RLP APPROVED

Product Name: SUPERWAY GLYPHOSATE CT 450 HERBICIDE

APVMA Approval No: 47743/121389

DISPLAYED BY INFOPEST

Label Name:	SUPERWAY GLYPHOSATE CT 450 HERBICIDE

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

Constituent Statements:	450 g/L GLYPHOSATE PRESENT AS THE ISOPROPYLAMINE SALT

Mode of Action:	GROUP **M** HERBICIDE

Statement of Claims:	A non-selective herbicide for the control of a broad range of annual and perennial weeds as per the directions for use table.

Net Contents:	5L to 1000L

Restraints:	DO NOT spray if rainfall is expected as rainfall within 6 hours of treatment may reduce the effectiveness of the product. Heavy rainfall within 2 hours of treatment may wash the product from the leaf surface and retreatment may be necessary. DO NOT disturb treated weeds by grazing, cultivation, sowing etc after treatment for one day for annual weeds and 7 days for perennial weeds to ensure complete uptake of the herbicide. DO NOT treat weeds under any stress from frost, cold, disease, waterlogging, lack of moisture or disease. Plants must be actively growing to ensure optimum uptake of the product.

Directions for Use:	This section contains file attachment.

Other Limitations:	

Withholding Periods:	WITHHOLDING PERIOD: NOT REQUIRED WHEN USED AS DIRECTED

Trade Advice:	

General Instructions:	GENERAL INSTRUCTIONS Mode of Action Superway Glyphosate CT 450 Herbicide is a water soluble liquid herbicide. The product is non-selective and will control of a wide range of emerged annual and perennial weeds. It provides no residual activity and is inactivated once it comes into contact with the soil. The product is absorbed by plant leaves and green stems and is then translocated throughout the plant to the root system. The product inhibits a plant enzyme causing a breakdown in the metabolic pathway leading to death of the plant. Visual effects of product efficacy are gradual wilting, yellowing leading to complete plant browning. For annual weeds effects are usually apparent in 3-7 days and for perennial weeds up to 14-21 days. The time taken for these effects to appear will vary depending on the speed of translocation which will be dependent on climatic conditions such as temperature, moisture conditions etc. Best results are obtained if plants are sprayed when they are actively growing and not under any stress from such factors as disease, waterlogging, insect damage, drought stress etc. To ensure that the product is adequately absorbed by weeds it is recommended that spraying be delayed if rainfall is expected. Rain up to 6 hours after application may reduce the efficacy of the product and heavy rain within 2 hours may necessitate re-treatment. Plants which are covered in dust or which are wet with dew should not be treated. CROP ESTABLISHMENT Where the product is used to control weeds prior to the establishment of a new crop or pasture it is important that the crop or pasture not be sown until a suitable seed bed is present. Where a light cover of weeds has been sprayed, it may be possible to sow in one day. Where a large amount of dead weed matter or trash is present the seed bed needs to be adequately prepared before crop or pasture sowing. MIXING Superway Glyphosate CT 450 Herbicide may be applied by boom spray, air, knapsack, handgun or wiper application. Boom Application - Spray volumes of 25 - 100L water /ha are recommended with a fan nozzle at pressures of 240 -280 kPa. Boom height must be set to ensure double overlap of spray patterns at the top of the weed canopy. Wiper Equipment - (eg ropewick, canvas, carpet or felt applicators) may be used to apply the product in the situations as per the directions for use table. Weeds should be at least 15cm above the crop and the wiper equipment should be operated at least 10cm above the crop. Best results are obtained with lower speeds of application (do not exceed 8 kilometers per hour) and where two applications are made in opposite directions ie double pass. Where herbicide does not contact foliage (due to different levels of foliage) results may not be satisfactory and re-treatment may be required. Do not store a mixed solution for more than 2 days. Rate: 800mL of product to 2 litres of water. TANK MIXES Compatibility The product may be mixed with a variety of products to enhance weed control, to broaden the spectrum of weeds and to add residual control. Refer to the "Directions for Use" Section for detailed information on the tank mix situations.

Additives: Crystalline Ammonium Sulphate assists in minimising antagonism when mixed with flowable Triazine herbicides. The only form of Ammonium sulphate to be used is the crystalline form (not prilled or granule forms). Test the quality be dissolving 2 tablespoons in 2 litres of water. Swirl gently for 2 minutes. Should undissolved particles still remain at the of that time, pre-dissolve them prior to adding product to spray tank. Ensure solution is poured through a screen.

Herbicides: Atrazine – flowable or granular (see additives above – do not apply the tank mix for control of Barnyard grass, Liverseed grass), Dicamba, 2,4-D ester, Express, triclopyr 600, chlorsulfuron, metsulfuron, Yield, Stomp, triasulfuron, LVE MCPA, oxyfluorfen 240, . Oxyfluorfen – The addition of Oxyfluorfen at 75mL/ha to recommended rates of this product prior to planting Wheat or Barley will improve knockdown and increase the speed at which treated weeds develop visible symptoms of phytotoxicity. Add Flowright Compatibility agent to improve the compatibility in cold water. (less than 150C). See Directions below.

Insecticides: Chlorpyrifos, dimethoate, fenitrothion, Le-Mat, Chlorpyrifos 500, metasystox, Sumithion, Perfekthion EC 400.

FLOWRIGHT COMPATIBILITY AGENT
Rate: 200mL/100L spray solution. When mixing with Oxyfluorfen 240, add to improve the compatibility in cold water (less than 150C). Flowright must be pre-mixed with Oxyfluorfen 240 (Goal CT) before adding to the spray tank. Refer to Flowright label for full directions.

GENERAL SPRAYING INSTRUCTIONS
Do not spray this product if rain is likely to occur within 6 hours. Heavy rainfall within 2 hours after application may wash the chemical off the foliage and a repeat treatment may be required

APPLICATION
Boom Equipment
Use at spray volume of 25 to 100 L/ha. Fan nozzles at pressure of 240 - 280 Kpa is recommended. Boom height must be set to ensure double overlap of nozzle patterns at the top of the weed canopy.

Aerial application
Apply a minimum spray volume of 20L/ha for Micronair and boom equipment. Droplet size should be 250 - 350 micron and the swath width 15 -17 metres. Aerial application is only recommended in pasture or fallow situations before establishment of a new crop or pasture or in pre-harvest sorghum.
On sloping ground, the spraying height may vary, so it is recommended that the spray volume be increased to 30 -80L/ha with a droplet size of at least 300 micron.
Since the product is non-selective it is important to avoid spraying in conditions likely to cause drift. Eg wind over 8 kph, temperature inversion, still air and hot dry days.
DO NOT use in intensive horticultural areas.
Use recommended rates specified in this label up to a maximum limit of 3.2L/ha.

APPLICATION IN HOT CONDITIONS: When the temperature reaches 25oC increase the water volume to at least 30L/ha and droplet size to at least 300 micron VMD to compensate for additional evaporation of sprayed droplets. DO NOT use by air in temperatures above 30oC.

Wiper Equipment - (eg ropewick, canvas, carpet or felt applicators) may be used to apply the product in the situations as per the directions for use table. Weeds should be at least 15cm above the crop and the wiper equipment should be operated at least 10cm above the crop. Best results are obtained with lower speeds of application (do not exceed 8 kilometers per hour) and where two applications are made in opposite directions ie double pass. Where herbicide does not contact foliage (due to different levels of foliage) results may not be satisfactory and re-treatment may be required. Do not store a mixed solution for more than 2 days.
Rate: 800mL of product to 2 litres of water.

	Surfactant The addition of surfactant may improve weed control where water rates are high or product rates are low. Suggested surfactant rates are 200mL/100L of 1000g/L non-ionic surfactant or 250-500mL of 700g/L surfactant. Do not add spraying oils, agricultural chemicals or any other material except as directed on the label. Equipment Maintenance and Usage Superway Glyphosate CT 450 Herbicide should ONLY be stored, mixed or applied in plastic or plastic lined, stainless steel, aluminium, copper, brass or fibreglass containers. The product and spray solutions react with galvanised steel and unlined steel tanks and containers to form hydrogen gas which may form a highly combustible gas mixture. This gas could cause an explosion if ignited by an open flame. All application equipment including tanks, nozzles, hoses aircraft and aircraft landing gear, should be thoroughly washed after use to prevent corrosion.

Resistance Warning:	Resistant Weeds Warning GROUP M HERBICIDE Superway Glyphosate CT 450 Herbicide is a member of the glycine group of herbicides. Superway Glyphosate CT 450 Herbicide has the inhibitor of EPSP synthase mode of action. For weed resistance management Superway Glyphosate CT 450 Herbicide 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 Superway Glyphosate CT 450 Herbicide or any other Group M herbicide. Since the occurrence of resistant weeds in difficult to detect prior to use, Pooma Fertilizers Pty Ltd accepts no liability for any losses that may result from the failure of this product to control resistant weeds.

Precautions:	

Protections:	PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT DO NOT contaminate streams, rivers or watercourses with the chemical or used containers. DO NOT apply to weeds growing in or over water. DO NOT spray across open bodies of water. PROTECTION OF CROP, NATIVE AND OTHER NON-TARGET PLANTS. This product is non selective and may severely injure or kill desirable plants should the product contact the foliage, green stems or fruit of such plants. DO NOT spray under meteorological conditions or under spraying conditions which could be expected to cause spray to drift onto nearby susceptible plants, adjacent crops, crop lands or pastures. DO NOT use prior to transplanting tomato seedlings.

Storage and Disposal:	Store in the closed, original container in a cool, well ventilated area. Do not store for prolonged periods in direct sunlight. Triple-rinse containers before disposal. Add rinsings to spray tank. Do not dispose of undiluted chemicals on site. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush, or puncture and deliver empty packaging to an approved waste management facility. If an approved waste management facility is not available, bury the empty packaging 500 mm below the surface in a disposal pit specifically marked

	and set up for this purpose, clear of waterways, desirable vegetation and tree roots, in compliance with relevant local, state or territory government regulations. Do not burn empty containers or product. For refillable containers: Empty contents fully into application equipment. Close all valves and return to point of supply for refill or storage.

Safety Directions:	Product will irritate eyes and skin. Avoid contact with eyes and skin. When preparing the product for use, wear elbow length PVC gloves and face shield or goggles. When using controlled droplet applicator wear protective waterproof clothing and impervious footwear. 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 and face shield or goggles and contaminated clothing.

First Aid Instructions:	If poisoning occurs, contact a doctor or Poisons Information Centre (Phone Australia: 131126)

First Aid Warnings:	

DIRECTIONS FOR USE

SITUATION	WEEDS CONTROLLED	STATE	RATE (L/ha)	CRITICAL COMMENTS
SOUTHERN AUSTRALIA Before sowing a crop or pasture For weed control prior to sowing a crop or pasture with full soil disturbance by cultivation or sowing with a tyned implement	Barley Grass (*Hordeum leporinum*), Brome Grass (*Bromus unioloides*), Volunteer Cereals, Wild Oats (*Avena spp.*)	NSW, VIC, ACT, WA, SA only	400mL-800mL pre tillering 800mL-1.0L post tillering	Use the Higher Rate when treating in cold/overcast conditions, when using late in the season Use the lower rate on young weeds and the higher rate on mature weeds ie fully tillered grasses or broadleaf weeds at budding or stem elongation. If weeds have been grazed heavily remove stock prior to spraying to ensure regrowth to 6-8 cm before treatment and use the higher rate. To allow for herbicide uptake do not begin sowing for 1 day after application for annual weeds and 7-10 days for perennial weeds. If cultivation or sowing does not take place within 21 days retreatment may be necessary. Annual Ryegrass, Silver grass and Perennial grasses - It is recommended to use a water volume of 70L/ha or more with low volume nozzles to improve control. Crop Establishment: Sowing should not proceed until conditions allow for the formation of a satisfactory seedbed. See Crop Establishment for directions Tank Mixtures: For improved control of clover add dicamba. Read and follow all label directions for the tank mix product. For perennial weeds perennial phalaris, Soursob, Skeleton weed and Sorrel this product will provide knockdown, seasonal suppression and reduction in treated plant numbers.
	Annual phalaris (*Phalaris canariensis*), Annual Ryegrass (*Lolium rigidum*), Silver Grass (*Vulpia spp.*) Winter Grass (*Poa annua*)		800mL-1.0L pre tillering 1.0 -1.2L post tillering	
	Capeweed (*Arctotheca calendula*), Spiny Emex / Doublegee (*Emex australis*)		400mL-800mL less than 8cm diameter, 800mL-1.0L greater than 8 cm diameter	
	Amsinkia (*Amsinkia),* Fumitory (*Fumaria officinalis, F. muralis*), Paterson's Curse/Salvation Jane (*Echium plantaginium*), Saffron Thistle (*Carthamus lanatus*), Scotch Thistle (*Onopordum acanthium*), Spear Thistle (*Circium vulgare*), Variegated Thistle (*Silybum marianum*), Volunteer Lupins (*Lupinus angustifolius*), Wild Turnip (*Brassica tournefortii*)		800mL-1.0L less than 12 cm diameter 1.0-1.2L greater than 12cm diameter	
	Dock -seedling (*Rumex spp*)		800mL-1.2L	
	Perennial Phalaris (*Phalaris*), Sorrel (*Rumex acetosella*), Sub Clover (*Trifolium subterraneum*), Sour sob (*Oxalis pes-caprae*), Skeleton Weed (*Chondrilla juncea*) - fully emerged rosettes (NSW only)		1.2L	

SITUATION	WEEDS CONTROLLED	STATE	RATE (L/ha)	CRITICAL COMMENTS
SOUTHERN AUSTRALIA Before sowing a crop or pasture For weed control prior to sowing a crop or pasture with full soil disturbance by cultivation or sowing with a tyned implement	All the above weeds	TAS only	1.2L-2.4L	TAS ONLY: Use 1.2L on annual weeds and 2.4L on perennial weeds. The product may also be tank mixed with dicamba to improve control of sorrel, dock and white clover. Observe dicamba label directions and plant back periods.
SOUTHERN AUSTRALIA Before sowing a crop or pasture For weed control prior to sowing a crop or pasture with minimal or no soil disturbance.	Barley Grass (*Hordeum leporinum*),Volunteer Cereals, Wild Oats (*Avena spp.*)	NSW, VIC, ACT, WA, SA only	800mL - 1.2L	Use the Higher Rate when treating in cold/overcast conditions, when using late in the season. Use the lower rate on young weeds and the higher rate on mature weeds ie fully tillered grasses or broadleaf weeds at budding or stem elongation. If weeds have been grazed heavily remove stock prior to spraying to ensure regrowth to 6-8 cm before treatment and use the higher rate. Annual Ryegrass, Silver grass and Perennial grasses - It is recommended to use water volumes of 70L/ha or more with low volume nozzles to improve control. Do not sow if heavy trash is present. Seeding may proceed 1 day after spraying annual weeds and 7 days after spraying perennial weeds. Aerial Application: May be applied by air provided a good seed bed has been established. Always use the higher rates. Tank Mixtures: For improved control of dock, sorrel and sub-clover add dicamba. Read and follow all label directions for the tank mix product. Addition of ammonium sulphate 2kg/100L may improve control when treating under adverse environmental conditions. Pasture or Crop Establishment: Do NOT sow into excessive trash. Trash may be removed by grazing after treatment. Grazing may commence one day after treatment of annual weeds (small) and 7 days for perennial weeds. Delay grazing for 3 days where annual weeds are large. Sowing may proceed when excessive trash is removed, but not sooner than one day after treatment of annual weeds and 7 days for perennial weeds. See also Crop Establishment. Aerial (or Surface) Seeding: Delay seeding until trash is completely removed by grazing and/or plant decay. When establishing pasture, ensure application of fertiliser and insecticides and follow-up management is undertaken as required.
	Brome Grass (*Bromus unioloides*), Canary Grass (*Phalaris spp.*), Capeweed (*Arctotheca calendula*), Variegated Thistle (*Silybum marianum*), Winter Grass (*Poa annua*)		1.0 - 1.6L	
	Annual Ryegrass (*Lolium rigidum*), Paterson's Curse/Salvation Jane (*Echium plantaginium*), Saffron Thistle (*Carthamus lanatus*), Scotch Thistle (*Onopordum acanthium*), Silver Grass (*Vulpia spp.*) Spear Thistle (*Circium vulgare*), Wild Mustard (*Sisymbrium officinale*), Wild Turnip (*Brassica tournefortii*)		1.2 - 1.6L	
	Erodium (*Erodium cicutarium*), Plantain (*Plantago spp.*), Perennial Phalaris (*Phalaris aquatica*), Sorrel (*Rumex acetosella*), Sub Clover (*Trifolium subterraneum*)		1.5 - 2.0L	
	Dock (*Rumex spp.*), Flatweed (*Hypochoeris radicata*)		2.0L	

SOUTHERN AUSTRALIA Before sowing a crop or pasture For weed control prior to sowing a crop or pasture with minimal or no soil disturbance.	All the above weeds	Tas only	1.2 – 2.4L	TAS ONLY: Use 1.2L on annual weeds and 2.4L on perennial weeds. The product may also be tank mixed with dicamba to improve control of sorrel, dock and white clover. Observe dicamba label directions and plant back periods.
SOUTHERN AUSTRALIA For weed control to commence a fallow	Barley Grass (*Hordeum leporinum*), Volunteer cereals, Wild Oats (*Avena spp.*)	NSW, VIC, WA, SA only	800mL-1.2L	Use the Lower Rate on young weeds or where cultivation is to take place within 21 days. Use the Higher Rate where broadleaf weeds reach stem elongation/budding or where grasses are fully tillered. If weeds have been grazed heavily remove stock prior to spraying to ensure regrowth to 6-8 cm before treatment and use the higher rate. Soursob -Treat at tuber exhaustion Hoary Cress -Treat from late rosette to early flowering Annual Ryegrass, Silver grass and Perennial grasses - It is recommended to use water volumes of 70L/ha or more with low volume nozzles to improve control. .
	Annual Ryegrass (*Lolium rigidum*), Brome Grass (*Bromus unioloides*), Silver Grass (*Vulpia spp.*) Capeweed (*Arctotheca calendula*), Paterson's Curse/Salvation Jane (rosette) (*Echium plantaginium*), Saffron Thistle (*Carthamus lanatus*), Scotch Thistle (*Onopordum acanthium*), Spear Thistle (*Circium vulgare*), Wild Mustard (*Sisymbrium orientale*), Wild Radish (*Raphanus raphanistrum*), Wild Turnip (*Brassica tournefortii*)		1.2-1.6L	
	Hoary Cress (*Cardaria draba*) Soursob (*Oxalis pes-caprae*)		1.2L	

NORTHERN AUSTRALIA For weed control prior to sowing a summer or winter crop or in a fallow	Annual Phalaris (*Phalaris spp.*), Barley Grass (*Hordeum vulgare*), Volunteer cereals, Wild Oats (*Avena spp.*)	NSW, QLD only	400mL-800mL	Use the Lower Rate on young weeds or where cultivation is to take place within 21 days. Use the Higher Rate where broadleaf weeds reach stem elongation/budding or where grasses are fully tillered. At more advanced stages certain broadleaf weeds may require the higher rate range or the addition of 2,4-D. In winter (cold) conditions, symptoms on Deadnettle may be slow to develop. If weeds have been grazed heavily remove stock prior to spraying to ensure regrowth to 6-8 cm before treatment and use the higher rate. Liverseed Grass and Barnyard Grass may be very sensitive to moisture stress. Dense stands may require re-treatment. For aerial application see General Instructions. Do not apply by air if temperature is over 30ºC. *Larger plants (>5cm) of Noogoora Burr, Variegated Thistle and Volunteer Sunflower may require up to 1.6L/ha to achieve control. Crop Establishment: Sowing should not proceed until conditions allow for formation of a satisfactory seedbed. See Crop Establishment for directions. Sowthistle: previously grazed plants may be difficult to control without allowing full recovery.
	Barnyard Grass (*Echinochloa crus-galli*), Liverseed grass (*Urchloa* spp.), Lovegrass/Stink Grass (*Eragrostis curvula*), Sweet summer grass, Volunteer Sorghum (*Sorghum halepense*)		800mL-1.6L	
	Aust Bluebell (Qld only), (*Wahlenbergia gracilis*), Cudweed (*Gnaphalium luteo-album*), Fumitory (*Fumaria officinalis*), Mexican Poppy (*Argemone ochroleuca*), Mintweed (*Salvia reflexa*), New Zealand Spinach (*Tetragonia tetragonoides*), *Noogoora Burr (*Xanthium pungens*), Saffron Thistle (*Carthamus lanatus*), Spear Thistle (*Circium vulgare*), Spurge (*Euphorbia* spp.), *Variegated Thistle (*Silybum marianum*), *Volunteer sunflower, Yellowvine/ Caltrop (*Tribulis terrestris*)		800mL-1.2L	
	Wireweed (*Polygonum aviculare*)		800mL - 1.2L	
	Boggabri weed (*Amaranthus macrocarpus*), Caltrop (*Tribulis terrestris*), Indian Hedge Mustard (*Sisymbrium orientale*), Mintweed (*Salvia reflexa*), Summer grass (*Digitaria ciliaris*)		400 -800mL up to 3cm in height or diameter or up to 5 true leaves OR 800mL- 1.2L greater than 3cm in height or diameter or 5 true leaves.	
	Annual Ground Cherry (*Physalis angulata*), Bladder ketmia, Sowthistle (*Sonchus oleraceus*), Turnip Weed (*Rapistrum rugosum*), Wild Lettuce (*Lactuca saligna*), Wild Turnip (*Brassica tournefortii*)		800mL - 1.2L prior to stem elongation/ budding OR 1.2 -1.6L after stem elongation/budding	

NORTHERN AUSTRALIA For weed control prior to sowing a summer or winter crop or in a fallow	Annual Phalaris (*Phalaris*), Barley Grass (*Hordeum vulgare*), Volunteer cereals, Wild Oats (*Avena fatua*)	NSW, Qld only	400mL-800mL	Use the Lower Rate on young weeds or where cultivation is to take place within 21 days. Use the Higher Rate where broadleaf weeds reach stem elongation/budding or where grasses are fully tillered. At more advanced stages certain broadleaf weeds may require the higher rate range or the addition of 2,4-D. In winter (cold) conditions, symptoms on Deadnettle may be slow to develop. If weeds have been grazed heavily remove stock prior to spraying to ensure regrowth to 6-8 cm before treatment and use the higher rate. Liverseed Grass and Barnyard Grass may be very sensitive to moisture stress. Dense stands may require re-treatment. For aerial application see General Instructions. Do not apply by air if temperature is over 30ºC. *Larger plants (>5cm) of Noogoora Burr, Variegated Thistle and Volunteer Sunflower may require up to 1.6L/ha to achieve control. Crop Establishment: Sowing should not proceed until conditions allow for formation of a satisfactory seedbed. See Crop Establishment for directions. Sowthistle: previously grazed plants may be difficult to control without allowing full recovery.
	Barnyard Grass (*Echinochloa crus-galli*), Liverseed grass (*Urchloa* spp.), Lovegrass/Stink Grass (*Eragrostis curvula*), Sweet summer grass, Volunteer Sorghum (*Sorghum halepense*)		800mL-1.6L	
	Aust Bluebell (Qld only), (*Wahlenbergia gracilis*), Cudweed (*Gnaphalium luteo-album*), Fumitory (*Fumaria officinalis*), Mexican Poppy (*Argemone ochroleuca*), Mintweed (*Salvia reflexa*), New Zealand Spinach (*Tetragonia tetragonoides*), *Noogoora Burr (*Xanthium pungens*), Saffron Thistle (*Carthamus lanatus*), Spear Thistle (*Circium vulgare*), Spurge (*Euphorbia* spp.), *Variegated Thistle (*Silybum marianum*), *Volunteer sunflower, Yellowvine/ Caltrop (*Tribulis terrestris*)		800mL-1.2L	
	Wireweed (*Polygonum aviculare*)		800mL - 1.2L	
	Boggabri weed (*Amaranthus macrocarpus*), Caltrop (*Tribulis terrestris*), Indian Hedge Mustard (*Sisymbrium orientale*), Mintweed (*Salvia reflexa*), Summer grass (*Digitaria ciliaris*)		400 -800mL up to 3cm in height or diameter or up to 5 true leaves OR 800mL- 1.2L greater than 3cm in height or diameter or 5 true leaves.	
	Annual Ground Cherry (*Physalis angulata*), Bladder ketmia, Sowthistle (*Sonchus oleraceus*), Turnip Weed (*Rapistrum rugosum*), Wild Lettuce (*Lactuca saligna*), Wild Turnip (*Brassica tournefortii*)		800mL - 1.2L prior to stem elongation/ budding OR 1.2 -1.6L after stem elongation/budding	

PASTURE RENOVATION AND TOPPING

SITUATION	WEEDS CONTROLLED	STATE	RATE (L/ha)	CRITICAL COMMENTS
Poa Tussock Infested Pasture For reduction of ground cover allowing pasture renovation	Annual weeds (see previous table) and Poa tussock (*Poa labillardii*)	QLD, NSW, ACT, VIC, TAS only	2.4-3.2L	Before spraying * graze heavily * remove stock 14 days or more before treatment * apply after autumn break when plants are actively growing but before frosts begin (March-May). Increasing to the higher rate may give more effective reductions. Sowing of new pasture may begin 14 days after treatment. It is essential that correct follow-up pasture establishment and management occurs after treatment. Spot treatment will limit re-infestation. May be aerially applied (see aerial equipment)
Bent Grass infested Pasture For control/suppression of Bent Grass before sowing a crop or pasture	Annual weeds (see previous table) and Bent Grass (*Agrostis tenuis*)	TAS, VIC only	2.0L	Apply late spring when seed heads have developed but before the onset of summer moisture stress. Remove stock prior to spraying to achieve good foliage cover. Ensure plants are actively growing. 10-21 days after spraying fully disturb soil with a tyned implement and then sow summer crop and/ or re-seeded pasture or crop the following autumn.
Pasture Topping for the reduction of seed set of annual grasses, Capeweed and Calomba daisy	Annual Ryegrass (*Lolium rigidum*), Calomba daisy (*Pentzia suffruticosa)*	NSW, ACT, VIC, SA, WA, TAS only	360mL	Use the Higher Rate for heavy infestation or where annual ryegass is present. Apply before “haying off”. Annual Ryegrass and Capeweed - Apply at Flowering Other weeds - Apply at head to milky dough stage. Stock should be removed before spraying to allow regrowth. Pasture legumes may be affected. Do not apply to medic/clover crops to be used for hay or seed. Apply a maximum of 50L/ha water. Above this water volume add a non-ionic surfactant..
	Barley Grass (*Hordeum leporinum*), Brome grass (*Bromus unioloides*), Capeweed (*Arctotheca calendula*), Silver Grass (*Vulpia spp.*)		240-360mL	

Pasture manipulation for the control /suppression of certain grasses before sowing soybeans, forage crops or Leucaena	Carpet Grass (*Axonopus spp.*), Kikuyu (*Pennisetum clandestinum*), Paspalum (*Paspalum dilatatum*)	WA, NSW, ACT, VIC only	1.1-4.8L	Apply the Lower Rate for suppression only. The Higher Rate will provide control. Leaucana - (QLD ONLY) Rows should be 4m apart. Use 2L/ha with single taper fan nozzle LFI-80 mounted at the rear of a single row planter giving a 1m swath.
	Carpet Grass, Paspalum	QLD only	1.1-4.8L	
	Kikuyu		500mL-4.8L	
	Barbed wire grass (*Cymbopogon refractrus*), Black spear grass (*Hederopogon contortus*), Wire grasses (*Aristida spp.*), Love Grasses (*Erogrostis spp.*), Red Natal Grass (*Rhynchelytrum repens*),		2.4L	

SUGAR CANE (RATOON CONTROL) FOR QLD AND NSW ONLY

SITUATION	VARIETY	RATE L/ha	CRITICAL COMMENTS
Sugar Cane Ratoon Control	Q63, Q87, Q90, Q102, Q117, Q120, Q129, Q130, H56-752, Pindar, Triton	2.4-3.2L	Apply when ratoons are actively growing and are 60-100cm tall. DO NOT apply if plants are under stress from water logging or low moisture. Use the Lower Rate for suppression or where control by cultivation is planned. Use the Higher Rate for control. Boom height must allow for correct overlap of the spray pattern at the top of the crop canopy.
	Q86, Q96, Q113	3.2-4L	
	Cassius, Q115, Q122, Q94	4-4.8L	
	NCO310, Q107	4.8-7.2L	

RICE DIRECT DRILLING FOR NSW ONLY

SITUATION	WEEDS CONTROLLED	RATE L/ha	CRITICAL COMMENTS
Rice Direct Drilling	Annual Ryegrass (*Lolium rigidum*), Annual Phalaris (*Phalaris canariensis*), Barley Grass (*Hordeum leporinum*), Burr Medic (*Medicago spp.*),Sub Clover (*Trifolium subterraneum*), Winter Grass (*Poa annua*)	800mL-1.0L	If plants are drought stressed a pre watering must be applied. If the site has been grazed allow plants to regrow to 6-8 cm before treatment. For the control of Annual Ryegrass use the higher rate. Crop Sowing- Sow 1-14 days after treatment. Residual control will only be achieved by adding another suitable herbicide.

SORGHUM CONTROL

SITUATION	WEEDS CONTROLLED	STATE	RATE L/ha	CRITICAL COMMENTS
Sorghum control Pre- harvest	Grain sorghum (*Sorghum bicolor*)	QLD, NSW only	1.2 or 1.6L	DO NOT apply to varieties intended for seed production or varieties prone to lodging. DO NOT apply to crop under stress from factors such as waterlogging, frost, disease, low moisture etc. Apply when grain moisture is less than 25%. The product can be applied when some browning has occurred. Use the Lower Rate for control of the crop, late tillers and ratoon regrowth. Use the Higher Rate for better suppression of ratoon regrowth. Treatment may increase potential for crop lodging especially if the crop has been stressed by low moisture. In this situation harvest as soon as possible after sufficient dry brown to prevent further lodging. CAUTION: Sorghum may be naturally toxic to stock.
Sorghum control Post harvest	Sorghum stubble (grain sorghum) (*Sorghum bicolor*)	QLD, NSW only	800mL-1.2L for new regrowth from slashed stubble 1.2 - 1.6L for standing green stubble 800mL - 1.2L for fresh spring regrowth	DO NOT apply if plants are stressed from such factors as waterlogging, frost, disease, low moisture, etc. For slashed stubble and spring regrowth apply when regrowth is at least 20cm high. Standing Stubble - apply only if sufficient green leaf is present. Allow regrowth of at least 20 cm if grazing has occurred. Use the Lower Rate for knockdown and regrowth suppression where cultivation is to follow. Use the Higher Rate for better control of regrowth. It is important to note that variable results can occur if the crop has been under stress or grown under marginal conditions. The varieties Ruby, Trump, Nugget 2, Goldrush 2 and Prize are particularly susceptible if growing conditions are not ideal CAUTION: Sorghum may be naturally toxic to stock.