INFINITY® ULTRA
POST-EMERGENCE APPLICATION CHECKLIST

Infinity® Ultra is a broadleaf weed herbicide containing the complementary combination of pyrasulfotole (Group 27) and diflufenican (Group 12) herbicides. With the versatility to be used in cereal crops, either alone or with a tank-mix partner or in fallow tank-mixed with glyphosate. Infinity Ultra allows growers to target hard-to-control weeds in a broad range of agronomic situations. See fallow applications checklist for recommendations for fallow use.

INFINITY ULTRA AT A GLANCE

Infinity Ultra is predominantly a foliar herbicide, with limited activity via the soil. A follow-up application of a suitable herbicide will generally be required to control plants that emerge after application. However, under good soil moisture conditions following application, particularly on lighter textured acidic soils with low organic matter, useful residual control of a range of broadleaf weeds may be attained.

Active Ingredients	Pyrasulfotole 250 g/L (Group 27), Diflufenican 125 g/L (Group 12)
Target weeds in crop	Wild radish, common sowthistle, wireweed and capeweed Application for approval of additional broadleaf weed targets have been made. These are expected to be approved in first half 2024.
Crops	Wheat (including durum wheat), barley, oats and triticale
Crop timing	Z12-Z30
Crop safener	Mefenpyr-diethyl 62.5 g/L
Use rate	110 – 140 mL/ha
Adjuvant	Hasten® or equivalent 0.5 – 1.0 % v/v
Water rate	70 – 150 L/ha
Maximum number of applications	1 application (do not apply in-crop if Infinity Ultra fallow application was made prior to planting)
Formulation	Suspension concentrate (SC)
Withholding period (grazing)	4 weeks
Rainfastness	4 hours under most environmental conditions

KEY ADVANTAGES

- High levels of control of a wide range of problematic broadleaf weeds.
- Unique combination of two active ingredients, pyrasulfotole and diflufenican.
- Registered for use in wheat (including durum wheat), barley, oats and triticale.
- Favourable recropping profile, plantback to winter cereal crops in 3 days and a broad range of winter and summer crops in 4 months or less*.
- Versatile mixing partner – tackle a range of difficult weed management conditions.
- Good resistance management option, alternative to Herbicide Groups 2 (B), 4 (I), 6 (C) and 14 (G).
- Combination of Herbicide Mode of Action Groups 27 and 12 offering a good resistance management option.
- Crop safener, mefenpyr-diethyl reduces phytotoxicity in crops, especially in crops under stress that cannot metabolise the herbicide quickly enough.
- A useful level of residual control of some key weeds under optimal conditions.

*Acid or neutral soils. Refer to label for more details.

CHECKLIST FOR POST-EMERGENT APPLICATION

1. Apply from growth stage Z12-Z30
Cereals should be at a minimum 2-leaf stage (Z12 growth stage) before applying of Infinity Ultra. For optimal results, it's recommended to apply 4 – 6 weeks after sowing when cereals are at 2 leaves to 2 tillers (Z12 – Z22) growth stages.

2. Use an adjuvant
Use Hasten® at 0.5-1.0% v/v to maximise efficacy. Using the higher rate in some situations may provide a faster speed of weed burndown. The use of non-ionic surfactants, paraffin-based adjuvants, or plant-based oils with lower loading of active ingredients may result in a significant loss of efficacy. 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.

3. Apply in good growing conditions
Control of weeds with Infinity Ultra may be reduced if weeds are stressed and aren't actively growing e.g., due to factors such as drought, damage from insects or disease.

4. Good coverage of weeds is essential
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).

5. Use adequate water volume
Apply Infinity Ultra in 70-150 L/ha of water, using a medium to coarse spray quality as classified according to ASABE S572.2 definition. As weed and crop densities increase, the water volume and rate of Infinity Ultra may also need to be increased within the label recommendations, with a recommended spray volume in the range 100-150 L water/ha with a medium spray quality in denser weed and crop situations. When tank mixing use the most stringent label requirement for spray quality.

6. Apply at the label rate
Apply between 110-140 mL/ha with 0.5 – 1.0% v/v Hasten depending on target weed and conditions. If adequate coverage can't be achieved, consider adding an effective herbicide such as MCPA LVE (where weeds are susceptible).

7. Crop safety considerations
Some crop yellowing or bleaching may occur following an application of Infinity Ultra, however, these effects are transient and do not affect crop development or grain yield. Oats are more sensitive to Infinity Ultra than other winter cereals and crop effects may be more pronounced and remain visible for longer periods of time. When applying Infinity Ultra in oats do not tank-mix with bromoxynil (e.g. Buctril® 200 EC, Bromicide® 200) or metribuzin (e.g. Mentor® WG Herbicide) as excessive damage may occur.

8. Ensure correct mixing order
When tank-mixing Infinity Ultra with other products always observe the directions for use and restrictions on the Infinity Ultra label and the label of the tank-mix partner. Minimise the number of products in a tank-mix to maximise compatibility. Spray mixes promptly after mixing; do not allow the mix to stand unagitated. See Infinity Ultra mixing guide for mixing order recommendations.

9. Thoroughly clean spraying equipment immediately after use
Cleaning should occur immediately following the last application of Infinity Ultra, or if the sprayer will not be used for several hours. When tank-mixing Infinity Ultra with another product, use the more rigorous recommended clean-up of the products in the tank-mix.

10. Don't follow a fallow application with an in-crop application
A fallow application of Infinity Ultra cannot be followed up with an in-crop application of any products containing pyrasulfotole (ie. Infinity Ultra, Velocity® or Precept®) in the same season.

11. Check plant-back requirements on label
Minimum re-cropping intervals apply for all crops following application of Infinity Ultra to minimise the risk of damage to following crops. 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.

12. Use in rotation with other chemical and non-chemical control options
Infinity Ultra is a co-formulation of 2 active ingredients from 2 different herbicide modes of action (Group 12 & Group 27). Using multiple modes of action, where the herbicide in each different mode of action is reasonably effective on the target weed, has been proven to delay the development of herbicide resistance of that weed.

13. Follow the Weedsmart 'Big 6' resistance management strategies

When mixing and rotating herbicides;

- Rotate between herbicide modes of action.
- Mix different modes of action within the same herbicide mix or in consecutive applications.
- Always use full label rates.
- Incorporate multiple modes of action in a double knock.
- Test weeds for resistance to know what herbicides will and won't work for you.

WEED smart