

Logran[®] 750 WG



SELECTIVE HERBICIDE

Active Constituent: 750 g/kg TRIASULFURON

For pre-plant control of Annual Ryegrass, Paradoxa Grass and certain broadleaf weeds in Wheat, and for post-emergent control of Wild Radish in Wheat, Oats and Barley as per Directions for Use table.

GROUP B HERBICIDE

NRA Approval No 46511/0802

Pack size: 1 kg



UN NO. 3077 ENVIRONMENTAL HAZARDOUS SUBSTANCES, SOLID, N.O.S.
(CONTAINS TRIASULFURON)
PACKING GROUP III HAZCHEM 2X

GENERAL INSTRUCTIONS

LOGRAN[®] 750 WG Selective Herbicide is a water dispersible granular herbicide for the pre-plant, incorporated by sowing, control of Annual Ryegrass, Paradoxa Grass and certain broadleaf weeds in wheat and for post-emergent control of Wild Radish in wheat, oats and barley.

Crops other than wheat, barley, oats, triticale and cereal rye can be very sensitive to low soil concentrations of LOGRAN 750 WG Selective Herbicide thus prior to using the product, careful consideration should be given to crop rotation plans.

Herbicide Resistance Warning

LOGRAN 750 WG Selective Herbicide is a member of the sulfonyleurea group of herbicides and has the ALS Inhibitor mode of action. For weed resistance management this is a Group B herbicide.

Some naturally-occurring weed biotypes resistant to LOGRAN 750 WG Selective Herbicide and other Group B 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 LOGRAN 750 WG Selective Herbicide or other Group B herbicides.

Since the occurrence of resistant weeds is difficult to detect prior to use, Syngenta Crop Protection Pty Limited accepts no liability for any losses that may result from the failure of LOGRAN 750 WG Selective Herbicide 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 Crop Protection representative.

Mixing

LOGRAN 750 WG Selective Herbicide is a water dispersible granular herbicide which mixes readily with water and is applied as a spray.

- Partly fill the spray tank with water
- Start the agitation
- Add the correct amount of product to the spray tank with the agitation system running
- Continue agitation while topping up the tank with water and while spraying
- Use the spray mix within 24 hours of preparation.

Application

Ground application: Apply by boom spray, applying 30 to 100 litres of water per hectare. Avoid overlapping of boom runs.

Aerial application: Always spray in a cross wind of less than 5 knots. Ensure good spray coverage is obtained. Apply 20 to 40 litres per hectare.

Sprayer Cleanup

Where the sprayer is being used to spray cereal crops, rinse the sprayer thoroughly with water. Where the sprayer is being used to spray crops other than cereals:

1. Drain tank and rinse tank and spray boom with clean water for at least 10 minutes.
2. Fill the tank with clean water and add to it 300 mL of household chlorine bleach (containing 4% chlorine) per 100 L of water. Rinse hoses and boom and leave in tank for 15 minutes whilst agitating. Drain through nozzle.
3. Repeat step 2 and then rinse thoroughly with clean water to remove all traces of chlorine bleach.
4. Nozzles and filters should be cleaned separately.
5. Dispose of all water used for cleaning.

Compatibility

When using a tank mix of LOGRAN and Spray.Seed[®], add LOGRAN 750 WG, with constant agitation to approximately half the total volume of water to be used.

Ensure that the LOGRAN is fully dispersed.

Add the Spray.Seed, fill the spray tank to full volume with water and mix thoroughly.

Apply tank mix immediately, under constant agitation.

LOGRAN 750 WG is compatible with Dual[®]Gold, Avadex[®] BW, Spray.Seed, Roundup[®] CT, sodium molybdate, zinc sulphate, manganese sulphate, copper sulphate, 2,4-D Amine, Ally[®], Lorsban[®], Ambush[®], bromoxynil, trifluralin.

(continued)

**CROP ROTATION GUIDELINES
(Pre-emergent Application)**

Where the product is applied at the rate of 30 to 35 g/ha:
Unless otherwise specified (see table below), wheat, barley, oats, triticale and cereal rye can be planted the following season without restriction.

For other specified crops the LOGRAN treated area may be replanted after the interval indicated in the table below. These recommendations are made on the assumption that LOGRAN is applied to a wheat crop that reaches maturity in the season of application.

Soil pH (1:5 Soil:Water suspension method)	State	Replanting Interval	Minimum rainfall requirements between application and sowing the following crop	Crop
6.5 or less	Qld, NSW, Vic, Tas, SA, WA only	12 months	300 mm	Field Peas, Linseed, Lucerne, Lupins, Medicst, Subterranean Clover†, Faba Beans, Chickpeas and Canola
	Qld, NSW only	15 months	700 mm	Sorghum, Maize, Soybean, Cotton, Cowpea and Mung Bean
		18 months	900 mm	Sunflowers
6.6 to 7.5	Qld, NSW only	12 months	500 mm	Chickpeas and Canola
		15 months	700 mm	Sorghum, Maize, Soybean, Cotton, Cowpea and Mung Bean
		18 months	900 mm	Sunflowers
	Vic, SA, Tas, WA only	22 months	500 mm	Field Peas, Linseed, Lucerne, Lupins, Medicst, Subterranean Clover†, Faba Beans, Chickpeas, Canola, Sorghum, Maize, Soybean and Cotton
7.6 to 8.5	Vic, SA, Tas only	12 months	250 mm	Barley, Oats, Cereal Rye for grain crops
			300 mm	Barley, Oats, Cereal Rye for hay crops
	Qld, NSW only	12 months	500 mm	Chickpeas and Canola
			18 months	700 mm
	Vic, SA, Tas, WA only	24 months	700 mm	Field Peas, Linseed, Lucerne, Lupins, Medicst, Subterranean Clover†, Faba Beans, Chickpeas, Canola, Sorghum, Maize, Soybean and Cotton
8.6 and above	Vic, SA, Tas only	12 months	250 mm	Barley, Oats, Cereal Rye for grain crops
			300 mm	Barley, Oats, Cereal Rye for hay crops
	Qld, NSW, Vic, SA, Tas, WA only	24 months	700 mm	Field Peas, Linseed, Lucerne, Lupins, Medicst, Subterranean Clover†, Faba Beans, Chickpeas, Canola, Sorghum, Maize, Soybean and Cotton

† Includes natural regeneration of Subterranean Clover and Medics. For all other crops seek advice from a Syngenta representative.

Where the product is applied at 10 to 15 g/ha plus 1 litre of 400 g/L trifluralin:

Where the pH is less than 7.5 the following crops can be replanted from 9 months after application of LOGRAN providing 300 mm of rainfall has been recorded; field peas, canola, chickpeas, medics, clover, lucerne, safflower, lupins, cereal rye, barley, oats, wheat, triticale. Where rainfall is less than 300 mm for this period further advice should be sought from a Syngenta representative.

Where the pH is above 7.5 the following crops can be replanted 9 months after application of LOGRAN - cereal rye, wheat, oats, barley, triticale.

Where the pH is above 7.5 the following crops can be replanted 12 months after application providing 350 mm of rainfall has been recorded; field peas, canola, chickpeas, medics, clover, lucerne, safflower, lupins. Where less than 350 mm of rain has fallen between application and sowing the crop, further advice should be sought from Syngenta Crop Protection.

Crop Rotation Guidelines (Post-emergent Application)

Soil pH (1:5 Soil:Water suspension method)	State	Replanting Interval	Crop
6.5 or less	NSW, Vic, SA, WA only	7 months	Field Peas, Linseed, Lucerne, Lupins, Medics†, Subterranean Clover†, Faba Beans, Chickpeas and Canola
		14 months	Sorghum, Maize, Soybean, Cotton
6.6 to 8.0	NSW, Vic, SA, WA only	20 months	Chickpeas, Canola, Sorghum, Maize, Soybean, Cotton, Field Peas, Linseed, Lucerne, Medics†, Subterranean Clover†, Faba Beans

†Includes natural regeneration of Subterranean Clover and Medics. For all other crops a replanting interval of 24 months has to be observed.

These recommendations are made on the assumption that LOGRAN is applied to a wheat crop that reaches maturity in the season of application.

Where LOGRAN is used on soil types with pH greater than 8 (1:5 soil:water suspension test), further advice should be sought from Syngenta regarding crop rotation guidelines, except for barley, cereal rye, oats, triticale and wheat.

Crop Rotation Guidelines (tank mixture of LOGRAN and Igran)

The following crops can be planted after an application of LOGRAN and Igran:

In areas where pH is less than 7.5

– **9 months** after an application: barley, cereal rye, chickpeas, faba beans, field peas, lupins, medics, oats, canola, safflower, subclover, triticale, wheat.

In areas where pH is greater than 7.5

– **9 months** after an application: barley, cereal rye, oats, triticale, wheat.

– **14 months** after an application: cotton, maize, sorghum, soybeans, sunflowers. Where residual herbicides are applied following an application, the crop rotational guidelines for these products must be followed.

– **22 months** after an application: chickpeas, faba beans, field peas, lupins, medics, canola, safflower, subclover.

For all other crops advice should be sought from Syngenta Crop Protection.

PRECAUTION

Some crop yellowing or crop retardation may occur where stress factors such as water logging, drought, excessive soil acidity or alkalinity, nutrient or trace element deficiency, disease – Rhizoctonia, Take-All, cereal cyst nematodes or soil insects are present or occur following application.

Special care should be taken with regard to the application of LOGRAN to durum wheats as these may be more sensitive where the above stresses are present. In these situations crop recovery will be rapid provided the stress factors DO NOT continue exerting a negative effect on the crop's growth.

Crop retardation may also occur in some instances where considerable late summer/early autumn weed growth occurs. Weeds such as goosefoot, *Chenopodium* spp can release herbicidally active compounds into the soil.

Re-entry Period

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

PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS

DO NOT apply on or near shrubs, trees, lawns or crops other than wheat, oats and barley.

DO NOT drain or flush equipment on, or near desirable trees or other plants, where their roots may extend or in situations where by movement of soil, or seepage, absorption of the herbicide may occur.

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

DO NOT allow spray to drift onto adjacent crops and non-target desirable plants.

DO NOT allow spray to drift onto adjacent fallow land.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

DO NOT contaminate streams, rivers or waterways with the chemical or used containers.

STORAGE AND DISPOSAL

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

FIRST AID

If poisoning occurs, contact a doctor or Poisons Information Centre. Phone 131 126.

MATERIAL SAFETY DATA SHEET

If additional hazard information is required refer to the Material Safety Data Sheet. For a copy phone 1800 067 108 or visit our website at www.syngenta.com.au

MANUFACTURER'S WARRANTY AND EXCLUSION OF LIABILITY

Syngenta has no control over storage, handling and manner of use of this product. Where this material is not stored, handled or used correctly and in accordance with directions, no express or implied representations or warranties concerning this product (other than non-excludable statutory warranties) will apply. Syngenta accepts no liability for any loss or damage arising from incorrect storage, handling or use.

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WESTERN AUSTRALIA ONLY

DIRECTIONS FOR USE

Pre-emergent Application

Restrictions: DO NOT apply to crops undersown with legumes.
DO NOT use if another Group B herbicide (ALS inhibitor) has been used during the current season.

Crop	Weeds Controlled	Rate/ha	Critical Comments
Wheat	Burr Medic, Common Cotula, Corn Gromwell (White Ironweed, Sheepweed), Deadnettle, Denseflower Fumitory, Hedge Mustard, Indian Hedge Mustard, Matricaria, Paterson's Curse, Rough Poppy, Smallflower Fumitory, Wards Weed, Wild Turnip, Yellow Burrweed (Amsinckia) and suppression of Crassula	30 g	Apply to bare moist soil prior to sowing or at sowing and incorporate by the sowing operation using low profile 10 cm combine points. Application should not be made to ridged or excessively cloddy soil. For best results apply to moist soil when follow up rain is likely to occur within 7 to 10 days. In conservation tillage situations where weeds and grasses have emerged apply as a tank mixture with the recommended rate of knockdown herbicide prior to sowing.
	Annual Ryegrass, Capeweed, Doublegee or Three-cornered Jack (Spiny Emex), Wireweed, suppression of Wild Radish, 60 to 80% suppression of Soursob	35 g	When used on Kulin Wheat on very acid soils (pH 5.5 in water) or under poor fertility conditions increased stem breakage may occur. Early season crop retardation may occur where the product is used on soils with a pH greater than 8, and which are prone to zinc deficiency.
	Annual Ryegrass, Corn Gromwell (White Ironweed, Sheepweed), Deadnettle, Hedge Mustard, Indian Hedge Mustard, Prickly Lettuce (Whipthistle), Smallflower Fumitory, Wild Turnip, Wireweed (Hogweed), Ward's Weed	10 g to 15 g plus 1 L of a 400 g/L trifluralin	This mixture to be only used on alkaline soils where pH is greater than 8 (1:5 Soil:Water suspension method). For best results apply mix to bare moist soil that has a minimum of trash and incorporate to a depth of 5 cm just prior to sowing. Incorporation should be made within 4 hours of application. Heavy rainfall (greater than 50 mm) within 7 days of application may affect efficacy especially at the 10 g/ha rate. Late germination of some weeds eg Annual Ryegrass will not be controlled in seasons of above average rainfall. Use the higher rate where heavy density of weeds is expected.

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

WITHHOLDING PERIOD: DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 7 WEEKS AFTER APPLICATION.

WESTERN AUSTRALIA ONLY

DIRECTIONS FOR USE

Post-emergent Application

Restrictions: DO NOT apply to crops undersown with legumes.
 DO NOT spray when very dry conditions prevail.
 DO NOT spray under dry frosty conditions.
 DO NOT use if another Group B herbicide (ALS inhibitor) has been used during the current season.
 If RAIN FALLS within 6 hours of application, the effect could be diminished.

Crop	Weeds Controlled	Rate/ha	Critical Comments
Barley, Oats, Wheat	Wild Radish	10 g to 15 g plus crop oil at 1 L per 100 L of spray mixture or surfactant at recommended label rates	<p>Early Post-Emergent Application: Spray prior to the crop reaching mid-tillering (Zadoks - 23) and when Wild Radish is in the 2 to 6 leaf stage. Use rates towards the lower end of the range when weeds are small and growing conditions ideal. Spray only when weeds are actively growing.</p> <p>Late Post-Emergent Application: Spray during early flowering. DO NOT apply to the crop during crop anthesis or flowering (Zadoks 60-69). DO NOT spray on weeds under stress.</p> <p>WARNING: Application to Oats may cause some yellowing.</p>
Barley, Oats, Triticale, Wheat From 3 leaf to early tillering stage	Turnip Weed	6.5 g + 300 mL Igran® 500 SC	<p>Spray when weeds are in the 2 to 6 leaf stage (up to 6 node/leaflet for Field Peas, 10 leaflet for Vetch), except 2 to 4 leaf for Doublegee. Use rates towards the lower end of the range (where applicable) when weeds are small and soil conditions are very moist. Spray only when weeds are actively growing.</p> <p>Spray only after good rain and when top soil is moist. Best results are obtained when good soil moisture has been present since planting.</p>
	Denseflower Fumitory, Hedge Mustard, Smallflower Fumitory	6.5 g + 300 mL Igran 500 SC to 10 g + 440 mL Igran 500 SC	
	Ball Mustard, Field Pea (volunteer)	10 g + 440 mL Igran 500 SC	
	Deadnettle	10 g + 440 mL Igran 500 SC to 13 g + 600 mL Igran 500 SC	
	Australian Crassula, Doublegee or Three-cornered Jack (Spiny Emex), Volunteer Lupins	13 g + 600 mL Igran 500 SC	

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WITHHOLDING PERIOD: DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 14 DAYS AFTER APPLICATION.

SOUTH AUSTRALIA ONLY DIRECTIONS FOR USE

Pre-emergent Application

Restrictions: DO NOT apply to crops undersown with legumes.
DO NOT use if another Group B herbicide (ALS inhibitor) has been used during the current season.

Crop	Weeds Controlled	Rate/ha	Critical Comments
Wheat	Ball Mustard, Burr Medic, Corn Gromwell (White Ironweed, Sheepweed), Deadnettle, Densflower Fumitory, Hedge Mustard, Indian Hedge Mustard, Prickly Lettuce, Rough Poppy, Smallflower Fumitory, Stemless Thistle, Vetch, Wards Weed, Wild Turnip, Yellow Burrweed (Amsinckia).	30 g	Apply to bare moist soil prior to sowing or at sowing and incorporate by the sowing operation using low profile 10 cm combine points. Application should not be made to ridged or excessively cloddy soil. For best results apply to moist soil when follow up rain is likely to occur within 7 to 10 days. In conservation tillage situations where weeds and grasses have emerged apply as a tank mixture with the recommended rate of knockdown herbicide prior to sowing. LOGRAN will provide good control of volunteer grain Legumes, however a small proportion of plants may survive and require an overspray to eliminate the potential for grain contamination. For Skeleton Weed a significant degree of control will be achieved on soil types of a predominantly sandy clay loam mixture with a pH greater than 8. Best control is observed where Skeleton Weed germinates in the very early stages of the crop. Surviving plants will be stunted.
	Annual Ryegrass, Capeweed, Three-cornered Jack or Doublegee (Spiny Emex), Volunteer Chickpeas, Faba Beans and Field Peas, Wireweed, suppression of Skeleton Weed, Wild Radish, 60 to 80% control of Soursob and suppression of remaining plants.	35 g	LOGRAN will provide good control of volunteer grain Legumes, however a small proportion of plants may survive and require an overspray to eliminate the potential for grain contamination. For Skeleton Weed a significant degree of control will be achieved on soil types of a predominantly sandy clay loam mixture with a pH greater than 8. Best control is observed where Skeleton Weed germinates in the very early stages of the crop. Surviving plants will be stunted.
	Annual Ryegrass, Corn Gromwell (White Ironweed, Sheepweed), Deadnettle, Hedge Mustard, Indian Hedge Mustard, Prickly Lettuce (Whipthistle), Smallflower Fumitory, Wild Turnip, Wireweed (Hogweed), Ward's Weed	10 g to 15 g plus 1 L of a 400 g/L trifluralin	This mixture to be only used on alkaline soils where pH is greater than 8 (1:5 Soil:Water suspension method). For best results apply mix to bare moist soil that has a minimum of trash and incorporate to a depth of 5 cm just prior to sowing. Incorporation should be made within 4 hours of application. Heavy rainfall (greater than 50 mm) within 7 days of application may affect efficacy especially at the 10 g/ha rate. Late germination of some weeds eg Annual Ryegrass will not be controlled in seasons of above average rainfall. Use the higher rate where heavy density of weeds is expected.

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WITHHOLDING PERIOD: DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 7 WEEKS AFTER APPLICATION.

SOUTH AUSTRALIA ONLY

DIRECTIONS FOR USE

Post-emergent Application

Restrictions: DO NOT apply to crops undersown with legumes.
 DO NOT spray when very dry conditions prevail.
 DO NOT spray under dry frosty conditions.
 DO NOT use if another Group B herbicide (ALS inhibitor) has been used during the current season.
 If RAIN FALLS within 6 hours of application, the effect could be diminished.

Crop	Weeds Controlled	Rate/ha	Critical Comments
Barley, Oats, Wheat Late Post emergent application	Wild Radish	15 g plus crop oil at 1 L per 100 L of spray mixture or surfactant at recommended label rates	Late Post-Emergent Application: Spray during early flowering. DO NOT apply to the crop during crop anthesis or flowering (Zadoks 60-69). DO NOT spray on weeds under stress. WARNING: Application to oats may cause some yellowing.
Barley, Oats, Triticale, Wheat From 3 leaf to early tillering stage	Faba Beans (volunteer), Long Fruited Turnip, Long Headed Poppy, Paterson's Curse, Turnip Weed	6.5 g + 300 mL Igran 500 SC	Spray when weeds are in the 2 to 6 leaf stage (up to 6 node/leaflet for Field Peas, 10 leaflet for Vetch), except 2 to 4 leaf for Doublegee. Use rates towards the lower end of the range (where applicable) when weeds are small and soil conditions are very moist. Spray only when weeds are actively growing. Spray only after good rain and when top soil is moist. Best results are obtained when good soil moisture has been present since planting.
	Hedge Mustard, Indian Hedge Mustard, Wild Turnip	6.5 g + 300 mL Igran 500 SC to 10 g + 440 mL Igran 500 SC	
	Ball Mustard, Crassula, Medic, Prickly Lettuce (Whipthistle)	10 g + 440 mL Igran 500 SC	
	Field Pea (volunteer), Wild Radish	10 g + 440 mL Igran 500 SC to 13 g + 600 mL Igran 500 SC	
	Lupins (volunteer), Three-cornered Jack or Doublegee (Spiny Emex), Vetch, Wireweed (less than 3 leaves) suppression	13 g + 600 mL Igran 500 SC	

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WITHHOLDING PERIOD: DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 14 DAYS AFTER APPLICATION.

NEW SOUTH WALES ONLY

DIRECTIONS FOR USE

Pre-emergent Application

Restrictions: DO NOT apply to crops undersown with legumes.
DO NOT use if another Group B herbicide (ALS inhibitor) has been used during the current season.

Crop	Weeds Controlled	Rate/ha	Critical Comments
Wheat	Black Bindweed (Climbing Buckwheat), Burr Medic, Common Cotula, Corn Gromwell (White Ironweed, Sheepweed), Deadnettle, Denseflower Fumitory, Hedge Mustard, Indian Hedge Mustard, Lesser Swinecress, Paterson's Curse, Prickly Lettuce, Rough Poppy, Shepherd's Purse, Smallflower Fumitory, Sow Thistle, Stagger Weed, Turnip Weed, Wild Turnip, Yellow Burrweed (Amsinckia) and suppression of Variegated Thistle.	30 g	Apply to bare moist soil prior to sowing and incorporate by the sowing operation using low profile 10 cm combine points. Application should not be made to ridged or excessively cloddy soil. For best results apply to moist soil when follow up rain is likely to occur within 7 to 10 days. In conservation tillage situations where weeds and grasses have emerged apply as a tank mixture with the recommended rate of knockdown herbicide prior to sowing.
	Annual Ryegrass, Capeweed, Doublegee or Three-cornered Jack (Spiny Emex), Paradoxa Grass (Annual Phalaris), Wireweed, and suppression of Wild Radish and Mexican Poppy.	35 g	For best results for Paradoxa Grass control, apply to dry soil before the sowing rain.
	Annual Ryegrass, Corn Gromwell (White Ironweed, Sheepweed), Deadnettle, Hedge Mustard, Indian Hedge Mustard, Prickly Lettuce (Whipthistle), Smallflower Fumitory, Wild Turnip, Wireweed (Hogweed), Ward's Weed	(Southern NSW only) 10 g to 15 g plus 1 L of a 400 g/L trifluralin	This mixture to be only used on alkaline soils where pH is greater than 8 (1:5 Soil:Water suspension method). For best results apply mix to bare moist soil that has a minimum of trash and incorporate to a depth of 5 cm just prior to sowing. Incorporation should be made within 4 hours of application. Heavy rainfall (greater than 50 mm) within 7 days of application may affect efficacy especially at the 10 g/ha rate. Late germination of some weeds eg Annual Ryegrass will not be controlled in seasons of above average rainfall. Use the higher rate where heavy density of weeds is expected.

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WITHHOLDING PERIOD: DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 7 WEEKS AFTER APPLICATION.

NEW SOUTH WALES ONLY

DIRECTIONS FOR USE

Post-emergent Application

Restrictions: DO NOT apply to crops undersown with legumes.
 DO NOT spray when very dry conditions prevail.
 DO NOT spray under dry frosty conditions.
 DO NOT use if another Group B herbicide (ALS inhibitor) has been used during the current season.
 If RAIN FALLS within 6 hours of application, the effect could be diminished.

Crop	Weeds Controlled	Rate/ha	Critical Comments
Barley, Oats, Wheat Late Post-emergent application	Wild Radish	15 g plus crop oil at 1 L per 100 L of spray mixture or surfactant at recommended label rates	Late Post-emergent Application: Spray during early flowering. DO NOT apply to the crop during crop anthesis or flowering (Zadoks 60-69). DO NOT spray on weeds under stress. WARNING: Application to oats may cause some yellowing.
Barley, Oats, Triticale, Wheat From 3 leaf to early tillering stage	Turnip Weed	6.5 g + 300 mL Igran 500 SC	Spray when weeds are in the 2 to 6 leaf stage (up to 6 node/leaflet for Field Peas, 10 leaflet for Vetch), except 2 to 4 leaf for Doublegee. Use rates towards the lower end of the range (where applicable) when weeds are small and soil conditions are very moist. Spray only when weeds are actively growing. Spray only after good rain and when top soil is moist. Best results are obtained when good soil moisture has been present since planting.
	Hedge Mustard, Indian Hedge Mustard, London Rocket, Wild Turnip	6.5 g + 300 mL Igran 500 SC to 10 g + 440 mL Igran 500 SC	
	Black Bindweed (Climbing Buckwheat), Faba Bean (volunteer), Field Pea (volunteer), Medic, Shepherds Purse	10 g + 440 mL Igran 500 SC	
	Deadnettle, Mexican Poppy, Wild Radish	10 g + 440 mL Igran 500 SC to 13 g + 600 mL Igran 500 SC	
	Coreopsis, Sunflower (volunteer), Vetch	13 g + 600 mL Igran 500 SC	

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WITHHOLDING PERIOD: DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 14 DAYS AFTER APPLICATION.

QUEENSLAND ONLY

DIRECTIONS FOR USE

Pre-emergent Application

Restrains: DO NOT apply to crops undersown with legumes.
DO NOT use if another Group B herbicide (ALS inhibitor) has been used during the current season.

Crop	Weeds Controlled	Rate/ha	Critical Comments
Wheat	African Turnip Weed, Black Bindweed (Climbing Buckwheat), Corn Gromwell (White Ironweed, Sheepweed), Deadnettle, Hedge Mustard, Indian Hedge Mustard, New Zealand Spinach, Prickly Lettuce, Slender Celery, Smallflower Fumitory, Turnip Weed, Yellow Burrweed (Amsinckia)	30 g	Apply to weed free soil prior to sowing or at sowing and incorporate by the sowing operation using low profile 10 cm combine points. Application should not be made to ridged or excessively cloddy soil. For best results apply when follow up rain is likely to occur within 7 to 10 days. In conservation tillage situations where weeds and grasses have emerged apply as a tank mixture with the recommended rate of knockdown herbicide prior to sowing.
	Annual Ryegrass, Common Peppergrass, Doublegee or Three-cornered Jack (Spiny Emex), London Rocket, Paradoxa Grass, Stagger Weed and suppression of Wild Radish and Wireweed.	35 g	For Paradoxa Grass control, apply to dry soil before the sowing rain. TO AVOID UNACCEPTABLE RESIDUES DO NOT graze or cut for stock food for 7 weeks after application.

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WITHHOLDING PERIOD: DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 7 WEEKS AFTER APPLICATION.

QUEENSLAND ONLY

DIRECTIONS FOR USE

Post-emergent Application

Restrictions: DO NOT apply to crops undersown with legumes.
 DO NOT spray when very dry conditions prevail.
 DO NOT spray under dry frosty conditions.
 DO NOT use if another Group B herbicide (ALS inhibitor) has been used during the current season.
 If RAIN FALLS within 6 hours of application, the effect could be diminished.

Crop	Weeds Controlled	Rate/ha	Critical Comments
Barley, Wheat From 3 leaf to early tillering stage	Turnip Weed	6.5 g + 300 mL lgran 500 SC	Spray when weeds are in the 2 to 6 leaf stage, except 2 to 4 leaf for Doublegee. Use rates towards the lower end of the range (where applicable) when weeds are small and soil conditions are very moist. Spray only when weeds are actively growing. Best results are obtained when good soil moisture has been present since planting. TO AVOID UNACCEPTABLE RESIDUES DO NOT graze or cut for stock food for 14 days after application.
	Denseflower Fumitory, Indian Hedge Mustard, Smallflower Fumitory, Wild Turnip	6.5 g + 300 mL lgran 500 SC to 10 g + 440 mL lgran 500 SC	
	Black Bindweed (Climbing Buckwheat), London Rocket	10 g + 440 mL lgran 500 SC	
	Wild Radish	10 g + 440 mL lgran 500 SC to 13 g + 600 mL lgran 500 SC	
	Coreopsis, Corn Gromwell (Sheepweed or White Ironweed)	13 g + 600 mL lgran 500 SC	

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WITHHOLDING PERIOD: DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 14 DAYS AFTER APPLICATION.

VICTORIA AND TASMANIA ONLY

DIRECTIONS FOR USE

Pre-emergent Application

Restraints: DO NOT apply to crops undersown with legumes.
DO NOT use if another Group B herbicide (ALS inhibitor) has been used during the current season.

Crop	Weeds Controlled	Rate/ha	Critical Comments
Wheat	Annual Ryegrass, Burr Medic, Capeweed, Corn Gromwell (White Ironweed, Sheepweed), Deadnettle, Hedge Mustard, Indian Hedge Mustard, Prickly Lettuce (Whipthistle), Smallflower Fumitory, Volunteer Chickpeas, Faba Beans and Field Peas, Wild Turnip, Wireweed (Hogweed), Yellow Burrweed (Amsinckia), and suppression of Wild Radish and Skeleton Weed.	30 to 35 g	Apply to bare moist soil prior to sowing or at sowing and incorporate by the sowing operation using low profile 10 cm combine points. Application should not be made to ridged or excessively cloddy soil. Use rates towards the lower end of the range where broadleaf weeds are the major problem. Use the higher rate where Capeweed, Volunteer Chickpeas, Faba Beans and Field Peas, Wild Radish and Wireweed are the problem. LOGRAN will provide good control of Volunteer Grain Legumes, however a small proportion of plants may survive and require an overspray to eliminate the potential for grain contamination. For best results apply to moist soil when follow up rain is likely to occur within 7 to 10 days. Use the lower rate (30 g/ha) on sandy clay loams with a pH greater than 8.5. For Skeleton Weed a significant degree of control will be achieved on soil types of a predominantly sandy clay loam mixture with a pH greater than 8. Best control is observed where Skeleton Weed germinates in the very early stages of the crop. Surviving plants will be stunted.
	Annual Ryegrass, Corn Gromwell (White Ironweed, Sheepweed), Deadnettle, Hedge Mustard, Indian Hedge Mustard, Prickly Lettuce (Whipthistle), Smallflower Fumitory, Wild Turnip, Wireweed (Hogweed), Ward's Weed	10 g to 15 g plus 1 L of a 400 g/L trifluralin	This mixture to be only used on alkaline soils where pH is greater than 8 (1:5 Soil:Water suspension method). For best results apply mix to bare moist soil that has a minimum of trash and incorporate to a depth of 5 cm just prior to sowing. Incorporation should be made within 4 hours of application. Heavy rainfall (greater than 50 mm) within 7 days of application may affect efficacy especially at the 10 g/ha rate. Late germination of some weeds eg Annual Ryegrass will not be controlled in seasons of above average rainfall. Use the higher rate where heavy density of weeds is expected.

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WITHHOLDING PERIOD: DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 7 WEEKS AFTER APPLICATION.

VICTORIA ONLY

DIRECTIONS FOR USE

Post-emergent Application

Restraints: DO NOT apply to crops undersown with legumes.
 DO NOT spray when very dry conditions prevail.
 DO NOT spray under dry frosty conditions.
 DO NOT use if another Group B herbicide (ALS inhibitor) has been used during the current season.
 If RAIN FALLS within 6 hours of application, the effect could be diminished.

Crop	Weeds Controlled	Rate/ha	Critical Comments
Barley, Oats, Wheat Late Post-emergent application	Wild Radish	15 g plus crop oil at 1 L per 100 L of spray mixture or surfactant at recommended label rates.	Late Post-emergent Application: Spray during early flowering. DO NOT apply to the crop during crop anthesis or flowering (Zadoks 60-69). DO NOT spray on weeds under stress. WARNING: Application to Oats may cause some yellowing.
Barley, Oats, Triticale, Wheat From 3 leaf to early tillering stage	Paterson's Curse, Turnip Weed	6.5 g + 300 mL Igran 500 SC	Spray when weeds are in the 2 to 6 leaf stage (up to 6 node/leaflet for Field Peas, 10 leaflet for Vetch), except 2 to 4 leaf for Doublegee. Use rates towards the lower end of the range (where applicable) when weeds are small and soil conditions are very moist. Spray only when weeds are actively growing. Spray only after good rain and when top soil is moist. Best results are obtained when good soil moisture has been present since planting.
	Hedge Mustard, Indian Hedge Mustard, Wild Turnip	6.5 g + 300 mL Igran 500 SC to 10 g + 440 mL Igran 500 SC	
	Crassula, Faba Beans (volunteer), Hyssop Loosestrife, Medic, Prickly Lettuce (Whipthistle)	10 g + 440 mL Igran 500 SC	
	Deadnettle, Field Pea (volunteer), Wild Radish	10 g + 440 mL Igran 500 SC to 13 g + 600 mL Igran 500 SC	
	Lupins (volunteer), Vetch, Wireweed (less than 3 leaves) suppression	13 g + 600 mL Igran 500 SC	

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WITHHOLDING PERIOD: DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 14 DAYS AFTER APPLICATION.

