

CAUTION

KEEP OUT OF REACH OF CHILDREN
READ SAFETY DIRECTIONS BEFORE OPENING OR USING

Raptor^{WG}

Herbicide

ACTIVE CONSTITUENT: **700 g/kg IMAZAMOX**

GROUP B HERBICIDE

For the post-emergence control of certain annual grass and broadleaved weeds in field peas, legume-based pastures, lucerne, peanuts and soybeans, as specified in the DIRECTIONS FOR USE table.



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NET CONTENTS: 250 g - 5 kg

DIRECTIONS FOR USE

RESTRAINTS

DO NOT apply to crops or weeds stressed by factors such as root or foliar diseases, water logging, nutrient deficiencies or extremes of temperature and moisture.

DO NOT apply to crops stressed by any previous herbicide treatments.

CROP	WEEDS CONTROLLED	RATE PER ha	WHP	CRITICAL COMMENTS
Field peas Post-emergence (See "Crop Safety" re varieties)	Barley grass (<i>Hordeum leporinum</i>), brome grass (<i>Bromus spp.</i>), deadnettle (<i>Lamium amplexicaule</i>), Indian hedge mustard (<i>Sisymbrium orientale</i>), storksbill (<i>Erodium spp.</i>), turnip weed (<i>Rapistrum rugosum</i>), volunteer barley (<i>Hordeum vulgare</i>), volunteer oats (<i>Avena sativa</i>), volunteer lupins (<i>Lupinus spp.</i>), volunteer triticale (<i>Triticosecale spp.</i>), volunteer wheat (<i>Triticum aestivum</i>), wild oats (<i>Avena spp.</i>), wild turnip (<i>Brassica tournefortii</i>), *doublegee (<i>Emex australis</i>), *shepherds purse(<i>Capsella bursa-pastoris</i>), *threehorn bedstraw(<i>Galium tricomutum</i>), *wild radish (<i>Raphanus raphanistrum</i>), *wireweed (<i>Polygonum aviculare</i>)	45 g plus BS 1000, or equivalent, at 200 mL per 100 L water	6 weeks (grazing)	Do NOT apply to field peas beyond the 4 node stage. Do NOT use adjuvants other than BS 1000 or equivalent. Apply to actively growing broadleaved weeds in the cotyledon to 3 leaf stage. Apply to grass weeds up to the 2 tiller stage. Good crop growth will aid weed control. Weeds may not be totally controlled but populations will be significantly reduced and surviving plants will generally be severely retarded. *Control will not be 100% but surviving plants will generally be retarded and will not compete with good crop growth. Ensure that crop agronomy is correct, to provide competition to such weeds. Leaf yellowing and height suppression may occur, especially under adverse growing conditions such as moisture stress. Flowering may be delayed. IMPORTANT: Refer to CROP SAFETY section of label re use on field peas. Refer to FOLLOW CROPS section of this label regarding follow crops.

CROP	WEEDS CONTROLLED	RATE PER ha	WHP	CRITICAL COMMENTS
Legume-based pastures Post-emergence clovers, lucerne, medics, serradellas only; see "Crop Safety" re varieties	As for field peas above. *Silver grass (<i>Vulpia spp.</i>), plus above weeds	45 g plus Hasten™ or Kwickin™ at 500 mL per 100 L water 50 g plus Hasten or Kwickin, at 500 mL per 100 L water plus Boost at 2 L per 100 L water	7 days (grazing)	Seedling Apply to legumes after full emergence of the third trifoliate leaf but well before commencement of flowering. Established Apply before commencement of flowering. Apply to actively growing broadleaved weeds in the cotyledon to 3 leaf stage. Apply to grass weeds up to the 2 tiller stage. Good pasture growth will aid weed control. Weeds may not be totally controlled but populations will be significantly reduced and surviving plants will generally be severely retarded. Where pasture stand is poor, weed control may be inadequate due to lack of competition. Ensure sufficient spray coverage of weeds particularly in dense pastures. *Control will not be 100% but surviving plants will generally be retarded and will not compete with good crop growth. Very high populations may not be efficiently controlled. Good spray coverage is essential. Ensure that crop agronomy is correct, to provide competition to such weeds. Refer to CROP SAFETY section of this label re varieties of clovers and medics and other pasture species. Note: Use of the 50 g/ha rate plus Hasten or Kwickin may severely damage medics. Refer to FOLLOW CROPS section of this label regarding follow crops.

CROP	WEEDS CONTROLLED	RATE PER ha	WHP	CRITICAL COMMENTS
Lucerne Post-emergence (See "Crop Safety" re varieties)	As for post emergence use in field peas (winter weeds) and soybeans (summer weeds)	45 or 50 g plus BS 1000, or equivalent, at 200 mL per 100 L water plus BOOST at 2 L per 100 L water	7 days (grazing)	Apply to actively growing weeds at growth stages as for field peas (winter weeds) and soybeans (summer weeds). Do NOT use the Hasten or Kwickin mix on seedling lucerne. Use the 50 g rate for summer weeds. Crop stage: Seedling: apply when crop is at 2 trifoliate leaf stage and before commencement of flowering. Established: apply as above following cutting or grazing. Refer to CROP SAFETY section of this label re varieties of lucerne.
Post-emergence Peanuts, soybeans	Amaranth (<i>Amaranthus</i> spp.), barley grass (<i>Hordeum leporinum</i>), barnyard grass (<i>Echinochloa crus-galli</i>), bell vine (<i>Ipomoea plebeia</i>), brome grass (<i>Bromus</i> spp.), deadnettle (<i>Lamium amplexicaule</i>), fathen (<i>Chenopodium album</i>), fierce thornapple (<i>Datura ferox</i>), Indian hedge mustard (<i>Sisymbrium orientale</i>), liverseed grass (<i>Urochloa panicoides</i>), turnip weed (<i>Rapistrum rugosum</i>), volunteer barley (<i>Hordeum vulgare</i>), volunteer oats (<i>Avena sativa</i>), volunteer lupins (<i>Lupinus</i> spp.), volunteer triticale (<i>Triticosecale</i> spp.), volunteer wheat (<i>Triticum aestivum</i>), wild gooseberry (<i>Physalis minima</i>), wild oats (<i>Avena</i> spp.), wild turnip (<i>Brassica tournefortii</i>),	50 g plus EITHER BS 1000, (or equivalent), at 200 mL per 100L water plus BOOST at 2 L per 100 L water OR Hasten or Kwickin, at 500 mL or 1 L per 100 L water	4 weeks (grazing)	DO NOT apply to crops beyond the 6 leaf stage. Apply to actively growing weeds in the cotyledon to 2 leaf stage. Apply to grass weeds up to the 2 tiller stage. If using the Hasten or Kwickin mix, use the 1 L per 100 L rate where grass weeds predominate. *Control will not be 100% but surviving plants will generally be retarded and will not compete with good crop growth. Ensure that crop agronomy is correct, to provide competition to such weeds. Refer to FOLLOW CROPS section of this label regarding follow crops.

CROP	WEEDS CONTROLLED	RATE PER ha	WHP	CRITICAL COMMENTS
Post- emergence Peanuts, soybeans cont.	*anoda weed (<i>Anoda cristata</i>), *awnless barnyard grass (<i>Echinochloa colona</i>), *blackberry nightshade (<i>Solanum nigrum</i>), *caltrop (<i>Tribulus terrestris</i>), *chickweed (<i>Stellaria media</i>), *crabgrass (<i>Digitaria ciliaris</i>), *doublegee (<i>Emex australis</i>), *Noogoora burr (<i>Xanthium pungens</i>), *shepherd's purse (<i>Capsella bursa-pastoris</i>), *threehorn bedstraw (<i>Galium tricornutum</i>), *wild radish (<i>Raphanus raphanistrum</i>), *wireweed (<i>Polygonum aviculard</i>)	50 g plus EITHER BS 1000, (or equivalent), at 200 mL per 100 L water plus BOOST at 2 L per 100 L water OR Hasten or Kwickin, at 500 mL or 1 L per 100 L water	4 weeks (grazing)	DO NOT apply to crops beyond the 6 leaf stage. Apply to actively growing weeds in the cotyledon to 2 leaf stage. Apply to grass weeds up to the 2 tiller stage. If using the Hasten or Kwickin mix, use the 1 L per 100 L rate where grass weeds redominate. *Control will not be 100% but surviving plants will generally be retarded and will not compete with good crop growth. Ensure that crop agronomy is correct, to provide competition to such weeds. Refer to FOLLOW CROPS section of this label regarding follow crops.

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

WITHHOLDING PERIODS:

GRAZING

Lucerne, pastures: **DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 7 DAYS AFTER APPLICATION.**

Peanuts, soybeans: **DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 4 WEEKS AFTER APPLICATION.**

Field peas: **DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 6 WEEKS AFTER APPLICATION.**

HARVEST

Field peas, peanuts, soybeans: **NOT REQUIRED WHEN USED AS DIRECTED.**

GENERAL INSTRUCTIONS

This product is for early post-emergence weed control in field peas, lucerne, legume-based pastures, soybeans and peanuts. Weeds will either die or remain stunted and will not compete with the crop. For weeds marked with an asterisk in the above table, the level of control will vary significantly depending on factors such as climatic conditions following application, crop vigour, weed seed depth, etc. A spray adjuvant must always be added, as per the "Directions for Use" table, while Boost liquid ammonium sulphate should also be added in situations indicated in the table. Good crop competition is essential for effective weed control.

MIXING

RAPTOR WG Herbicide is a water dispersible granule formulation. Part fill the spray tank with water, then with the agitator running, add the required amount of product, then fill the tank with water. When tank mixing this product with other recommended compatible products, first add the other product to the tank and mix thoroughly before adding this product.

APPLICATION

For ground application only: Apply with boom equipment in not less than 50 L/ha water using flat fan nozzles. Avoid overlap and do not overspray headlands.

Do NOT apply by aircraft.

Do NOT apply by mister.

RAPTOR WG Herbicide should be applied a minimum of two hours before rainfall or irrigation.

Do NOT apply RAPTOR more than once per growing season.

EQUIPMENT CLEAN-UP

Thoroughly flush all spray equipment with water following the use of RAPTOR and before use with other products. Rinse water should NOT be discharged where it will reach streams, water bodies or natural vegetation.

COMPATIBILITY

The product is compatible with MCPA, simazine, dimethoate, FASTAC® Duo, Crop care Dominex Duo, phosmet, omethoate and endosulfan. DO NOT tank mix with selective post-emergence grass herbicides. DO NOT apply these herbicides following use of RAPTOR until grasses have resumed active growth. Alternatively, apply the grass herbicide at least one day before using RAPTOR. DO NOT tank mix with either MCPA Amine or 2,4-D Amine when using in pastures.

RESISTANT WEEDS WARNING

RAPTOR WG Herbicide is a member of the Imidazolinone group of herbicides. The product has the ALS mode of action. For weed resistance management, the product is a Group B herbicide.

GROUP **B** HERBICIDE

Some naturally-occurring weed biotypes resistant to the product and other Group B herbicides may exist through normal genetic variability in any weed population. The resistant individuals can eventually dominate the population if these herbicides are used repeatedly. These resistant weeds will not be controlled by this product or other Group B herbicides.

Since the occurrence of resistant weeds is difficult to detect prior to use, Adama Australia accepts no liability for any losses that may result from failure of this product to control resistant weeds.

FOLLOW CROPS

Under conditions, such as very dry seasons, which do not favour breakdown of this product, carry-over soil residues can affect susceptible follow crops.

As environmental and agronomic factors make it impossible to eliminate all risks associated with this product, rotational crop injury is always possible. The following minimum re-cropping intervals (months after application) should be observed.

Following use in lucerne, legume-based pastures and field peas:

MONTHS AFTER APPLICATION		
0	10	21
field peas canola varieties with CLEARFIELD technology maize varieties with CLEARFIELD technology wheat varieties with CLEARFIELD technology	chick peas faba beans lucerne lupins pasture legumes vetch *barley *wheat (except varieties with CLEARFIELD technology) *triticale	All other crops including canola (except varieties with CLEARFIELD technology) Oats Safflower

* The following additional requirements apply if it is intended to sow WHEAT, BARLEY or TRITICALE during the next winter season:
DO NOT apply RAPTOR later than the end of August.

DO NOT use RAPTOR in areas where rainfall from the time of spraying to sowing of cereals is expected to be below 200mm.

Furthermore:

Do NOT use on soils of pH 5.5 (CaCl₂) or less in areas where rainfall from spraying to sowing of cereals is expected to be below 300 mm.

In late, short seasons where the soil is cold for most of the time it is wet, break-down will be slower and plant-back times will be extended. If expected rainfall is not received following use of RAPTOR, consult your local Adama representative before planting wheat, barley or triticale. (In calculating rainfall actually received, exclude single, isolated, falls which do not result in periods of continuous soil moisture to allow microbial breakdown to occur in the root zone).

Following use in summer crops:-

Irrigated only:

MONTHS AFTER APPLICATION			
0	5	10	18
Mungbeans, peanuts soybeans canola varieties with CLEARFIELD technology maize varieties with CLEARFIELD technology wheat varieties with CLEARFIELD technology	*chick peas *lucerne *lupins *pasture legumes *barley *wheat (except varieties with CLEARFIELD technology)	**maize (except Varieties with CLEARFIELD technology) **sorghum **cotton **oats **sunflower	All other crops (providing rainfall and irrigation exceeds 2000 mm)

* DO NOT plant these crops unless interim rainfall (rainfall plus irrigation) from application to sowing is at least 500 mm.

** DO NOT plant these crops unless interim moisture (rainfall plus irrigation) from application to sowing is at least 800 mm.

Dryland only:

MONTHS AFTER APPLICATION				
0	8	10	15	22
Mungbeans, peanuts soybeans canola varieties with CLEARFIELD technology maize varieties with CLEARFIELD technology wheat varieties with CLEARFIELD technology	*lucerne *barley *wheat (except varieties with CLEARFIELD technology)	**chick peas **maize (except varieties with CLEARFIELD technology) **sorghum **cotton **oats **sunflower	pasture legumes lupins	All other crops (providing rainfall exceeds 2000 mm)

* DO NOT plant these crops unless interim rainfall from application to sowing is at least 500 mm.

** DO NOT plant these crops unless interim rainfall from application to sowing is at least 800 mm.

PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS

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. DO NOT spray within 50 m of wetlands or waterways.

Crop safety: This product may cause shortening of plant internodes and may in some circumstances lead to transient crop yellowing but plants will soon recover. This effect is more pronounced under poor growth conditions including conditions of prolonged moisture stress.

Field peas

DO NOT apply to field peas beyond the 4 node stage. DO NOT apply if frost is forecast.

DO NOT use RAPTOR after simazine (unregistered in field peas) and do NOT exceed 250 g ac/ha diuron if use of RAPTOR is planned.

DO NOT roll field peas after germination if use of RAPTOR is planned. Before using this product on field pea varieties other than Bohatyr, Bonzer, Dun, Dundale, Glenroy, Laura, Magnet, Mukta, Santi and Wirrega, contact Adama Australia for up-to-date information.

DO NOT use on Alma, Excell and Parafield varieties.

Pasture legumes and perennial grasses

Safety to medic varieties may be lower than to clover varieties. Safety to seedling pastures less than one year old may be lower than to older established pastures. Transient biomass reduction and leaf yellowing may occur to pasture legumes and perennial grasses, with good recovery occurring under favourable seasonal conditions. In some situations a reduction in perennial grass numbers may occur as a result of unfavourable seasonal conditions following application. For up-to-date information on all pasture clover and medic varieties and other temperate pasture species, contact Adama Australia before use.

Lucerne

Before using this product on lucerne varieties other than Hunterfield, Sceptre, Sequel, Siriver and Trifecta, contact Adama Australia for up-to-date information. **DO NOT USE THE HASTEN OR KWICKIN MIX ON SEEDLING LUCERNE.**

Replanting: If replanting is necessary in a field previously treated with RAPTOR, the field may be replanted to field peas (above listed varieties only), soybeans or peanuts. DO NOT apply a second treatment of RAPTOR.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

Toxic to aquatic flora. 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. Triple or preferably pressure rinse containers before disposal. Add rinsings to spray tank. DO NOT dispose of undiluted chemicals on-site. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush, or puncture and bury empty containers in 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.

SAFETY DIRECTIONS

Will irritate the eyes. When opening the container and preparing spray, wear face shield or goggles. If product in eyes, wash it out immediately with water. Wash hands after use. After each day's use, wash face shield or goggles.

FIRST AID

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

SAFETY DATA SHEET

Additional information is listed in the safety data sheet (SDS). A safety data sheet for RAPTOR is available from Adama on request or at adama.com. Call Customer Service on 1800 423 262.

CONDITIONS OF SALE

The use of RAPTOR WG Herbicide being beyond the control of the manufacturer, no warranty expressed or implied is given by Adama Australia regarding its suitability, fitness or efficiency for any purposes for which it is used by the buyer, whether in accordance with the Directions for Use or not. Adama Australia accepts no responsibility for any consequence whatsoever resulting from the use of this product.

APVMA Approval No: 50854/12229

Batch No:

Date of Manufacture:

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