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

**Infinity<sup>®</sup> Ultra**

**HERBICIDE**

**ACTIVE CONSTITUENTS:** 250 g/L PYRASULFOTOLE  
 125 g/L DIFLUFENICAN  
**CROP SAFENER:** 62.5 g/L MEFENPYR-DIETHYL

**GROUP 27 12 HERBICIDE**

For the post-emergent control of various broadleaf weeds in wheat (including durum wheat), barley, oats, triticale and fallow situations as specified in the DIRECTIONS FOR USE table

**DIRECTIONS FOR USE**

**RESTRAINTS**

- DO NOT** apply by aircraft.
- DO NOT** apply if heavy rains or storms are forecast within 4 hours.
- DO NOT** irrigate to the point of field runoff for at least 4 hours after application.
- DO NOT** apply after commencement of crop stem elongation (Z30).
- DO NOT** follow a fallow application of Infinity Ultra Herbicide with an in-crop application of a pyrasulfotole-containing product.

**SPRAY DRIFT RESTRAINTS**

- Specific definitions for terms used in this section of the label can be found at [www.apvma.gov.au/spraydrift](http://www.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 not smaller than a MEDIUM spray droplet size category.
    - Minimum distances between the application site and downwind sensitive areas are observed (see 'Mandatory downwind buffer zones' in the table titled 'Buffer zones for boom sprayers' below).

**Buffer zones for boom sprayers**

Application rate	Boom height above the target canopy	Mandatory downwind buffer zones	
		Natural aquatic areas	Vegetation areas
Up to 140 mL/ha	0.5 m or lower	0 metres	20 metres
	1.0 m or lower	10 metres	60 metres
110 mL/ha + 1.6 L glyphosate 450 g/L	0.5 m or lower	0 metres	75 metres
	1.0 m or lower	10 metres	230 metres



**DIRECTIONS FOR USE**

<b>CROP</b>	<b>WEED</b>	<b>WEED STAGE</b>	<b>RATE / HA</b>	<b>CRITICAL COMMENTS</b>
Wheat (including durum wheat), barley, oats, triticale  2 leaf to commencement of stem elongation (Z12-30)	<b>APPLICATION AND WEED CONTROL</b> Good coverage of weeds is essential for satisfactory levels of control. If good coverage cannot be achieved due to shading by weeds, crop or stubble, then tank mix with an effective systemic herbicide such as MCPA LVE (where weeds are susceptible to this herbicide). A minimum spray volume of 70 L water/ha with a medium to coarse spray quality is recommended. However, in the case of advanced weeds, heavy weed density (causing shading of weeds) or heavy crop canopy (causing shading of weeds), it is recommended that a spray volume in the range 100 - 150 L water/ha with a medium spray quality is used to optimise weed coverage. #Refer to "Adjuvant" under General Instructions			
	Wild radish ( <i>Raphanus raphanistrum</i> )	Up to 4 leaf	110 - 140 mL	Apply with Hasten® 0.5% - 1.0% v/v # Use the higher rate of Infinity Ultra (140 mL/ha) and Hasten (1.0% v/v) where excellent coverage is not possible due to shading from crop canopy or where weeds overlap each other (e.g., populations > 150 plants /m <sup>2</sup> ).
	Common sowthistle ( <i>Sonchus oleraceus</i> ) Wireweed ( <i>Polygonum aviculare</i> ) Capeweed ( <i>Arctotheca calendula</i> )	Up to 6 leaf	110 mL	Apply with Hasten 0.5 – 1.0% v/v #
Fallow	Common sowthistle ( <i>Sonchus oleraceus</i> ) Bladder ketmia ( <i>Hibiscus trionum</i> )	Up to 8 leaf	110 mL + 1.6 L glyphosate 450 g/L (720 g a.i./ha glyphosate)  Refer to Compatibility information in the General Instructions.	Apply with Hasten 0.5% v/v #

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

**WITHHOLDING PERIODS**

**Harvest**

**All crops: NOT REQUIRED WHEN USED AS DIRECTED**

**Grazing/Stockfood**

**All crops: DO NOT GRAZE OR CUT FOR STOCKFOOD FOR 4 WEEKS AFTER APPLICATION**



## GENERAL INSTRUCTIONS

### Adjuvant

Infinity Ultra requires the use of Hasten Spray Adjuvant or equivalent (e.g., Kwickin® Spray Adjuvant) to enable good uptake into weeds and to maximise efficacy. Where Hasten is recommended in the Directions for Use table at a range of 0.5 – 1.0% v/v, the higher rate in some situations may provide faster speed of weed burndown and the level of final control may be improved in conditions such as cool, cloudy weather, weak crop competition or less than optimal spray coverage.

The use of non-ionic surfactants, paraffin-based adjuvants, or plant-based oils with lower loading of active ingredient may result in a significant loss of efficacy. However, where Hasten 0.5% v/v is recommended in the Directions for Use table then Loveland Products MSO with Leci-Tech® at 1.0% v/v can be substituted.

### Recommended crop growth stage

Wheat, durum wheat, barley, oats and triticale should be a minimum 2 leaf stage (Z12 growth stage) before application of Infinity Ultra.

DO NOT apply after commencement of stem elongation (Z30). Although Infinity Ultra may be applied to crops up to growth stage Z30, weed control is generally optimised when Infinity Ultra is applied to young crops before shading of weeds occurs from advanced, dense crop canopies.

Optimum results are achieved when sprayed 4 – 6 weeks after sowing when cereals have usually 2 leaves to 2 tillers (Z12 – Z22).

### Agronomic and environmental factors

DO NOT apply to crops undersown with legumes.

Some crop yellowing or bleaching can be expected following application of Infinity Ultra. These effects are transient and only impact leaves present at application and do not affect crop development or grain yield.

DO NOT apply if crop or weeds are not actively growing or stressed due to, for example, cold or dry or excessively moist conditions, disease, previous herbicide or foliar fertiliser treatment as crop damage may be more severe and/or reduced levels of weed control may result.

### Efficacy

For optimum weed control from Infinity Ultra, complete and even coverage of all target weeds is essential. Results are best when applied under good growing conditions and with thorough coverage of weeds. Application to weeds or crop under stress may result in reduced weed control and should be avoided.

As weed and crop densities increase, water volume and rate of Infinity Ultra may also need to be increased where this is indicated.

It is recommended that Infinity Ultra is applied in 70 to 150 L water/ha. Use a medium to coarse spray quality as classified according to ASABE S572.2 definition for standard nozzles. For most reliable control of weeds a medium droplet is recommended when applying in less than 100 L water/ha.

In the case of advanced weeds (greater than 4 leaf at application), heavy weed density (causing shading of weeds) or heavy crop canopy (causing shading of weeds), it is recommended that a spray volume at the upper end of the 70 - 150 L water/ha range in combination with a medium spray droplet is used as adequate coverage is critical to ensure control. Under these conditions, it is also recommended for control of up to 4 leaf wild radish that the higher rate of Infinity Ultra rate (140 mL/ha) is applied with Hasten at 1.0% v/v. Even where weed populations are less than 150 plants/m<sup>2</sup>, weeds overlapping each other may result in reduced weed control.

In dense weed or crop stands, good control may not be achieved even when the product rate and water volume are increased. In these situations where weeds lower in the plant canopy are shaded a later clean-up spray of a suitable herbicide of a different mode of action to Infinity Ultra is generally recommended.

Optimum performance of Infinity Ultra occurs when it is applied in warmer temperatures with high light intensity. To maximise efficacy, avoid application of Infinity Ultra within 1 hour of sunset or at night, particularly if followed by low overnight temperatures.



Control of weeds from Infinity Ultra may be reduced if weeds are stressed e.g., due to factors such as frosts before and/or after application, waterlogging, drought, damage from insects or disease or previous herbicide treatment. Optimum results will be obtained if applied in warmer temperatures with high light intensity and good soil moisture. Avoid applying to frost affected weeds or if frosts are imminent as decreased weed control can be expected.

Infinity Ultra is predominantly a foliar herbicide, with limited activity via the soil. Infinity Ultra will not reliably control weeds that have not yet emerged at the time of spraying and a follow-up application of a suitable herbicide will generally be required to control plants that emerge after application. However, under conditions of good soil moisture following application, particularly on lighter textured acidic soils with low organic matter, useful residual control of broadleaf weeds may be attained.

### Compatibility

For advice on the compatibility of products not listed below, contact the manufacturer, Bayer Crop Science. When tank mixing Infinity Ultra with other products always observe the directions for use and plant back restrictions on the Infinity Ultra label and the label of the tank mix partner.

#### Compatibility/tank mixes for application in wheat and barley

Infinity Ultra (at 110 mL/ha + Hasten at 1.0% v/v) is biologically compatible with the following products: Arcade® at 3.0 L/ha, Nufarm Associate® Herbicide at 5 g/ha, Atlantis® OD at 330 mL/ha, Aviator® Xpro® at 500 mL/ha, Axial® 100 EC at 300 mL/ha, Buctril® 200 or Bromicide® 200 at 2.0 L/ha, Cadence® 700 WG at 115 g/ha, Kentrel 300 at 300 mL/ha, chlorpyrifos 500 EC at 900 mL/ha, Matenc® Complete at 1.0 L/ha, MCPA LVE 570 at 1.84 L/ha, Genfarm McPik 242 at 1.0 L/ha, Starane® Advanced® at 900 mL/ha, and Nufarm Throttle® 500 Fungicide at 250 mL/ha.

Mixing Mentor WG at 100 g/ha with Infinity Ultra (at 110 mL/ha + Hasten 0.5% v/v) can result in significantly increased crop effects (crop discoloration and/or biomass reduction) but these crop effects are generally transient and unlikely to result in yield reduction.

In barley, increased crop effects can be expected when Infinity Ultra is tank mixed with Arcade at 3.0 L/ha, Starane Advanced at 900 mL/ha or Cadence at 115 g/ha. The effects are transient and under normal growing conditions should not affect yield.

Infinity® Ultra at 110 mL/ha + Hasten 1.0% v/v is also compatible with Yara N42 liquid nitrogen fertiliser (UAN 42% w/v) applied at 30 L/ha when applied in a total spray volume of 100 L/ha.

Infinity Ultra (at 110 mL/ha) is biologically compatible with the following products applied for control of wild oats (*Avena* spp.): Atlantis® OD at 330 mL/ha + Hasten 1.0% v/v, Rexade® 200 WG at 100 g/ha + BS1000 0.25% v/v, Monza® 750 WG at 25 g/ha + Hasten 1.0% v/v, Topik® 240 EC at 85 mL/ha + Hasten 0.5% v/v, and Axial® 100 EC at 150 mL/ha + Hasten 0.5% v/v. Some reduction in wild oat efficacy may occur when Infinity Ultra is tank mixed with Atlantis OD and Monza, and some transient increase in crop effects may occur when tank mixed with Atlantis OD.

#### Crop safety and compatibility in oats

Oats are more sensitive to Infinity Ultra than wheat, barley or triticale and crop effects may be more pronounced and remain visible for longer periods of time.

Avoid spraying oats during periods of frosty weather or if frosts are imminent or may follow for some days after application as excessive damage in terms of biomass reduction may occur.

Do not tank mix with bromoxynil (e.g., Buctril 200 EC, Bromicide 200) or metribuzin (e.g., Mentor WG Herbicide) products when applying to oats as excessive damage may occur.

Infinity Ultra (at 110 mL/ha plus Hasten at 1% v/v) applied to oats is biologically compatible with MCPA LVE 570 at up to 440 mL/ha.

#### Compatibility in fallow

Satisfactory performance requires the use of high-quality glyphosate products from reputable manufacturers.

### Crop rotation recommendations

Minimum re-cropping intervals apply for all crops following application of Infinity Ultra to minimise the risk of damage to following crops (see tables below). However, environmental and agronomic factors make it



impossible to eliminate all risk and therefore the potential for damage to following crops remains. The safety of following winter crops planted with disc seeders has not been evaluated.

Infinity Ultra breaks down by microbial degradation, which is favoured by warm, moist, aerobic soil which has adequate levels of organic matter (> 2%). Soils low in organic matter will slow microbial degradation.

Rainfall or irrigation less than what is described in the following tables will result in extended re-cropping intervals. Conditions which don't support microbial activity such as patchy, light rainfall with extended dry and/or cold periods may also result in extended re-cropping intervals. Rainfall or irrigation occurring late in the re-cropping interval will result in an extended re-cropping interval.

Re-cropping intervals following application of Infinity Ultra to soils with little or no ground cover has not been fully tested and may require longer re-cropping intervals and/or greater interim rainfall. Vegetation such as crop or weeds provide a barrier to intercept Infinity Ultra from reaching the soil as well as importantly providing a canopy to aid microbial degradation by maintaining a moist micro-climate.

### Plant back to winter crops

Crop	Infinity Ultra rate	Minimum rainfall or irrigation required	Re-cropping interval
Wheat (including durum wheat), barley, triticale, oats	Up to 140 mL/ha	-	3 days
Acid soils (pH < 6.5 in CaCl <sub>2</sub> ) Canola, chickpeas, clover, faba beans, field peas, lentils, lucerne, lupins, medic, vetch	Up to 140 mL/ha	100 mm	3 months

### Plant back to summer crops

Crop	Infinity Ultra rate	Minimum rainfall or irrigation required	Re-cropping interval
Maize, Japanese millet, sorghum	Up to 140 mL/ha	-	2 months
Soil pH (CaCl <sub>2</sub> ) < 7.0* Cotton, soybean, mung bean, sunflower ‡	Up to 140 mL/ha	200 mm	4 months

\*Application to soils pH (CaCl<sub>2</sub>) > 7.0 has not been fully tested and may require longer re-cropping intervals and/or greater interim rainfall.

If another product is mixed with Infinity Ultra check the label of that product to determine any re-cropping intervals or restrictions which also may apply.

For minimum re-cropping intervals to other crops, contact Bayer Crop Science for further information.

### Mixing

Infinity Ultra is a suspension concentrate (SC) formulation and settling may occur in the container after storage. It is important to stir or shake the contents of the container several times before use.

Half fill the spray tank and commence agitation before adding the required amount of Infinity Ultra to the tank. Ensure product is fully in suspension before adding adjuvant and then continue agitation while filling the tank to the required volume and throughout the spraying operation. Spray solutions should be used promptly. Do not leave standing in the tank overnight.

When Infinity Ultra is used in a tank mix with other products the following mixing order should be followed:

1. Fill the spray tank to half of the total amount of water required and commence agitation
2. Water conditioners, acidifiers, e.g., Liase, LI 700
3. Wettable powders (WP)
4. Water-dispersible granules (WG)
5. Infinity Ultra and other suspension concentrates (SC)
6. Emulsifiable concentrates (EC)
7. Soluble concentrates (SL) e.g., glyphosate
8. Adjuvants
9. UAN and other liquid fertilisers



It is important that Infinity Ultra is fully in suspension in the spray tank before adding glyphosate products as flocculation may occur.

### Sprayer clean up

Spraying equipment should be cleaned out immediately after spraying has been completed using the following process.

1. Select a suitable area clear of waterways and desirable vegetation.
2. Drain sprayer completely and flush out tank, boom, and hoses with clean water.
3. Fill the tank with clean water to one quarter to one half of the tank volume and add the required amount of a suitable boom cleaning agent (e.g., Nufarm Tank & Equipment Cleaner) whilst agitating.
4. Flush some solution through the lines and nozzles for two to three minutes and allow remainder to agitate in the tank for 10 to 15 minutes.
5. While tank cleaning is in progress remove nozzles and filters and soak in a bucket with the cleaning agent solution.
6. Drain or spray out the tank.
7. Flush the tank, boom, and hoses with clean water.

### RESISTANT WEEDS WARNING

#### GROUP 27 12 HERBICIDE

Infinity Ultra is a member of two groups of herbicides:

Pyrasulfotole is a member of the pyrazole group of herbicides and acts by inhibiting 4-hydroxyphenylpyruvate dioxygenase (HPPD). For weed resistance management pyrasulfotole is a Group 27 herbicide. Diflufenican is a member of the phenyl-ethers group of herbicides and acts by inhibiting carotenoid biosynthesis via inhibiting phytoene desaturase (PDS). For weed resistance management diflufenican is a Group 12 herbicide. Some naturally occurring weed biotypes resistant to Infinity Ultra, and other Group 27 or Group 12 herbicides, may exist through normal genetic variability in any weed population. These resistant individuals can eventually dominate the weed population if these herbicides are used repeatedly. These resistant weeds will not be controlled by Infinity Ultra or other Group 27 or Group 12 herbicide.

Do not rely exclusively on Infinity Ultra for weed control. Use as part of an integrated weed management program involving herbicides with other modes of action and non-chemical methods of control. CropLife Australia resistance management strategies are available from your local agricultural chemical supplier or at the CropLife Australia website ([www.croplife.org.au](http://www.croplife.org.au)). Refer to these strategies for details of how to manage the build-up of resistant weeds.

Since occurrence of resistant weeds is difficult to detect prior to use Bayer CropScience Pty Ltd accepts no liability for any losses that may result from the failure of Infinity Ultra to control resistant weeds.

### PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS

Toxic to flora. DO NOT apply or drain or flush equipment on or near native or non-target trees or other plants or on areas where their roots may extend or in locations where the chemical may be washed or moved into contact with their roots.

### PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

Very toxic to aquatic life. DO NOT contaminate wetlands or watercourses with this product or used containers.

### STORAGE AND DISPOSAL

Store in the closed, original container in a cool, well-ventilated area. Do not store for prolonged periods in direct sunlight.

Triple-rinse container 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 to an approved waste management facility. If an approved 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. Do not re-use empty container for any other purpose.

### SAFETY DIRECTIONS

May irritate the eyes. Avoid contact with eyes. When opening the container and preparing spray and using the prepared spray wear cotton overalls buttoned to the neck and wrist (or equivalent clothing). Wash hands after use. After each day's use wash contaminated clothing.



**FIRST AID**

If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 13 11 26.

**SAFETY DATA SHEET**

Additional information is listed in the Safety Data Sheet, which can be obtained from [www.crop.bayer.com.au](http://www.crop.bayer.com.au).

**EXCLUSION OF LIABILITY**

This product must be used strictly as directed, and in accordance with all instructions appearing on the label and in other reference material. So far as it is lawfully able to do so, Bayer CropScience Pty Ltd accepts no liability or responsibility for loss or damage arising from failure to follow such directions and instructions.

Infinity® and Buctril® are Registered Trademarks of the Bayer Group.

APVMA Approval No.: 91984/134081

FOR 24 HOUR SPECIALIST ADVICE  
IN EMERGENCY ONLY  
PHONE 1800 033 111

**GHS STATEMENT**

Classification not required according to GHS criteria.