



Company Name: MONSANTO AUSTRALIA LTD
Product Name: ROUNDUP CT BROADACRE HERBICIDE BY MONSANTO
APVMA Approval No: 31394/107884

Label Name:	ROUNDUP CT BROADACRE HERBICIDE
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Signal Headings:	CAUTION KEEP OUT OF REACH OF CHILDREN READ SAFETY DIRECTIONS BEFORE OPENING OR USING
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Constituent Statements:	450 g/L GLYPHOSATE PRESENT AS THE ISOPROPYLAMINE SALT
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Mode of Action:	GROUP M HERBICIDE
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Statement of Claims:	Water soluble herbicide for non-selective control of many annual and perennial weeds in conservation tillage situations.
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Net Contents:	1000L 110L 20L 500L 60L BULK
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Restrains:	To ensure herbicide absorption, DO NOT disturb weeds by cultivation, sowing or grazing for 1 day after treatment of annual weeds and 7 days for perennial weeds, except where noted.
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Directions for Use:	Please refer to Page 4.
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Other Limitations:	
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Withholding Periods:	PRE-HARVEST SORGHUM: DO NOT HARVEST FOR 7 DAYS OTHER USES: NOT REQUIRED WHEN USED AS DIRECTED
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Trade Advice:	
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General Instructions:	Please refer to Page 18.
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Resistance Warning:	<p>RESISTANT WEEDS WARNING</p> <p>GROUP M HERBICIDE</p> <p>Roundup® CT is a member of the Glycines group of herbicides. Roundup CT has the inhibition of EPSP synthase mode of action. For weed resistance management Roundup® CT is a Group M herbicide. Some naturally occurring weed biotypes resistant to Roundup® CT 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 Roundup CT or other Group M Herbicides. Since the occurrence of resistant weeds is difficult to detect prior to use, Monsanto accepts no liability for any losses that may result from the failure of Roundup® CT to control resistant weeds.</p>
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Precautions:	
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Protections:	<p>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.</p> <p>PROTECTION OF WILDLIFE, FISH, CRUSTACEA 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.</p>
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Storage and Disposal:	<p>STORAGE AND DISPOSAL Store in the closed, original container in a cool, well-ventilated area. DO NOT store for prolonged periods in direct sunlight. Triple or preferably pressure rinse containers before disposal. Add rinsings to spray tank. DO NOT dispose of undiluted chemicals on site. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush or puncture and bury containers in a local authority landfill. If no landfill is available, bury the containers below 500mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should NOT be burnt.</p> <p>For REFILLABLE containers: Empty contents fully into application equipment. Close all valves and return to point of supply for refill or storage.</p>
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Safety Directions:	SAFETY DIRECTIONS Product 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. 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.
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First Aid Instructions:	FIRST AID If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 13 1126.
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First Aid Warnings:	
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DIRECTIONS FOR USE

SITUATION	STATE	WEEDS CONTROLLED	RATE Vol/ha
SOUTHERN AUSTRALIA Prior to sowing a crop or pasture with full soil disturbance by cultivation or sowing with a tyned implement	WA SA VIC NSW only	Barley grass, Brome grass, Volunteer cereals, Wild oats	400 - 800 mL pre tillering 800 mL – 1.0 L post tillering
		Annual phalaris (Canary grass), Annual ryegrass, Silvergrass, Winter grass	800mL – 1.0 L pre tillering 1.0 – 1.2 L post tillering
		Calomba daisy, Capeweed, Doublegee/Spiny Emex	400 – 800 mL less than 8cm dia/height 800 mL – 1.2 L greater than 8cm dia/height
		Amsinckia, Fumitory, Paterson's curse, Saffron thistle, Scotch thistle, Spear thistle, Variegated thistle, Volunteer lupins, Wild turnip	800 ml – 1.0 L less than 12cm dia 1.0- 1.2 L greater than 12cm dia
		Dock (seedling)	800 mL – 1.2 L
		Perennial phalaris, Skeleton weedfully emerged rosettes (NSW only), Sorrel, Soursob, Sub.clover	1.2 L
	TAS only	All the above weeds	1.2 – 2.4 L

CRITICAL COMMENTS

Treat only actively growing weeds not under stress from low moisture, frost, cold, disease or waterlogging. If heavy grazing has occurred allow regrowth to 6-8cm 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 a cultivation or sowing with a tyned implement may start one day after treatment (7 days if Dock, Phalaris, Skeleton weed, Soursob, or Sorrel are present) and should occur within 21 days after treatment. When treating light infestations or seedling annual grasses (pre-tillering) and annual broadleaved weeds (less than 8cm dia/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 200mL/100L spray solution, may improve control. When treating dense infestations of Silvergrass, nozzles designed to give MEDIUM to COARSE spray quality (ASAE S572) and a spray volume of 70 L/ha or more is recommended to improve spray coverage. Good coverage of Silvergrass is critical for control.

TANK MIXTURES For improved control of clover add KAMBA® 500. Read and follow all label directions, restraints, plant-back 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, Roundup CT will provide knockdown, seasonal suppression and reduction in treated plant numbers.

TASMANIA Use 1.2 L/ha on annual weeds. Increase to 2.4 L/ha where perennial weeds are being treated. To control White clover and improve control of Sorrel and Dock, add 400mL/ha KAMBA® 500. Observe KAMBA® 500 label directions and plant-back periods.

SITUATION	STATE	WEEDS CONTROLLED	RATE Vol/ha
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	800 mL – 1.2 L
		Brome grass, Canary grass, Capeweed, Variegated thistle, Winter grass	1.0 – 1.6 L
		Annual ryegrass, Paterson's curse, Saffron thistle, Scotch thistle, Silvergrass, Spear thistle, Wild mustard, Wild radish, Wild turnip	1.2 – 1.6 L
		Erodium, Perennial phalaris, Plantain, Sorrel, Sub.clover, Yorkshire Fog	1.5 – 2.0 L
		Dock, Flatweed	2.0 L
	TAS only	All the above weeds	1.2 – 2.4 L

CRITICAL COMMENTS

Treat only actively growing weeds not under stress from low moisture, frost, cold, disease or waterlogging. If heavy grazing of mature plants has occurred, allow regrowth to 6-8cm 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 reach stem elongation/budding. Increase to higher rates in Spring or when treating under cold/overcast conditions.

AERIAL APPLICATION Use the higher rates. See **AERIAL EQUIPMENT**.

ANNUAL RYEGRASS, SILVERGRASS AND PERENNIAL GRASSES Add Wetter TX, 200mL/100L spray solution. When treating dense infestations of Silvergrass, nozzles designed to give **MEDIUM** to **COARSE** spray quality (ASAE S572) and a spray volume of 70 L/ha or more is recommended to improve spray coverage. Good coverage of Silvergrass is critical for control.

TANK MIXTURES For improved control of dock, sorrel, sub clover add KAMBA® 500. Read and follow all label directions, restraints, plant-back periods, withholding periods, regional use restrictions and safety directions for the tank mix products. See **Tank Mixtures** for directions. Addition of Liase at, 2 L/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 three 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 fertilizer and insecticides and follow-up management is undertaken as required.

TASMANIA Use 1.2L/ha on annual weeds. Increase to 2.4 L/ha where perennial weeds are being treated. To control White clover and improve control of Sorrel and Dock, add 400mL/ha KAMBA® 500. Observe KAMBA® 500 label directions and plant-back periods.

SITUATION	STATE	WEEDS CONTROLLED	RATE Vol/ha
SOUTHERN AUSTRALIA To commence a fallow	NSW VIC SA WA only	Barley grass Volunteer cereals Wild oats	800 mL – 1.2 L
		Annual ryegrass Brome grass Capeweed Paterson's curse Saffron thistle Scotch thistle Silvergrass Spear thistle Wild mustard Wild radish Wild turnip	1.2 – 1.6 L
		Bathurst burr	1.5 – 2.4 L
		Hoary cress Soursob	1.2 L
		Couch	1.2 – 2.4 L
	TAS only	All the above weeds	1.2 – 2.4 L
PASTURE TOPPING For annual grass Capeweed and Calomba daisy seed-set reduction.	WA SA VIC TAS NSW only	Barley grass Brome grass Capeweed Silvergrass	240 mL – 360 mL
		Annual ryegrass Calomba daisy	360 mL

CRITICAL COMMENTS

Treat only actively growing weeds not under stress from low moisture, frost, cold, disease or waterlogging. If heaving grazing has occurred allow regrowth 6-8cm before spraying.

RATE SELECTION Use lower rates on young weeds or where cultivation is to follow within 21 days. Increasing to the high rates where grasses reach full tillering or where broadleaf weeds reach stem elongation/budding.

ANNUAL RYEGRASS, SILVERGRASS AND PERENNIAL GRASSES Addition of Wetter TX 200mL/100L spray solution, may improve control. When treating dense infestations of Silvergrass, nozzles designed to give MEDIUM to COARSE spray quality (ASAE S572) and a spray volume of 70 L/ha or more is recommended to improve spray coverage. Good coverage of Silvergrass is critical for control.

BATHURST BURR For mature weeds use the higher rate.

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. The use of LI 700 500mL/100L may improve control.

TANK MIXTURES Read and follow all label directions, restraints, plant-back periods, withholding periods, regional use restrictions and safety directions for the tank mix products. See **TANK MIXTURES** for directions.

TASMANIA Use 1.2L/ha on annual weeds. Increase to 2.4 L/ha where perennial weeds are being treated. To control White clover and improve control of Sorrel and Dock, add 400L/ha KAMBA® 500. Observe KAMBA® 500 label directions and plant-back periods.

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 the 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.

SITUATION	STATE	WEEDS CONTROLLED	RATE Vol/ha
SEED-HEAD SUPPRESSION OF PERENNIAL GRASSES	VIC TAS NSW WA SA only	Bentgrass	300 – 500 mL
BENT GRASS INFESTED PASTURE For control/suppression prior to establishing crops or improved pasture species	VIC TAS only	Most annual weeds and Bent grass	2.0 L
PASTURE MANIPULATION For suppression or control of pastures species prior to drilling improved pasture, forage species, Soybeans or Leucaena. BAND SPRAYING: May also be applied as a band or strip spray	NSW VIC WA only	Carpet grass Kikuyu Paspalum	1.1 – 4.8 L
	QLD only	Carpet grass Paspalum	1.1 – 4.8 L
		Kikuyu	500 mL – 4.8 L
		Barbed wire grass Black speargrass Love grasses Red Natal grass Wire grasses	2.4 L
POA TUSSOCK INFESTED PASTURE For reduction of ground cover allowing pasture renovation	NSW TAS VIC QLD only	Most annual weeds and suppression of Poa tussock	2.4 – 3.2 L

CRITICAL COMMENTS

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.

TIMING Apply to actively growing plants in late Spring when they have some seed-head development, but before Summer moisture stress. Remove stock to ensure there is full leaf growth.
FOLLOW-UP MANAGEMENT Full disturbance with a tyned implement should follow 10-21 days after spraying. Then follow with a Summer crop, and/or re-seeded pasture or crop the following Autumn.

RATE SELECTION For suppression, apply the low rate. Where complete control is required apply up to the high rate.

BAND SPRAYING Band spraying may be done immediately after the sowing operation. Mount the nozzles behind the coulter/tyne/press wheel assembly of the band seeder. Adjust to spray 0.5 to 1.0m strips. Ensure minimal disturbance of the pasture. Excessive dust created in the seedling operation may reduce herbicide activity. Pasture seed must be drilled at the appropriate depth and covered by soil.

LUCAENA (QLD ONLY) Apply 2 L/ha through a single taper fan nozzle LFI-80 mounted at the rear of the single row planter providing a 1 m swath. Planting rows to be 4 m apart.

TIMING Graze heavily, then remove at least 14 days before spraying to allow fresh regrowth. Apply to actively growing plants after the autumn break but before heavy frosts (March – May).

APPLICATION Increasing 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 each treatment. Spot treatment will limit re-infestation.

SITUATION	STATE	WEEDS CONTROLLED	RATE Vol/ha
NORTHERN AUSTRALIA In fallows or prior to sowing a crop	QLD NSW only	Annual phalaris (Canary grass), Barley grass, Volunteer cereals, Wild oats	400 – 800 mL
		Barnyard grass, Bathurst burr, Button grass, Columbus grass (seedling), Liverseed grass, Native Millet, Stinkgrass (Lovegrass), Volunteer sorghum	800 mL – 1.6 L
		Australian bluebell (QLD only) Cudweed, Fumitory, Mexican poppy, New Zealand spinach, Saffron thistle, Spear thistle, Spurge, Stinking goosefoot	800 mL – 1.2 L
		Black (giant) pigweed, Boggabri weed, Caltrop (Yellowvine), Indian hedge mustard, Mintweed, Summer grass	400 – 800 mL up to 5 true leaves or 3cm dia/height 800 mL – 1.2 L greater than 5 true leaves or 3cm dia/height
		African turnip weed, Deadnettle, Sweet summer grass, Variegated thistle, Volunteer sunflower	600 – 800 mL up to 5 true leaves or 3cm dia/height 800 mL – 1.6 L greater than 3 cm dia/height
		Annual ground cherry (Gooseberry), Bladder ketmia, Camel melon, False castor oil plant/Thornapple, Noogoora burr, Turnip weed, Wild lettuce, Wild turnip, Wireweed	800 mL – 1.2 L prior to stem elongation/budding. After that use 400 ml – 1.2 L plus 1.1 – 1.7 L Surpass 475 or 1.2 – 1.6 L of Roundup CT alone
		Pigweed	800 mL – 1.6 L up to 20cm dia
		Prickly Paddy Melon	770 mL – 1.6 L plus 80mL of Invader/Garlon 600

CRITICAL COMMENTS

Treat only actively growing weeds not under stress from low moisture, frost, cold, disease or waterlogging. If heavy grazing has occurred allow regrowth to 6-8cm before spraying. 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 rate 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. Use Surpass 475 for summer fallow weed control. Use Surpass 475 or Estercide Xtra 680 prior to sowing a winter crop.

CROP ESTABLISHMENT Sowing should not proceed until conditions allow the formation of a satisfactory seed bed. See **Crop Establishment** for directions.

TANK MIXTURES Read and follow all label directions, restraints, plant-back periods, 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 temperature is above 30°C.

Use a higher rate on larger weeds. Control of Pigweed over a wide range of growth stages can be obtained with the addition of Associate®/Ally*. Observe re-cropping intervals.

DO NOT add crop oil.

SITUATION	STATE	WEEDS CONTROLLED	RATE Vol/ha
NORTHERN AUSTRALIA In fallows or prior to sowing a crop	QLD NSW Only	Sowthistle/ milkthistle	600 – 800 mL rosettes up to 3cm dia 800mL – 1.6 L greater than 3cm dia
		Couch	1.2 – 2.4 L
		Johnson grass	1.6 – 2.4 L
		Nutgrass	2.4 + 2.4 L
SORGHUM CONTROL Pre-harvest	QLD NSW only	Sorghum, grain sorghum DO NOT apply to varieties intended for seed production or varieties prone to lodging	1.2 or 1.6 L
SORGHUM CONTROL Post-harvest	QLD NSW only	Sorghum stubble, grain sorghum	800 mL – 1.2 L for fresh regrowth from slashed stubble 1.2-1.6 L for standing stubble if sufficiently green and for fresh spring regrowth
SUGAR CANE Ratoon spray out	Qld NSW only	Sugar cane ratoon regrowth	4.8L – 7.2L

CRITICAL COMMENTS

Previously grazed plants may be difficult to control without allowing full recovery.

Use the higher rate for dense infestations. Apply sequential treatments during Summer and Autumn, with autumn being most effective. Repeat applications will be required for full control. For improved control use in conjunction with cultivation. The use of LI 700 500mL/100L may improve control.

Use the higher rate on plants approaching seedhead stage. Apply to plants with a minimum of 30cm new growth. Sequential treatments will be required for long term control.

Make first application to actively growing plants when at least 20% have reached the head stage (normally about Feb). After allowing maximum re-emergence to occur (normally in 6-8 weeks), it is essential to make a second application.

NOTE Followup treatments should be made as part of a Nutgrass control program.

DO NOT apply if crop is under stress from low moisture, frost, cold or waterlogging.

RATE SELECTION Use the lower rate for control of crop and late tillers and suppression of ratoon regrowth. Use the higher rate for improved suppression of ratoon regrowth.

TIMING Apply when grain moisture is less than 25%. Application can be made when moderate browning has occurred.

CAUTION Treatment may increase potential for CROP LODGING, particularly if prior moisture stress has occurred. Harvest should commence at least 7 days after application provided sufficient dry down has occurred to avoid possible lodging. Speed of dry down is dependant on physiological maturity, soil moisture and climatic conditions.

CAUTION Sorghum may be naturally toxic to stock.

APPLY UNDER GOOD GROWING CONDITIONS ONLY. **DO NOT** apply if plants are under stress from low moisture, frost, cold or waterlogging.

SLASHED STUBBLE AND SPRING REGROWTH apply when fresh regrowth is at least 20cm high.

STANDING STUBBLE Apply only if sufficient green leaf area is present. If grazing has occurred allow regrowth to 20cm before treatment.

RATE SELECTION Use the lower rate for knockdown and regrowth suppression where cultivation is to follow. Increase to the higher rate for improved regrowth control.

NOTE Variable results occur where the crop has been subject to stress or growing conditions are marginal. **CAUTION** Sorghum may be naturally toxic to stock.

APPLY UNDER GOOD GROWING CONDITIONS ONLY to actively growing ratoons 60-120 cm tall. **DO NOT** apply if plants are under stress from low moisture or waterlogging. Use the lower rate for suppression or where cultivation is to follow. Use higher rate for control.

SITUATION	STATE	WEEDS CONTROLLED	RATE Vol/ha
RICE Direct drilling	NSW only	Annual ryegrass Annual phalaris Canary grass Barley grass Burr medic Sub. Clover Winter grass	800mL – 1.0L
Cotton pre-harvest DO NOT use on crops intended for seed production	NSW Qld only	Bathurst burr Noogoora burr Winter annual weeds including Sowthistle / milkthistle	1-2L
		Nutgrass (seasonal suppression only)	2L
Cotton: Shielded sprayers	NSW Qld only	Refer to Weeds Controlled section Northern Australia : In fallows or prior to sowing a crop	
TREE AND VINE CROPS Vineyards, Berries and other small fruits (excluding strawberry) Citrus fruits Tropical and Sub-tropical fruits Pome fruits Stone fruits Tree nuts Duboisia Hops Tea	All States	Amaranth, Barley grass, Brome grass, Barnyard grass, Caltrop, Canary grass, Capeweed, Chickweed, Deadnettle, Doublegee, Liverseed Grass, Mintweed, Paterson's Curse, Pigweed, Ryegrass, Silvergrass, Spear thistle, Thornapple, Wild mustard, Wild oats, Wild turnip, Winter grass, Variegated thistle	Boom: 1.6 – 2.4L Handgun: 400 – 600mL per 100L Knapsack: 60 – 80mL per 15L

CRITICAL COMMENTS

Roundup CT is less effective on 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 6-8cm before spraying.

ANNUAL RYEGRASS Add Wetter TX at 200mL/100L of spray solutions and where dominant use the higher rate.

SOWING Direct drilling may take place 1-14 days after spraying. Roundup CT does not provide residual weed control. Permanent water and approved selective herbicides should be used to provide continuing control of weeds.

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 sharp knife. Where 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 or 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 direction for the tank mix products.

Apply Roundup CT to weeds growing between crop rows using a shielded sprayer. Do not apply in crops less than 20cm high. DO NOT allow spray or spray drift to contact any part of the cotton plant as severe injury or destruction may result.

Apply as a directed or shielded spray or using wiper equipment. DO NOT apply as a spray near trees or vines less than 3 years old unless they are effectively shielded from spray and spray drift. DO NOT allow wiper surface to contact any part of the tree, vine or plant.

Citrus fruit, Nuts, Olives, Pome fruit & Vineyards DO NOT allow spray or spraydrift to contact green bark or stems, canes, laterals, suckers, fresh wounds, foliage or fruit.

Hops Apply in Winter, prior to crop emerging from dormancy.

Tea Apply a maximum of 3.2L/ha by shielded boom or directed off-centre nozzle or 0.4L/100L by directed hand-gun 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.

Annual weeds may be sprayed anytime they are actively growing. Use the lower rate on weeds up to 15cm tall.

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

GENERAL INSTRUCTIONS

Roundup® CT is a non-volatile, non selective, water soluble liquid herbicide with non-selective herbicidal activity. It is absorbed by plant foliage and green stems and moves through the plant from the point of contact to and into the root system. Effects may not be apparent for 3–7 days (annual weeds) or 2–3 weeks (perennial weeds) or longer under cool, cloudy conditions.

Roundup® CT will control emerged weeds only, and provides no residual weed control. Apply treatments to weeds which have at least one true leaf (broadleaf weeds) or two leaves (grasses) to provide an adequate surface area for herbicide uptake.

Roundup® CT may be used prior to sowing any crop (edible or non edible) but not prior to transplanting tomato seedlings.

A withholding period for grazing stock is not required. However, it is recommended that grazing of treated plants be delayed for one day after treatment of annual weeds, or 7 days of perennial weeds are present, to ensure absorption of Roundup® CT. Certain plants (eg. Soursob, variegated thistle) 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.

Weeds should be actively growing at the time of treatment. Do not treat weeds under poor growing or dormant conditions (such as occur in drought, water logging, disease, insect damage or following frosts) as reduced weed control may result. Reduced results may also occur when treating weeds heavily covered with dust or silt. Prior herbicide application may also induce stress in weeds.

Rainfall occurring up to 6 hours after application may reduce effectiveness. Rainfastness or general efficacy may be reduced if weeds are not actively growing, are under stress or conditions of low light intensity/darkness. Heavy rainfall within 2 hours after application may wash the chemical off the foliage and a repeat treatment may be required. Delay treatment of plants wet with dew or rain, if water droplets run off when plants are disturbed. Avoid contact with foliage, green stems or fruit of crops, desirable plants and trees, since severe injury or destruction may result.

CROP ESTABLISHMENT

Roundup® CT is recommended for control of emerged weeds prior to crop establishment. Suitable cultivation and/or sowing operations are required to provide seed bed conditions satisfactory for crop germination and development. Spraying early to control young weeds will favour preparation of suitable seed beds. On friable soils and where there is only light cover of young weeds, sowing may proceed satisfactorily from one day after spraying.

In situations of heavy weed growth sowing should be delayed until weed decay and soil conditions allow formation of a satisfactory seed bed. 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 of risk of retarded crop emergence.

MIXING

Roundup® CT mixes readily with water.

Note 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. Ensure the sprayer is free of any residue of previous spray materials. Use spray solutions promptly and certainly within 5 days since a gradual loss of activity will occur. Fill the spray tank with one half the required amount of clean water and add the proper amount of Roundup® CT. Mix well before adding the remaining portion of water. Add surfactant near the end of the filling process to minimize foaming. Placing the filling hose below the surface of the spray solution will prevent excessive foaming. Removing hose from tank immediately after the filling will prevent back siphoning into water source.

Do not use mechanical agitators as these may cause excessive foaming. Spray tanks, pumps, lines and nozzles should be thoroughly rinsed with clean water following application to prevent corrosion.

TANK MIXTURES/COMPATIBILITY

Roundup® CT 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 Liase where required.
3. Add recommended herbicide/insecticide/additive to the spray tank and mix thoroughly.
4. Add Roundup® CT and the remaining water. Mix thoroughly.
5. Add surfactant, if required, near the end of the filling process to minimize foaming.
6. Always maintain adequate agitation during application and use the tank mix promptly.

TANK MIXTURES – HERBICIDES

Ally*, Archer®, Associate®, Avadex® Xtra, Comet® 400, Nufarm Estericide® Xtra 680, Express*, Flame®, Garlon* 600, Glean*, Hammer*, Invader®, Kamba® 500 (dicamba), Lusta®, Logran* 750WG, Logran* B Power (ensure fully dispersed prior to addition of Roundup CT), Lontrel*, LVE Agritone®, MONZA®, Nugran, Nu-trazine 600, Nu-trazine 900 DF (DO NOT apply this tank mix for control of Barnyard grass or Liverseed grass), Rifle®, Flowable Simazine, Nufarm Simazine 900 DF, Starane* 200, Stomp®, Striker®, Nufarm Surpass® 475, TriflurX® and Triflur Xcel® (trifluralin). Other brands have not been tested.

*Liase (Ammonium sulphate) may improve the performance of tank mixtures of Roundup CT and atrazine or simazine. See directions below.

STRIKER®

The addition of Striker at 75 mL/ha to recommended rates of Roundup® CT prior to planting Wheat or Barley or prior to planting cotton will improve knockdown and increase the speed at which treated weeds develop visible symptoms of phytotoxicity.

TANK MIXTURES - INSECTICIDES

Roundup® CT is compatible with the following insecticides: Imidan*, Le-Mat*, Lorsban* 500, Pirate® 300, Karate*, Sumithion* ULV, Talstar* and emulsifiable concentrates of dimethoate and fenitrothion. Other insecticides have not been tested.

TANK MIXTURES - ADDITIVES

Nufarm Liase (417 g/L Ammonium Sulphate liquid)

RATE: 2 L per 100 litres spray solution.

Liase may be used as an adjuvant to alleviate the adverse effects of high levels of calcium, magnesium and bicarbonate ions in water. The addition of Liase to Roundup® CT, when used to control annual weeds, MAY improve the performance of Roundup® CT under adverse environmental conditions such as cool cloudy weather. Liase may also improve the performance of tank mixtures of Roundup CT and atrazine or simazine. Ammonium sulfate may be corrosive to metal parts of the sprayer. Thoroughly flush tanks, pumps and nozzles with water after use.

Solubility and impurity profiles of other forms of ammonium sulphate can vary and may reduce the performance of Roundup® CT or tank mixtures.

SURFACTANT ADDITION

Nufarm LI 700® Surfactant

RATE: 250mL - 500 mL per 100L

The addition of LI 700 surfactant MAY improve weed control. At rates of 300mL-500mL per 100L, LI 700 may modify the droplet spectrum produced by CP and flat fan nozzles. This may reduce the proportion of FINE droplets produced by these nozzles.

Nufarm Activator®

RATE: 70mL - 125 mL per 100L

General Purpose non-ionic surfactants may increase the production of FINE and VERY FINE droplets, which are prone to drift when used through certain nozzle types.

Wetter TX Surfactant

RATE: 200 mL /100L spray solution. Add when treating Annual Ryegrass, Silvergrass and Perennial grasses.

Wetter TX is NOT a general purpose surfactant and should be used only where recommended.

DO NOT use spray oils, adjuvants or surfactants other than those recommended on this label.

APPLICATION

Roundup® CT 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

Application of Roundup® CT in spray volumes of 25-100 L/ha is recommended for broadacre uses and 200L/ha or less for treeline and vinery spraying in orchards and vineyards. Glyphosate works better when it is present at a higher concentration in the spray solution provided sufficient coverage of the target is achieved. Nozzles and pressure settings should be selected to deliver a COARSE to VERY COARSE spray quality (as defined by ASAE S572 Standard) at the target. The use of nozzles and/or pressure settings that produce VERY FINE or FINE spray quality should be avoided as these are prone to loss or drift. Environmental conditions, including delta T, wind speed and direction, and the size and density of the target weeds, should be taken into consideration when selecting nozzles. To minimise off-target drift, apply with the lowest boom height to achieve double overlap of the spray pattern at the top of the target.

SHIELDED EQUIPMENT

For shielded applications a spray volume of 80 L/sprayed ha is recommended using nozzle types and pressure settings to deliver a COARSE (as defined by ASAE S572 Standard) spray quality 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.

AERIAL EQUIPMENT

Aerial equipment may be used to apply Roundup® CT only in pasture or fallow situations prior to establishment of field crops, fodder crops, or new pasture, and for preharvest application to sorghum crops. DO NOT use in intensive horticultural cropping areas. Use recommended rates of Roundup CT specified in this label up to a maximum rate of 3.1L/ha.

DO NOT apply treatments by aircraft in situations where drift onto sensitive crops and pastures is likely to occur.

Apply treatments using boom or Micronair equipment using a spray volume not less than 20 L/ha and using settings to produce a minimum COARSE spray quality (as defined by ASAE S572 Standard) at the target. 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. Swath width should be set to take into account aircraft type, wind conditions, target height and density. Swath width will need to be reduced to avoid striping under light wind conditions and/or application to tall, dense targets eg. preharvest application, treatments in heavy crop stubble. DO NOT apply Roundup® CT by aircraft in temperatures above 30°C and increase spray output to at least 30 L/ha if temperatures rise above 25°C. Avoid application when relative humidity falls below 35%. Thoroughly wash aircraft, especially landing gear, after each day of spraying to remove herbicide residues.

Application on hilly terrain

Spraying height may vary. Increase water volume to 30-80 L/ha and use nozzles that produce a COARSE to VERY COARSE spray quality (as defined by ASAE S572 Standard) at the target.

Application under hot conditions

High temperatures and/or low relative humidity cause excessive evaporation of spray droplets, which may reduce results. When temperature reaches 25°C, increase water volume to at least 30 L/ha, and use nozzles that produce a COARSE to VERY COARSE spray quality at the target (as defined by ASAE S572 Standard). DO NOT apply Roundup® CT by aircraft when temperature is above 30° C.