

 **UNYUNOX<sup>®</sup> 250 EC**  
SELECTIVE HERBICIDE



**ACTIVE INGREDIENT: 250 g/L IOXYNIL**  
present as the Octanoate (MOA Group 6)

## Contact Control of Tough Broadleaf Weeds in Onions

### Features

- Fast-acting contact herbicide for use in onions
- Wide range of weeds controlled
- Liquid formulation for ease of use
- 3 hour rainfastness
- No withholding period when used according to the label (see page 2)

### Background

Ioxynil, the active ingredient of Unyunox<sup>®</sup> 250 EC Selective Herbicide has been used successfully for many years for the early control of many broadleaf weeds in onions.

After some recent worldwide supply issues, AgNova is pleased to re-introduce ioxynil as Unyunox 250 EC Selective Herbicide, an important option in obtaining successful early weed control.

### Mode of Action

Unyunox is a Group 6 Herbicide and is a member of the nitrile group of herbicides. The mode of action of group 6 herbicides is to inhibit photosynthesis at photosystem II.

This means that treated weeds cannot fix CO<sub>2</sub> or produce the nutrients needed for their survival.

Unyunox is a fast-acting contact herbicide. It has no translocation or soil activity, so thorough spray coverage is essential for effective weed control.

### Use Rates and Timing

Unyunox is registered at a range of rates and can be applied as a stand-alone herbicide treatment or as a tank mix with another registered onion herbicide in multiple applications.

Unyunox is applied early post-emergence to small seedling weeds that are actively growing. Application should follow

standard pre-emergence herbicide treatments or cultivation. This application timing allows the weeds to still be small enough for successful treatment by the time the onions have reached the tolerant stage. When applied at low rates as a tank mix with another registered onion herbicide, Unyunox can be used at the one to eight leaf crop stage (refer to label). When applied as a stand-alone herbicide treatment, Unyunox can be used at the three to eight leaf crop stage.

Best results are achieved when weeds are between the cotyledon and six leaf stage. Use the higher recommended rates on more mature weeds.

Note: Unyunox will not control weeds which have not emerged at the time of application.

### Crop Safety

Apply between the one leaf and eight leaf crop stage when applied as a tank mix with another registered onion herbicide, or between the three leaf and eight leaf crop stage when applied as a stand-alone herbicide treatment.

Slight scorch or symptoms of wilting may occur but this is transient as subsequent growth and yield is unaffected.



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## Withholding Period

Not required when used as directed.

When tank mixing, follow the withholding period of the mixing partner.

## Re-entry Intervals

The US EPA OPREC calculator for maintenance activities in onion, indicate an acceptable margin of exposure (MOE  $\geq 100$ ) is achieved on different days after treatment as shown below:

**Table 1 Acceptable (MOE >100) re-entry intervals for maintenance activities based on application rates.**

Maintenance activity	Re-entry intervals (days) for onion based on application rate						
	0.25 L/ha	0.5 L/ha	0.75 L/ha	1.0 L/ha	1.5 L/ha	2.1 L/ha	2.8 L/ha
Harvesting, hand	0	4	8	11	15	18	21
Irrigation (handset)	1	7	11	14	18	21	24
Scouting	0	4	8	11	15	18	21
Thinning plants	0	0	0	0	1	4	7
Weeding, hand	8	15	19	22	25	29	>30

It is expected that hand weeding is uncommon practice in onion crops, however when performed in the re-entry intervals listed above, the below recommended PPE is required.

### For hand weeding:

DO NOT enter treated areas until the spray has dried unless wearing cotton overalls buttoned to the neck and wrist (or equivalent clothing) and chemical resistant gloves. Clothing must be laundered after each day's use.

### For other post-application activities:

DO NOT enter treated areas until on the day when MOE is acceptable (Table 1). If prior entry is necessary wear cotton overalls buttoned to the neck and wrist (or equivalent clothing) and chemical resistant gloves. Clothing must be laundered after each day's use.



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## Directions for Use Table

The following is an extract of the product label and does not constitute the complete directions for use.

The product label should be read thoroughly before opening the packaging.

**Table 1. APPLIED AS STAND-ALONE HERBICIDE TREATMENT**

CROP	WEEDS CONTROLLED	STATE	RATE/HA	CRITICAL COMMENTS	
Onions	Bellvine Burr Medic* Capeweed* Chickweed Climbing Buckwheat (Black Bindweed) Common Heliotrope Common Sowthistle (Milk Thistle) Corn Gromwell (Sheepweed) Dandelion Dead Nettle (Henbit, Stingless Nettle) Fat-Hen Fumitories Green Amaranth Green Crumbweed (Keeled Goosefoot) Lesser Swinecress (Bittercress) Ox Tongue Pigweed (Portulaca) Potato Weed (Yellow Weed) Prickly Paddy Melon Saffron Thistle* Scarlet Pimpernel or Blue Pimpernel Shepherd's Purse Slender Celery* Smallflower Mallow (Marshmallow)* Stagger Weed Threecornered Jack (Spiny Emex) Threeflower Nightshade Turnip Weed (Rapistrum) Wards Weed Wild Radish Wild Turnip Wireweed (Hogweed)*	( <i>Ipomoea plebeia</i> ) ( <i>Medicago polymorpha</i> ) ( <i>Arctotheca calendula</i> ) ( <i>Stellaria media</i> ) ( <i>Polygonum convolvulus</i> ) ( <i>Heliotropium europaeum</i> ) ( <i>Sonchus oleraceus</i> ) ( <i>Buglossoides arvensis</i> ) ( <i>Taraxacum officinale</i> ) ( <i>Lamium amplexicaule</i> ) ( <i>Chenopodium album</i> ) ( <i>Fumaria</i> spp.) ( <i>Amaranthus viridis</i> ) ( <i>Chenopodium carinatum</i> ) ( <i>Coronopus didymus</i> ) ( <i>Picris echioides</i> ) ( <i>Portulaca oleracea</i> ) ( <i>Galinsoga parviflora</i> ) ( <i>Cucumis myriocarpus</i> ) ( <i>Carthamus lanatus</i> ) ( <i>Anagallis arvensis</i> ) ( <i>Capsella bursa-pastoris</i> ) ( <i>Apium leptophyllum</i> ) ( <i>Malva parviflora</i> ) ( <i>Stachys arvensis</i> ) ( <i>Emex australis</i> ) ( <i>Solanum triflorum</i> ) ( <i>Rapistrum rugosum</i> ) ( <i>Carrichtera annua</i> ) ( <i>Raphanus raphanistrum</i> ) ( <i>Brassica tournefortii</i> ) ( <i>Polygonum aviculare</i> )	All states	2.1 to 2.8 L	<b>CROP:</b> Apply between the 3 and 8 leaf stage. Slight scorch or symptoms of wilting may occur but this is transient as subsequent growth and yield is unaffected. <b>WEEDS:</b> Apply at the cotyledon to 6 leaf stage. Most weeds will be more susceptible at the young plant stage than at later stages of growth. Use the higher rate when weeds are more mature.  *Burr Medic, Capeweed, Saffron Thistle, Slender Celery, Smallflower Mallow and Wireweed will be controlled only in the cotyledon stage.  Where Wireweed is dominant or weeds are more mature, 2 applications of 2.1 L/ha should be made at an interval of 14 to 21 days.

**Table 2. APPLIED AS TANK MIX WITH ANOTHER REGISTERED ONION HERBICIDE IN MULTIPLE APPLICATIONS**

CROP	WEEDS CONTROLLED	STATE	RATE/HA	CRITICAL COMMENTS
Onions: 1 to 8 leaf crop stage	Weeds as specified in Table 1.	Tas, Vic, SA & WA	0.25 L to 0.5 L	<b>CROP:</b> Slight scorch or symptoms of wilting may occur but this is transient as subsequent growth and yield is unaffected. Lower rates should be used on young crops. <b>WEEDS:</b> Apply between the cotyledon to 6 leaf stage. Most weeds will be more susceptible at the young plant stage than at later stages of growth. Use the higher rate when weeds are more mature.
		NSW & QLD	0.5 L	Tank mix with Tribunil® Selective Herbicide or another registered onion herbicide. Some weeds will be controlled only in the cotyledon stage and a single application at the lower rate may provide suppression only. Multiple applications will most likely be required for complete weed control.
Onions: 3 to 8 leaf crop stage	Weeds as specified in Table 1.	All states	0.5 L to 1.5 L	Mixtures, rates and timings to be based on local agronomic practices for the region; always seek local agronomic advice.  DO NOT apply more than 4.2 L/ha in total per crop.

The information provided herein may include extracts from the product label and does not constitute the complete directions for use.

**READ THE PRODUCT LABEL THOROUGHLY BEFORE OPENING OR USING UNYUNOX**

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