

# CAUTION

KEEP OUT OF REACH OF CHILDREN

READ SAFETY DIRECTIONS BEFORE OPENING OR USING



F.S.A.

# GLYPHOSATE 540 K

## HERBICIDE

ACTIVE CONSTITUENT: 540 g/L GLYPHOSATE  
present as the potassium salt

GROUP **9** HERBICIDE

Non selective herbicide for the control of many  
annual and perennial weeds

IMPORTANT: READ THIS BOOKLET BEFORE USING THIS PRODUCT



## 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 (ref label), unless specified otherwise in critical comments.

### CONSERVATION TILLAGE

SITUATION	WEEDS	RATE Vol/ha	CRITICAL COMMENTS
<b>SOUTHERN AUSTRALIA</b> Prior to sowing a crop or pasture with full soil disturbance with a cultivation or sowing with a tyned implement	Barley grass, Brome grass Volunteer cereals, Wild oats	340 – 660 mL pre tillering 660 – 840 mL post tillering	<b>Rate Selection:</b> Use higher rates for advanced weed growth or when treating under cold/overcast conditions.  Cultivation or planting may proceed from 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.  <b>Silvergrass:</b> When treating dense infestations of Silvergrass, add a registered non-ionic surfactant containing 1040g/L Octyl phenol ethoxylate and use water volumes of 70L/ha or more and small droplets to improve coverage.  <b>Perennial weeds:</b> F.S.A. Glyphosate 540 K 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	660 – 840 mL pre tillering 840 – 1 L post tillering	
	Calomba daisy, Capeweed Doublegee (Spiny Emex), Fumitory, Volunteer lupins Volunteer peas	340 – 660 mL less than 8 cm diam/height 660 - 1 L greater than 8 cm diam/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 840 - 1 L greater than 12 cm diameter	
	Perennial phalaris, Skeleton weed, Sorrel, Sub clover	1 L	

SITUATION	WEEDS	RATE Vol/ha	CRITICAL COMMENTS
<b>SOUTHERN AUSTRALIA</b> 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 of pastures	Barley grass, Canary grass Volunteer cereals, Wild oats	660 mL – 1 L	<p><b>Rate Selection:</b> Use the lower rate on young weeds; increase to the higher rate where grasses reach full tillering or where broadleaf weeds reach stem elongation 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.</p> <p><b>Pasture or Crop Establishment:</b> Do not sow into excessive trash. Excessive plant residues may be removed by grazing after treatment. Planting may proceed from start 1 hour of daylight after application to seedling annual weeds if a satisfactory seedbed can be created for crop germination and seedling establishment.</p> <p><b>Aerial (or Surface) Seeding:</b> Delay seeding until trash level is reduced to allow for satisfactory placement of broadcast seed on the soil surface.</p> <p><b>Bathurst burr:</b> For mature weeds use the higher rate.</p> <p><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.</p> <p><b>Couch:</b> Use the higher rate on dense infestations. Apply sequential treatments during summer and autumn. Repeat applications will be required for full control. For improved control, use in conjunction with cultivation.</p> <p><b>Dock, Flatweed:</b> Use the maximum rate for full control.</p> <p><b>Hoary Cress:</b> Use at a rate of 1 L/ha. Treat from late rosette to early flowering. Kikuyu, Paspalum: Use the low rate for suppression, the high rate for control.</p> <p><b>Silvergrass:</b> When treating dense infestations of Silvergrass, add A registered non-ionic surfactant containing 1040 g/L Octyl phenol ethoxylate and use water volumes of 70 L/ha or more and small droplets to improve coverage.</p> <p><b>Soursob:</b> Use at a rate of 1 L/ha. Treat at tuber exhaustion.</p>
	Bathurst burr, Bentgrass, Couch, Dock, Erodium, Flatweed, Kikuyu, Plantain, Paspalum, Phalaris, Sorrel, Sub. clover, Yorkshire fog	1.0 – 1.3 L	
	Poa tussock	1.25 – 2 L	
<b>Pasture Topping</b>	Annual ryegrass	300 – 680 mL	<p><b>Timing:</b> Treat fresh re-growth (at least 14 days after heavy grazing) after the Autumn break but before onset of heavy frosts. Sowing may start 14 days after spraying.</p> <p>Remove livestock prior to application to allow even regrowth. Use lower rate if grasses are flowering and higher rate if at the milky dough stage.</p> <p>Apply to Capeweed and Calomba Daisy at flowering.</p> <p>Do not add wetter. Do not apply to clover or medic crops intended for seed production.</p>
	Barley grass, Brome grass, Capeweed, Silvergrass	200 - 300 mL	
	Calomba Daisy	300 mL	
<b>Seedhead Suppression</b>	Bentgrass	240 - 420 mL	<p>Apply treatments late October to late November, before seedheads have emerged.</p> <p>Add a registered non-ionic surfactant containing 1040g/L Octyl phenol ethoxylate. Use higher rate where growth is excessive.</p> <p>Graze hard after spraying.</p>

SITUATION	WEEDS	RATE Vol/ha	CRITICAL COMMENTS
<b>SOUTHERN AUSTRALIA</b> NSW, ACT, Vic, Tas only For control / suppression prior to establishing crops or improved pasture species	Serrated tussock	2.7 – 4.0 L	Apply to actively growing and stress free plants. Best results May to October. <b>Application:</b> Boom spray volume of 70 L/ha or more is recommended to improve plant overage. Also see <b>Aerial Equipment</b> . <b>Surfactants:</b> Addition of 200mL of a registered non-ionic surfactant containing 1040g/L Octyl phenol ethoxylate to 100L of spraying solution may improve control of Serrated tussock. <b>Site Preparation: Burning</b> of Serrated tussock 10-12 months before spraying <b>or slashing/ heavy grazing</b> (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). <b>Rates:</b> 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).
		500 – 840 mL	Apply to actively growing and stress free plants. Best results obtained during mid September - mid October. Apply prior to any seedhead emergence. Also see <b>Aerial Equipment</b> . <b>Surfactants:</b> Addition of 200mL of a registered non-ionic surfactant containing 1040g/L Octyl phenol ethoxylate to 100L of spraying solution may improve results. <b>Rates:</b> The lower rates will be less damaging to desirable pasture species. If seed-head emergence is imminent then higher rates will give better results.
<b>NORTHERN AUSTRALIA</b> In fallow or prior to planting a crop  <b>Cotton:</b> Shielded Sprayers	Paradoxa grass, Volunteer cereals, Wild oats	340 – 660 mL	<b>Rate Selection:</b> Use the lower rates on young weeds and increase to the higher rates where weeds are dense or well developed. Dense infestations of some weeds eg Barnyard grass, Liverseed (Urochloa) grass may need follow-up treatments for complete control. <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. 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 are used. <b>Shielded Sprayers:</b> Apply F.S.A. Glyphosate 540 K to weeds growing between crop rows using a shielded sprayer. Do not apply in cotton less than 20cm high. Do not allow spray or spray drift to contact any part of the cotton plant as severe injury may result. <b>Pasture or Crop Establishment:</b> 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.
	African turnip weed, Black pigweed, Boggabri weed Caltrop (Yellow vine), Deadnettle, Mintweed, Milk (Sow) thistle, Stinkgrass (Lovegrass), Sweet summer grass, Variegated thistle Volunteer sorghum	500 – 660 mL up to 5 true leaves of 3 cm in dia/height 660 mL – 1.35 L greater than 5 true leaves of 3 cm in dia/height	

SITUATION	WEEDS	RATE Vol/ha	CRITICAL COMMENTS
<b>NORTHERN AUSTRALIA</b> In fallow or prior to planting a crop  <b>Cotton:</b> Shielded Sprayers (cont'd)	Annual ground cherry, Barnyard grass, Bathurst burr, Bladder Ketmia, Button grass, Camel (Afghan) melon, Caustic weed, Columbus grass, Liverseed grass, Mexican poppy, Native millet, New Zealand spinach, Noogoora burr, Pigweed (up to 25 cm), Spear thistle, Stinking goosefoot, Thornapple (Datura), Turnip weed, Wild/ Prickly lettuce, Wireweed	660 mL - 1.35 L	As per previous page
	Prickly Paddy melon	640 mL - 1.3 L plus 80mL Garlon 600	DO NOT add crop oil.
	Climbing buckwheat (less than 12 leaves), Couch, Johnson grass	1.3 - 2.0 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 ( <i>Cyperus rotundus</i> )	2L followed by 2L	Make first application to actively growing plants when majority of plants have reached at least the 6 - 8 leaf stage but preferably later. Allow for maximum re-emergence before re-treating.
<b>SUGAR CANE Inter-row spraying</b>	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 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.
<b>SUGAR CANE Ratoon sprayout Qld, NSW, only</b>	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 waterlogging or low moisture. Use the lower rate for suppression or where cultivation is to follow. Use the higher rate for control.
<b>Sorghum control</b>	Grain Sorghum (pre-harvest)	1 - 1.35 L	<b>DO NOT</b> 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 protection. Treatment may increase potential for crop lodging.
	Grain Sorghum (post-harvest)	660 mL - 1.35 L	<b>Slashed/Grazed stubble:</b> 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.
<b>Cotton Pre-harvest</b>	Bathurst burr, Noogoora burr, Winter annual weeds	840 mL - 1.7 L	Treatments may be applied alone or in tank mixtures with Dropp or Harvade. Apply when at least 60% of bolls are open. When tank mixed with defoliant, a slightly higher proportion of cotton leaf may be retained, particularly where the higher rate is used and the conditions are unfavourable for defoliation.

SITUATION	WEEDS	RATE Vol/ha	CRITICAL COMMENTS
<p><b>PRE-HARVEST APPLICATION</b> to reduce viable seed set of weeds in:</p> <p>Field Peas (<i>Pisum sativum</i>)</p> <p>Faba Beans (<i>Vicia faba</i>)</p>	Annual ryegrass ( <i>Lolium rigidum</i> )	320 – 680 mL	<p>Use lower rate if Ryegrass is flowering and higher rate if Ryegrass is at milky dough stage.</p> <p>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).</p> <p>Apply when average seed moisture content is below 30%. For Faba beans, this is indicated by pods going black, and for Field peas by the pods going yellow.</p> <p>Do not harvest within 7 days after application. Do not use on crops intended for seed or sprouting.</p>
<p><b>PRE-HARVEST APPLICATION</b> as harvest aid and weed control:</p> <p>Wheat (<i>Triticum aestivum</i>)</p>	Annual weeds	900 mL – 1.8 L	<p>Apply to mature crop from late dough (28% moisture) onwards. The higher rate will be required when crops are heavy and leaf shading effects may occur.</p> <p>Do not harvest within 7 days after application. Do not use on crops intended for seed or sprouting.</p> <p>Where wheat is grown in rotation with any herbicide tolerant crop, management should be consistent with implementation of any management plan for herbicide tolerant crops.</p>
<p><b>PRE-HARVEST APPLICATION</b> to desiccate crop as a harvest aid and weed control:</p> <p>Adzuki Beans Chickpeas Cowpea Faba Beans Field Peas Lentils Mungbeans Soybeans</p> <p>(Application to crops intended for seed production or sprouting may reduce germination to commercially unacceptable levels)</p>	Annual weeds	680 mL – 1.8 L	<p>Apply with boom or by air. Use higher rates where crops or weeds are dense and where faster desiccation is required.</p> <p>Application should be made at or after crop maturity.</p> <p><b>Chickpeas and Lentils:</b> apply when physiologically mature and less than 15% green pods.</p> <p><b>Soybeans:</b> apply only after seed pods have lost all green colour and 80 - 90% of leaves have dropped.</p> <p><b>Mung Beans/ Adzuki and Cowpea:</b> apply to mature crops when pods are brown/black.</p> <p><b>Field Peas:</b> apply when seeds turn yellow and average seed moisture is below 30%.</p> <p><b>Faba Beans:</b> apply when pods turn black and average seed content is below 30%.</p> <p><b>Do not harvest within 7 days of application.</b> <b>Speed of crop desiccation is dependent on crop stage, growing conditions and weather conditions during and after application.</b></p>

SITUATION	CRITICAL COMMENTS Read Application Checklist before using See Annual, Perennial and Woody weeds sections below for most appropriate rate.
<p><b>GENERAL WEED CONTROL</b></p> <p>For 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>	<p>For the control of many grasses and broadleaf weeds.</p> <p><b>Rate:</b> 7.0mL per litre of water.</p> <p>Apply when weeds are actively growing.</p> <p>Apply to ensure complete and uniform wetting of foliage.</p> <p>Visible symptoms may take from 3 to 7 days to develop.</p>
<p><b>AGRICULTURAL AREAS</b></p>	<p>F.S.A. Glyphosate 540 K may be used for control of annual and 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.</p>
<p><b>DRY DRAINS and CHANNELS ONLY</b></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><b>FORESTS</b></p>	<p>This product 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.</p>
<p><b>NON-AGRICULTURAL AREAS</b></p> <p>Around buildings, Commercial and Industrial areas, Domestic and public service areas, rights-of-way.</p>	<p>F.S.A. Glyphosate 540 K does not provide residual weed control. For residual weed control, F.S.A. Glyphosate 540 K may be tank-mixed with certain residual herbicides.</p> <p>Refer to <b>Tank Mixtures/Compatibility</b>.</p>
<p><b>TREE AND VINE CROPS</b></p> <p>Avocado, Banana, Blueberries, Citrus fruit, Custard apples, Duboisia Figs – dessert, Guava, Hops, 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 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 palm.</p> <p><b>Citrus fruit, litchi, Nuts, Olives and 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.</p> <p><b>Hops:</b> Apply in winter, prior to crop emerging from dormancy.</p> <p><b>Tea:</b> Apply a maximum of 2.7 L/ha by shielded boom or directed off-centre nozzle or 340 mL/100 L by directed handgun or knapsack to avoid application to the crop.</p> <p><b>All other crops:</b> DO NOT allow spray or spray drift to contact any part of the plant including the trunk.</p> <p><b>CAUTION:</b> Where split bark on Kiwifruit and greens stems on Pawpaw occur, extreme care is required.</p>

WEEDS CONTROLLED	RATE	CRITICAL COMMENTS
<p><b>ANNUAL WEEDS</b></p> <p>Amaranth, Barley grass, Barnyard grass, Bathurst Burr, Brome Grass, Caltrop, Canary grass, Capeweed, Chickweed, Cobbler's pegs, Deadnettle, Doublegee, Fumitory, Ground cherry, Hedge mustard, 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, Variegated thistle, Volunteer cereals, Wild mustard, Wild oats, Wild turnip, Winter grass</p>	<p><b>Boom:</b> 1.35 - 2 L/ha</p> <p><b>Handgun:</b> 330 - 480 mL per 100 L</p> <p><b>Knapsack:</b> 50 - 70 mL per 15 L</p>	<p>Apply to weeds whenever they are not subject to stress due to drought or frost. Use higher rate on weeds over 15cm in height or diameter or where dense weed cover limits spray coverage. Use higher spot spraying rate when applying less than 5L spray per 100sqm.</p> <p>F.S.A. Glyphosate 540 K does not provide residual weed control. Repeat treatments may be necessary to control later germinating weeds.</p> <p>For residual control of annual weeds, F.S.A. Glyphosate 540 K may be tank-mixed with certain residual herbicides. See <b>Tank Mixtures</b> in the General Instructions for directions. Do not use an atrazine tank-mix for control of Barnyard grass or Liverseed grass.</p>
<p><b>PERENNIAL WEEDS</b></p> <p>Artichoke thistle, African lovegrass, Bent grass, Carpet grass, Cocksfoot, Flatweed, Johnson grass, Kangaroo grass, Kikuyu, Nutgrass (<i>Cyperus rotundus</i>), Paspalum, Phalaris, Plantains, Poa tussock, Prairie grass, Qld Blue grass, Red-leg grass, Rhodes grass, Rope twitch, Sorrel, Soursob, Yorkshire fog grass</p>	<p><b>Boom:</b> 2- 4 L/ha</p> <p><b>Handgun:</b> 470 - 660 mL per 100 L</p> <p><b>Knapsack:</b> 70 - 100 mL per 15 L</p>	<p>Control of established perennials is best obtained when plants are at the seedhead stage.</p> <p>In general best control of winter perennials is obtained with application during winter-spring.</p> <p>Best control of summer growing perennials is obtained with application late summer and autumn.</p> <p>For Nutgrass in cultivated situations apply sequential low rate treatments when Nutgrass has a minimum of 6 - 8 leaves. Use higher rate in uncultivated situations.</p> <p>For Rhodes grass, Rope Twitch, Prairie grass, Qld Blue grass, Johnson grass, Kangaroo grass, Kikuyu, Red-leg grass, Paspalum and Sorrel, use the higher rate only.</p>
<p>Blady grass, Bracken, Couch, Guinea grass, *Paragrass, Silverleaf nightshade, *Water couch</p> <p>* use on dry drains and channels only, (see Situations critical comments above)</p>	<p><b>Boom:</b> 6 L/ha</p> <p><b>Handgun:</b> 870 mL - 1.35 L per 100 L</p> <p><b>Knapsack:</b> 130 - 200 mL per 15 L</p>	<p>For Bracken add Pulse at 200 mL/100 L spray mix.</p> <p>Best control of couch in WA and SA is obtained with spring treatment. Most effective control of couch in the Eastern states is obtained with summer and autumn treatments.</p> <p>In cultivated situations use sequential treatments of 1.9 - 4.3 L/ha for control. Use higher rate only for Silverleaf nightshade.</p>

WEEDS CONTROLLED	RATE	CRITICAL COMMENTS
<p><b>WOODY WEEDS</b> Bamboo, Bitou bush, Boneseed, Boxthorn, Crofton weed, Gorse, Groundsel bush, Lantana, Mistflower</p>	<p><b>Handgun:</b> 330 - 660 mL per 100 L</p> <p><b>Knapsack:</b> 50 - 100 mL per 15 L</p>	<p>Apply to actively growing plants. Do not apply to drought stressed plants. Further treatment may be necessary to restrict seedling re-establishment.</p> <p><b>Bamboo</b>, apply when foliage/regrowth is 1 - 2m tall.  <b>Bitou Bush/Boneseed</b>, apply higher rates on bushes &gt;1.5m. Best results are achieved when treated at peak flower during winter.  <b>Boxthorn</b> minimum rate is 470 mL for handgun and 70 mL for knapsack.  <b>Groundsel bush</b>, apply higher rate on bushes greater than 2m. Do not apply in Winter. Minimum rate is 470 mL for handgun and 70 mL for knapsack.  <b>Gorse</b>, always add Pulse at 200 mL/100 L of spray mix, use higher rate only.  <b>Lantana</b>, use higher rate only. Addition of Pulse (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 re-growth.</p>
<p>Blackberry, Chinese shrub, Eucalypts spp. (seedlings &lt;2m), Hawthorn bush, Pampas grass, Sifton bush, Sweet briar, Willow (&lt;2m)</p>	<p><b>Handgun:</b> 660 - 870 mL per 100 L</p> <p><b>Knapsack:</b> 100 - 140 mL per 15 L</p>	<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><b>Blackberry</b>, apply from flowering to leaf fall, use higher rate on old dense infestations &gt;2m high. In Tasmania, do not treat bushes bearing mature fruit.  <b>Chinese scrub</b>, use higher rates on bushes &gt;1m.  <b>Eucalyptus spp.</b>, add Pulse at 200 mL/100 L of spray mix.  <b>Hawthorn</b>, apply from flowering to leaf fall, use higher rates on bushes greater than 2m.  <b>Pampas grass</b>, allow regrowth to reach 1m, best results apply after flowering.  <b>Sifton bush</b>, use higher rates on bushes greater than 1m.  <b>Sweet briar</b>, apply from flowering to leaf fall, use 1.0 - 1.35 L/100 L, and 150 - 200 mL/100 L, use higher rates on bushes greater than 1.5m.</p>

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

**WITHHOLDING PERIOD:**

**WHEAT & LEGUMES: DO NOT HARVEST FOR 7 DAYS AFER APPLICATION.**

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

# GENERAL INSTRUCTIONS

## PRODUCT INFORMATION

F.S.A. Glyphosate 540 K is a non-volatile, non selective, water soluble liquid herbicide for the control of annual and perennial grasses and broadleaf weeds in a wide range of agricultural and non-agricultural use situations. F.S.A. Glyphosate 540 K may be used for weed control in agricultural land prior to sowing any edible or non-edible crop, but not prior to transplanting tomato seedlings.

When applying this product prior to transplanting crops into plastic mulch, care must be taken to remove residues of this product from the plastic prior to transplanting. Residues can be removed by 2 cm of natural rainfall or by applying water via a sprinkler irrigation system.

F.S.A. Glyphosate 540 K is absorbed by plant foliage and green stems. It is inactivated immediately in the soil and does not provide residual weed control. This product moves through the plant from the point of contact to and into the root system. Initial visible effects on annual weeds take 3 to 7 days, but may not be noticeable for 2 to 3 weeks under cool cloudy conditions or on some perennial weeds.

## RESISTANT WEEDS WARNING

GROUP	<b>9</b>	HERBICIDE
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F.S.A. Glyphosate 540 K Herbicide is a member of the Glycines group of herbicides. F.S.A. Glyphosate 540 K has the inhibition of EPSP synthase mode of action. For weed resistance management, F.S.A. Glyphosate 540 K is a Group 9 herbicide.

Some naturally occurring weed biotypes resistant to F.S.A. Glyphosate 540 K and other Group 9 herbicides may exist through normal genetic variability in any weed population. The resistant individuals can eventually dominate the weed population if these herbicides are used repeatedly. These resistant weeds will not be controlled by F.S.A. Glyphosate 540 K or other Group 9 herbicides.

Since the occurrence of resistant weeds is difficult to detect prior to use, Four Seasons Agribusiness Pty Ltd accepts no liability for any losses that may result from the failure of F.S.A. Glyphosate 540 K to control resistant weeds.

## CROP ESTABLISHMENT

F.S.A. Glyphosate 540 K 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.

## MIXING

F.S.A. Glyphosate 540 K mixes readily with water. Reduced results may occur if water is used containing; suspended clay or organic matter, eg. from dams, streams and 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 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  $\frac{1}{3}$  to  $\frac{1}{2}$  full with clean water and start agitation.
  2. Where ammonium sulphate is recommended, add liquid Spraymate Liase 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 F.S.A. Glyphosate 540 K 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 clean water.

## TANK MIXTURES

F.S.A. Glyphosate 540 K may be tank-mixed with the following herbicides, insecticides and adjuvants.

Read and follow all label directions, restraints, plantback periods and withholding periods, and safety directions for the tank-mix products. 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/spraying is occurring.

### 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 F.S.A. Glyphosate 540 K prior to planting winter cereals will improve the knockdown of certain weeds.

### Insecticides

This product is compatible with the following insecticides: dimethoate, fenitrothion, phosmet, omethoate, chlorpyrifos, fenitrothion ULV and emulsifiable concentrates of dimethoate and fenitrothion. Other insecticides have not been tested.

### Adjuvants – A registered non-ionic surfactant containing 1040 g/L Octyl phenol ethoxylate

A registered non-ionic surfactant containing 1040 g/L Octyl phenol ethoxylate is recommended for the control of Silvergrass and annual ryegrass in late 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 – Ammonium sulphate

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

## 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 (BCPC – British Crop Protection Council standard). The use of nozzle 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/ha or less is recommended using nozzle types and pressure settings to deliver a COARSE (BCPC) 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 (eg. ropewick, canvas, felt or carpet applicators) may be used to apply F.S.A. Glyphosate 540 K. Avoid contact with desirable vegetation. Operate wiper equipment a minimum of 10 cm above 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 700mL F.S.A. Glyphosate 540 K Herbicide with 2.3 litres of clean water. Adjust flow to suit equipment.

### Aerial equipment

F.S.A. Glyphosate 540 K 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 application to sorghum and cotton crops up to a maximum rate of 2.7 L/ha where specified by the 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 of not less than 20 L/ha and using settings to produce a median droplet diameter 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 eg 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 F.S.A. Glyphosate 540 K Herbicide by aircraft when temperature is above 30°C. Increase water volume to at least 30 L/ha when temperature rises above 25°C. 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 light winds (less than 4 km/hr) or inversion conditions or where wind speed exceeds 12 km/hr.

### **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.
- Rainfall occurring 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 that 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.

### **PROTECTION OF CROP, 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 spraying 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**

Keep out of reach of children

Store in the closed, original container in a cool, well ventilated area. Do not store for prolonged periods in direct sunlight. Triple rinse containers before disposal. Add rinsings to spray tank. Do not dispose of undiluted chemicals on site. If recycling, replace cap and return clean containers to recycler or designated collection point.

If not recycling, break, crush, or puncture and bury empty 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. In compliance with relevant local, state or territory government regulations. Do not burn empty containers or product.

The method of disposal of the container depends on the container type. Read the 'Storage and disposal' instructions on the label that is attached to the container.

This container can be recycled if it is clean, dry, free of visible residue and has the drumMUSTER logo visible. Triple-rinse container for disposal. Dispose of rinsate by adding it to the spray tank. Do not dispose of undiluted chemical on site. Wash outside of the container and the cap. Store cleaned container in a sheltered place with cap removed. It will then be acceptable for recycling at any drumMUSTER collection or similar container management program site. The cap should not be replaced, but may be taken separately. Triple or preferably pressure rinse inner bladder before disposal. Add rinsings to spray tank. DO NOT dispose of undiluted chemicals on site. If recycling, replace cap and return clean packaging to recycler or designated collection point. If not recycling 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.

### 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 and preparing spray and using the prepared spray, wear cotton overalls buttoned to the neck and wrist (or equivalent clothing), elbow-length PVC gloves and face shield or goggles. If product in eyes, wash it out immediately with water. Wash hands after use. After each day's use, wash gloves, face shield or goggles and contaminated clothing.

### FIRST AID

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

### SAFETY DATA SHEET

Additional information is listed in the Safety Data Sheet which is available from the supplier.

### CONDITIONS OF SALE

The sale, supply, storage, use and application of this product is beyond the control of the manufacturer, and, subject to this provision, all warranties, conditions, rights and remedies express or implied under common law, statute or otherwise, in relation to the sale, supply, storage, use or application are excluded. Four Seasons Agribusiness Pty Limited and its associated entities shall not accept any liability whatsoever (including consequential loss) or however arising (including negligence) for any damage, injury or death connected with the sale, supply, storage, use or application of this product except for liability which cannot be excluded by statute.

**Toxic to aquatic life with long lasting effects. Avoid release to the environment. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice. Collect spillage. Not combustible. Use extinguishing media suited to burning materials.**

**IN AN EMERGENCY  
DIAL 000  
POLICE OR FIRE BRIGADE**



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