

**READ SAFETY DIRECTIONS BEFORE OPENING OR USING**



**RAVENSDOWN**  
**UNIDIFEN 500**  
**HERBICIDE**

**ACTIVE CONSTITUENT: 500g/L DIFLUFENICAN**

|       |          |           |
|-------|----------|-----------|
| GROUP | <b>F</b> | HERBICIDE |
|-------|----------|-----------|

For control of certain weeds in clover-based Pasture, Field Peas, Lentils, Lupins and Oilseed Poppy as specified in the Directions for Use table.

**IMPORTANT: READ THE ATTACHED BOOKLET BEFORE OPENING OR USING THE PRODUCT**

CONTENTS: 1L, 2.5L, 3L, 5L, 10L, 20L

**RAVENSDOWN FERTILISER CO-OPERATIVE LIMITED**  
2 BIRKSGATE ROAD ROUS HEAD  
Locked Bag 10  
NORTH FREMANTLE, W.A. 6159 AUSTRALIA  
Phone 08 9430 2222 Fax 1800 683 122  
ACN 128 889 814

Batch No:  
Date of Manufacture:  
APVMA Approval Number: 56889/54164

## Ravensdown Unidifen 500 Herbicide

### **STORAGE AND DISPOSAL:**

#### **KEEP OUT OF REACH OF CHILDREN**

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 deliver empty packaging for appropriate disposal 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.

### **SAFETY DIRECTIONS:**

Avoid contact with eyes and skin. Wash hands after use.

### **FIRST AID**

If poisoning occurs, contact a doctor, or Poisons Information Centre (Phone Australia 131126).

### **MATERIAL SAFETY DATA SHEET**

Additional information is listed in the Material Safety Data Sheet, which is available from Ravensdown.

### **CONDITIONS OF SALE**

The use of Ravensdown UniDifen 500 Herbicide being beyond the control of the manufacturer no warranty expressed or implied is given by Ravensdown Fertiliser Cooperative Limited regarding its suitability, fitness or efficiency for any purpose for which it is used by the buyer, whether in accordance with the directions or not and Ravensdown Fertiliser Cooperative Limited accepts no responsibility for any consequence whatsoever resulting from the use of this product.

### **IN AN EMERGENCY DIAL 000 POLICE OR FIRE BRIGADE**

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# Ravensdown Unidifen 500 Herbicide

## DIRECTIONS FOR USE

### RESTRAINTS:

DO NOT apply if crop or weeds are stressed due to dry or excessively moist conditions. DO NOT apply to crops under stress due to pre-emergence herbicide, root disease, insect damage, nutrient deficiency, excessively moist or dry conditions or extremes of pH. DO NOT apply to frost affected crops or if frosts are imminent. DO NOT apply if heavy rain is expected within 4 hours

| CROP   | WEEDS CONTROLLED   | STATE                           | WEED STAGE   | RATE   | CRITICAL COMMENTS  |           |
|--|--|---------------------------------|--|--|--|-----------|
| Clover-based Pasture, Field Peas, Lentils, Lupins  | Wild Radish ( <i>Raphanus raphanistrum</i> )   | WA only                         | Up to 2 leaf stage and not more than 60mm in diameter  | 100 mL/ha  | <p>Sow crop evenly to a depth of 20 to 50mm.</p> <p><b>CROP STAGE</b></p> <p><b>CLOVER-BASED PASTURE:</b> Apply post-emergence, not before the 3 trifoliolate leaf stage.</p> <p><b>Warning:</b> Some species and varieties of clover may be more sensitive than others. Refer to legume tolerance table in the General Instructions. DO NOT apply to medics or yellow serradella.</p> <p><b>FIELD PEAS:</b> Apply early post-emergence after the third node stage and before the start of flowering. <b>Warning:</b> Field Peas grown on high pH soils in the presence of free lime may be less tolerant to Ravensdown UniDifen 500 Herbicide.</p> <p><b>LENTILS:</b> Apply early post-emergence after the third node stage of the crop. <b>Warning:</b> Some lentil varieties may be more sensitive than others. DO NOT apply to Northfield variety. Avoid spray overlap. Refer to General Instructions.</p> <p><b>LUPINS: Post emergence of Crop:</b> Apply post-emergence from the 2 leaf to the 6 leaf stage of crop (40 to 100 mm high).</p> <p><b>Post-sowing, Pre-emergence of Crop (Not WA):</b> Apply in a tank mix with the recommended rate of post-sowing pre-emergence treatment of simazine. (Ravensdown UniDifen 500 Herbicide should NOT be incorporated.)</p> <p><b>APPLICATION AND WEED CONTROL:</b></p> <p>Apply when weeds are actively growing. For optimum results apply 4 to 6 weeks post-sowing. Application beyond 8 week post-sowing may result in reduced levels of weed control. In most situations the rate specified for each weed size will give satisfactory control. Under certain conditions such as:</p> <ul style="list-style-type: none"> <li>• High crop and weed density</li> <li>• Last season germinations</li> <li>• Abnormal weed growth (including early flowering)</li> </ul> <p>Higher rates of product (up to the maximum rate of application specified for that weed) may be required.</p> <p>Ravensdown UniDifen 500 Herbicide will NOT effectively control:</p> <ul style="list-style-type: none"> <li>• Regrowth of suppressed weeds</li> <li>• Transplanted weeds</li> <li>• Regrowth from rhizomes or roots</li> <li>• Weeds growing under stress from previous herbicide applications.</li> </ul> <p>The level of effective residual control may be reduce where:</p> <ul style="list-style-type: none"> <li>• Rates lower than 200 mL/ha are used</li> <li>• Dry conditions prevail</li> <li>• Poor coverage of the soil surface is achieved</li> <li>• Crop is planted in non-wetting sand</li> <li>• Soils have a high content of clay or organic matter.</li> </ul> <p>Where weeds are present at application, good spray coverage of the weeds is important. Apply before the crop canopy obscures weeds. Weed control may be reduced in areas where trash or burnt straw from previous harvest is dense, such as in header trails. Best results will be obtained if good soil moisture exists at and after application.</p> |           |
|  |  |                                 | Up to 4 leaf stage and not more than 120mm in diameter | 150 mL/ha  |  |           |
|  |  |                                 | Up to 6 leaf stage and not more than 180mm in diameter | 200 mL/ha  |  |           |
|  | Hedge Mustard ( <i>Sisymbrium officinale</i> ), Indian Hedge Mustard ( <i>Sisymbrium orientale</i> ), Wild Turnip ( <i>Brassica tournefortii</i> )   | NSW, ACT, Vic, Tas, SA only     | Up to 4 leaf stage and not more than 120mm in diameter | Up to 2 leaf stage and not more than 60mm in diameter  |  | 100 mL/ha |
|  |  |                                 |  | Up to 4 leaf stage and not more than 120mm in diameter |  | 150 mL/ha |
|  |  |                                 |  | Up to 6 leaf stage and not more than 180mm in diameter |  | 200 mL/ha |
|  | Turnip Weed ( <i>Rapistrum rugosum</i> )   |                                 |  | Up to 4 leaf stage and not more than 120mm in diameter |  |           |
|  | Charlock (Wild Mustard) ( <i>Sinapis arvensis</i> ), Deadnettle ( <i>Lamium amplexicaule</i> )   | NSW, ACT, Vic, Tas, SA only     | Up to 4 leaf stage and not more than 120mm in diameter | Up to 2 leaf stage and not more than 60mm in diameter  |  |           |
|  |  |                                 |  |  |  |           |
|  | Prickly Lettuce ( <i>Lactuca serriola</i> )  |                                 |  | Up to 2 leaf stage and not more than 60mm in diameter  |  |           |
|  | Pheasants Eye ( <i>Adonis microcarpa</i> )   | SA only                         |  | Up to 2 leaf stage and not more than 60mm in diameter  |  |           |
|  | Capeweed ( <i>Arctotheca calendula</i> ), Crassula ( <i>Crassula</i> spp.), Corn Gromwell ( <i>Buglossoides arvensis</i> ), Marshmallow ( <i>Malva parviflora</i> ), Shepherd's Purse ( <i>Capsella bursa-pastoris</i> ) | NSW, ACT, Vic, Tas, SA, WA only | Up to 4 leaf stage and not more than 120mm in diameter |  |  |           |
|  |  |                                 |  |  |  |           |
| Chickweed ( <i>Stellaria media</i> ), Hyssop Loosestrife ( <i>Lythrum hyssopifolia</i> ), Mouse-eared Chickweed ( <i>Cerastium glomeratum</i> ), Night-scented Stock ( <i>Matthiola longipetala</i> ), Skeleton Weed ( <i>Chondrilla juncea</i> ), Speedwell ( <i>Veronica hederifolia</i> ) | NSW, ACT, Vic, Tas, SA only  |                                 |  |  |  |           |
| Amsinckia ( <i>Amsinckia</i> spp.), Wireweed ( <i>Polygonum aviculare</i> )  | NSW, ACT, Vic, Tas, SA only  |                                 | Up to 2 leaf stage and not more than 60mm in diameter  |  |  |           |

## Ravensdown Unidifen 500 Herbicide

| CROP   | WEEDS CONTROLLED  | STATE                       | WEED STAGE  | RATE  | CRITICAL COMMENTS   |
|--|---|-----------------------------|---|---|---|
| Clover-based Pasture, Field Peas, Lentils, Lupins continued..  | Paterson's Curse (Salvation Jane) ( <i>Echium plantagineum</i> ), Rough Poppy ( <i>Papaver hybridum</i> )   | NSW, ACT, Vic, SA only      | Up to 2 leaf stage and not more than 60mm in diameter                           | 200mL/ha  | As above  |
|  | Sorrel ( <i>Rumex acetosella</i> ), Toad Rush ( <i>Juncus bufonius</i> )  | NSW, ACT, Vic, Tas, SA only |   |   |   |
|  | Stinging Nettle ( <i>Urtica urens</i> )   | NSW, ACT only               | Cotyledon stage   |   |   |
| Field peas   | Prickly lettuce ( <i>Lactuca serriola</i> )   | NSW, Vic, Tas, SA only      | 4 leaf  | 125 mL/ha plus 125 mL/ha Ravensdown MCPA 500 Herbicide                |   |
|  |   |                             | 6 leaf  | 150 mL/ha plus 150 mL/ha Ravensdown MCPA 500 Herbicide                |   |
|  | Charlock (Wild Mustard) ( <i>Sinapis arvensis</i> )   |                             | 4 leaf  | 125 mL/ha plus 125 mL/ha Ravensdown MCPA 500 Herbicide                |   |
|  | 6-8 leaf  |                             | 150 mL/ha plus 150 mL/ha Ravensdown MCPA 500 Herbicide                          |   |   |
| Lupins Danja, Gungurru, Kalya, Kiev and Tanjil varieties.<br><br>For information on other varieties contact your Ravensdown representative | Wild Radish ( <i>Raphanus raphanistrum</i> )  | WA only                     | Up to 8 leaf stage and not more than 200 mm in diameter.                        | <b>100 mL/ha plus 7 g/ha Eclipse</b>                                  | <p><b>CROP STAGE:</b> Apply no earlier than the 8 leaf stage and before the start of primary flowering (big bud).</p> <p><b>APPLICATION AND WEED CONTROL:</b> Apply when weeds are actively growing. Good spray coverage of the weeds is important. Apply before weeds are obscured by the crop canopy. Control may be reduced where wild radish populations exceed 100 plants per m<sup>2</sup>. DO NOT add crop oils, wetters, surfactants, insecticides or grass herbicides as unacceptable crop damage may occur. A minimum of 10 days should elapse between application and a grass herbicide and this mixture. DO NOT use where water hardness exceeds 500 ppm.</p> <p>Lupins should be actively growing at the time of treatment with no evidence of brown leaf spot or insect damage. A slight yellowing, often accompanied by height reduction, may be noticeable from 1-4 weeks after application, however these effects are generally transient. Avoid spraying double overlaps.</p> |
|  | Capeweed ( <i>Arctotheca calendula</i> ) suppression only   |                             | Up to 6 leaf stage  |   |   |
| Oilseed Poppy  | Charlock (Wild Mustard) ( <i>Sinapis arvensis</i> ), Hedge Mustard ( <i>Sisymbrium officinale</i> ), Indian Hedge Mustard ( <i>Sisymbrium orientale</i> ), Wild Radish ( <i>Raphanus raphanistrum</i> ), Wild Turnip ( <i>Brassica tournefortii</i> ) | Tas only                    | Early post-emergence up to the 4 leaf stage and not more than 120mm in diameter | 150mL/ha (4-6 leaf crop stage) and/or 200mL/ha (6-10 leaf crop stage) | <p><b>CROP STAGE:</b> Ravensdown UniDifen 500 Herbicide may be mixed with Reglone or Asulox based on recommendations from poppy contracting companies. DO NOT use in mixtures with Tramat.</p> <p><b>APPLICATION AND WEED CONTROL:</b> See comments on Clover-based Pasture, Field Peas, Lentils and Lupins.</p>  |

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

**WITHHOLDING PERIOD:**

**HARVEST: NOT REQUIRED WHEN USED AS DIRECTED.**

**GRAZING: ALL CROPS – DO NOT GRAZE OR CUT FOR STOCKFEED FOR 14 DAYS AFTER APPLICATION.**

## Ravensdown Unidifen 500 Herbicide

### GENERAL INSTRUCTIONS:

For use as an early post-emergence spray in clover-based pasture, field peas, lentils and lupins. Ravensdown UniDifen 500 Herbicide may also be used as a pre-emergence spray on lupins in NSW, ACT, Vic, SA and Tas. This product provides both contact and residual activity. Residual activity can be expected for up to 8 weeks after application under favourable growing conditions. This product is taken up by the shoots of germinating seeds and seedlings. Susceptible weeds germinate but show immediate chlorosis followed by a mauve-pink discolouration. The chlorosis spreads with the aerial growth and the plants become necrotic and die back. After application, some transient crop discolouration may occur. In lentils and lupins this usually appears as yellow or white banding on the leaves, while in clover and field peas, white/pink colouration of the leaf veins and tips may occur. Some crop height reduction may also occur. Provided the crop is not under stress from pre-emergent herbicide, disease, insect damage, nutrient deficiency, frost, extremes of pH, dry or excessively moist conditions, the development of the crop and all subsequent growth will not be affected. Some pre-emergence herbicides, such as atrazine, can cause stress to certain crops resulting in an increase in crop damage when using this product. Field peas are particularly sensitive.

### CLOVER TOLERANCE TABLE

| VARIETY  | EFFECT ON VEGETATIVE GROWTH |
|--|-----------------------------|
| Arrowleaf (Zulu)   | Moderate                    |
| Balansa (Paradana)                                       | Moderate                    |
| Persian (Kyambro)  | Minimal                     |
| Strawberry (Palestine)                                   | Moderate                    |
| Subterranean (Clare)                                     | Moderate                    |
| Subterranean (June)                                      | Moderate                    |
| Subterranean (Karridale)                                 | Moderate                    |
| Subterranean (Larissa)                                   | Moderate                    |
| Subterranean (Mt Barker)                                 | Moderate                    |
| Subterranean (Seaton Park)                               | Minimal                     |
| Subterranean (Trikkala)                                  | Minimal                     |
| Subterranean (Woogenellup)                               | Moderate                    |
| White (Haifa)  | Moderate                    |
| Reduction in growth – Minimal (0-20%), Moderate (20-50%) |                             |

The following varieties of subterranean clover have been tested for effects on seed yield: Seaton Park, Trikkala and Woogenellup. Some reduction in seed yield may occur with cv. Trikkala.

**Subsequent Crop Tolerance:** To reduce the effect on subsequent susceptible crop (eg. canola), ensure thorough cultivation of soil prior to the sowing of these crops.

### RESISTANT WEEDS WARNING:

|       |          |           |
|-------|----------|-----------|
| GROUP | <b>F</b> | HERBICIDE |
|-------|----------|-----------|

Ravensdown UniDifen 500 Herbicide is a member of the Nicotinanalide group of herbicides and acts by inhibiting carotenoid biosynthesis. For weed resistance management Ravensdown UniDifen 500 Herbicide is a group F herbicide. Some naturally occurring weed biotypes resistant to Ravensdown UniDifen 500 Herbicide and other nicotinanalides 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 Ravensdown UniDifen 500 Herbicide or other Nicotinanalide herbicides. Since the occurrence of resistant weeds is difficult to detect prior to use, Ravensdown Fertiliser Co-operative Limited accepts no liability for any losses that may result from the failure of Ravensdown UniDifen 500 Herbicide to control resistant weeds.

### MIXING:

Stir product or invert container several times before use as settling may occur after storage for some weeks. To ensure even mixing, half fill the spray tank with clean water and add the required amount of product. Agitate thoroughly then add the remainder of the water. Agitate thoroughly while carrying out spray operations. Reseal part-used container immediately after use.

### APPLICATION:

**Ground:** A minimum water rate of 50L/ha should be used, however for optimum results water rates of 70-100L/ha are recommended. Increase the water volume where weed infestation is heavy or the crop cover is dense. Complete coverage of weeds is essential. Higher water volumes (up to 100L/ha) will ensure improved activity of the product on the weeds but may increase the symptoms of crop damage.

The following settings are examples that will ensure excellent coverage of exposed weeds:

| WATER RATE | 50L/ha                     | 75L/ha                     | 75L/ha                     |
|------------|----------------------------|----------------------------|----------------------------|
| NOZZLE     | Hardi No. 10 or equivalent | Hardi No. 12 or equivalent | Hardi No. 14 or equivalent |
| SPEED      | 10 KpH                     | 10 KpH                     | 12 KpH                     |
| PRESSURE   | 240 KpA (2.4 bar)          | 220 KpA (2.2 bar)          | 210 KpA (2.1 bar)          |

## Ravensdown Unidifen 500 Herbicide

### COMPATIBILITY:

Ravensdown UniDifen 500 Herbicide is physically compatible with most currently registered grass herbicides as two-way tank mixtures:

| Ravensdown UniDifen 500 HERBICIDE | COMPATIBLE PRODUCT  |
|-----------------------------------|---|
| Up to 150 mL                      | Simazine (500 g/L product) up to 1.0 L/ha   |
| All rates                         | Ravensdown Bifenthrin 100 Insecticide/Miticide, Ravensdown Metribuzin 750 WG Herbicide, Ravensdown Unidime 400 Insecticide, Alphacypermethrin, Deltamethrin, Esfenvalerate, Haloxyfop, Lambda-cyhalothrin, Omethoate. |
| Up to 100 mL                      | Eclipse up to 7 g/ha (provided water hardness does not exceed 500 ppm)  |

**Warning:** For tank-mixtures with grass herbicides, use the recommended rates for both herbicides as well as the surfactant recommendations of the grass herbicide. Read the label for the grass herbicide before mixing and using the tank mixtures. DO NOT use crop oils with Ravensdown UniDifen 500 Herbicide or Ravensdown UniDifen 500 Herbicide/grass herbicide tank mixtures. Applications to lupins and field peas under stressed conditions may cause significant damage to the crop. Tank-mixes with simazine should be applied post-emergence to lupins crops only. When tank- mixing Ravensdown UniDifen 500 Herbicide and quizalofop-p-ethyl, use a surfactant only. Mixtures of Ravensdown UniDifen 500 Herbicide and Haloxyfop applied to lupins or field peas can cause damage which may result in yield losses. Consult your local Ravensdown Fertiliser Cooperative representative or the relevant grass herbicide manufacturer for advice on application and timing of tank-mixtures. As formulations of other manufacturers' products are beyond the control of Ravensdown Fertiliser Cooperative Limited, all mixtures should be tested prior to mixing commercial quantities.

### 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 land or pastures.

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

DO NOT contaminate streams, rivers or waterways with the chemical or used containers.

### STORAGE AND DISPOSAL:

#### KEEP OUT OF REACH OF CHILDREN

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 deliver empty packaging for appropriate disposal 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.

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**FIRST AID:** If poisoning occurs, contact a doctor, or Poisons Information Centre (Phone Australia 131126).

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