide Adjuvant at 2 L/100 L spray solution and mix thoroughly.
- 3. Add recommended herbicide/insecticide/additive to the spray tank and mix thoroughly.
- 4. Add KELPIE® GLY 540 SL 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.

Clean all equipment after use by washing thoroughly with water.

## **Application**

**Boom Equipment:** For boom application, a spray volume of 80 L/ha or less is recommended for optimum performance. Nozzles and pressure settings should be selected to deliver a MEDIUM or MEDIUM-COARSE size droplet at the target (as defined by ASAE S572). The use of nozzles and/or pressure settings that produce VERY FINE or FINE droplets should be avoided as these are prone to loss or drift. 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 as is good in-tank agitation when application is occurring.

For shielded applications a spray volume of 80 L/sprayed ha is recommended using nozzle types and pressure settings to deliver a COARSE (ASAE) size droplet 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.

Wiper Equipment: Wiper equipment (e.g. Ropewick, canvas, felt or carpet applicators) may be used to apply KELPIE® GLY 540 SL HERBICIDE. Avoid contact with desirable vegetation. Operate wiper equipment a minimum of 10 cm above the crop or pasture. Weeds should be at least 15 cm above the crop or pasture at time of application. Speed of travel should be no greater than 8 km/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. RATE: Mix 700 mL KELPIE® GLY 540 SL HERBICIDE with 2.3 litres clean water. Adjust flow rate to suit equipment.

**Aerial Equipment:** KELPIE® GLY 540 SL HERBICIDE may be applied by aircraft for control of weeds in forests, cropland or pasture prior to establishment of crops, new pastures or new forest plantings and for pre-harvest applications to sorghum and cotton crops up to a maximum rate of 2.7 L/ha where specified by this label. 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 MEDIUM droplet size of 250-350 microns. Swath width should be set to take into account aircraft type, wind conditions and target height. Swath width will need to be reduced to avoid stripping under light wind conditions and/or application to tall, dense targets, e.g. pre-harvest application, treatments in heavy crop stubble. Thoroughly wash aircraft, especially landing gear, after each day of spraying to remove herbicide residues.

## Application on hilly terrain

Increase water volume to 30-80 L/ha and increase droplet diameter of output to at least 300 microns to optimise deposition of spray output onto weeds.

# Air temperature and relative humidity

DO NOT apply KELPIE® GLY 540 SL HERBICIDE by aircraft at temperatures above 30 degrees Celsius. Increase water volume output to at least 30 L/ha when temperatures rise above 25 degrees Celsius. Avoid application when relative humidity falls below 35%.

# **AVOID DRIFT**

DO NOT apply treatments with spraying equipment or under weather conditions which are likely to cause spray drift onto nearby susceptible crops, pastures or other sensitive plants. DO NOT apply treatments under very light winds (less than 4 km/h) or inversion conditions or where wind speeds exceed 12 km/h.

# Application checklist

- Do not treat weeds under poor growing conditions due to moisture stress, waterlogging, severe frosting, insect damage etc. Reduced performance may also occur where weeds are covered with dust or silt.
- Do not add surfactants, adjuvants or other pesticides except as specifically directed on this label.
- Rain within 1 hour of application which causes run-off may require re-treatment. Rainfastness is reduced if weeds are not actively growing, under stress
  or conditions of low light intensity/darkness. The addition of a registered non-ionic surfactant containing 1040 g/L octyl phenol ethoxylate may improve
  rainfastness on winter annual weeds.
- A withholding period for grazing is not required. However, it is recommended that grazing of treated plants be delayed to ensure herbicide uptake. Certain
  plants such as Soursob, Variegated Thistle, Sorghum and Johnson Grass may be naturally toxic to stock when eaten in large quantities under certain
  conditions. Where plants are known to be toxic, grazing should be delayed until complete browning of treated plants has occurred.
- 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.
- If heavy grazing has occurred, allow regrowth to 6-8 cm before spraying and use the higher rates recommended.



### **RESISTANT WEEDS WARNING**

# GROUP MHERBICIDE

KELPIE® GLY 540 SL HERBICIDE is a member of the Glycines group of herbicides. KELPIE® GLY 540 SL HERBICIDE has the inhibition of EPSP synthase mode of action. For weed resistance management, KELPIE® GLY 540 SL HERBICIDE is a Group M herbicide.

Some naturally occurring weed biotypes resistant to KELPIE® GLY 540 SL 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® GLY 540 SL HERBICIDE or other Group M herbicides.

Since the occurrence of resistant weeds is difficult to detect prior to use, Sinochem International Australia accepts no liability for any losses that may result from the failure of this product to control resistant weeds.

#### COMPATIBILITY

KELPIE® GLY 540 SL HERBICIDE may be tank-mixed with the following herbicides, insecticides and adjuvants. Read and follow all label direction, restraints, plantback and withholding periods, and safety directions for the tank-mix products. In multiple product tank mixes, a minimum of water volume of 50 L/ha is recommended and local advice should be sought. Correct mixing order is important as is good in-tank agitation when application/spraying is occurring.

#### Tank Mixtures - Herbicides

2,4-D ester, 2,4-D IPA, atrazine flowable or granular, carfentrazone, chlorsulfuron, dicamba, imazapic, LVE MCPA, metsulfuron-methyl, oryzalin, trifluralin, oxyfluorfen, pendimethalin, simazine flowable or granular, sulfometuron methyl, triasulfuron, tri-allate, triclopyr, tribenuron.

The addition of oxyfluorfen at 75 mL /ha to recommended rates of KELPIE® GLY 540 SL HERBICIDE prior to planting winter cereals will improve the knockdown of certain weeds.

## Tank Mixtures - Insecticides

This product is compatible with the following insecticides: Imidan® Insecticide, Le-Mat® 290 SL Insecticide, Lorsban® 500 EC Insecticide 500, Karate® Zeon Insecticide, Sumithion® ULV Premium Grade Insecticide, Talstar® 250 EC Insecticide and emulsifiable concentrates of dimethoate and fenitrothion. Other insecticides have not been tested.

## Adjuvants - 1040 g/L octyl phenol ethyoxylate non-ionic surfactant

A registered non-ionic surfactant containing 1040 g/L octyl phenol ethoxylate is recommended for the control of Silver Grass and Annual Ryegrass in later winter and spring. A registered non-ionic surfactant containing 1040 g/L octyl phenol ethoxylate is not a general purpose surfactant and should only be used where recommended.

Rate: 200 mL/100 L spray solution.

## Adjuvants - Pulse® Penetrant

Pulse® Penetrant is recommended for the control of Bracken and many woody weeds. Rate: 200 mL/100 L spray solution.

## Adjuvants - Liase Liquid Herbicide Adjuvant (Ammonium Sulphate)

Liase Liquid Herbicide Adjuvant may be used as an adjuvant to alleviate the adverse effects of high levels of calcium, magnesium and bicarbonate ions in water. Add Liase Liquid Herbicide Adjuvant to water first at 2 L/100 L spray solution.

## PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS

Avoid contact with foliage, green bark or stems, canes, laterals, suckers, fresh wounds, exposed non-woody roots, flowers or fruit of crops, desirable plants and trees, since severe injury or destruction may result.

DO NOT apply under weather conditions, or from spray equipment, that may cause spray to drift onto nearby susceptible plants/crops, cropping lands or pastures.

# PROTECTION OF WILDLIFE, FISH, CRUSTACEANS 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 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.

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

# SAFETY DIRECTIONS

Will irritate the eyes. May irritate the nose and throat. Repeated exposure may cause allergic disorders. Avoid contact with eyes and skin. When opening the container, preparing spray and using the prepared spray, wear cotton overalls buttoned to the neck and wrist or equivalent clothing, elbow-length PVC or nitrile gloves and face shield or goggles. If product in eyes, wash it out immediately with water. Wash hands after use. After each days use, wash gloves, face shield or goggles and contaminated clothing.

IN A TRANSPORT EMERGENCY

DIAL 000

POLICE OR FIRE BRIGADE

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

## **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

## **FIRST AID**

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

Phone Australia 13 11 26.

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

Very toxic to aquatic life with long lasting effects. Avoid release to the environment. Collect spillage.

Harmful if swallowed. Do not eat, drink or smoke when using this product. IF SWALLOWED: Rinse mouth. If exposed or concerned: Get medical advice. Suspected of causing cancer. May cause damage to organs through prolonged or repeated exposure.

Store locked up.

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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