

CAUTION

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



Glyphoggran 680

HERBICIDE

ACTIVE CONSTITUENT: 680 g/kg GLYPHOSATE
present as the MONO-AMMONIUM SALT

GROUP M HERBICIDE

For the control of many
Annual and Perennial weeds in certain
situations as per Directions for Use Table.

IMPORTANT: READ THE ATTACHED LEAFLET
BEFORE USING THIS PRODUCT



AUSTRALIS
CROP PROTECTION

NET CONTENTS: 15kg



Glyphogran 680

HERBICIDE

STORAGE AND DISPOSAL

Store in the closed, original container in a dry, cool, well-ventilated area out of direct sunlight. DO NOT contaminate seed, feed or foodstuff. Single rinse before disposal. Add rinsings to spray tank. DO NOT dispose of undiluted chemicals on-site. Puncture and bury empty bags in a local authority landfill. If no landfill is available, bury the containers below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty bags and product should not be burnt.

SAFETY DIRECTIONS

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 day's use wash gloves, face shield and goggles and contaminated clothing.

FIRST AID

If poisoning occurs contact a doctor or Poisons Information Centre. Phone Australia 131126.

MATERIAL SAFETY DATA SHEET

Additional information is listed in the MSDS, which is available from the supplier.

CONDITIONS OF SALE: The use of ACP Glyphogran 680 Herbicide being beyond the control of the manufacturer no warranty expressed or implied is given by Australis Crop Protection Pty Ltd regarding its suitability, fitness or efficiency for any purpose for which it is used by the buyer, whether in accordance with the directions or not and Australis Crop Protection Pty Ltd accepts no responsibility for any consequence whatsoever resulting from the use of this product.

APVMA Approval No.: 68173/57694

PLACE LEAFLET HERE



BATCH NO:

DATE OF MANUFACTURE:

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



AUSTRALIS
CROP PROTECTION

Australis Crop Protection Pty Ltd

ABN 94 150 711 185

Shop 4, 30 Heber Street, Moree NSW 2400

Telephone: 0417 329 133 • Facsimile: 07 3337 9882

www.austcrop.com.au

DIRECTIONS FOR USE
GENERAL WEED CONTROL – All States

SITUATION	CRITICAL COMMENTS (Read Application Checklist before using)
For general weed control in Domestic areas (home gardens), Commercial, Industrial and Public Service areas, Agricultural buildings and other farm situations. For specific weeds, refer to the appropriate Weeds Controlled table.	<ul style="list-style-type: none"> For the control of many grasses and broadleaf weeds. RATE: 5 g per litre of water Apply when weeds are actively growing. Apply to ensure complete and uniform wetting of foliage. Visible symptoms may take from 3 to 7 days to develop.

USE SITUATIONS – All States (except where noted):

For rates of application and weeds controlled, see Weeds Controlled tables.

SITUATION	CRITICAL COMMENTS
NON-AGRICULTURAL AREAS Around buildings, Commercial and Industrial areas, Domestic and Public Service areas, Right-of-ways	ACP Glyphogran 680 Herbicide does not provide residual weed control. For residual control of annual weeds, ACP Glyphogran 680 Herbicide may be tank-mixed with certain residual herbicides. See Tank Mixtures/Herbicides.
AGRICULTURAL AREAS	ACP Glyphogran 680 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.
DRY DRAINS AND CHANNELS (ETC)	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 water. DO NOT allow water to return to dry channels and drains within 4 days of application.
FORESTS	ACP Glyphogran 680 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.
COTTON Shielded sprayers Qld and NSW only	Shielded Sprayers: Apply ACP Glyphogran 680 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 crop less than 20 cm high. DO NOT allow spray or spray drift to contact any part of the cotton plant as severe injury or destruction may result.
TREE AND VINE CROPS 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	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 & 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/litre 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, ACP Glyphogran 680 Herbicide may be tank-mixed with compatible herbicides which are labelled for use in the above crops. See Tank Mixtures/Herbicides for directions.
PASTURE	DIRECTED (SPOT) APPLICATION: ACP Glyphogran 680 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: ACP Glyphogran 680 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.
ONIONS Post-plant, pre-emergence application TAS only	For control of annual weeds and suppression of perennial weeds, including Rope Twitch, apply ACP Glyphogran 680 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/ha	HANDGUN / KNAPSACK	CRITICAL COMMENTS
Annual Ryegrass, Amaranth, Barley Grass, Barnyard Grass ^{cd} , Bent Grass, Brome Grass, Catrop, Canary Grass, Capeweed, Cereals, Chickweed, Cobbler's Peg, Deadnettle, Doublegee, Fumitory, Ground Cherry, Hedge Mustard, Hoary Cress ^{bcd} , Lesser Swinecress, Liverseed Grass, Mintweed, Noogoora Burr ^{ab} , 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 to 1.6 kg/ha	3 to 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 . ACP Glyphogran 680 Herbicide does not provide residual weed control. Repeat treatments may be necessary to control later germinating weeds. For residual control of annual weeds, ACP Glyphogran 680 Herbicide may be tank-mixed with certain residual herbicides. See Tank Mixtures in the General Instructions for directions.
STATE REGISTRATION CODE: a - Queensland d - Tasmania b - New South Wales e - South Australia c - Victoria f - Western Australia			

PERENNIAL WEEDS – Registration in all states/territories unless otherwise specified.

WEEDS CONTROLLED	BOOM RATE/ha	HANDGUN / KNAPSACK	CRITICAL COMMENTS
Artichoke Thistle ^{cd} , African Lovegrass ^{cd} , Carpet Grass, Cocksfoot, Flatweed, Johnson Grass, Kikuyu, Nutgrass, Paspalum, Phalaris ^{bcd} , Plantain, Prairie Grass, Rhodes Grass, Rope Twitch ^{cd} , * Tall Sedge ^{bcd} , Yorkshire Fog	1.5 to 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 to 8 leaves. Use the higher rate in uncultivated situations. For Rhodes Grass and Rope Twitch, use the higher boom rate only.
Blady Grass ^{ab} , Bracken, Couch, * Cumbungi, * Glyceria ^a , Guinea Grass, * Paragrass * See Dry Drains and Channel Use situation	4.5 kg/ha	7 g/L	For bracken, add Pulse 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 to 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 ^{abcd} , Boxthorn, Gorse, Groundsel Bush ^{ab} , Lantana ^{ab}	5 g/L	For Gorse, add Pulse at 20 mL/10 L of spray mix.
Blackberry, Eucalyptus spp. (seedlings <2 m) ^{abcd} , Hawthorn ^{bcd} , Pampas Grass, Sifton Bush ^{ab} , Willow (<2 m) ^{abcd}	5 to 7 g/L	For Eucalyptus spp., add Pulse at 20 mL/10 L of spray mix.
STATE REGISTRATION CODE: a - Queensland d - Tasmania b - New South Wales e - South Australia c - Victoria f - Western Australia		

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
SOUTHERN AUSTRALIA Prior to sowing a crop or pasture with full soil disturbance by cultivation or sowing with a tyned implement WA, SA, Vic and NSW only	Barley Grass, Brome Grass, Volunteer Cereals, Wild Oats	265 g to 530 g/ha pre-tillering 530 g to 660 g/ha post-tillering	Treat only actively growing weeds not under stress from low moisture, frost, cold, disease or waterlogging. If heavy grazing has occurred, allow regrowth to 6 to 8 cm before spraying and use the higher rate. Rate Selection: Increase to higher rates late in the season or when treating under cold/overcast conditions. 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. 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. Crop Establishment: Sowing should not proceed until conditions allow the formation of a satisfactory seedbed. See Crop Establishment for directions. Annual Ryegrass, Silvergrass and perennial grasses: Addition of Wetter TX, 200 mL/100 L spray solution, may improve control. When treating dense infestation of Silvergrass, use low volume nozzles (eg: SS11001, Hardi. No. 10) and a spray volume of 70 mL/ha or more is recommended to improve plant spray coverage. Tank Mixtures: For improved control of Clover, add dicamba. Read and follow all label directions, restraints, plantback periods, withholding periods, regional use restrictions and safety directions for the tank mix products. See Tank Mixtures for directions. Perennial Weeds: For Perennial phalaris, Soursob, Skeleton weed and Sorrel, ACP Glyphogran 680 Herbicide will provide knockdown, seasonal suppression and reduction in treated plant numbers.
	Annual Phalaris (Canary grass), Annual Ryegrass, Silver Grass, Winter Grass	530 g to 660 g/ha pre-tillering 660 g to 790 g/ha post-tillering	
	Calomba Daisy, Capeweed, Doublegee/Spiny Emex	265 g to 530 g/ha less than 8 cm diameter/height 530 g to 790 g/ha greater than 8 cm diameter/height	
	Amsinckia, Fumitory, Paterson's Curse, Saffron Thistle, Scotch Thistle, Spear Thistle, Variegated Thistle, Volunteer Lupins, Wild Turnip	530 g to 660 g/ha less than 12 cm diameter/height 660 g to 790 g/ha greater than 12 cm diameter/height	
	Dock (seedling)	530 g to 790 g/ha	
	Perennial Phalaris, Sorrel Sub. Clover, Soursob	790 g/ha	
	Skeleton Weed – fully emerged rosettes NSW only		
	All the above weeds TAS only	790 g to 1.6 kg/ha	

CONSERVATION TILLAGE (continued)

SITUATION	WEEDS CONTROLLED	RATE	CRITICAL COMMENTS
SOUTHERN AUSTRALIA Prior to establishing a crop or pasture with an implement that gives minimal or no soil disturbance. NSW, Vic, SA, WA only	Barley Grass, Volunteer Cereals, Wild Oats	530 g to 790 g/ha	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 to 8 cm before spraying and use the higher rate. Rate Selection: Use the lower rate on young weeds. 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. Aerial Application: Use higher rates. See Aerial Equipment . Annual Ryegrass, Silvergrass and Perennial Grasses: Addition of Wetter TX, 200 mL/100 L spray solution may improve control. When treating dense infestation of Silvergrass, use low volume nozzles (eg: SS11001, Hardi. No. 10) and a spray volume of 70 mL/ha or more is recommended to improve plant spray coverage. Tank Mixtures For improved control of Clover, add dicamba. Read and follow all label directions, restraints, plantback periods, withholding periods, regional use restrictions and safety directions for the tank mix products. See Tank Mixtures for directions. Addition of ammonium sulfate, 2 kg/100 L may improve control when treating under adverse environmental conditions. Pasture or Crop Establishment: DO NOT sow into excessive trash. Excessive plant residues may be removed by grazing after treatment. Grazing may commence one (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 one (1) day after treatment of annual weeds and 7 days for perennial weeds. See also Crop Establishment . 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.
	Brome Grass Canary Grass Capeweed Variegated Thistle Winter Grass	660 g to 1 kg/ha	
	Annual Ryegrass Paterson's Curse Saffron Thistle Scotch Thistle Spear Thistle Silvergrass Wild Mustard Wild Radish Wild Turnip	790 g to 1 kg/ha	
	Erodium Plantain Perennial-Phalaris Sorrel Sub. Clover Yorkshire Fog	990 g to 1.3 kg/ha	
	Dock, Flatweed	1.3 kg/ha	
	All the above weeds TAS only	790 g to 1.6 kg/ha	
SOUTHERN AUSTRALIA To commence a fallow NSW, Vic, SA, WA only	Barley Grass Volunteer Cereals Wild Oats	530 g to 790 g/ha	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 to 8 cm before spraying and use the higher rate. Rate Selection: Use the lower rate on young weeds or where cultivation is to follow within 21 days. Increase to the high rate where grasses reach full tillering or where broadleaf weeds commence stem elongation/budding. Annual Ryegrass, Silvergrass and Perennial Grasses: Addition of Wetter TX, 200 mL/100 L spray solution may improve control. When treating dense infestation of Silvergrass, use low volume nozzles (eg: SS11001, Hardi. No. 10) and a spray volume of 70 L/ha or more is recommended to improve plant spray coverage. Hoary Cress: Treat from late rosette to early flowering. Soursob: Treat at tuber exhaustion. 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. Tank Mixtures: For improved control of Clover, add dicamba. Read and follow all label directions, restraints, plantback periods, withholding periods, regional use restrictions and safety directions for the tank mix products. See Tank Mixtures for directions.
	Annual Ryegrass Brome Grass Capeweed Paterson's Curse Saffron Thistle Scotch Thistle Silvergrass Spear Thistle Wild Mustard Wild Radish Wild turnip	790 g to 1 kg/ha	
	Hoary Cress Soursob	790 g/ha	
	Couch	790 g to 1.6 kg/ha	
	All the above weeds TAS only	790 g to 1.6 kg/ha	
Pasture topping For annual grass, Capeweed and Calomba daisy seed-set reduction	Barley Grass Brome Grass Capeweed Silvergrass	160 g to 240 g/ha	Remove stock prior to treatment to allow even regrowth. Apply to Capeweed and Annual Ryegrass at FLOWERING. For other grasses, apply from HEAD to MILKY DOUGH stage. Use higher rate for dense infestations or where Annual Ryegrass is present. Apply before signs of plants "haying off". Reduction in pasture legume population may occur as a result of treatment. DO NOT apply to clover or medic crops intended for seed or hay.
	Annual Ryegrass Calomba Daisy	240 g/ha	
Seed-head suppression of Perennial grasses	Bentgrass	200 g to 330 g/ha	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. Follow-up Management: Graze hard after spraying.
Poa Tussock infested pasture For reduction of ground cover allowing pasture renovation	Most annual weeds and suppression of Poa Tussock	1.6 kg to 2.1 kg/ha	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 to May). Application: Increase to the higher rate may give more effective reductions. If aerial spraying, see Aerial Equipment . 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.

continued overleaf

CONSERVATION TILLAGE (continued)

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 g to 530 g/ha	Treat only actively growing weeds not under stress for low moisture, frost, cold, disease or waterlogging. If heavy grazing has occurred, allow regrowth to 6 to 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. 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 2,4-D ester. Crop Establishment: Sowing should not proceed until conditions allow the formation of a satisfactory seedbed. See Crop Establishment for directions. 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. 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.
	Barnyard Grass, Button Grass, Columbus Grass (seedling), Liverseed Grass, Native Millet, Stinkgrass (Lovegrass), Volunteer Sorghum	530 g to 1 kg/ha	
	Aust Bluebell (QLD only), Cudweed, Fumitory, Mexican Poppy, New Zealand Spinach, Safron Thistle, Spear Thistle, Spurge, Stinking Goosefoot	530 g to 790 g/ha	
	Black (Giant) Pigweed, Boggabri Weed, Caltrop (Yellow Vine), Indian Hedge Mustard, Mintweed, Summer Grass	265 g to 530 g/ha up to 5 true leaves or 3 cm diameter/height 530 g to 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 g to 530 g/ha up to 5 true leaves or 3 cm diameter/height 530 g to 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 g to 790 g/ha prior to stem elongation/budding. After that, use 265 g to 790 g/ha plus 500 mL to 700 mL 2,4-D ester (800 g/L) or 790 g to 1 kg/ha	
	Pigweed	530 g to 1 kg/ha	
	Sowthistle Milkthistle	400 g to 530 g/ha rosettes up to 3 cm diameter 530 g to 1 kg/ha greater than 3 cm diameter	
	Couch	790 g to 1.6 kg/ha	
Johnson Grass	1 kg to 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	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 to 8 weeks), it is essential to make a second application. Note: Follow-up treatments should be made as part of a Nutgrass control programme.	

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 to 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	

OTHER SITUATIONS

SITUATION	WEEDS CONTROLLED	RATE	CRITICAL COMMENTS
RICE Direct drilling NSW only	Annual Phalaris (Canary Grass) Annual Ryegrass Barley Grass Burr Medic Sub. Clover Winter Grass	530 g to 660 g/ha	ACP Glyphogran 680 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 to 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 to 14 days after spraying. ACP Glyphogran 680 Herbicide does not provide residual weed control. Permanent water and approved selective herbicides should be used to provide continuing control of weeds.
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 to 1 kg/ha	Apply when grain moisture is less than 25%. Pre-harvest treatments may increase the likelihood of crop lodging. Apply treatments to previously slashed/grazed stubble when at least 20 cm of new growth has occurred. Caution: Sorghum may be naturally toxic to stock.
SORGHUM CONTROL (post-harvest) QLD, NSW only	Sorghum stubble (grain-sorghum)	530 g to 790 g/ha for fresh regrowth from slashed stubble. 790 g to 1 kg/ha for standing stubble if sufficiently green and for fresh spring regrowth.	
SUGARCANE Ratoon Spray out QLD, NSW only	Sugarcane ratoon regrowth	2.1 kg to 4.8 kg/ha	APPLY UNDER GOOD GROWING CONDITIONS ONLY to actively growing ratoons 60 to 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.
WITHHOLDING PERIOD: NOT REQUIRED WHEN USED AS DIRECTED.

GENERAL INSTRUCTIONS
PRODUCT INFORMATION

ACP Glyphogran 680 Herbicide is a non-volatile, water soluble product with non-selective herbicidal activity against many annual and perennial broadleaf weeds and grasses. ACP Glyphogran 680 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. ACP Glyphogran 680 Herbicide is absorbed by plant foliage and green stems. It is inactivated immediately in the soil and does not provide residual weed control. ACP Glyphogran 680 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. ACP Glyphogran 680 Herbicide will control emerged weeds only, and provides no residual weed control. 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.

RESISTANT WEEDS WARNING

ACP Glyphogran 680 Herbicide is a member of the Glycines group of herbicides. The product has the inhibition of EPSP synthase mode of action. For weed resistance management, the product is a Group M herbicide. Some naturally-occurring weed biotypes resistant to the product 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 the product or other Group M herbicides. Since the occurrence of resistant weeds is difficult to detect prior to use Australis Crop Protection Pty Ltd accepts no liability for any losses that may result from the failure of the product to control resistant weeds.

CROP ESTABLISHMENT

ACP Glyphogran 680 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 seeding 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 1kg (6 L/kg) of ACP Glyphogran 680 Herbicide. Reduced results may occur if water containing soil is used, eg, water from ponds and unlined ditches, or if hard water containing calcium salts is used. 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. 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 the ACP Glyphogran 680 Herbicide dissolves when first added to the tank.

Full Agitation in Pre-Filled Spray Tank:

- Fill the tank with one-half (½) the required amount of clean water and set the pump on full agitation.
- Add the required amount of ACP Glyphogran 680 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 to 3 minutes.
- Continue water addition and fully agitate until all the ACP Glyphogran 680 Herbicide is completely dissolved.

SURFACTANT ADDITION

Additional surfactant is not required except where the rate of ACP Glyphogran 680 Herbicide is less than 6 g/L when applied by boom.
Rate: Add Turbo Plus 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.

TANK MIXTURES

ACP Glyphogran 680 Herbicide may be tank-mixed with the following herbicides, insecticides and additives. Read and follow all label directions, restraints, plant-back periods, withholding periods, regional use restrictions and safety directions for the tank-mix products.

Mixing Instructions for all Tank Mixtures:

1. Fill the spray tank 1/3 to 1/2 full with clean water and start agitation.
2. Add ACP Glyphogran 680 Herbicide. Mix thoroughly and continue water addition.
3. Where crystalline ammonium sulphate is recommended, wash 2% w/v (2 kg/100 L spray solution) through a top mesh-screen into the tank and mix thoroughly.
4. Add recommended herbicide/insecticide/additive to the spray tank and mix thoroughly.
5. Add surfactant near the end of the filling process to minimise foaming.
6. Always maintain adequate agitation during application and use the tank mix promptly.

Tank Mixtures – Herbicides:

Atrazine* flowable or granular (Agricultural uses only. **DO NOT** apply the tank-mix for control of Barnyard grass or liverseed grass), 2,4-D ester, dicamba, Express, Triclopyr 600, Chlorsulfuron, simazine* flowable or granular, Sulfometuron, Yield, Pendimethalin 330, Metsulfuron methyl, Triasulfuron, Clopyralid 300, LVE MCPA and Diuron 500SC.
* Ammonium sulfate may improve the performance of tank mixtures of ACP Glyphogran 680 Herbicide and atrazine or simazine. See directions below.

The addition of Diuron 500SC at 75 mL/ha to recommended rates of ACP Glyphogran 680 Herbicide prior to planting wheat or barley will improve knockdown and increase the speed at which treated weeds develop visible symptoms of phytotoxicity.

Tank Mixtures – Additives:

Ammonium sulphate (crystalline or liquid 500 g/L)
Rate: 2 L or 1 kg/100 L spray solution.

The addition of crystalline ammonium sulphate to ACP Glyphogran 680 Herbicide, when used to control annual weeds, MAY improve the performance of ACP Glyphogran 680 Herbicide under adverse environmental conditions such as cool, cloudy weather. Ammonium sulfate may also improve the performance of tank mixtures of ACP Glyphogran 680 Herbicide and atrazine or simazine. Use only crystalline or liquid (500 g/L) ammonium sulfate, NOT prilled or granular forms. Ammonium sulfate may be corrosive to metal parts of the sprayer. Thoroughly flush tanks, pumps and nozzles with water after use.

Pulse Penetrant

Rate: 20 mL/10 L spray solution
Add when treating bracken (boom application).
Wetter TX Surfactant

Rate: 20 mL/10 L spray solution.
Add when treating Annual ryegrass in spring (from the beginning of August to the end of October), Silvergrass and perennial grasses – see Critical Comments section. Wetter TX is not a general purpose surfactant and should be used only where recommended.

Tank Mixtures – Insecticides:

This product is compatible with the following insecticides. Dimethoate, Imidan, Omethoate, Chlorpyrifos 500, Metasystox, Sumithion ULV and emulsifiable concentrates of dimethoate and fenitrothion. Other insecticides have not been tested.

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.
- DO NOT add additional surfactant or mix with any other agricultural chemicals, herbicides, oils or other materials except as specifically directed on this label.
- ACP Glyphogran 680 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.
- DO NOT disturb treated weeds by cultivation, sowing or grazing for one (1) day after treatment of annual weeds and 7 days for perennial weeds to ensure herbicide absorption except where noted.
- 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.

APPLICATION

ACP Glyphogran 680 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, a spray volume of 60 L/ha or less is recommended for optimum performance. Fan nozzles equipment is recommended using pressures in the range 240 to 280 kPa. Boom height must be set to ensure double overlap of nozzle patterns at the top of the weed canopy.

High Volume Application: (eg: Knapsack/Handgun Equipment) The dilution rate is given as g/litre, eg: 5 grams ACP Glyphogran 680 Herbicide per one (1) litre of water. This is equal to 75g ACP Glyphogran 680 Herbicide per 15 litres of water or 500g per 100 litres of water. Adjust equipment to achieve an even spray pattern. Apply to ensure complete and uniform wetting of all foliage. For handgun equipment, a D6 spray tip (Spraying Systems Australia P/L) or equivalent and an operating pressure of 400 to 700 kPa are recommended.

Aerial Equipment: Aerial equipment may be used to apply ACP Glyphogran 680 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. Use recommended rates of ACP Glyphogran 680 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. Droplets with an average size (VMD) of 250 to 350 micron diameter are recommended. 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 to 80 L/ha and increase droplet size to at least 300 micron VMD.

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 at least 300 micron VMD. **DO NOT** apply ACP Glyphogran 680 Herbicide by aircraft when ambient temperature is above 30°C.

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.

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

Glyphogran 680

HERBICIDE

ACTIVE CONSTITUENT: 680 g/kg GLYPHOSATE
present as the MONO-AMMONIUM SALT

GROUP M HERBICIDE

For the control of many Annual and Perennial weeds in certain situations as per Directions for Use Table.

IMPORTANT: THIS LEAFLET IS PART OF THE LABEL ATTACHED TO THE CONTAINER. READ THOROUGHLY BEFORE OPENING OR USING THIS PRODUCT.



AUSTRALIS
CROP PROTECTION

Australis Crop Protection Pty Ltd
ABN 94 150 711 185
Shop 4, 30 Heber Street, Moree NSW 2400
Telephone: 0417 329 133 • Facsimile: 07 3337 9882

PROTECTION OF CROP, NATIVE AND OTHER NON-TARGET PLANTS

Avoid contact with foliage, green stems or fruit of crops, desirable plants and trees, since severe injury or destruction may result. **DO NOT** apply under weather conditions, or from spraying equipment, that may cause spray to drift onto nearby susceptible plants/crops, cropping lands or pastures.

PROTECTION OF WILDLIFE, FISH, 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 dry, cool, well-ventilated area out of direct sunlight. **DO NOT** contaminate seed, feed or foodstuff. Single rinse before disposal. Add rinsings to spray tank. **DO NOT** dispose of undiluted chemicals on site. Puncture and bury empty bags in a local authority landfill. If no landfill is available, bury the containers below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty bags and product should not be burnt.

SAFETY DIRECTIONS

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 day's use wash gloves, face shield and goggles and contaminated clothing.

FIRST AID

If poisoning occurs contact a doctor or Poisons Information Centre. Phone Australia 131126.

MATERIAL SAFETY DATA SHEET

Additional information is listed in the MSDS, which is available from the supplier.

CONDITIONS OF SALE: The use of ACP Glyphogran 680 Herbicide being beyond the control of the manufacturer no warranty expressed or implied is given by Australis Crop Protection Pty Ltd regarding its suitability, fitness or efficiency for any purpose for which it is used by the buyer, whether in accordance with the directions or not and Australis Crop Protection Pty Ltd accepts no responsibility for any consequence whatsoever resulting from the use of this product.