

# CAUTION

KEEP OUT OF REACH OF CHILDREN

READ SAFETY DIRECTIONS BEFORE OPENING OR USING



**ACTIVE CONSTITUENT: 400 g/kg OXYFLUORFEN**

**GROUP G HERBICIDE**

For selective weed control of grass and broadleaf weeds in onions, certain brassica vegetables and pyrethrum as specified in the Directions For Use table.

**READ THE ATTACHED BOOKLET BEFORE USING THIS PRODUCT**

Distributed by:

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**DIRECTIONS FOR USE**

**RESTRAINTS**

DO NOT allow stock to graze any treated plants.  
 DO NOT apply to crops stressed by heat or cold.

Crop Situation	Weeds Controlled	Time of Application	Rate	Critical Comments
Transplanted Cabbages, Cauliflower, Broccoli	<i>Amaranthus</i> spp. <i>Amsinckia</i> ( <i>Amsinckia</i> spp.) Apple of Peru ( <i>Nicandra physaloides</i> ) Barley grass ( <i>Hordeum</i> spp.) Barnyard grass ( <i>Echinochloa</i> spp.) Bellvine ( <i>Ipomoea plebeia</i> ) Blackberry nightshade ( <i>Solanum nigrum</i> ) Bladder ketmia ( <i>Hibiscus trionum</i> ) Buckshorn plantain ( <i>Plantago lanceolata</i> ) Burrgrass ( <i>Cenchrus australis</i> ) Caltrop ( <i>Tribulus terrestris</i> ) Capeweed ( <i>Arctotheca calendula</i> ) Cleavers ( <i>Galium aparine</i> ) Crowsfoot grass ( <i>Eleusine indica</i> ) Deadnettle ( <i>Lamium amplexicaule</i> ) Dock ( <i>Rumex</i> spp) Fumitory/pinkweed ( <i>Fumaria</i> spp.) Giant pigweed ( <i>Trianthema portulacastrum</i> ) Green amaranth ( <i>Amaranthus viridis</i> ) Groundsel ( <i>Senecio vulgaris</i> ) Ivy-leaf speedwell ( <i>Veronica hederifolia</i> ) Liverseed grass ( <i>Urochloa panicoides</i> ) Lovegrass ( <i>Eragrostis</i> spp.) Pigeon grass ( <i>Setaria</i> spp.) Pigweed ( <i>Portulaca oleracea</i> ) Prickly lettuce ( <i>Lactuca</i> spp.) Rayless chamomile ( <i>Matricaria matricarioides</i> ) Red Natal grass ( <i>Rhynchelytrum repens</i> ) Red root ( <i>Amaranthus</i> spp) Redshank ( <i>Amaranthus cruentus</i> ) Ryegrass ( <i>Lolium rigidum</i> ) Sesbania pea ( <i>Sesbania cannabina</i> ) Shepherd's purse ( <i>Capsella bursa-pastoris</i> ) Smallflower mallow ( <i>Malva parviflora</i> ) Sow thistle ( <i>Sonchus oleraceus</i> ) Speedwell ( <i>Veronica persica</i> ) Starburr ( <i>Acanthospermum hispidum</i> ) Stinkgrass ( <i>Eragrostis cilianensis</i> ) Summer grass ( <i>Digitaria</i> spp.) Thornapple ( <i>Datura stramonium</i> ) Twin cress ( <i>Coronopus didymus</i> )	Immediately after transplanting and no later than 3 days after transplanting to weed free soil	0.5 to 1 kg/ha	Apply BARON 400 WP as soon as possible after transplanting and no later than 3 days after transplanting to a weed free soil. Rain or irrigation is required shortly after application, preferably within 7 days, to activate the product and maximise residual weed control. Some leaf spotting on the older leaves may occur on some varieties. Note: under cool humid conditions, some varieties of broccoli and cabbage may be damaged resulting in yield reductions. Consequently, small areas should be tested first. Use the lower rate under cold, wet conditions (mid-winter) or on medium soils and higher rate in warmer weather (summer) on heavy soils. Make only one application per crop. Do not use on light sandy soils unless small scale testing has proven BARON 400 WP to be safe to the variety. DO NOT mix any surfactants or any other pesticide with BARON 400 WP as serious crop damage may occur.

**DIRECTIONS FOR USE cont.**

Crop Situation	Weeds Controlled	Time of Application	Rate	Critical Comments
Transplanted Cabbages, Cauliflower, Broccoli	White eye ( <i>Richardia brasiliensis</i> ) Wild carrot ( <i>Daucus carota</i> ) Wild hops ( <i>Humulus lupulus</i> ) Wild mustard ( <i>Sisymbrium</i> spp.) Wild turnip ( <i>Brassica rapa</i> ) Wireweed ( <i>Polygonum aviculare</i> )  <b>Suppression only</b> Chickweed ( <i>Stellaria media</i> ) Wild radish ( <i>Raphanus raphanistrum</i> )	Immediately after transplanting and no later than 3 days after transplanting to weed free soil	0.5 to 1 kg/ha	Apply BARON 400 WP as soon as possible after transplanting and no later than 3 days after transplanting to a weed free soil. Rain or irrigation is required shortly after application, preferably within 7 days, to activate the product and maximise residual weed control. Some leaf spotting on the older leaves may occur on some varieties. Note: under cool humid conditions, some varieties of broccoli and cabbage may be damaged resulting in yield reductions. Consequently, small areas should be tested first. Use the lower rate under cold, wet conditions (mid-winter) or on medium soils and higher rate in warmer weather (summer) on heavy soils. Make only one application per crop. Do not use on light sandy soils unless small scale testing has proven BARON 400 WP to be safe to the variety. DO NOT mix any surfactants or any other pesticide with BARON 400 WP as serious crop damage may occur.
Onions (seeded)	Apple of Peru ( <i>Nicandra physaloides</i> ) Blackberry nightshade ( <i>Solanum nigrum</i> ) Buckshorn plantain ( <i>Plantago lanceolata</i> ) Caltrop ( <i>Tribulus terrestris</i> ) Cleavers ( <i>Galium aparine</i> ) Deadnettle ( <i>Lamium amplexicaule</i> ) Dock ( <i>Rumex</i> spp) Fumitory/pinkweed ( <i>Fumaria</i> spp.) Groundsel ( <i>Senecio vulgaris</i> ) Pigweed ( <i>Portulaca oleracea</i> ) Red root ( <i>Amaranthus retroflexus</i> ) Sow thistle ( <i>Sonchus oleraceus</i> ) Twin cress ( <i>Coronopus didymus</i> ) Wireweed ( <i>Polygonum aviculare</i> )	Begin applications no sooner than the onion 2 true leaf stage (excludes 'flag' or 'hook' leaf) to weed free soil	150 to 300 g/ha	Apply BARON 400 WP to a weed free soil, once onions have at least 2 true leaves. If weeds are present, treat these first with a suitable contact herbicide. Use the low rate when onions are small and conditions are wet and cold. The higher rate can be used once onions have 3 true leaves. Repeat the applications at 4 to 6 week intervals as required. Do not use more than 1.2 kg/ha per crop. Treat any emerged weeds with suitable contact herbicides, if required, prior to the BARON 400 WP application. DO NOT mix any surfactants or any other pesticide with BARON 400 WP as serious crop damage may occur.
	Fat hen ( <i>Chenopodium album</i> )		300 g/ha	
Established pyrethrum	<i>Amaranthus</i> spp. Amsinckia ( <i>Amsinckia</i> spp.) Barley grass ( <i>Hordeum</i> spp.) Barnyard grass ( <i>Echinochloa</i> spp.) Blackberry nightshade ( <i>Solanum nigrum</i> ) Buckshorn plantain ( <i>Plantago lanceolata</i> ) Capeweed ( <i>Arctotheca calendula</i> ) Cleavers ( <i>Galium aparine</i> ) Crowsfoot grass ( <i>Eleusine indica</i> ) Deadnettle ( <i>Lamium amplexicaule</i> ) Dock ( <i>Rumex</i> spp.) Fumitory/pinkweed ( <i>Fumaria</i> spp.) Groundsel ( <i>Senecio vulgaris</i> ) Ivy-leaf speedwell ( <i>Veronica hederifolia</i> ) Redshank ( <i>Amaranthus cruentus</i> ) Ryegrass ( <i>Lolium rigidum</i> ) Shepherd's purse ( <i>Capsella bursa-pastoris</i> )	Prior to weed emergence in autumn	0.5 – 1.0 kg/ha	Apply Baron 400 WP in the autumn following harvest and just prior to autumn weed germination. Applications following autumn rains may result in crop damage. Use the lower rate on medium soils and higher rate on heavy soils. DO NOT mix surfactants or any other pesticides with Baron 400 WP.

**DIRECTIONS FOR USE cont.**

Crop Situation	Weeds Controlled	Time of Application	Rate	Critical Comments
Established pyrethrum	Smallflower mallow ( <i>Malva parviflora</i> ) Sow thistle ( <i>Sonchus oleraceus</i> ) Speedwell ( <i>Veronica persica</i> ) Wild carrot ( <i>Daucus carota</i> ) Wild mustard ( <i>Sisymbrium</i> spp.) Wild turnip ( <i>Brassica rapa</i> ) Wireweed ( <i>Polygonum aviculare</i> )  <b>Suppression only</b> Chickweed ( <i>Stellaria media</i> ) Wild radish ( <i>Raphanus raphanistrum</i> )	Prior to weed emergence in autumn	0.5 – 1.0 kg/ha	Apply Baron 400 WP in the autumn following harvest and just prior to autumn weed germination. Applications following autumn rains may result in crop damage.  Use the lower rate on medium soils and higher rate on heavy soils. DO NOT mix surfactants or any other pesticides with Baron 400 WP.

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

**WITHHOLDING PERIODS**

**HARVEST – NOT REQUIRED WHEN USED AS DIRECTED**

**GRAZING – DO NOT GRAZE TREATED WEEDS OR PRODUCE**

**GENERAL INSTRUCTIONS**

Baron 400 WP is an effective residual herbicide for control of a range of grass and broad leaf weeds. Baron 400 WP has very little contact action on weeds and should be used alone, on clean, weed free ground, immediately after transplanting cabbages, cauliflowers and broccoli, post-emergence over onions with at least 2 true leaves and prior to weed emergence in pyrethrum. Depending on the rate applied, Baron 400 WP will provide good residual control for several weeks in onions and this control may be extended by applying repeat applications. Longest residual activity will occur under cold, wet, overcast conditions and on soils low in organic matter.

**RESISTANT WEEDS WARNING**

<b>GROUP</b>	<b>G</b>	<b>HERBICIDE</b>
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Baron 400 WP is a member of the Diphenyl ether group of herbicides. The mode of action of Baron 400 WP is to inhibit protoporphyrinogen oxidase. For weed resistance management, Baron 400 WP is a Group G herbicide. Some naturally-occurring weed biotypes resistant to Baron 400 WP and other inhibitors of protoporphyrinogen oxidase 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 weeds will not be controlled by Baron 400 WP or other inhibitors of protoporphyrinogen oxidase herbicides. Since the occurrence of resistant weeds is difficult to detect prior to use, AgNova Technologies Pty Ltd accepts no liability for any losses that may result from the failure of Baron 400 WP to control resistant weeds.

**TIMING**

For optimum residual weed control, treated area should be left undisturbed during the time period for which weed control is desired. Spot treatment, with knockdown herbicides, for emerged weeds may be necessary.

**MIXING**

Pre-mix the required amount of Baron 400 WP in a bucket with a small amount of water. Add this pre-mix to the partially filled spray tank while agitation is running. Complete filling of spray tank with agitation running.

**APPLICATION**

Baron 400 WP may be applied by conventional boomspray equipment capable of applying the necessary volumes of spray per hectare. Best results will be obtained by using 400 litres of spray per hectare. Spraying at low pressure (eg. 200 kPa) using fan nozzles will give uniform coverage of the soil surface.

DO NOT apply Baron 400 WP through irrigation systems.

## **CROP SAFETY**

Apply this product carefully. Spray drift may cause serious damage to other desirable plants. Do not use on sandy soils until small-scale tests prove that the product will not cause crop damage. Some leaf spotting can occur due to the activity of the spray, or from rain splashes from the soil following application, and the extent of damage may vary between varieties. The size and age of transplanted seedlings may also affect the selectivity of Baron 400 WP, with younger seedlings potentially more susceptible. Conduct small scale crop safety tests prior to treating large numbers of plants.

**Caution:** The selectivity of Baron 400 WP to transplanted seedlings may be affected by applications of adjuvants (eg wetting agents, oils, etc) to the leaves up to 10 days before or after the application of Baron 400 WP. Check with your seedling supplier prior to applying Baron 400 WP.

**DO NOT resow or replant into Baron-treated soil within 6 months of last application without prior germination testing.**

DO NOT apply more than 1.5 kg per hectare Baron 400 WP or any other products containing oxyfluorfen in any 12 month period.

## **COMPATIBILITY**

DO NOT mix any surfactants or any pesticide with Baron 400 WP as serious crop damage may occur.

## **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.

## **PROTECTION OF LIVESTOCK**

DO NOT allow stock to graze any treated plants.

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

This product is highly toxic to wildlife and fish.

DO NOT contaminate streams, rivers or waterways with the chemical or used containers. Use care when applying in areas frequented by wildlife or adjacent to any body of water.

## **STORAGE AND DISPOSAL**

Store in the closed, original container in a dry, cool, well-ventilated area out of direct sunlight.

Shake bag contents into spray tank until the bag is empty. Do not dispose of undiluted chemicals on site. Puncture or shred and bury empty bags in a local authority landfill. If no landfill is available, bury the containers below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty bags and product should not be burnt.

## **SAFETY DIRECTIONS**

Harmful if inhaled. Will irritate the eyes, nose and throat and skin. Avoid contact with eyes and skin. Do not inhale dust. If product on skin, immediately wash area with soap and water. If product in eyes, wash it out immediately with water. Wash hands after use. When opening the container and preparing spray, wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length PVC gloves, goggles and a disposable dust face mask covering the mouth and nose. If applying by hand, wear cotton overalls buttoned to the neck and wrist (or equivalent clothing) and elbow-length PVC gloves. After each day's use wash gloves, goggles and contaminated clothing.

## **FIRST AID**

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

## **MATERIAL SAFETY DATA SHEET**

Additional information is listed on the Material Safety Data Sheet for Baron 400 WP which is available from AgNova Technologies Pty Ltd on request.

**CONDITIONS OF SALE**

AgNova Technologies Pty Ltd shall not be liable for any consequential or other loss or damage relating to the supply or subsequent handling or use of this product, unless such liability by law cannot be lawfully excluded or limited. All warranties, conditions or rights implied by statute or other law which may be lawfully excluded are so excluded. Where the liability of AgNova Technologies Pty Ltd for breach of any such statutory warranties and conditions cannot be lawfully excluded but may be limited to it re-supplying the product or an equivalent product or the cost of a product or an equivalent product, then the liability of AgNova Technologies Pty Ltd for any breach of such statutory warranty or condition is so limited.

In a transport emergency Dial 000, Police or Fire Brigade.

**Specialist Advice in Emergency Only Dial 1800 033 111 Toll free – All hours – Australia-wide**

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