



Company Name: SINOCHEM INTERNATIONAL AUSTRALIA PTY LTD
Product Name: KELPIE GLY 680 DRY HERBICIDE
APVMA Approval No: 81926/104440

Label Name:	KELPIE GLY 680 DRY 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:	ACTIVE CONSTITUENT: 680 g/kg GLYPHOSATE (present as the mono-ammonium salt)
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Mode of Action:	<table border="1"><tr><td>GROUP</td><td>M</td><td>HERBICIDE</td></tr></table>	GROUP	M	HERBICIDE
GROUP	M	HERBICIDE		

Statement of Claims:	Non-selective herbicide for the control of many annual and perennial weeds as per the Directions for Use.
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Net Contents:	15 KG
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Restraints:	<p>RESTRAINTS: DO NOT treat weeds under poor or dormant growing conditions (such as those which can occur in drought, waterlogging, disease, insect damage or following frosts) as reduced weed control may result. Reduced efficacy can also occur when treating weeds heavily covered with dust or silt.</p> <p>RESTRAINTS - CONSERVATION TILLAGE: To ensure herbicide absorption, DO NOT disturb weeds by cultivation, sowing or grazing for one (1) day after treatment of annual weeds and seven (7) days for perennial weeds except where noted.</p>
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Directions for Use:	This section contains file attachment. File Name: 160719_Directions for Use Table_v2.0.docx File Size: 32209 bytes
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Other Limitations:	
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Withholding Periods:	<p>WITHHOLDING PERIODS (WHP): WHEAT AND LEGUMES: DO NOT HARVEST FOR 7 DAYS AFTER APPLICATION. ALL OTHER USES: NOT REQUIRED WHEN USED AS DIRECTED.</p> <p>A withholding period for grazing stock is not required. However, it is recommended that grazing of treated plants be delayed (as recommended above) to ensure herbicide absorption. Certain plants such as Soursob, St John's Wort and Bracken, may be naturally toxic to stock. Where known toxic plants are present, grazing should be delayed until complete browning of treated plants has occurred.</p>
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Trade Advice:	
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General Instructions:	<p>This section contains file attachment. File Name: 160719_General Instructions_v2.0.docx File Size: 18952 bytes</p>
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Resistance Warning:	<p>KELPIE GLY 680 DRY HERBICIDE is a member of the Glycines group of herbicides. KELPIE GLY 680 DRY HERBICIDE has the inhibition of EPSP synthase mode of action. For weed resistance management, KELPIE GLY 680 DRY HERBICIDE is a Group M herbicide.</p> <p>Some naturally occurring weed biotypes resistant to KELPIE GLY 680 DRY 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 680 DRY HERBICIDE or other Group M herbicides.</p> <p>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.</p>
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Precautions:	
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Protections:	<p>PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS</p> <p>Avoid contact with foliage, green bark or stems or fruit of crops, desirable plants and tress, since severe injury or destruction may result.</p> <p>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>PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT</p> <p>DO NOT contaminate streams, rivers or watercourses with the chemical or used containers.</p> <p>DO NOT apply to weeds growing in or over water.</p> <p>DO NOT spray across open bodies of water.</p>
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Storage and Disposal:	<p>Store in the closed, original container in a cool, well-ventilated area. Do not store for prolonged periods in direct sunlight.</p> <p>Single-rinse or shake remainder into spray tank. Do not dispose of undiluted chemicals on site.</p> <p>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.</p> <p>Do not burn empty containers or product.</p>
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Safety Directions:	<p>Harmful if swallowed. 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 days use, wash gloves and face shield or goggles and contaminated clothing.</p>
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First Aid Instructions:	<p>If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 13 11 26.</p>
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First Aid Warnings:	
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DIRECTIONS FOR USE

GENERAL USE SITUATIONS – ALL STATES (EXCEPT WHERE NOTED)

SITUATION	CRITICAL COMMENTS (Read Application Checklist before using)
<p>GENERAL WEED CONTROL in Domestic Areas (Home Gardens), Commercial, Industrial and Public Service Areas, Agricultural Buildings and other farm situations.</p> <p>For specific weeds refer to the appropriate WEEDS CONTROLLED table.</p>	<ul style="list-style-type: none"> • For the control of many grasses and broadleaf weeds. RATE: 5 g/L of water • Apply when weeds are actively growing • Apply to ensure complete and uniform wetting of foliage • Visible symptoms may take from 3-7 days to develop
<p>NON-AGRICULTURAL AREAS Around buildings, Commercial and Industrial Areas, Domestic and Public Service Areas, Right-of-Ways</p>	<p>KELPIE® GLY 680 DRY HERBICIDE does not provide residual weed control. For residual control of annual weeds, KELPIE® GLY 680 DRY HERBICIDE may be tank-mixed with certain residual herbicides. See TANK MIXTURES/HERBICIDES.</p>
<p>AGRICULTURAL AREAS</p>	<p>KELPIE® GLY 680 DRY HERBICIDE 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.</p>
<p>DRY DRAINS AND CHANNELS, DRY MARGIN OF DAMS, LAKES AND STREAM SITUATION</p>	<p>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.</p>
<p>FORESTS</p>	<p>KELPIE® GLY 680 DRY 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. DO NOT allow spray or spray drift to contact foliage or green bark of desirable trees, since severe injury may result.</p>
<p>COTTON Shielded sprayers Qld and NSW only</p>	<p>SHIELDED SPRAYERS: Apply KELPIE® GLY 680 DRY HERBICIDE to weeds growing between crop rows using a shielded sprayer. Refer to the WEEDS CONTROLLED tables for rates of application. 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.</p>
<p>TREE AND VINE CROPS Avocado, Banana, Blueberries, Citrus Fruit, Custard Apples, Duboisia, Figs – Dessert, Guava, Kiwifruit, Litchi, Mango, Monstera – Fruit, Nuts (including Almond, Pecan, Macadamia, Pistachio and Walnut), Olives, Pawpaw, Persimmons, Pome Fruit, Raspberries, Stone Fruit, Tea, Vineyards</p>	<p>Apply as a directed spray or shielded spray. 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. Citrus Fruit, Nuts, Olives, Pome Fruit and Vineyards DO NOT allow spray or spray drift to contact green bark or stems, canes, laterals, suckers, fresh wounds, foliage or fruit. Tea Apply a maximum of 2 kg/ha by shielded boom or directed off-centre nozzle or 3 g/L by directed handgun or knapsack to avoid application to the crop. 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. For residual control of annual weeds, KELPIE® GLY 680 DRY HERBICIDE may be tank-mixed with compatible herbicides which are labelled for use in the above crops. See TANK MIXTURES/HERBICIDES for directions.</p>
<p>PASTURE</p>	<p>DIRECTED (SPOT) APPLICATION: KELPIE® GLY 680 DRY HERBICIDE is non-selective and may damage or kill any plant in the sprayed area. Re-treatment and/or pasture improvement may be necessary to restrict seedling re-establishment. BOOM APPLICATION: KELPIE® GLY 680 DRY HERBICIDE may be used to suppress or kill existing pasture species prior to re-seeding or establishment of other crops. Where spot application is undertaken, grazing stock need not be removed. CAUTION: Certain plants 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.</p>

SITUATION	CRITICAL COMMENTS (Read Application Checklist before using)
ONIONS Post-plant, pre-emergence application TAS only	For control of annual weeds and suppression of perennial weeds, including Rope Twitch, apply KELPIE® GLY 680 DRY HERBICIDE at 530 g to 1.6 kg/ha post-sowing and at least 7 days before crop is due to emerge. DO NOT 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 15 cm tall) and for suppression of perennial weeds.

ANNUAL WEEDS – REGISTRATION IN ALL STATES/TERRITORIES UNLESS OTHERWISE SPECIFIED

WEEDS CONTROLLED	BOOM RATE	HANDGUN/ KNAPSACK	CRITICAL COMMENTS
Annual Ryegrass, Amaranth, Barley Grass, Barnyard Grass, Bent Grass, Brome Grass, Caltrop, Canary Grass, Capeweed, Cereals, Chickweed, Cobbler's Peg, Deadnettle, Doublegee, Fumitory, Ground Cherry, Hedge Mustard, Hoary Cress, Lesser Swinecress, Liverseed Grass, Mintweed, Noogoora Burr, Paradoxa Grass, Paterson's Curse, Pigweed, Potato Weed, Saffron Thistle, Silvergrass, Sowthistle, Spear Thistle, Spiny Burrgrass, Spurge, Thornapple, Wild Oats, Wild Turnip, Winter Grass, Variegated Thistle	1—1.6 kg/ha	3—5 g/L	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 cover limits spray coverage. Use higher spot spraying rate when applying less than 5 L spray per 100 m ² . KELPIE® GLY 680 DRY HERBICIDE does not provide residual weed control. Repeat treatments may be necessary to control later germinating weeds. For residual control of annual weeds, KELPIE® GLY 680 DRY HERBICIDE may be tank-mixed with certain residual herbicides. See TANK MIXTURES in the GENERAL INSTRUCTIONS for directions. DO NOT use an atrazine tank mix for control of Barnyard Grass or Liverseed Grass.

PERENNIAL WEEDS – REGISTRATION IN ALL STATES/TERRITORIES UNLESS OTHERWISE SPECIFIED

WEEDS CONTROLLED	BOOM RATE/HA	HANDGUN/ KNAPSACK	CRITICAL COMMENTS
Artichoke Thistle, African Lovegrass, Bent Grass, Carpet Grass, Cocksfoot, Flatweed, Johnson Grass, Kangaroo Grass, Kikuyu, Nutgrass, Paspalum, Phalaris, Plantain, Prairie Grass, Qld Blue Grass, Redling Grass, Rhodes Grass, Rope Twitch, Sorrell, *Tall Sedge, Yorkshire Fog	1.5—3 kg/ha	5 g/L	Control of established perennials is best obtained when plants are at the seedhead stage. (Early flower flatweed). 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 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 Sorrell, use the higher boom rate only.
Blady Grass, Bracken, Couch, Cumbungi*, Glyceria*, Guinea Grass, Paragrass*, Silver Nightshade, Watercouch* * See Dry Drains and Channel Use situation	4.5 kg/ha	7 g/L	For Bracken, add Brushwet® Organosilicone Surfactant at 200 mL/100 L 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 2-4.5 L/ha for control.

WOODY WEEDS – REGISTRATION IN ALL STATES/TERRITORIES UNLESS OTHERWISE SPECIFIED

WEEDS CONTROLLED	HANDGUN/ KNAPSACK	CRITICAL COMMENTS
Bamboo, Bitou Bush, Boneseed, Boxthorn, Croftonweed, Gorse, Groundsel Bush, Lantana, Mistflower	5 g/L	<p>Apply to actively growing plants, DO NOT apply to drought stressed plants. Further treatment may be necessary to restrict seedling reestablishment.</p> <p>Bamboo Apply when foliage/regrowth is 1-2 m tall.</p> <p>Bitou Bush/Boneseed Best results are achieved when treated at peak flowering during winter.</p> <p>Groundsel Bush DO NOT apply in winter.</p> <p>Gorse Add Brushwet® Organosilicone Surfactant at 200 mL/100 L of spray mix, use higher rate only.</p> <p>Lantana Addition of Brushwet® Organosilicone Surfactant (200 mL/100 L) may improve control.</p> <p>Boxthorn, Gorse, Lantana Removal of bushes (after complete brownout), pasture improvement or further treatments are recommended to control seedlings and/or regrowth.</p>
Blackberry, Chinese Scrub, Eucalyptus spp. (seedlings <2 m), Hawthorn, Pampas Grass, Sifton Bush, Sweet Briar, Willow (<2 m)	5–7 g/L	<p>Apply to actively growing plants. Removal of bushes (after complete brownout), pasture improvement or further treatments are recommended to control seedlings and/or regrowth.</p> <p>Blackberry Apply from flowering to leaf fall. In Tasmania, DO NOT treat bushes bearing mature fruit.</p> <p>Chinese Scrub Use higher rate on bushes greater than 1 m.</p> <p>Eucalyptus spp Add Brushwet® Organosilicone Surfactant at 200 mL/100 L of spray mix.</p> <p>Hawthorn Apply from flowering to leaf fall.</p> <p>Pampas Grass Allow regrowth to reach 1 m, best results – apply after flowering.</p> <p>Sifton Bush Use higher rates on bushes greater than 1 m.</p> <p>Sweet Briar Apply from later flowering to leaf fall, use 780 g-1.06 kg/100 L, and 115-150 g/15 L, use higher rates on bushes greater than 1.5 m.</p>

CONSERVATION TILLAGE

RESTRAINTS:

To ensure herbicide absorption, **DO NOT** disturb weeds by cultivation, sowing or grazing for one (1) day after treatment of annual weeds and seven (7) days for perennial weeds except where noted.

SITUATION	WEEDS CONTROLLED	RATE	CRITICAL COMMENTS
<p>SOUTHERN AUSTRALIA</p> <p>Prior to sowing a crop or pasture with FULL SOIL DISTURBANCE by cultivation or sowing with a tyned implement.</p> <p>WA, SA, Vic and NSW only</p>	Barley Grass, Brome Grass, Volunteer Cereals, Wild Oats	265—530 g/ha pre-tillering 530—660 g/ha post-tillering	<p>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.</p> <p>Rate Selection Increase to higher rates late in the season or when treating under cold/overcast conditions.</p> <p>Full disturbance with cultivation or sowing with a tyned implement may start one (1) day after treatment (7 days if Dock, Phalaris, Skeleton Weed, Soursob or Sorrel are present) and should occur within 21 days after treatment.</p> <p>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 8 cm diameter/height), cultivation or sowing may start 6 hours after treatment and should occur within 21 days.</p> <p>Crop Establishment Sowing should not proceed until conditions allow the formation of a satisfactory seedbed. See Crop Establishment for directions.</p> <p>Annual Ryegrass, Silvergrass and Perennial Grasses Addition of Wetter TX, 200 mL/100 L spray solution, may improve control. When treating dense infestation of Silver Grass, use nozzles designed to give a 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 Silver Grass is critical for control.</p> <p>Tank Mixtures For improved control of Clover, add a 500 g/L dicamba aqueous concentrate product. Read and follow all label directions, restraints, plantback periods, withholding periods, regional use restrictions and safety directions for the tank mix products.</p> <p>See Tank Mixing for directions.</p> <p>Perennial Weeds For Perennial Phalaris, Soursob, Skeleton Weed and Sorrel, KELPIE® GLY 680 DRY HERBICIDE will provide knockdown, seasonal suppression and reduction in treated plant numbers.</p> <p>Tasmania Use 790 g/ha on annual weeds. Increase to 1.6 kg/ha where perennial weeds are being treated. To control White Clover and improve control of Sorrel and Dock, add 4 g/L dicamba aqueous concentrate product. Observe label directions and plantback periods.</p>
	Annual Phalaris (Canary Grass), Annual Ryegrass, Silver Grass, Winter Grass	530—660 g/ha pre-tillering 660—790 g/ha post-tillering	
	Colomba Daisy, Capeweed, Doublegee/Spiny Emex	265—530 g/ha less than 8 cm diameter/height 530—790 g/ha greater than 8 cm diameter/height	
	Amsinckia, Fumitory, Paterson's Curse, Saffron Thistle, Scotch Thistle, Variegated Thistle, Volunteer Lupins, Wild Turnip	530—660 g/ha less than 12 cm diameter/height 660—790 g/ha greater than 12 cm diameter/height	
	Dock (seedling)	530—790 g/ha	
	Perennial Phalaris, Sorrel, Soursob, Sub. Clover	790 g/ha	
	Skeleton Weed – fully emerged rosettes NSW only		
	All the above weeds TAS only	790 g—1.6 kg/ha	

SITUATION	WEEDS CONTROLLED	RATE	CRITICAL COMMENTS
<p>SOUTHERN AUSTRALIA</p> <p>To commence a fallow or prior to establishing a crop or pasture with an implement that gives MINIMAL OR NO SOIL DISTURBANCE.</p> <p>NSW, Vic, SA, WA only</p>	Barley Grass, Volunteer Cereals, Wild Oats	530—790 g/ha	<p>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.</p> <p>Rate Selection Use the lower rate on young weeds or where cultivation is to follow within 21 days. Increase to the higher rate where grasses reach full tillering or where broadleaf weeds commence stem elongation/budding. Increase to higher rates in spring and under cold conditions.</p> <p>Aerial Application: Use higher rates. See Aerial Equipment.</p> <p>Annual Ryegrass, Silver Grass and Perennial Grasses Addition of Wetter TX, 200 mL/100 L spray solution may improve control. When treating dense infestation of Silver Grass, use nozzles designed to give a 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 Silver Grass is critical for control.</p> <p>Hoary Cress Treat from late rosette to early flowering.</p> <p>Soursob Treat at tuber exhaustion</p> <p>Couch 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.</p> <p>Tank Mixtures For improved control of Clover, add a 500 g/L dicamba aqueous concentrate product. Read and follow all label directions, restraints, plantback periods, withholding periods, regional use restrictions and safety directions for the tank mix products.</p> <p>See Tank Mixtures under GENERAL INSTRUCTIONS for directions. Addition of crystalline ammonium sulfate, 2 kg/100 L may improve control when treating under adverse environmental conditions.</p> <p>Pasture or Crop Establishment DO NOT sow into excessive trash. Excessive plant residues may be removed by grazing after treatment. Grazing may commence 1 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 1 day after treatment of annual weeds and 7 days for perennial weeds. See also Crop Establishment.</p> <p>Aerial (or Surface) Seeding Delay seeding until trash level 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.</p>
	Brome Grass, Canary Grass, Capeweed, Variegated Thistle, Winter Grass	660 g—1 kg/ha	
	Annual Ryegrass, Paterson's Curse, Saffron Thistle, Scotch Thistle, Spear Thistle, Silver Grass, Wild Mustard, Wild Radish, Wild Turnip	790 g—1 kg/ha	
	Hoary Cress, Soursob	790 g/ha	
	Couch	790 g – 1.6 kg/ha	
	Erodium, Plantain, Perennial-Phalaris, Sorrel, Sub. Clover, Yorkshire Fog	990 g—1.3 kg/ha	
	Dock, Flatweed	1.3 kg/ha	
	All of the above weeds TAS only	790 g—1.6 kg/ha	
<p>SOUTHERN AUSTRALIA PASTURE TOPPING</p> <p>For Annual Grass, Capeweed and Colomba Daisy seed-set reduction</p>	Barley Grass, Brome Grass, Capeweed, Silver Grass	160—240 g/ha	<p>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 higher rate for dense infestations or where Annual Ryegrass is present. Apply before signs of plants 'hayng 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.</p>
	Annual Ryegrass, Calomba Daisy	240 g/ha	
Seed-head suppression of Perennial Grasses	Bent Grass	200—330 g/ha	<p>Timing 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.</p> <p>Follow-up Management: Graze hard after spraying.</p>

SITUATION	WEEDS CONTROLLED	RATE	CRITICAL COMMENTS
Poa Tussock infested pasture For reduction of ground cover allowing pasture renovation	Most annual weeds and suppression of Poa Tussock	1.6—2.1 kg/ha	<p>Timing 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).</p> <p>Application Increase to the higher rate may give more effective reductions. If aerial spraying, see Aerial Equipment.</p> <p>Follow-up Management 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-infestation.</p>
Serrated Tussock For control/suppression prior to establishing crops or improved pasture species NSW, Vic, Tas only	Serrated Tussock	2.1-3.2 kg/ha	<p>Apply to actively growing and stress free plants. Best results May to October.</p> <p>Application: Boom spray volume of 70 L/ha or more is recommended to improve plant coverage. Also see Aerial Equipment.</p> <p>Surfactants: Addition of 200 mL of Wetter TX to 100 L of spraying solution may improve control of serrated tussock.</p> <p>Site Preparation: Burning of serrated tussock 10-12 months before spraying or slashing/heavy grazing (cell grazing) 2 weeks before spraying is essential for good results (Note: serrated tussock is almost indigestible and prolonged exposure can lead to starvation and death of stock).</p> <p>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).</p>
Serrated Tussock For prevention of seed head emergence and seed formation	Serrated Tussock	360-710 g/ha	<p>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 Aerial Equipment.</p> <p>Surfactants: Addition of 200 mL of Wetter TX to 100 L of spraying solution may improve results.</p> <p>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.</p>

SITUATION	WEEDS CONTROLLED	RATE	CRITICAL COMMENTS	
NORTHERN AUSTRALIA In fallow or prior to planting a crop. Qld, NSW only	Annual Phalaris (Canary Grass), Barley Grass, Volunteer Cereals, Wild Oats	265—530 g/ha	<p>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. 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.</p> <p>Rate Selection Use the lower rates 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 a 680 g/L 2,4-D ethyl hexyl ester emulsifiable concentrate product.</p> <p>Crop Establishment Sowing should not proceed until conditions allow the formation of a satisfactory seedbed. See Crop Establishment for directions.</p> <p>Tank Mixtures Read and follow all label directions, restraints, plantback and 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.</p> <p>Aerial Application For instructions on aerial application under hot conditions, see Aerial Equipment. DO NOT apply by aircraft when ambient temperature is above 30°C.</p>	
	Barnyard Grass, Button Grass, Columbus Grass (seedling), Liverseed Grass, Native Millet, Stinkgrass (Lovegrass), Volunteer Sorghum	530 g—1 kg/ha		
	Australian Bluebell (Qld only), Cudweed, Fumitory, Mexican Poppy, New Zealand Spinach, Saffron Thistle, Spear Thistle, Spurge, Stinking Goosefoot	530—790 g/ha		
	Black (Giant) Pigweed, Boggabri Weed, Caltrop (Yellow Vine), Indian Hedge Mustard, Mintweed, Summer Grass	265—530 g/ha up to 5 true leaves or 3 cm diameter/height 530—790 g/ha greater than 5 true leaves or 3 cm diameter/height		
	African Turnip Weed, Deadnettle, Sweet Summer Grass, Variegated Thistle, Volunteer Sunflower	400—530 g/ha up to 5 true leaves or 3 cm diameter/height 530 g—1 kg/ha greater than 5 true leaves or 3 cm diameter/height		
	Annual Ground Cherry (Gooseberry), Bladder Ketmia, Camel Melon, False Castor Oil Plant (Thornapple), Noogoora Burr, Turnip Weed, Wild Lettuce, Wild Turnip, Wireweed	530—790 g/ha prior to stem elongation/budding. After stem elongation/budding, use 265—790 g/ha plus 500 mL—700 mL 2,4-D ester (800 g/L) or 790—1 kg/ha of KELPIE® GLY 680 DRY HERBICIDE alone		
	Pigweed	530 g—1 kg/ha		Use higher rates on larger weeds. Control of pigweed over a wide range of growth stage can be obtained with the addition of a 600 g/kg metsulfuron-methyl water dispersible granule. Observe re-cropping intervals.
	Sowthistle, Milkthistle	400—530 g/ha rosettes up to 3 cm diameter 530 g—1 kg/ha greater than 3 cm diameter		Previously grazed plants may be difficult to control without allowing full recovery.
	Couch	790 g—1.6 kg/ha		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.
	Johnson Grass	1—1.6 kg/ha		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	1.6 kg/ha + 1.6 kg/ha	<p>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 6-8 weeks), it is essential to make a second application.</p> <p>Note: Follow-up treatments should be made as part of a Nutgrass control programme.</p>		

OTHER SITUATIONS

SITUATION	WEEDS CONTROLLED	RATE	CRITICAL COMMENTS
COTTON (pre-harvest) DO NOT use on crops intended for seed production QLD, NSW only	Bathurst Burr, Noogoora Burr, Winter Annual Weeds including Sowthistle/Milkthistle	660 g—1.3 kg/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 knife. When 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 and Noogoora Burr is required, treatments 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 the tank mix products.
	Nutgrass, seasonal suppression only	1.3 kg/ha	
PRE-HARVEST APPLICATION to reduce viable seed set of weeds in: Field Peas Faba Beans	Annual Ryegrass	250—530 g/hg	Use lower rate if Ryegrass is flowering and higher rate if Ryegrass is at milky dough stage. 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). 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: Wheat	Annual weeds	710 g—1.4 kg/ha	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. DO NOT harvest within 7 days after application. DO NOT use on crops intended for seed or sprouting. Glyphosate resistant biotypes have been detected in Australia. If glyphosate resistant weeds are known to be present, apply an additional method of control.
PRE-HARVEST APPLICATION To desiccate a crop as a harvest aid and weed control Adzuki Beans, Chickpeas, Cowpea, Faba Beans, Field Peas, Lentils, Mungbeans, Soybean (Application to crops intended for seed production or for sprouting may reduce germination percentage to commercially unacceptable levels).	Annual weeds	530 g—1.4 kg/hg	Apply with boom or by air. Use higher rates where crops or weeds are dense and where faster desiccation is required. Application should be made at or after crop maturity: Chickpeas and Lentils – apply when physiologically mature and less than 15% green pods. Soybean – apply only after seed pods have lost all green colour and 80-90% of leaves have dropped. Use only on soybean crops grown for crushing. Mungbeans/Adzuki and Cowpea – apply to mature crops when pods are brown/black. Field Peas – apply when seeds turn yellow and average seed moisture content is below 30%. Faba Beans – apply when pods turn black and average seed moisture content is below 30%. DO NOT harvest within 7 days of application. Speed of crop desiccation is dependent on crop stage, growing conditions and weather conditions during and after application. This use should be part of an Integrated Weed Management strategy which incorporates herbicides with different modes of action and alternative cultural weed control practices.
RICE Direct drilling NSW only	Annual Phalaris (Canary Grass), Annual Ryegrass, Barley Grass, Burr Medic, Sub. Clover, Winter Grass	530—660 g/ha	KELPIE® GLY 680 DRY HERBICIDE is less effective in 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 6-8 cm before spraying. Annual Ryegrass Add Wetter TX at 200 mL/100 L of spray solution and where dominant, use the higher rate. Sowing Direct drilling may take place 1-14 days after spraying. KELPIE® GLY 680 DRY HERBICIDE does not provide residual weed control. Permanent water and approved selective herbicides should be used to provide continuing control of weeds.

SITUATION	WEEDS CONTROLLED	RATE	CRITICAL COMMENTS
SORGHUM CONTROL (pre-harvest) QLD, NSW only	Sorghum (grain-sorghum) DO NOT apply to varieties intended for seed production or varieties prone to lodging	790 g—1 kg/ha	DO NOT apply if crop is under stress from low moisture, frost, cold or water logging. Apply when grain moisture is less than 25%. Use the higher rate where the crop has produced a significant number of late tillers or where following crops will be established without further treatment. Pre-harvest treatments may increase the likelihood of crop lodging. Apply post-harvest treatments to previously slashed/grazed stubble when at least 20 cm of new growth has occurred. Use the higher rate on standing stubble or where regrowth from slashed sorghum has advanced beyond 50 cm in height.
SORGHUM CONTROL (post-harvest) QLD, NSW only	Sorghum stubble (grain-sorghum)	530—790 g/ha for fresh regrowth from slashed stubble 790 g—1 kg/ha for standing stubble if sufficiently green and for fresh spring regrowth	Caution: Sorghum may be naturally toxic to stock.
SUGARCANE Ratoon Spray out QLD, NSW only	Sugarcane ratoon regrowth	2.1—4.8 kg/ha	APPLY UNDER GOOD GROWING CONDITIONS ONLY to actively growing ratoons 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 the higher rate for control.

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

GENERAL INSTRUCTIONS

Product Information

KELPIE® GLY 680 DRY HERBICIDE is a non-volatile, water soluble product with non-selective herbicidal activity against many annual and perennial broadleaf weeds and grasses. KELPIE® GLY 680 DRY HERBICIDE may be used for weed control on agricultural land prior to planting any edible or non-edible crop, but not prior to transplanting tomatoes. KELPIE® GLY 680 DRY HERBICIDE is absorbed by plant foliage and green stems. It is inactivated immediately in the soil and does not provide residual weed control. KELPIE® GLY 680 DRY HERBICIDE moves throughout the plant from the point of contact to and into the root system. Visible effects on annual weeds take 3 to 7 days but on perennial weeds may not be obvious for 2 to 3 weeks or longer in some cases. Visible effects of control may be delayed by cool or cloudy weather at and following treatment. KELPIE® GLY 680 DRY HERBICIDE will control emerged weeds only. Apply treatments to weeds which have at least one (1) true leaf (broadleaf weeds) or 2 leaves (grasses) to provide an adequate surface area for herbicide uptake.

Crop Establishment

KELPIE® GLY 680 DRY HERBICIDE is recommended for control of emerged weeds prior to crop establishment. Suitable cultivation and/or sowing operations are required to provide seedbed conditions satisfactory for crop germination and development. Spraying early to control young weeds will favour preparation of suitable seedbeds. On friable soils and where there is only light cover of young weeds, sowing may proceed satisfactorily from one (1) day after spraying. In situations of heavy weed growth, sowing should be delayed until weed decay and soil conditions allow formation of a satisfactory seedbed. 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 seedling depth and avoid use of pre-emergence herbicides where label directions advise risk of retarded crop emergence.

Mixing

For boom application, water volumes should not be less than 6 litres per 1 kg (6 L/kg) of KELPIE® GLY 680 DRY HERBICIDE.

KELPIE® GLY 680 DRY HERBICIDE mixes readily with water. Reduced results may occur if water containing suspended clay or organic matter is used, e.g. water from ponds and unlined ditches, dams, streams and irrigation channels with high levels of calcium, magnesium or bicarbonate ions.

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, fibreglass, plastic or plastic-lined containers or spray tanks. Spray tanks, pumps, lines and nozzles should be thoroughly cleaned with clean water following application to prevent corrosion. Ensure the spray tank is free of any residue of previous spray materials by cleaning with a tank cleaner such as All Clear® DS. Use spray solutions promptly and certainly within 5 days, since gradual loss of activity will occur. Good agitation is required particularly under cold conditions, to ensure all of KELPIE® GLY 680 DRY HERBICIDE dissolves when first added to the tank.

Mixing the KELPIE® GLY 680 DRY HERBICIDE using one of the two methods below:

Full Agitation in Pre-Filled Spray Tank:

1. Fill the tank with one-half the required amount of clean water and set the pump on full agitation.
2. Add the required amount of KELPIE® GLY 680 DRY HERBICIDE slowly to ensure that it is well dispersed throughout the tank and none collects on the bottom. Suggested rate is 10 kg in 2-3 minutes. Ensure complete dispersion.
3. Continue water addition and fully agitate until all the KELPIE® GLY 680 DRY HERBICIDE is completely dissolved.

External Pre-Slurry

1. Fill the spray tank with one-half the required amount of clean water, and set pump on full agitation.
2. Pre-mix the required amount of KELPIE® GLY 680 DRY HERBICIDE in a separate container until it is completely slurried by adding one part KELPIE® GLY 680 DRY HERBICIDE to a minimum 3 parts water.
3. Add to vigorously agitating tank and continue water addition.
4. Fully agitate until all the KELPIE® GLY 680 DRY HERBICIDE is completely dissolved. Ensure complete dispersion.

Tank Mixing Procedure

1. Fill the spray tank $\frac{1}{3}$ or $\frac{1}{2}$ full with clean water and start agitation.
2. Where crystalline ammonium sulfate is recommended, add 2 L / 100 L spray solution into the tank and mix thoroughly. Ensure complete dispersion and continue agitation.
3. Add KELPIE® GLY 680 DRY HERBICIDE. Mix thoroughly and continue agitation. Ensure complete dispersion.
4. Add recommended herbicide/additive to the spray tank and mix thoroughly and continue agitation. Ensure complete dispersion.
5. Add surfactant near the end of the filling process to minimise foaming and continue agitation. Ensure complete dispersion.
6. Always maintain adequate agitation during application and use the tank-mix promptly.
7. Clean all equipment after use by washing thoroughly with water or recommended decontaminant.

Surfactant Addition

Additional surfactant is not required except where the rate of KELPIE® GLY 680 DRY HERBICIDE is less than 6 g/L when applied by boom. **Rate:** Add a non-ionic 1000 g/L surfactant at 100 mL per 100 L water. Results with other surfactants may be variable. **DO NOT** mix with spraying oils, agricultural chemicals or other materials except as directed on the label.

COMPATIBILITY

DO NOT add additional surfactant or mix with any other agricultural chemicals, herbicides, oils or other materials except as specifically directed on this label.

Application

KELPIE® GLY 680 DRY 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: For broadacre application, unless noted otherwise in the DIRECTIONS FOR USE table, a spray volume of 60 L/ha or less is recommended for optimum performance. Select nozzle types that produce a minimum COARSE spray quality (ASAE S572). Depending on prevailing temperature, relative humidity, delta T, wind speed, travel speed and boom height the spray quality produced at the nozzles may need to be coarser than this. In sensitive areas avoid using nozzles and/or pressure settings that produce a VERY FINE to MEDIUM spray quality, as these droplets are more prone to drift off-target. Boom height must be set to ensure double overlap of nozzle patterns at the top of the weed canopy.

High Volume Application: e.g. Knapsack/Handgun Equipment. The dilution rate is given as g/litre, e.g. 5 grams KELPIE® GLY 680 DRY HERBICIDE per 1 litre of water. This is equal to 75 g KELPIE® GLY 680 DRY HERBICIDE per 15 litres of water or 500 g per 100 litres of water. Adjust equipment to achieve an even spray pattern with a minimum of a COARSE spray quality at the target. Apply to ensure complete and uniform wetting of all foliage.

Aerial Equipment: Aerial equipment may be used to apply KELPIE® GLY 680 GLY HERBICIDE only in pasture or fallow situations prior to establishment of field crops, fodder crops or new pastures and for pre-harvest application to sorghum and cotton crops. DO NOT use in intensive horticultural cropping areas. Pressure settings must be selected to deliver a minimum of a COARSE spray quality (ASAE S572) at the target. Depending on prevailing temperature, relative humidity, delta T, wind speed, travel speed and boom height the spray quality produced at the nozzles may need to be coarser than this. In sensitive areas avoid using nozzles and/or pressure settings that produce a VERY FINE to MEDIUM spray quality as these droplets are more prone to drift off-target. Use recommended rates of KELPIE® GLY 680 DRY HERBICIDE specified in this label up to a maximum limit of 2.1 kg/ha. For Micronair and boom equipment, apply in a minimum spray volume of at least 20 L/ha. Swath width should be 15 to 17 m. Thoroughly wash aircraft, especially landing gear, after each day of spraying to remove herbicide residues.

Application on hilly terrain

As spraying height may vary, to maximise target contact, increase water volume to 30-80 L/ha and increase droplet size to a MEDIUM to COARSE spray quality (ASAE S572) to optimise deposition of spray output onto weeds.

Application under summer conditions

High temperatures and/or low relative humidity cause excessive evaporation of spray droplets which may reduce results. When ambient temperature reaches 25°C, increase water volume to at least 30 L/ha and increase droplet size to a MEDIUM to COARSE spray quality (ASAE S572). **DO NOT** apply KELPIE® GLY 680 DRY HERBICIDE by aircraft when ambient temperature is above 30°C. Avoid application when relative humidity falls below 35%.

Application Checklist

DO NOT treat weeds under poor or dormant growing conditions (such as occur in drought, waterlogging, disease, insect damage or following frosts) as reduced weed control may result. Reduced efficacy may also occur when treating weeds heavily covered with dust or silt.

KELPIE® GLY 680 DRY HERBICIDE is absorbed by plant foliage and green stems. Rainfall soon after application may wash the herbicide off the weeds, particularly if the weeds are not actively growing, under stress or conditions of low light intensity or darkness.

Delay treatment of plants wet with dew or rain if water droplets run off when plants are disturbed.

AVOID DRIFT

DO NOT use with spraying equipment or under meteorological conditions which could be expected to cause spray drift onto nearby susceptible plants, adjacent crops, crop lands or pastures. Equipment settings which produce FINE droplets (150 micron or less), winds over 8 km/h, inversion conditions, still air and hot dry days all contribute to drift.