Product Name: Agro-Essence Boxmate A Herbicide

APVMA Approval No: 81065/140929



Label Name:	Agro-Essence Boxmate A Herbicide
Signal Headings:	CAUTION
	KEEP OUT OF REACH OF CHILDREN
	READ SAFETY DIRECTIONS BEFORE OPENING OR USING
Constituent Statements:	ACTIVE CONSTITUENT: 960 g/L S-METOLACHLOR
Mode of Action:	GROUP 15 HERBICIDE
Statement of Claims:	Controls Certain Annual Grasses and Broadleaf Weeds in Certain Crops as specified in the Directions for Use
Net Contents:	5 L - 1000 L

# Restraints:

DO NOT use on soils containing less than 5% clay in the top 30 cm.

DO NOT use more than once per year.

#### SPRAY DRIFT RESTRAINTS

Specific definitions for terms used in this section of the label can be found at apvma.gov.au/spraydrift

DO NOT allow bystanders to come into contact with the spray cloud.

DO NOT apply in a manner that may cause an unacceptable impact to native vegetation, agricultural crops, landscaped gardens and aquaculture production, or cause contamination of plant or livestock commodities, outside the application site from spray drift. Wherever possible, correctly use application equipment designed to reduce spray drift and apply when the wind direction is away from these sensitive areas.

DO NOT apply unless the wind speed is between 3 and 20 kilometres per hour at the application site during the time of application.

DO NOT apply if there are hazardous surface temperature inversion conditions present at the application site during the time of application. Surface temperature inversion conditions exist most evenings one to two hours before sunset and persist until one to two hours after sunrise.

Directions for Use:	This section contains file attachment.

#### Other Limitations:

## Withholding Periods:

**GRAZING** 

Canola, Mustard: DO NOT GRAZE TREATED FIELDS FOR 10 WEEKS AFTER APPLICATION

Forage Crops (except Sweet Potatoes): DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 13 WEEKS AFTER APPLICATION

Green Beans and Navy Beans: DO NOT GRAZE OR USE FOR STOCKFEED FOR AT LEAST 10 WEEKS AFTER APPLICATION

Pastures: DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 13 WEEKS AFTER APPLICATION

Spinach, Silverbeet: DO NOT GRAZE OR USE FOR STOCKFEED FOR 8 WEEKS AFTER APPLICATION

Sweet Potatoes: DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 23 WEEKS AFTER APPLICATION

Wheat, Barley, Oats, Triticale: DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 8 WEEKS AFTER APPLICATION

All other crops: NOT REQUIRED WHEN USED AS DIRECTED

#### **HARVEST**

Galangal, Turmeric: DO NOT HARVEST FOR AT LEAST 23 WEEKS AFTER APPLICATION

Green Beans and Navy Beans: DO NOT HARVEST FOR AT LEAST 8 WEEKS AFTER APPLICATION

Herbs, Chervil, Mizuna, Rucola, Lemon Verbena: DO NOT HARVEST FOR AT LEAST 8 WEEKS AFTER APPLICATION

Sweet Potatoes: DO NOT HARVEST FOR 23 WEEKS AFTER APPLICATION All other crops: NOT REQUIRED WHEN USED AS DIRECTED

#### Trade Advice:

**Export of Treated Produce** 

Growers should note that maximum residue limits (MRLs) or import tolerances may not exist in all markets for edible produce treated with this product. If you are growing edible produce for export, please check with Agro-Alliance (Australia) Pty Ltd for the latest information on MRLs and import tolerances before using this product.

#### General Instructions:

**USES** 

Agro-Essence Boxmate A Herbicide is a short residual, pre-emergent herbicide for the control of many important annual grasses and broadleaf weeds in the crops nominated. The product does not control the important broadleaf weeds in maize, sweet corn and Concep II treated sorghum, but when mixed with atrazine (500 g/L) control of many important annual weeds and grasses is obtained without the problem of carryover of herbicides affecting succeeding crops. The product acts mainly through shoot (coleoptile) absorption. Its effectiveness depends on the occurrence of rainfall or irrigation to move it down into the top 3 to 4 cm of soil, where it must be present at the time of weed germination.

#### **APPLICATION**

Ground Application only: Apply in a minimum of 60 L/ha of water. DO NOT apply by aircraft.

#### MIXING

Add the required amount directly to the spray tank, fill with water and mix well.

#### **COMPATIBILITY**

Agro-Essence Boxmate A Herbicide is compatible with atrazine (500 g/L), glyphosate 360 and 450 herbicides and paraquat + diquat.

Warning - Cotton: Heavy rain following an application of Agro-Essence Boxmate A Herbicide, together with below average soil temperatures, can result in crop injury, due to the inability of the germinating plant being able to metabolise the herbicide. Agro-Essence Boxmate A Herbicide should not be used in situations where these conditions are likely to occur

Warning - Brassica Crops: Crop retardation may occur where Agro-Essence Boxmate A Herbicide is used on soils that have a low organic matter content and which contain more than 60% of fine sand and silt. On these soil types, use rates of Agro-Essence Boxmate A Herbicide towards the lower end of the rate range and apply onto moist soil. Irrigation after application should be limited to no more than 25 mm. DO NOT use more than once per vear.

#### Resistance Warning:

## **RESISTANT WEEDS WARNING**

#### **GROUP 15 HERBICIDE**

Agro-Essence Boxmate A Herbicide is a member of the amide group of the Chloroacetamide group of herbicides, which inhibit cell division and inhibit very long chain fatty acids (VLCFA inhibitors) mode of action. For weed resistance management this is a Group 15 herbicide. Some naturally occurring weed biotypes resistant to Agro-Essence Boxmate A Herbicide and other Group 15 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 Agro-Essence Boxmate A Herbicide or other Group 15 herbicides. Since the occurrence of resistant weeds is difficult to detect prior to use, Agro-Alliance (Australia) Pty Ltd accepts no liability for any losses that may result from the failure of Agro-Essence Boxmate A Herbicide to control the resistant weeds.

#### Precautions:

As S-metolachlor is known to cause some crop damage in sandy-sandy loam soils with low organic matter, it is recommended that growers test the safety of S-metolachlor on a small area of their crop before using the product on larger areas. If any adverse crop symptoms are observed within 14 days of application in which irrigation or rainfall has occurred, then the product should not be used.

Re-entry Period

DO NOT allow entry into treated areas without protective clothing until spray has dried.

## Protections:

PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS

DO NOT plant crops other than broccoli, Brussels sprouts, cabbages, cauliflowers, cotton, maize, peanuts, soybeans, sunflowers, sweetcorn, tobacco or Concep II treated sorghum within 6 months of application of Agro-Essence Boxmate A Herbicide.

DO NOT apply under weather conditions, or from spraying equipment, that may cause spray to drift onto nearby susceptible plants/crops, cropping lands or pastures.

#### PROTECTION OF LIVESTOCK

DO NOT graze or cut sweet potato leaves for stock food.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT DO NOT contaminate streams, rivers or watercourses with the chemical or used containers.

# Storage and Disposal:

Store in the closed, original container in a cool, well-ventilated area, out of direct sunlight. For refillable containers

Empty contents fully into application equipment. Close all valves and return to point of supply for refill or storage.

Other containers

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 for appropriate disposal to an approved waste management facility. If an approved waste management facility is not available, bury the empty packaging 500 mm below the surface in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation, and tree roots, in compliance with relevant Local, State or Territory government regulations. DO NOT burn empty containers or product.

## Safety Directions:

Will damage eyes. Repeated exposure may cause allergic disorders. Sensitive workers should use protective clothing. Avoid contact with eyes. When opening the container and preparing spray, wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length PVC gloves, and goggles. When using the prepared spray, wear cotton overalls buttoned to the neck and wrist, a washable hat, elbow-length PVC gloves and face shield or goggles. If product in eyes, wash it out immediately with water. Wash hands after use. After each day's use, wash gloves, and face shield or goggles, and contaminated clothing.

First Aid Instructions:

If poisoning occurs, contact a doctor or Poisons Information Centre, Phone Australia 13 11 26, New Zealand 0800 764 766.

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## **DIRECTIONS FOR USE**

Crop	Weeds Controlled	State	Rate	Critical Comments
Brassica leafy vegetables including: Chinese White Cabbage, Chinese Flowering Cabbage, Chinese Broccoli, Indian Mustard Cabbage, Chinese Cabbage, Mizuna Greens, Red Mustard, Curled Mustard, Chinese Flat Cabbage, Mustard Greens, Turnip Greens, Turnip Greens, Rutabaga Greens, And Mibuna Greens)	Barnyard Grass, Blackberry Nightshade, Chickweed (suppression), Deadnettle, Fat Hen, Lovegrass, Pigeon Grass, Pigweed (suppression), Potato Weed, Shepherds Purse, Stinging Nettle, Summer Grass, Wireweed (suppression)	All states	1 to 2 L/ha	Apply one treatment only, immediately after transplanting. Apply in a minimum of 60 L water per hectare. Apply sufficient irrigation after application to wet the upper 3 to 4 cm of soil with 24 hours. Use rates towards the higher end of the range where blackberry nightshade, chickweed, fat hen, love grass, pigweed, potato weed and wire weed are major problems (Refer Brassica use pattern on product label). See general instructions for warning — Brassica crops.
Broccoli, Brussels Sprouts, Cabbages, Cauliflowers	Barnyard Grass, Blackberry Nightshade, Chickweed (suppression), Deadnettle, Fat Hen, Lovegrass, Pigeon Grass, Pigweed (suppression), Potato Weed, Shepherds Purse, Stinging Nettle, Summer Grass, Wireweed (suppression)	Qld, NSW, ACT, Vic, Tas, NT only	1.5 to 2 L/ha	Apply immediately after transplanting. Sufficient irrigation to wet the top 3 to 4 cm of soil should be applied within 24 hours. Use rates towards the higher end of the range where Blackberry Nightshade, Chickweed, Fat Hen, Lovegrass, Pigeon Grass, Pigweed, Potato Weed and Wireweed are the major problem. See Warning - Brassica crops.
	Crowsfoot Grass, Fierce Thornapple (suppression), Liverseed Grass, Winter Grass  Apple of Peru, Awnless Barnyard Grass, Fierce Thornapple (suppression), Liverseed Grass, Yellow Weed, Redroot Amaranth (suppression).	NSW, ACT only  Qld only		Apply immediately after transplanting. Sufficient irrigation to wet the top 3 to 4 cm of soil should be applied within 24 hours. Use rates towards the higher end of the range where Apple of Peru, Common Sowthistle, Fierce Thornapple, Liverseed Grass, Redroot Amaranth, Twiggy Turnip and Nettleleaf Goosefoot are the major problems. WARNING: Qld. only stunting and reduced yield may occur in broccoli in red soils and light alluvial soils. See Warning - Brassica crops.
	Annual Ryegrass, Common Cotula, Common Sowthistle (suppression), Crowsfoot Grass, Fiddle Dock, Italian Ryegrass, Liverseed Grass, Nettleleaf Goosefoot (suppression), Twiggy Turnip (suppression),	Vic, Tas only		

Crop	Weeds Controlled	State	Rate	Critical Comments
Canola, Mustard (oilseed cultivars) ( <i>Brassica juncea</i> )	Winter Grass Toad Rush	Qld, NSW, ACT, Vic, Tas, SA only	0.15 to 0.25 L/ha	Apply at or immediately after planting and before crops and weeds emerge. Apply to moist soil. Use rates towards the higher end of the range where longer residual control is required.  Apply before crops and weeds emerge.
Oatto	Demond Ones	Old NOW	41/6-	Apply to moist soil. To avoid crop injury use rates towards the lower end of the range on light sandy soils.
Cotton	Barnyard Grass, Crowsfoot Grass, Liverseed Grass, Lovegrass, Pigeon Grass, Summer Grass, Wandering Jew	Qld, NSW, WA only	1 L/ha	Pre-emergent: Apply before, at, or immediately after planting and before crops and weeds have germinated using a low volume boom sprayer applying 60 to 120 litres of mixture per hectare.  Rain or irrigation is necessary within 10 days of spraying to thoroughly wet the top 3 to 4 cm of soil. If rain does not occur or irrigation is unavailable, incorporate chemical to a depth of 3 to 4 cm. Use rates towards the higher end of the range on heavy soils or where a heavy grass population is expected.  DO NOT throw untreated soil onto treated areas, as this will reduce weed control.  DO NOT use on soils where the sand content exceeds 70%.  Use lower rate where sand content of the soil is within the range 50% to 70%.  See Warning - Cotton.
Culinary Herbs: Basil, Bay Leaves, Borage, Chives, Coriander, Dill, Fennel, Lemon Balm, Lemon Grass, Kaffir Lime Leaves, Marigold Flowers, Marjoram (Oregano), Mints, Nasturtium Leaves, Parsley, Rosemary, Sage, Salad Burnett, Sorrel, Tarragon, Thyme Savoury Root Vegetable: Galangal Leafy Vegetables: Rucola (Rocket), Chervil, Mizuna. Teas: Lemon	Barnyard Grass, Blackberry Nightshade, Chickweed (suppression), Deadnettle, Fat Hen, Lovegrass, Pigeon Grass, Pigweed (suppression), Potato Weed, Shepherds Purse, Stinging Nettle, Summer Grass, Wireweed (suppression)	All states	1.5 to 2 L/ha	Apply before, at, or immediately after planting/transplanting and before crops and weeds have germinated.  Sufficient irrigation to wet the top 3 to 4 cm of soil should be applied within 24 hours.  DO NOT use more than once per season.

Crop	Weeds Controlled	State	Rate	Critical Comments
Verbena Spice: Turmeric. <b>Edible Flowers:</b> Dianthus, Roses.				
Green Beans, Navy Beans	Blackberry Nightshade, Common Sowthistle, Fat Hen, Potato Weed, Barnyard Grass, Crowsfoot Grass, Liverseed Grass, Lovegrass, Pigeon Grass, Summer Grass and suppression of Pigweed	Qld, NSW, ACT, Vic, SA only	1.5 to 2 L/ha	Pre-emergent: Apply before, at, or immediately after planting and before crops and weeds have germinated.  Rain or irrigation is necessary within 10 days of spraying to thoroughly wet the top 3 to 4 cm of soil. If rain does not occur or irrigation is unavailable, incorporate chemical to a depth of 3 to 4 cm.  DO NOT throw untreated soil onto treated areas, as this will reduce weed control.  DO NOT use on soils where the sand content exceeds 70%. Use lower rate where the sand content is within the range 50% to 70%.
	Powell's Amaranth	Tas only	2 L/ha	Pre-emergent: Apply before, at, or immediately after planting and before crops and weeds have germinated. For sufficient Amaranth control, the Agro-Essence Boxmate A Herbicide application should be followed by 1 L/ha Basagran* (2-leaf Amaranth) plus 2 L/ha Basagran* (4-leaf Amaranth).  Rain or irrigation is necessary within 10 days of spraying to thoroughly wet the top 3 to 4 cm of soil. If rain does not occur or irrigation is unavailable, incorporate chemical to a depth of 3 to 4 cm.  DO NOT throw untreated soil onto treated areas, as this will reduce weed control.
Maize (not Waxy Maize), Sweetcorn	Barnyard Grass, Crowsfoot Grass, Liverseed Grass, Lovegrass, Pigeon Grass, Summer Grass, Wandering Jew  Blackberry Nightshade, Caltrop, Common Thornapple, Mintweed, Needle Burr, Noogoora Burr, Pigweed, Redroot Amaranth, Slim Amaranth	Qld, NSW, ACT, Vic, Tas, SA, NT, Tas only	1 to 2 L/ha 1 to 2 L/ha plus 2.5 L/ha atrazine (500 g/L)	Pre-emergent: Apply before, at, or immediately after planting and before crops and weeds have germinated using a low volume boom sprayer applying 60 to 120 litres of mixture per hectare.  Rain or irrigation is necessary within 10 days of spraying to thoroughly wet the top 3 to 4 cm of soil. If rain does not occur or irrigation is unavailable, incorporate chemical to a depth of 3 to 4 cm. Use rates towards the higher end of the range on heavy soils or where a heavy grass population is expected.  DO NOT throw untreated soil onto treated areas, as this will reduce weed control.  DO NOT use on soils where the sand content exceeds 70%.  Use lower rate where the sand content of the soil is within the range of 50% to 70%.

Crop	Weeds Controlled	State	Rate	Critical Comments
Pastures - Trikkala sub- clover, Haifa White clover, Maral Persian clover, Paradana Balansa clover, Redquin Red clover, Phalaris and Cocksfoot	Toad Rush	NSW, ACT, Vic, SA, NT only	200 to 250 mL/ha	Apply at or immediately after planting and before pasture species and weeds emerge. Application should be made to a moist seedbed. Sufficient rain to thoroughly wet the top 3 to 4 cm of soil should occur within 10 days of spraying. Use rates towards the higher end of the range in wet areas or when longer residual control is required.  DO NOT use in soils where prolonged waterlogging is anticipated, otherwise unacceptable crop retardation will occur. Avoid damage to pasture species by avoiding overlaps and double spraying in headlands where White, Persian and Balansa clovers are sown if the 250 mL rate is being used.
Peanuts	Barnyard Grass, Crowsfoot Grass, Liverseed Grass, Love Grass, Pigeon Grass, Summer Grass, Wandering Jew	QId, NSW, NT only	1 to 2 L/ha	Apply pre-irrigation where soil crusting is likely. Apply before, at or immediately after planting and before weeds germinate. Rain or irrigation is necessary within 10 days of spraying to thoroughly wet the top 3 to 4 cm of soil. If rain does not occur or irrigation is unavailable, incorporate chemical to a depth of 3 to 4 cm. DO NOT throw untreated soil onto treated areas as this will reduce weed control. Use rate toward the higher end of the range on heavy soils or where a heavy grass population is expected.
Rhubarb	Barnyard Grass, Blackberry Nightshade, Chickweed (suppression), Deadnettle, Fat Hen, Lovegrass, Pigeon Grass, Pigweed (suppression), Potato Weed, Shepherds Purse, Stinging Nettle, Summer Grass, Wireweed (suppression)	All states		Pre-emergent: Apply one (1) application only, immediately before or after transplanting crowns and before weeds have germinated.  Sufficient irrigation to wet the soil through the weed zone should be applied within 24 hours.  Further weed germination may occur following re-hilling due to exposure of untreated soil.
Soybeans, Sunflowers	Barnyard Grass, Crowsfoot Grass, Liverseed Grass, Love Grass, Pigeon Grass, Summer Grass, Wandering Jew	Qld, NSW, ACT, Vic, SA, NT only		Apply pre-irrigation where soil crusting is likely. Apply before, at or immediately after planting and before weeds germinate. Rain or irrigation is necessary within 10 days of spraying to thoroughly wet the top 3 to 4 cm of soil. If rain does not occur or irrigation is unavailable, incorporate chemical to a depth of 3 to 4 cm. DO NOT throw untreated soil onto treated areas as this will reduce weed control. Use rate toward the higher end of the range on heavy soils or where a heavy grass population is expected.
Sorghum treated with Concep II	Barnyard Grass, Crowsfoot Grass, Liverseed Grass, Lovegrass, Pigeon	Qld, NSW, ACT, NT only	1 to 2 L/ha	Pre-emergent: Apply before, at or immediately after planting and before crops and weeds have germinated using a low volume boom sprayer applying 60 to

Crop	Weeds Controlled	State	Rate	Critical Comments
Sorghum Seed Safener	Grass, Summer Grass, Wandering Jew		1 to 2	120 litres of mixture per hectare. DO NOT apply to sorghum seed not previously treated with Concep II Sorghum Seed Safener.
	Blackberry Nightshade, Caltrop, Common Thornapple, Mintweed, Needle Burr, Noogoora Burr, Pigweed, Redroot Amaranth, Slim Amaranth		1 to 2 L/ha plus 2.5 L/ha atrazine (500 g/L)	Rain or irrigation is necessary within 10 days of spraying to thoroughly wet the top 3 to 4 cm of soil. If rain does not occur or irrigation is unavailable, incorporate chemical to a depth of 3 to 4 cm. DO NOT throw untreated soil onto treated areas as this will reduce weed control. Use rate toward the higher end of the range on heavy soils or where a heavy grass population is expected. Use the lower rate on sandy soils.
Spinach, Silverbeet	Barnyard Grass, Blackberry	All states	1.5 to 2 L/ha	Apply with a boom spray, in a minimum of 60 L water/ha.
	Nightshade, Chickweed (suppression), Deadnettle, Fat Hen, Lovegrass,			Apply immediately before, at, or immediately after sowing.  If transplanting the crop, apply immediately before transplanting. DO NOT apply herbicide over the transplants.
	Pigeon Grass, Pigweed (suppression), Potato Weed, Shepherds Purse, Stinging Nettle, Summer Grass, Wireweed (suppression)			Crop retardation may occur where the herbicide is used on soils that have low organic matter content and which contain more than 60% of fine sand and silt. On these soil types, use rates towards the low end of the rate range, and apply to moist soil. Irrigation after application on these types of soils should be limited to no more than 25 mm. Also, on these soils, DO NOT use more than once per year (as on product label for brassicas).
				For other relevant instructions, see Broccoli (etc) section of Directions for Use table.
Spring Onions (Allium fistulosum),			1 L/ha	DIRECT SEEDED CROPS: Apply one application before, at or immediately after planting and before crops and weeds have germinated.
Shallots (Allium cepa. var. aggragatum)				TRANSPLANTED CROPS: Apply one application before planting and before weeds have germinated.
Sugarcane plant and ratoon	Awnless Barnyard Grass, Barnyard Grass, Bellvine, Billygoat Weed (Blue Top), Blackberry Nightshade, Caltrop, Common Sowthistle (Milk Thistle), Common Thornapple, Crowsfoot Grass, Green Summer Grass, Guinea Grass, Mexican Clover, Mintweed, Needle Burr,	Southern Qld only (Bundaberg South)	1.65 to 2.175 L/ha plus 2.7 to 3.6L/ha atrazine (500 g/L)	Apply as a pre- or post-emergent application to crop. Apply once per year only.  Application should be made to a moist soil before weeds and grasses have germinated. If conditions remain dry for a period of 10 days after spraying, irrigation or a shallow cultivation (2.5 cm) may assist results. DO NOT throw untreated soil on to treated areas as this will reduce weed control. In Southern Queensland, use rates toward the higher end of the range on heavy soils where a high grass population is expected.  In Northern Queensland, application must be made to maint soil and rainfall, or
	Passionfruit Vines, Pigeon Grass, Pigweed, Redroot Amaranth, Square			be made to moist soil and rainfall, or irrigation should occur within 24 hours of application. Use rates toward the higher end of the range where high Green Summer Grass population is expected.

Crop	Weeds Controlled	State	Rate	Critical Comments
	Weed, Star of Bethlehem, Summer Grass, Wild Rose			Where broadleaf weeds and grasses have emerged and are in the 2 to 4 true leaf stage, knockdown herbicides such as ametryn (500 g/L) at 2 L/ha), flowable diuron (500 g/L) at 1 L/ha or paraquat (250 g/L) at 1.2 to 1.6 L/ha, applied as a post directed spray, can be added.
		Northern Qld only (Mackay North)	2.175 to 2.17 L/ha plus 3.6 to 4.5 L/ha atrazine (500 g/L) or 2 to 2.5 kg/ha atrazine (900 g/kg)	Where broadleaf weeds only have emerged and are at the 2 to 4 true leaf stage then 2,4-D amine (500 g/L) at 2 L/ha should be added.  In all cases add a non-ionic surfactant.  Follow all instructions and restrictions on the atrazine labels.
Sweet Potatoes	Black pigweed, Red Shank, Potato Weed, Barnyard Grass, Crowsfoot Grass, Liverseed Grass, Lovegrasses, Pigeon Grass, Summer Grass, Suppression of Evening Primrose	Qld, NSW, ACT, Vic, SA, NT only	1.5 L/ha	Pre-emergent: Apply immediately after transplanting before weeds have germinated. Sufficient irrigation to wet the soil through the weed zone should be applied within 24 hours.  Further weed germination may occur following re-hilling due to exposure of untreated soil.
Tobacco (transplanted in field)	Barnyard Grass, Lovegrass, Pigeon Grass, Summer Grass and suppression of Common Thornapple (Datura stramonium) and Nightshades (Solanum sarrachoides and S. nigrum)	NSW, Vic only	1.5 L/ha	Apply by low volume boom spray prior to transplanting and before weeds and grasses germinate. The seedbed should be fine and free of large clods. Thoroughly incorporate within 7 days of spraying using a rotary hoe or similar equipment set to work to a depth of 7.5 cm. DO NOT use disc-cultivating implements. An even coverage of the herbicide is essential. The herbicide needs to be activated by moisture through to the top 3 to 4 cm of soil at the time of application or within 4 days of incorporation. This can be achieved by applying to moist soil, irrigating soon after incorporation or irrigating immediately after transplanting. Avoid boom overlaps as double treatment may cause growth suppression. Temporary crop retardation may be observed when soil conditions remain dry after application or where black root rot may occur.

Crop	Weeds Controlled	State	Rate	Critical Comments
Barley, Oats	Suppression of Annual Ryegrass	NSW, ACT, Vic, Tas, SA, WA only	375 to 500 mL/ha	Apply to moist soils immediately after planting and before crop and weeds emerge. Use the lower rate on light soils. Application should be made to a moist seedbed and sufficient rain to thoroughly wet the top 3 to 4 cm of soil should occur within 10 days after spraying. Damage may occur if crop is sown too shallow (less than 4 cm). Damage can occur on light sandy soil types after heavy rain.
				<b>See General Instructions</b> for use in zero-tillage systems.
Wheat, Barley, Oats, Triticale	Toad Rush	Vic, NSW, ACT, Tas, SA, WA only	150 to 250 mL/ ha	Apply at or immediately after planting and before crop and weeds emerge. Application should be made to a moist seedbed and sufficient rain to thoroughly wet the top 3 to 4 cm of soil should occur within 10 days after spraying. Use rates towards the higher end of the range in wet areas or when longer residual control is required or in situations where crop competition is minimal. When mixed with triasulfuron formulations, apply pre-sowing and incorporate by sowing operation (for wheat only).

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