



Product Name: ULTRO 600 WG Herbicide
APVMA Approval No: 90958 / 130585

Label Name:	ULTRO 600 WG Herbicide
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Signal Headings:	POISON KEEP OUT OF REACH OF CHILDREN READ SAFETY DIRECTIONS BEFORE OPENING OR USING
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Constituent Statements:	ACTIVE INGREDIENT: 600 g/kg CARBETAMIDE
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Mode of Action:	GROUP 23 HERBICIDE
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Statement of Claims:	Crops: Broad beans, Chickpeas, Faba beans, Field peas, Lentils, Lupins, Vetch, Winter fallow Controls or Suppresses: Annual ryegrass, Barley grass and Brome grass as per the Directions for Use
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Net Contents:	1 - 1000 kg
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Restraints:	This section contains file attachment.
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Directions for Use:	This section contains file attachment.
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Other Limitations:	
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Withholding Periods:	Harvest: NOT REQUIRED WHEN USED AS DIRECTED.
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	<p>Grazing: DO NOT GRAZE OR CUT FOR STOCKFOOD FOR 12 WEEKS AFTER APPLICATION. DO NOT GRAZE TREATED WEEDS FOR 12 WEEKS AFTER APPLICATION.</p>
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Trade Advice:	
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General Instructions:	This section contains file attachment.
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Resistance Warning:	<p>RESISTANT WEEDS WARNING</p> <p>GROUP 23 HERBICIDE</p> <p>ULTRO 600 WG Herbicide is a member of the carbamate group of herbicides. The mode of action of ULTRO is to inhibit mitosis and microtubule polymerisation in target weeds. For weed resistance management, ULTRO is a Group 23 herbicide. Some naturally-occurring weed biotypes resistant to ULTRO and other Group 23 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 ULTRO or other Group 23 herbicides. Since the occurrence of resistant weeds is difficult to detect prior to use, ADAMA Australia Pty Ltd accepts no liability for any losses that may result from the failure of ULTRO to control resistance weeds.</p> <p>To minimise herbicide resistance:</p> <ul style="list-style-type: none"> • Avoid dry sowing in heavily weed infested paddocks. Wait for weed germination after the opening rains in weedy paddocks and use a pre-plant knockdown or cultivation. No weeds should be allowed to survive at this stage. • Watch for escapes, especially in paddocks with a long history of Group 23 herbicide use.
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Precautions:	
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Protections:	<p>PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT Toxic to aquatic life. DO NOT contaminate wetlands or watercourses with this product or used containers.</p> <p>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.</p>
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Storage and Disposal:	<p>Store in the closed, original container in a dry, cool, well-ventilated area out of 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.</p>
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Safety Directions:	<p>May irritate the eyes. Avoid contact with eyes. When opening the container, preparing the product for use and using the prepared spray, wear cotton overalls buttoned to the neck</p>
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	and wrist (or equivalent clothing). In addition, if applying by aerial spraying equipment, when opening the container and preparing the product for use, wear a half face-piece respirator. Wash hands after use. After each day's use, wash respirator and contaminated clothing.
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First Aid Instructions:	If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 13 11 26.
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First Aid Warnings:	
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RESTRAINTS

DO NOT apply if heavy rains or storms are forecast within 3 days.

DO NOT irrigate to the point of runoff from treated fields for at least 3 days after application.

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. The buffer zones in the relevant buffer zone table/s below provide guidance but may not be sufficient in all situations. 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.

DO NOT apply by a boom sprayer unless the following requirements are met:

- Spray droplets are not smaller than a MEDIUM spray droplet size category.
- Minimum distances between the application site and downwind sensitive areas are observed (see 'Mandatory buffer zones' section of the following table titled 'Buffer zones for boom sprayers').

Buffer zones for boom sprayers

Application rate	Boom height above target canopy	Mandatory downwind buffer zones (distances given in metres)				
		Bystander areas	Natural aquatic areas	Pollinator areas	Vegetation areas	Livestock areas
Up to maximum label rate	0.5 m or lower	0	0	0	25	0
	1.0 m or lower		5		65	40
1.67 kg/ha or lower	0.5 m or lower		0		10	0
	1.0 m or lower		0		40	15

DO NOT apply by aircraft unless the following requirements are met:

- Spray droplets are not smaller than a COARSE spray droplet size category.
- For maximum release height above the target canopy of 3 metres or 25 per cent of wingspan or 25 per cent of rotor diameter, whichever is the greatest, minimum distances between the application site and downwind sensitive areas are observed (see the following table titled 'Buffer zones for aircraft')

Buffer zones for aircraft

Type of aircraft	Mandatory downwind buffer zones (distances given in metres)				
	Bystander areas	Natural aquatic areas	Pollinator areas	Vegetation areas	Livestock areas
Fixed-wing	0	10	0	150	120
Helicopter		20		110	75

DIRECTIONS FOR USE

CROP	SITUATION	WEEDS	RATE/ha	CRITICAL COMMENTS
Lupins	Incorporated by sowing (IBS)	Annual ryegrass (<i>Lolium rigidum</i>)	1.67 to 3.5 kg	Lupins, broad beans, faba beans, field peas, lentils, vetch: Apply ULTRO® directly to uncultivated soil up to 7 days pre-sowing and incorporate by sowing (IBS). Refer to the APPLICATION section in the GENERAL INSTRUCTIONS for further guidelines on IBS application. Apply ULTRO with a suitable knockdown herbicide if emerged weeds are present. ULTRO can also be tank mixed with a registered residual herbicide e.g. Simanex®, as per label guidelines, to improve weed control and broaden the weed spectrum.
Broad beans, faba beans, field peas, lentils, vetch		Brome grass (<i>Bromus</i> spp) Barley grass (<i>Hordeum</i> spp)	1.67 to 2.5 kg	
Winter fallow	Pre-emergence	Annual ryegrass (<i>Lolium rigidum</i>) Brome grass (<i>Bromus</i> spp) Barley grass (<i>Hordeum</i> spp)	1.67 to 3.5 kg	Winter fallow application: Apply ULTRO when sufficient rain is forecast within 7 days to ensure soil incorporation to a depth of 5 cm. If emerged weeds are present, apply a suitable knockdown herbicide either prior to application or as a tank mix with ULTRO. Rate selection: Apply the lower rate on sandy soils and lower weed densities are expected. At the lower rate, suppression only may be achieved if conditions are not optimal for effective soil incorporation of ULTRO. Apply the higher rate on heavier soil and where the weed density is moderate to high. Weed control from ULTRO may be compromised by the following factors: <ul style="list-style-type: none"> • Insufficient rainfall to effectively incorporate ULTRO – Refer to APPLICATION section in GENERAL INSTRUCTIONS • High stubble loading i.e. >50% of ground cover • Germinated weeds present that were not controlled by a knockdown herbicide • Uneven application • Application to ridged/cloddy soil. NOTE: Some early crop phytotoxicity/ minor stunting may be observed particularly on light soils. Heavy, intense rainfall following application may cause crop damage. Avoid overlapping sprays and spraying-out corners. Minimum recropping intervals apply for all crops following an ULTRO application. See “CROP ROTATION RECOMMENDATIONS” section below for recropping restrictions.
Chickpeas	Incorporated by sowing (IBS) or Post-sowing pre-emergence (PSPE)	Suppression of: Annual ryegrass (<i>Lolium rigidum</i>) Brome grass (<i>Bromus</i> spp) Barley grass (<i>Hordeum</i> spp)	1.67 kg	Chickpeas: To improve control of annual ryegrass and brome grass and/or to broaden the weed spectrum, apply ULTRO in a tank mix with a registered pre-emergent herbicide e.g. Simanex. NOTE: Some early crop phytotoxicity/ minor stunting may be observed particularly on light soils. Heavy, intense rainfall following application may cause crop damage. Avoid overlapping sprays and spraying-out corners. Refer to the APPLICATION section in the GENERAL INSTRUCTIONS for further guidelines on IBS and PSPE application. Minimum recropping intervals apply for all crops following an ULTRO application. See “CROP ROTATION RECOMMENDATIONS” section below for recropping restrictions.

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

GENERAL INSTRUCTIONS

ULTRO 600 WG Herbicide can be used pre-emergent to selectively control weeds in the crops listed in the directions for use table. ULTRO is mainly absorbed via the roots. Sufficient rainfall (15 to 25 mm either as rainfall or irrigation) to wet the soil through the weed root zone is necessary within 2 to 3 weeks of application to ensure activation and uptake by germinating weeds. DO NOT incorporate by flood irrigation as this may result in poorer weed control and increase crop damage. Delay in activation of this product may result in some weed growth. Results can be variable if seasonal conditions are dry prior to sowing and crops are sown into a dry or low moisture seedbed with minimal rainfall within 3 weeks of sowing. Dense weed populations and multiple germinations may require both a pre-emergent application of ULTRO and a registered post emergent herbicide application to give acceptable control.

ACCELERATED MICROBIAL DEGRADATION WARNING

ULTRO breaks down in soil primarily by microbial degradation, with the rate of break down dependant on the number of micro-organisms present that metabolise carbetamide. Applications of ULTRO can increase the population of micro-organisms that degrade carbetamide, resulting in accelerated microbial break down and reduced soil persistence of subsequent applications. Accelerated degradation of carbetamide reduces the residual activity and efficacy on key weeds.

To reduce the risk of a control failure due to accelerated microbial degradation:

- ULTRO should only be applied to a field no more than once every four years, with a minimum three-year use-free interval between applications.
- Rotate use of ULTRO in pulses with at least one application of a different mode of action herbicide i.e. Propyzamide.
- Do not apply ULTRO to a field if accelerated microbial degradation is suspected or has been observed. Contact an ADAMA Australia representative for more information prior to making further applications.

MIXING

DO NOT mix or load within 20 m of any well, dam, intermittent or perennial stream. Half fill the spray tank with water and maintain agitation while slowly adding the required quantity of ULTRO. Agitation should continue after filling and during spraying. Do not allow the spray solution to stand prior to spraying.

APPLICATION

Crop seed should be sown 3–5 cm below the application band of ULTRO to avoid reduced establishment and/or reduced vigour. Damage can occur to establishing crops when higher rates of ULTRO are applied on light soils with low organic matter. Heavy rainfall and waterlogging after application and prior to crop establishment may concentrate the herbicide in the seeding furrow and can reduce crop establishment and early vigour.

Avoid overlapping sprays and spraying-out corners.

Weeds germinating from depth, weeds about to emerge or emerged weeds may not be controlled by ULTRO.

Incorporation by sowing (IBS)

ULTRO can be applied up to 7 days prior to planting and mechanically incorporated by the sowing operation (incorporation by sowing) using minimum-tillage sowing equipment fitted with knife points and press wheels. A high level of trash (greater than 50% ground cover) may reduce weed control and hamper the sowing operation. IBS applications can result in poorer weed control in the seed furrow due to the herbicide being displaced from this zone.

For crop safety, maintain slow to moderate speed to avoid leaving deep furrows and avoid throwing soil into adjacent furrows. Deep furrows may also lead to reduced weed control in the crop row.

DO NOT apply pre-sowing if planting with a disc seeder as greater contact between the germinating seed and herbicide may reduce crop safety.

Post sowing pre-emergence (PSPE) in chickpeas

Apply within 2 days of sowing to soil which is relatively flat after the sowing operation. Rainfall within 2-3 weeks of application is required to ensure herbicide activation.

Ground application

USE ONLY medium spray quality or larger according to ASAE S572 definition for standard nozzles. Apply using an application volume of 50–150 litres of water per hectare. Calibrate the machine before use to ensure the correct application rate is obtained. Check height of boom to ensure the spray is evenly distributed.

Aerial application

USE ONLY coarse spray quality or larger according to ASAE S572 definition for standard nozzles. Apply a minimum of 30 litres of water per hectare. Markers should always move upwind before aircraft passes overhead.

COMPATIBILITY

DO NOT use with glyphosate products present as the potassium salt.

Contact your local ADAMA Australia representative for compatibility information. If applying ULTRO in a tank mix, observe all label directions, precautions and limitations on each product to be used. As formulations of other manufacturer's products are beyond the control of ADAMA Australia, and water quality may vary with location, all mixtures should be tested for efficacy and crop safety prior to mixing commercial quantities.

Cleaning Equipment

Rinse application equipment thoroughly with water after use. Dispose rinsings away from waterways, drainage, desirable vegetation and tree roots.

CROP ROTATION RECOMMENDATIONS

ULTRO is primarily degraded in soil by microbial activity. Under conditions that do not favour breakdown such as low soil moisture or in soils low in microbial activity, carry-over residues can affect susceptible follow crops.

Minimum recropping intervals i.e. months after application; must be observed as per the following table.

Minimum recropping intervals and rainfall requirements following an application of ULTRO

Crop	Recropping recommendation [^]	
	Minimum recropping interval	Minimum interim rainfall
Barley, oats, wheat	9 months	250 mm
Soybeans, sunflower		
Canola	6 months	200 mm
Corn, cotton, mungbean, sorghum	7 months	
Legume pastures including clovers, lucerne, medics	4 months	
All other crops	12 months	300 mm

[^] Post-application, the recropping interval commences after rainfall has occurred that is sufficient to wet the soil to a depth of 5 cm. At least half the minimum recommended rainfall should fall within the first half of the recropping interval to reduce potential risk of rotational crop injury. If the interval elapses and the minimum rainfall has not occurred, delay sowing until the required total rainfall has occurred.

When applying ULTRO in a tank mix with another herbicide(s), refer to all product labels and observe the longest recropping interval by crop of the tank mixed products.

As environmental and agronomic factors make it impossible to eliminate all risks associated with this product, rotational crop injury is always possible. Where ULTRO residue carry-over is suspected (even after observing the minimum recropping requirements) and susceptible crops are to be planted, test the treated area as follows:

- Field bioassay – where rain allows, plant a small area of the susceptible crop e.g. wheat, barley, oats; four to six weeks before desired planting date and taken note of any symptoms of injury. If any herbicide symptoms are observed, only plant a non-susceptible crop i.e. crops listed in the directions for use on this label.
- Pot bioassay – where not practical to do field bioassay, plant a small number of seeds of the susceptible crop into pots containing soil from the treated field. Do this four to six weeks before desired planting date. If any herbicide symptoms are observed, only plant a non-susceptible crop i.e. crops listed in the directions for use on this label.