Product Name: GESAPRIM GRANULES HERBICIDE

APVMA Approval No.: 61892/130475





Label Name:	GESAPRIM GRANULES HERBICIDE

Signal Headings: CAUTION

KEEP OUT OF REACH OF CHILDREN

READ SAFETY DIRECTIONS BEFORE OPENING OR USING

Constituent ACTIVE CONSTITUENT Statements: 900 g/kg ATRAZINE

Mode of Action:

GROUP C HERBICIDE

Statement of Claims: For selective annual grass and broadleaf weed control as per the Directions for Use

Net Contents: 10 kg

Restraints: RESTRAINTS

DO NOT use as a pre-emergence spray on light sandy soils

DO NOT use on weeds over 4 cm tall DO NOT apply to waterlogged soil

DO NOT apply if heavy rains or storms that are likely to cause run off are forecast within 2 days of application

DO NOT irrigate to the point of run off for at least 2 days after application

DO NOT use a pre-emergence application in sorghum, broom millet or saccaline during the wet season in the northern irrigation areas of WA

TT Canola: DO NOT use or apply this product post-emergence on raised beds or where furrows have been created in soil for the purposes of holding or channeling water DO NOT apply product to any drainage line. Drainage lines show evidence of the action of periodically flowing water (eg gravel, pebble, rock or sand bed, scour hole or nick point) and/or an incised channel at least 30 cm deep.

DO NOT handle, mix, apply or conduct testing operations in areas susceptible to runoff where drainage results in rapid entry into waterways, particularly where no specific and effective action has been taken to prevent runoff into waterways. These areas may include areas mounded perpendicular to the contour, roads, access tracks, snig tracks and compacted log dumps.

Soil moisture: The product requires rainfall or irrigation to move it down through the soil into the weed root zone to make it effective. Sufficient rain or irrigation to thoroughly wet the soil through the weed root zone should occur or be made within 10 days after spraying.

Directions for Use:

See attached file.

Other Limitations:

Withholding Periods:

WITHHOLDING PERIODS

Canola:

Pre-emergence application: DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 15

WEEKS AFTER APPLICATION

Post-emergence application: DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 6

WEEKS AFTER APPLICATION

Other crops (except Canola): DO NOT APPLY TO AREAS THAT WILL OR MAY BE GRAZED OR CUT FOR STOCK FOOD WITHIN 28 DAYS AFTER APPLICATION

Trade Advice:

General Instructions:

GENERAL INSTUCTIONS

GESAPRIM® GRANULES is a pre-emergence and post-emergence herbicide that controls weeds from seed and weed seedlings. However, established perennial species, large annuals, and large broadleaf weeds are not satisfactorily controlled at the rates recommended.

It acts mainly through root absorption, its effectiveness depends on the occurrence of control rainfall or irrigation to move it down into the weed zone. Duration and effectiveness of control depends on the amount of chemical applied, soil type, rainfall and particular weed species.

The maximum rate of atrazine application in all crops except plantation forestry is limited to an amount of product equivalent to 3 kg ai atrazine/ha per year. DO NOT exceed this limit, especially when applying an atrazine herbicide post-emergence, where an atrazine herbicide has been applied pre-emergence.

The maximum rate of application in plantation forestry is an amount of product equivalent to 4.5 kg ai atrazine/ha per year in sandy soils and those defined as highly erodible, and product equivalent to 8 kg ai atrazine/ha per year in clay loam and heavier textured soils.

Mixing

DO NOT mix, load or apply within 20 m of any well, sink hole or intermittent or perennial stream or river.

This product readily mixes with water. Add required quantity to the spray vat with the tank filter mesh removed and the vat 50 to 75% full with water. The agitation system should be running during addition of the product and during the spraying operation. If left to settle, stir and re-suspend any settled material before starting pump and spraying product. Avoid drawing accumulated particles into outlet pipe. DO NOT pre-mix in a bucket as a paste. Wetting agent: Add Agral at 125 mL/100L or BS1000* Bio-Degradable Surfactant at 75 mL/100 L of spray mixture when applying to emerged weeds as a foliar spray.

Application

Incorporation (pre-plant and at sowing application)

This product acts mainly by root absorption. Its effectiveness depends on the occurrence of rainfall or irrigation to move it down into the weed root zone. Sufficient rain or irrigation to thoroughly wet the soil through the weed root zone should occur or be made immediately after application to provide appropriate weed control. Delay in activation of the product may result in some weed growth.

In flood or furrow irrigation situations complete and continued activation of the product may not occur due to a thin band of dry soil on the surface during or after irrigation. Mechanical incorporation after application, using light harrows to incorporate the product into the soil not more than 4 cm deep is required to ensure the irrigation water activates the product. Always apply the product to an even unridged seedbed.

Aircraft application: Pre-plant and pre-emergence application minimum volume of spray mixture 15 L/ha. Post-emergence application minimum volume of spray mixture 22 L/ha. With aircraft application the need for good soil moisture at the time of application and follow up rain or irrigation within 10 days is most critical.

DO NOT use human flaggers in aerial spraying, unless protected by engineering controls such as enclosed cabs.

Ground application: Pre-plant and pre-emergence application minimum volume of spray mixture 55 L/ha. Post-emergence application minimum volume of spray mixture 110 L/ha. Application can be made as an overall or band treatment. Minimum band width should be 30 cm.

TT Canola: DO NOT apply to TT-canola by aircraft. Apply only with a low boom sprayer with a 60 m buffer zone downwind of treated fields to natural or impounded lakes or dams, and a 20 m buffer zone for any well, sink hole, intermittent or perennial stream. Apply only to areas where runoff is unlikely to occur or where run-off may be captured by farm earthworks.

Summer Crops

Heavy rains immediately following an application tend to result in excessive concentrations of herbicide in the seed furrow, thus encouraging possible crop injury. This is most likely to occur when a pre-plant or pre-emergence application is made using rates in excess of 2 kg/ha. To avoid the likelihood of herbicide injury follow time of application (a), (b) or (d) listed below.

Time of application

Sorghum, Maize, Broom Millet, Saccaline, Sweet Corn

- (a) Pre-plant application followed by a post-emergence application: Apply after establishment of the seed bed and up to 2 weeks prior to sowing. If using this technique on irrigated crops, application should preferably be made to moist soil. If applied to dry soil, lightly harrow to incorporate GESAPRIM GRANULES into the soil not more than 4 cm deep. A post-emergence spray must be applied as soon as possible after the crop has emerged and developed 2 to 3 leaves.
- (b) Pre-emergence application followed by a post-emergence application: Apply at or immediately after planting and before crop and weeds emerge. Application should preferably be made to moist soil. If applied to dry soil, lightly harrow to incorporate GESAPRIM GRANULES into the soil not more than 4 cm deep. If using this technique on irrigated crops, then a post-emergence spray must be applied as soon as possible after the crop has emerged and developed 2 to 3 leaves.
- (c) Pre-emergence application: Apply at or immediately after planting and before crop and weeds emerge. Application should preferably be made to moist soil.
- Note: Applying the total amount of this product as a pre-emergence application increases the risk outlined in Crop Safety Summer Crops below.
- (d) Post-emergence application: Application must be made to seedling broadleaf weeds and grasses when they are not more than 1 cm high. Normally the crop is then at the 2 to 3 leaf stage. For best results the soil should be moist and rain or irrigation should follow the application. If applied to dry soil, lightly harrow to incorporate GESAPRIM GRANULES into the soil not more than 4 cm deep. Add Agral at the rate of 125 mL/100 L or BS1000 at the rate 75 mL/100 L of spray, for all post-emergence applications, or in sweet corn/maize 5.5 L crop oil/ha.

Note: Should weeds develop after pre-plant or pre-emergence application, a shallow cultivation may assist the control. Avoid deep cultivation which may throw untreated soil over the sprayed areas as this may seriously reduce weed control.

Crop safety

Sorghum, Broom Millet, Saccaline

Heavy rains immediately following an application tend to result in excessive concentrations of herbicide in the seed furrow, thus encouraging possible crop injury. This is most likely to occur when a pre-plant or pre emergence application is made using rates in excess of 2 kg/ha. To avoid the likelihood of herbicide injury use technique (a), (b) or (d) (see Time of Application). In the northern irrigation areas of WA, DO NOT use as a pre-emergence application during wet season.

Maize, Sweetcorn, Sorghum, Broom Millet, Saccaline

When sowing is made on the 'flat', avoid application to ridged soil.

Note: Pre-plant or pre-emergence applications are preferred where grasses are the major problem.

Warning: When used in Signal Grass and Panicum maximum, application of this product may cause damage and the user accepts all responsibility should any damage occur to the crop.

Resistance Warning:

RESISTANCE WEEDS WARNING - GROUP C HERBICIDE

GESAPRIM GRANULES Herbicide is a member of the triazine group of herbicides. The product has the inhibitor of photosynthesis at photosystem II mode of action. For weed resistance management, this product is a Group C herbicide. Some naturally occurring weed biotypes resistant to GESAPRIM GRANULES and other Group C 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 GESAPRIM GRANULES or other Group C herbicides. Since the occurrence of resistant weeds is difficult to detect prior to use, Syngenta Australia Pty Ltd accepts no liability for any losses that may result from the failure of GESAPRIM GRANULES to control the resistant weeds.

Advice as to strategies and alternative treatments that can be used should be obtained from your local supplier, consultant, local Department of Agriculture, Primary Industries Department or a Syngenta representative.

Resistant weeds reporting

Growers should collect plant or seed samples where weeds that are normally susceptible to atrazine and simazine may be resistant, get them tested and seek professional advice. Any incidents of resistance must be reported to Syngenta, phone 1800 067 108.

To minimise herbicide resistance

- Avoid dry sowing in heavily weed infested paddocks. Wait for weed germination after the opening rains in weedy paddocks. Use a pre-plant knockdown or cultivation. No weeds should be allowed to survive at this stage.
- Adapt the weed control program to the anticipated weed spectrum and pressure Broadleaf weeds and Ryegrass: Use GESAPRIM GRANULES or simazine plus trifluralin pre-emergence. A follow-up with a Group A herbicide (if Ryegrass is susceptible) or GESAPRIM GRANULES may be necessary.

Broadleaf weeds only: Use GESAPRIM GRANULES post-emergence.

- DO NOT use GESAPRIM GRANULES or simazine if the area to be treated had a triazine herbicide applied to it last season.
- Watch for escapes, especially in paddocks with a long history of Group C herbicide use.
- DO NOT use Group C herbicides in consecutive years.

To avoid triazine carry-over

On acid soils (pH less than 6.5): The maximum rate of GESAPRIM GRANULES or simazine or a combination of the 2 products to be applied to the crop during the growing season is 2.2 kg/ha.

On alkaline soils (pH greater than 6.5): The maximum rate of GESAPRIM GRANULES or simazine or a combination of the 2 products to be applied to the crop during the growing season is 1.1 kg/ha.

Post-emergence: It is recommended that GESAPRIM GRANULES only be used, and at rates of 1.1 kg/ha or less, on both acid or alkaline soils.

Integrated Weed Management Strategy for TT-Canola

An Integrated Weed Management Strategy for TT-Canola (the Strategy) has been developed by Syngenta with the assistance and agreement of the Canola Association of Australia. The Strategy outlines recommendations, measures and options for weed management, including management of herbicide resistance in weed populations. The Strategy is available from a Syngenta representative and the Canola Association of Australia. A program has been developed that outlines sound agronomic practices and integrated weed management programs designed to optimise the performance of TT-Canola. It is advised that consultation on IWM be undertaken with an accredited agronomist prior to use of GESAPRIM GRANULES on TT-Canola.

Important: Use may not control canola escapes or weedy canola relatives if triazine tolerant. Syngenta, the Canola Association of Australia, neighbouring land managers and growers should be notified of suspected incidents of resistance.

Precautions:

Re-entry period

DO NOT enter treated areas without protective clothing until spray has dried.

Protections:

PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS

DO NOT apply under weather conditions or from spraying equipment which may cause spray to drift onto nearby susceptible plants/crops, cropping lands or pastures. DO NOT apply product, or drain or flush equipment on or near desirable trees or other plants or on areas where their roots may extend or in locations where the chemical may be washed or moved into contact with their roots.

Crop Rotation

DO NOT plant crops other than those recommended on this label for at least 6 months following treatments at rates up to 1.4 kg/ha and for 18 months following treatments of 1.4 to 3.3 kg/ha.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

DO NOT contaminate streams, rivers or waterways with the chemical or used containers. This product is very highly toxic to algae and aquatic macrophytes.

DO NOT apply this product within 60 m of natural or impounded lakes or dams.

DO NOT use in channels or drains.

DO NOT apply under meteorological conditions or from spraying equipment which could be expected to cause drift of this product or spray mix into adjacent areas, particularly wetlands, waterbodies or watercourses.

Storage and Disposal:

STORAGE AND DISPOSAL

Store in the closed, original container in a cool, well ventilated locked area. DO NOT store for prolonged periods in direct sunlight. Single-rinse or shake remainder into spray tank. DO NOT dispose of undiluted chemicals on site. 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.

Safety Directions:

SAFETY DIRECTIONS

Avoid contact with eyes and skin. DO NOT inhale dust or spray mist. When preparing spray and using the prepared spray, wear:

- cotton overalls buttoned to the neck and wrist (or equivalent clothing),
- a washable hat, and
- elbow-length PVC gloves.

If using a hand directed sprayer, wear in addition: waterproof trousers and boots. 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.

First Aid Instructions:	FIRST AID INSTRUCTIONS If poisoning occurs, contact a doctor or Poisons Information Centre. Phone 131 126.
First Aid Warnings:	

DIRECTIONS FOR USE

Crop/Situation	Weed	State	Rate/ha	Critical Comments
Canola (Triazine Tolerant varieties only) pre-emergence or post-sowing pre-emergence only	Capeweed, Charlock, Clover, Corn Gromwell, Doublegee, Fumitories, Geraniums, Ivy-leaf Speedwell, London Rocket, Mustards, Paterson's Curse, Shepherd's Purse, Silver Grass (Vulpia spp.), Turnips Suppression of Annual Ryegrass, Barley Grass, Brome Grass, Wild Oats, Wild Radish	All States	1.1 to 2.2 kg	This use is subject to an Integrated Weed Management Strategy for the use of triazine herbicides in triazine tolerant (TT) canola See General Instructions: Integrated Weed Management Strategy for TT-Canola Can be applied up to a week before sowing or postsowing pre-emergence (ideally Incorporated by harrows). For best results, apply to bare moist soil, either immediately before seeding or as a preemergence treatment at or within 7 days of planting. Sufficient rainfall (20 to 30 mm) to wet the soil through the weed root zone is necessary within 2 to 3 weeks of application. Application should not be made to ridged or excessively cloddy soil. When applied before seeding, incorporate to a depth of 5 cm.
Canola (Triazine Tolerant varieties only) post-emergence application	Annual Ryegrass (1 to 2 leaf stage only), Mustards, Turnips, Wild Radish		555 g to 1.1 kg	This use is subject to an Integrated Weed Management Strategy for the use of triazine herbicides in triazine tolerant (TT) canola See General Instructions: Integrated Weed Management Strategy for TT-Canola Apply to moist soil when weeds are actively growing. The addition of 0.5 to 1% v/v of crop oil will enhance post emergence activity. Cold water: Under cold water conditions (10 °C or less), use Adigor® Spray Adjuvant or Hasten* Spray Adjuvant as a crop oil. DO NOT apply more than 1 post-emergence application.

Crop/Situation	Weed	State	Rate/ha	Critical Comments
Eucalypt, Pine plantations	Common Sowthistle, Mouse-Ear Chickweed, Sand Brome, Silver Grass, Wild Oats, Yorkshire Fog Grass	All States	5 to 8.8 kg	Pre-planting: Graze the area heavily and apply by boom spray or aircraft no more than 2 weeks before planting. Post-planting: Apply by boom spray either immediately after or within 1 month of planting. When applying by aircraft, the pines must be at least 1 month old. Application must be made before the spring flush commences. Use rates towards the lower end of the range where broadleaf weeds are the major problem and rates towards the higher end of the range where grasses are the major problem. Use up to 8.8 kg/ha on clay loams and heavier textured soils. For sandy soils and soils described as highly erodible, apply a maximum of 5 kg/ha. DO NOT apply with a knapsack sprayer.
Established Ryegrass Seed Crops	Barley Grass, Docks, Loosestrife, Silver Grass, Soft Brome, Sorrel, Toad Rush, Winter Grass	Vic only	830 g to 1.1 kg	Apply after good autumn rains have fallen and conditions are becoming cooler around late May to mid-June. Graze heavily prior to application. Note: Some crop damage may occur on sandy soils if crop water stressed then damage may occur. DO NOT apply Nitrogen prior to spraying.
Fallow Area Maintenance prior to sowing Lupins, Peas, Wheat	Broadleaf weeds and grasses		650 to 870 g	Apply late July to mid September for May to June sowing. Use the higher rate for a 14 month fallow - apply in February/April before autumn rains.
Grass Seed Crops - established stand of Currie Cocksfoot, Demeter Fescue, Phalaris, Sirocco - seedling Panicum Maximum,	Broadleaf weeds, Brome Grasses, Crowsfoot Grass, Feathertop, Love Grass, Pigeon Grasses, Rhodes Grass, Setaria spp.	Qld only	2.5 to 3.3 kg	Pre-emergence: Apply at or immediately after planting, preferably to a moist soil, and before crop and weeds germinate. Use the lower rate on Panicum maximum seed crops and the higher rate on Signal Grass when grasses are likely to be the major problem. Guinea Grass, Green Summer Grasses (Brachiaria spp.) and Panics are not controlled. Warning: Damage can occur to Panicum maximum when application is made under cool, dry conditions. Note: When used in Signal Grass and Panicum maximum user accepts all responsibility should any damage occur.
Signal Grass	Brome Grass	All States	1 to 1.2 kg	Apply after the Autumn break when Brome grass is just emerging. Apply by low volume boom spray.
Lucerne established for more than 1 year	Mintweed		600 g	Apply when the first germination of mintweed seedlings are 5 to 8 cm high and actively growing. Grazing prior to spraying improves efficiency. Using the low volume boom spray apply 140 to 170 L spray mixture/ha.

Crop/Situation	Weed	State	Rate/ha	Critical Comments
Lupins weed free seedbed	Capeweed, Clovers, Doublegee, Medics, Mustard, Turnip, Wireweed, Wild Radish Suppression of Annual Grass Weeds	WA only	280 to 560 g plus 420 to 830 mL simazine (600 g/L) or 280 to 560 g simazine (900 g/kg)	Apply to bare moist soil immediately before or at seeding. Application should not be made to ridged or excessively cloddy soil. Incorporation by the sowing operation should not exceed 5 cm. Sufficient rainfall (20 to 30 mm) to wet the soil through the weed root zone is necessary within 2 to 3 weeks of application. Results can be variable if seasonal conditions are dry prior to sowing and lupins are sown into a dry or low moisture seedbed. Apply a maximum of 930 g/ha of the mixture on yellow sands. Apply 1.2 kg/ha on all other soil types. Note: Some early crop phytotoxicity may be observed particularly on yellow sands carrying Native Pear and Pine vegetation. Caution: DO NOT use on white or grey sands.
Maintenance of fallow areas prior to planting a Sorghum crop in a conservation tillage system	Amaranths, Annual Ground Cherry, Barnyard Grass, Black Bindweed (Climbing Buckwheat), Blackberry Nightshade, Bladder Ketmia, Burrs, Caltrop, Cobbler's Pegs, Common Thornapple, Crowsfoot Grass, Dwarf Marigold, Fat Hen, Love Grass, Mintweed, Parthenium Weed, Pigeon Grass, Pigweed, Plains Grass, Potato Weed, Prickly Paddy Melon, Sesbania Pea, Spring Grass, Summer Grass, Wireweed	Qld, NSW only	2 to 3.3 kg	Pre-plant: Apply to moist soil or when rain is imminent and prior to the germination of weeds and grasses, or as a tank mixture with a specific knockdown herbicide if weeds and grasses are present. Use the lower rate when short-term control of weeds and grasses is required or where a wheat crop will follow sorghum in the rotation. Use the higher rate when longer term control of weeds and grasses is required.
Maize,	Black Pigweed	Central	1.2 kg	Pre-emergence
Sorghum		Qld only	350 g or 1.2 kg	Post-emergence: Use lower rate for seedlings (2 true leaves). For plants up to 3 cm in diameter use higher rate. Add wetting and spreading agent (see Application).
	Thornapple (<i>Datura</i> spp.), other broadleaf weeds including <i>Amaranthus</i> spp., Annual Ground Cherry, Bellvine, Black Pigweed, Bladder Ketmia, Caltrop, Mintweed, Noogoora Burr, Pigweed, Sesbania Pea, Wandering Jew, Wild Gooseberry	Qld, NSW only	830 g to 1.1 kg plus 350 to 500 mL Tordon 75-D*	Use the lower rate when weeds are small and actively growing. Use the higher rate for larger weeds or when plants are not growing actively. Spray when the crop has 4 to 6 fully expanded leaves and secondary roots have developed. DO NOT add surfactants or crop oil. If rotating to winter cereal crops DO NOT apply this tank mixture within 6 months of the expected sowing date. For other crops or situations observe plant back information on the respective product labels.

Crop/Situation	Weed	State	Rate/ha	Critical Comments
Maize, Sweet Corn irrigated and dryland	Amaranths, Annual Ground Cherry, Barnyard Grass, Blackberry Nightshade, Black Bindweed (Climbing Buckwheat), Bladder Ketmia, Burrs, Caltrop, Cobbler's Peg, Common Sowthistle, Common Thornapple, Crowsfoot Grass, Dwarf Marigold, Fat Hen, Love Grass, Mintweed, Parthenium Weed, Pigeon Grass, Pigweed, Plains Grass, Potato Weed, Prickly Paddy Melon, Spring Grass, Summer Grass, Sunflower, Wild Oats, Wireweed	All States	2.5 to 3.3 kg	Pre-plant, pre-emergence or post-emergence: Use the lower rate where broadleaf weeds are the major problem and the higher rate where grasses are the major problem or on heavy soils. Post-emergence: Add Agral® Spray Adjuvant (refer to Mixing and Summer Crops).
Oil Tea tree	Purple top (Verbena bonariensis)	All States	Post-harvest spray 2.2 kg/ha or in crop shielded spray 1.8 kg/ha	DO NOT apply to weeds growing in light sandy soil. Apply once per season. Add wetting agent or surfactant at label rates. Post-Harvest: Apply by boom in a spray volume of at least 100 L/ha immediately after harvest when the surface of stumps have dried but before bud swell. For suppression of existing plants apply in combination with Spray.Seed®. In crop: Apply using a shielded sprayer in combinations with Spray.Seed or glyphosate. Avoid contact with foliage.
Pinus radiata plantation	Capeweed, Clovers, Mouse-Ear Chickweed, Rye Grass, Sand Brome, Silver Grass, Sow Thistle Seedlings, Wild Oats, Yorkshire Fog Grass	NSW, Vic, Tas, SA, WA, only	1.6 to 2.2 kg plus 5.6 to 8 L Amitrole T*	Pre-planting or post-planting: Spray to pine seedlings. Use the higher rate where grasses are a major problem. Preferably apply as a strip, rather than a blanket application (see Method of Application).
Roadsides, Rights of way	Parthenium Weed	Qld, NSW, NT only	3.3 kg	Pre emergence and post-emergence: Apply to moist soil, following germinating rains and when further follow up rain is imminent. Where germination has occurred, ensure application is made to seedling plants.
Seedling Ryegrass Seed	Toad Rush, Winter Grass	Vic only	480 to 550 g	Use the lower rate at 2 to 3 leaves and the higher rate at early tillering.
Crops	Broadleaf Weeds, Toad Rush, Winter Grass		550 g plus 500 mL MCPA (500 g/L) plus 400 mL dicamba (500 g/L)	Use at the tillering stage.
Sorghum	Parthenium Weed	Qld only	3.3 kg	Apply as a pre-emergence blanket spray. Add 150 mL non-ionic surfactant (900 g/L) to each 100 L spray.
	Black Pigweed, Sesbania Pea		1.1 kg plus 400 mL MCPA (500 g/L)	Post-emergence Warning: Atrazine mixtures with 2,4-D and dicamba can cause crop damage in central Qld. Refer to Incorporation in General Instructions.
Sorghum, Broom Millet, Saccaline,	Amaranths, Annual Ground Cherry, Barnyard Grass,	All States	2 kg	Pre-plant or pre-emergence only: Use this technique where grasses are likely to be the major problem.

Crop/Situation	Weed	State	Rate/ha	Critical Comments
Forage Sorghum dryland	Blackberry Nightshade, Black Bindweed (Climbing Buckwheat), Bladder Ketmia, Burrs, Caltrop, Cobbler's Peg, Common Sowthistle, Common Thornapple, Crowsfoot Grass, Dwarf Marigold, Fat-hen, Love Grass, Mintweed, Parthenium Weed, Pigeon Grass, Pigweed, Plains Grass, Potato Weed, Prickly Paddy Melon, Sesbania Pea, Spring Grass, Summer Grasses, Sunflower, Wild Oats, Wireweed		2 kg followed by 1.3 kg	Pre-plant or pre-emergence followed by post- emergence: Use this technique where long term weed control is required because of heavy rainfall or prolonged wet conditions following the initial application, or because dry weather follows sowing and spraying and weed and grass growth occurs.
			2 to 2.5 kg	Post-emergence only: Use the lower rate where only a broadleaf weed problem occurs and the higher rate where grasses are the major problem. Add a non-ionic surfactant.
Sorghum, Broom Millet, Saccaline, Forage Sorghum irrigated	Amaranths, Annual Ground Cherry, Barnyard Grass, Blackberry Nightshade, Black Bindweed (Climbing Buckwheat), Bladder Ketmia, Burrs, Caltrop, Cobbler's Peg, Common Sowthistle, Common Thornapple, Crowsfoot Grass, Dwarf Marigold, Fat-hen, Love Grass, Mintweed, Parthenium Weed, Pigeon Grass, Potato Weed, Pigeon Grass, Potato Weed, Prickly Paddy Melon, Sesbania Pea, Spring Grass, Summer Grasses, Sunflower, Wild Oats, Wireweed	All States	1.7 kg followed by 1.4 to 1.6 kg	Pre-plant or pre-emergence followed by a post emergence (see General Instructions): Use the lower rate on medium textured soils and the higher rate where grasses are the major problem or on heavy soils.
	Black Bindweed (Climbing Buckwheat), Cobbler's Peg, Sesbania Pea, Sunflowers, Wild Oats	NSW, Vic, SA, WA only	2.5 to 3.3 kg	Pre-emergence or post-emergence only (see General Instructions): Use the lower rate on light sandy soils, ie soils low in organic matter, and medium textured soils and the higher rate where grasses are the major problem or on heavy soils. DO NOT apply as a pre-emergence application to light sandy soils. Add a non-ionic surfactant to Post-emergence applications. Note: Not recommended in the MIA.
Sorghum, Broom Millet, Saccaline, Forage Sorghum irrigated and dryland	Black Pigweed, Mintweed	Qld only	1.3 kg	Pre-plant, pre-emergence or post-emergence only: Apply when weeds are young (4 to 6 true leaves) and actively growing.

Crop/Situation	Weed	State	Rate/ha	Critical Comments
Sugarcane	African Star Grass, Bellvine, Barnyard Grass, Billygoat Weeds, Blue Top, Chinese Burr, Crowsfoot Grass, Cupid's Flower (Star of Bethlehem), Gambia Pea, Green Summer Grass, Mossman River Grass, Rattle Pods, Summer Grass	Qid, NSW WA only	3.3 kg plus 4 L ametryn (500 g/L) in sufficient water for thorough coverage	Apply as a pre-emergence or early post-emergence application to both crop and weeds. If weeds and grasses are present at time of application, these should be actively growing and not exceed the 3 to 4 leaf stage. Aim to apply onto moist soil and when rain is likely to occur within 10 days of application. Application may be as either a band or blanket spray. When applying after the cane has emerged, use a directed spray to minimise contact of the spray with the cane plants (see Incorporation in General Instructions). Warning: Some phytotoxicity may be observed in Q90.
	Barnyard Grasses, Blue Top, Borreria (Square weed), Budda Pea, Cobbler's-Pegs, Crowsfoot Grass, Flannel Weed, Paddy's Lucerne (Common sida), Pigweed, Sesbania, Sida Retusa, Spiny Spider Flower (Wild Rose), Stinking Passion Vine, Summer Grasses, Sweet Briar, Thickhead, Vines Giant Sensitive Plant	Qld, NSW WA only	2.2 to 3.3 kg	Apply when soil is moist. Avoid spraying weeds under stress. Apply by ground rig only and obtain good cover of target weeds. Use high rates towards the higher end of the range where heavy soil or high trash levels are present. Use higher rates for grasses. Approximate period of weed control - 2.2 kg up to 4 weeks. - 3.3 kg up to 10 weeks. A pre-emergence application is preferred for grasses. Control of emerging broadleaf weeds: Where plants are large or conditions dry, 1 L of 2,4-D amine/ha should be added. If grasses are a problem this product should be applied prior to weed emergence. If emerged grasses are present add Gramoxone® 250 Herbicide at 1.2 to 1.7 L/ha.

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

METHOD OF APPLICATION

Pinus radiata Plantations

Type of Application	Critical Comments
Pre-planting	Graze area heavily and apply the tank mixture no more than 2 weeks before planting.
Post-planting	Apply tank mixture either immediately after or within 1 month of planting. Application must be made before the spring commences. Avoid spraying the pine seedlings by using directed spray.