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# **CAUTION**

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



# Bentazone 480 SL

# **HERBICIDE**

**ACTIVE CONSTITUENT: 480 g/L BENTAZONE** present as sodium salt

GROUP C HERBICIDE

For selective post-emergence control of certain broadleaf weeds in Green (Dwarf French) Beans, Navy (Haricot) Beans, Peanuts, Red Kidney Beans, Red Mexican Beans and Soybeans as per the Directions for Use table.

IMPORTANT: Read this booklet before use.

al No: 69311/60457

## APPARENT PTY LTD A.C.N. 143 724 136

Suite G.08 | 762 Toorak Road, Hawthorn East VIC 3123 Australia T +61 3 9822 1321 **F** +61 3 9817 7845 **E** enquiries@apparentag.com.au www.apparentag.com.au

# DIRECTIONS FOR USE

### RESTRAINTS:

DO NOT apply under hot, dry conditions.

CROP	WEEDS	STATE	RATE/ha
Broad beans	Black bindweed ( <i>Polygonum convolvulus</i> ), Blackberry nightshade ( <i>Solanum nigrum</i> ), Corn spurry ( <i>Spergula arvensis</i> ), Fat hen ( <i>Chenopodium album</i> ), Fumitory ( <i>Fumaria muralis</i> ), Hedge mustard ( <i>Sisymbrium officinale</i> ), Shepherd's purse ( <i>Capsella bursapastoris</i> ), Wild radish ( <i>Raphanus raphanistrum</i> ), Wild turnip ( <i>Brassica rapa campestris</i> )	Tas only	1 L 2 L 3 L
Green beans	Thornapples ( <i>Datura</i> spp.)	Qld, NSW, Vic,	1.5 L
(Dwarf French)	Noogoora burr ( <i>Xanthium pungens</i> )	WA only	or 2 L
(Swall Frontier)	Annual ground cherry ( <i>Physalis angulata</i> ), Apple of Peru ( <i>Nicandra physalodes</i> ), Bellvine ( <i>Ipomea plebeia</i> ), Cobblers pegs ( <i>Bidens pilosa</i> ), Star burr ( <i>Acanthospermum hispidum</i> ), Variegated thistle ( <i>Silybum marianum</i> )		2 L
	Anoda weed ( <i>Anoda cristata</i> ), Hairy wandering jew ( <i>Commelina benghalensis</i> )	Qld only	2 L
	Blackberry nightshade ( <i>Solanum nigrum</i> ), Black bindweed ( <i>Polygonum convolvulus</i> ), Corn spurry ( <i>Spergula arvensis</i> ), Fumitory ( <i>Fumaris muralis</i> )	Tas only	1 L 2 L 3 L
	Fat hen (Chenopodium album), Hedge mustard (Sisymbrium officinale), Shepherd's purse (Capsella bursa-pastoris), Wild turnip (Brassica rapa campestris), Wild radish (Raphanus raphanistrum)	Vic, SA only	3 L
Navy beans	Thornapples ( <i>Datura</i> spp.)	Qld, NSW, Vic,	1.5 L
(Haricot)	Noogoora burr (Xanthium pungens)	WA Only	or 2 L
	Annual ground cherry ( <i>Physalis angulata</i> ), Apple of Peru ( <i>Nicandra physalodes</i> ), Bellvine ( <i>Ipomea plebeia</i> ), Cobblers pegs ( <i>Bidens pilosa</i> ), Star burr ( <i>Acanthospermum hispidum</i> ), Variegated thistle ( <i>Silybum marianum</i> )	Qld, NSW, Vic, WA only	2 L
	Anoda weed (Anoda cristata), Hairy wandering jew (Commelina benghalensis)	Qld only	

WHP	CRITICAL COMMENTS
5 weeks	Apply when weeds are less than two true leaves.
	Apply when broad bean plants are at the two leaf stage or earlier and weeds are less than 5 cm high.
	Ensure weeds are less than 5 cm high, and broad bean plants are developed past the two leaf stage.
	Sequential applications may be necessary to achieve satisfactory weed control, but no more than two applications should be used and the total rate applied should not exceed 3 L/ha. The addition of a non-ionic surfactant such as *BS1000 at 125 mL per 100 litres of the spray volume is necessary for optimum weed control.
5 weeks	Apply low rate when weeds are cotyledon to 4 leaves and high rate when 5 to 8 leaves.
	Apply low rate when weeds are cotyledon to 3 leaves and high rate when 4 to 6 leaves.
	Apply when weeds are cotyledon to 4 leaves.
	Variegated thistle should be less than 15 cm in diameter. Annual ground cherry should be less than 1.5 cm high.
	Control of bellvine may be inconsistent if soil is dry.
	Apply when weeds are cotyledon to 3 leaves.
	Apply when unifoliate bean leaf is fully expanded.
	Apply when first trifoliate bean leaf is fully expanded.
	Ensure weeds are less than 5 cm high and second trifoliate bean leaf is fully expanded.
	Ensure weeds are less than 5 cm high and second trifoliate bean leaf is fully expanded.
	If product is applied prior to the full expansion of the second trifoliate leaf, sequential applications may be necessary to achieve satisfactory weed control, but no more than two applications should be used and the total rate applied should not exceed 3 L/ha.
	The addition of a non-ionic surfactant such as *BS1000 at 125 mL per 100 litres of the spray
	volume is necessary for optimum weed control.
8 weeks	Apply low rate when weeds are cotyledon to 4 leaves and high rate when 5 to 8 leaves.
	Apply low rate when weeds are cotyledon to 3 leaves and high rate when 4 to 6 leaves.
8 weeks	Apply when weeds are cotyledon to 4 leaves.
	Variegated thistle should be less than 15 cm in diameter. Annual ground cherry should be less than 1.5 cm high.
	Control of bellvine may be inconsistent if soil is dry.
	Apply when weeds are cotyledon to 3 leaves.

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CROP (cont)	WEEDS	STATE	RATE/ha
Navy beans (Haricot) (cont)	Blackberry nightshade ( <i>Solanum nigrum</i> ), Black Bindweed ( <i>Polygonum convolvulus</i> ), Corn spurry ( <i>Spergula arvensis</i> ), Fumitory ( <i>Fumaris muralis</i> ), Fat hen ( <i>Chenopodium album</i> ), Hedge mustard ( <i>Sisymbrium officinale</i> ), Shepherd's purse ( <i>Capsella bursa-pastoris</i> ), Wild turnip ( <i>Brassica rapa campestris</i> ), Wild radish ( <i>Raphanus raphanistrum</i> )	Vic, Tas, SA only	3 L
Peanuts	Thornapples ( <i>Datura</i> spp.)  Noogoora burr ( <i>Xanthium pungens</i> )	Qld only	1.5 L or 2 L
	Annual ground cherry ( <i>Physalis angulata</i> ), Apple of Peru ( <i>Nicandra physalodes</i> ), Bellvine ( <i>Ipomea plebeia</i> ), Cobblers pegs ( <i>Bidens pilosa</i> ), Star burr ( <i>Acanthospermum hispidum</i> ), Variegated thistle ( <i>Silybum marianum</i> )  Anoda weed ( <i>Anoda cristata</i> ), Hairy wandering iew		2 L
	(Commelina benghalensis)		
Red kidney beans, Red	Thornapples ( <i>Datura</i> spp.)  Noogoora burr ( <i>Xanthium pungens</i> )	Qld, NSW, Vic, WA only	1.5 L or 2 L
mexican beans	Annual ground cherry ( <i>Physalis angulata</i> ), Apple of Peru ( <i>Nicandra physalodes</i> ), Bellvine ( <i>Ipomea plebeia</i> ), Cobblers pegs ( <i>Bidens pilosa</i> ), Star burr ( <i>Acanthospermum hispidum</i> ), Variegated thistle ( <i>Silvbum marianum</i> )		2 L
	Anoda weed ( <i>Anoda cristata</i> ), Hairy wandering jew ( <i>Commelina benghalensis</i> )	Qld only	2 L
Soybeans	Thornapples ( <i>Datura</i> spp.)  Noogoora burr ( <i>Xanthium pungens</i> )	Qld, NSW, Vic, WA only	1.5 L or 2 L
	Annual ground cherry ( <i>Physalis angulata</i> ), Apple of Peru ( <i>Nicandra physalodes</i> ), Bellvine ( <i>Ipomea plebeia</i> ), Cobblers pegs ( <i>Bidens pilosa</i> ), Star burr ( <i>Acanthospermum hispidum</i> ), Variegated thistle ( <i>Silybum marianum</i> )		2 L
	Anoda weed ( <i>Anoda cristata</i> ), Hairy wandering jew ( <i>Commelina benghalensis</i> )	Qld only	
	Bathurst burr (Xanthium spinosum) and Blackberry nightshade (Solanum nigrum) (SUPPRESSION ONLY)	NSW only	2 L plus 2 L of *D-C Trate per ha

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

WHP	CRITICAL COMMENTS
8 weeks	Ensure weeds are less than 5 cm high.
	The addition of a non-ionic surfactant such as *BS1000 at 125 mL per 100 litres of the spray volume is necessary for optimum weed control in Tasmania.
21 days	Apply low rate when weeds are cotyledon to 4 leaves and high rate when 5 to 8 leaves.
	Apply low rate when weeds are cotyledon to 3 leaves and high rate when 4 to 6 leaves.
	Apply when weeds are cotyledon to 4 leaves.
	Variegated thistle should be less than 15 cm in diameter. Annual ground cherry should be less than 1.5 cm high.
	Control of bellvine may be inconsistent if soil is dry
	Apply when weeds are cotyledon to 3 leaves.
8 weeks	Apply low rate when weeds are cotyledon to 4 leaves and high rate when 5 to 8 leaves.
	Apply low rate when weeds are cotyledon to 3 leaves and high rate when 4 to 6 leaves.
	Apply when weeds are cotyledon to 4 leaves.
	Variegated thistle should be less than 15 cm in diameter. Annual ground cherry should be less than 1.5 cm high.
	Control of bellvine may be inconsistent if soil is dry.
	Apply when weeds are cotyledon to 3 leaves.
	Apply low rate when weeds are cotyledon to 4 leaves and high rate when 5 to 8 leaves.
	Apply low rate when weeds are cotyledon to 3 leaves and high rate when 4 to 6 leaves.
	Apply when weeds are cotyledon to 4 leaves. Variegated thistle should be less than 15 cm in
	diameter. Annual ground cherry should be less than 1.5 cm high.  Control of bellvine may be inconsistent if soil is dry.
	Control of benefite may be inconsistent if soil is dry.
	Apply when weeds are cotyledon to 3 leaves.
	Apply as a post-emergent spray no later than early 4 leaf stage of the weeds.

WITHHOLDING PERIODS (WHP)

PEANUTS: DO NOT HARVEST FOR 21 DAYS AFTER APPLICATION.

BROAD BEANS, GREEN BEANS: DO NOT HARVEST FOR 5 WEEKS AFTER APPLICATION.

NAVY BEANS, RED KIDNEY BEANS, RED MEXICAN BEANS, SOYBEANS: DO NOT HARVEST FOR 8 WEEKS AFTER APPLICATION.

**GENERAL INSTRUCTIONS** 

RESISTANT WEEDS WARNING



Apparent Bentazone 480 SL Herbicide is a member of the benzothiadiazole group of herbicides. Apparent Bentazone 480 SL Herbicide is a herbicide which inhibits photosynthesis at photosystem II. For resistance management Apparent Bentazone 480 SL Herbicide is a Group C Herbicide. Some naturally occurring weed biotypes resistant to Apparent Bentazone 480 SL Herbicide and other Group C 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 resistant weeds will not be controlled by Apparent Bentazone 480 SL Herbicide or other Group C herbicides. Since the occurrence of resistant weeds is difficult to detect prior to use, Apparent Pty Ltd accepts no liability for any losses that may result from the failure of Apparent Bentazone 480 SL Herbicide to control resistant weeds.

#### APPLICATION

#### **Ground Application**

Apparent Bentazone 480 SL Herbicide is a contact herbicide and therefore coverage of the foliage of weeds is essential. To obtain thorough coverage Apparent Bentazone 480 SL Herbicide should be applied through properly calibrated and maintained spray equipment at a volume of 220 to 440 L water per ha and pressure of 240 to 340 kPa. Coverage will be reduced if weeds are being shaded by the crop or any other factors such as drift or dusty leaves that prevent the herbicide reaching target leaves. Best results are obtained when conditions favour rapid growth.

#### Aerial Application (read instructions for ground application first)

Apply with aircraft fitted with either conventional boom and nozzles or with micronair rotary atomizers, flying between 3 to 4 metres above the ground. Booms should be fitted with D8 to D12 nozzles and calibrated to apply at least 50 L/ha with overlapping swaths to prevent striping. Micronairs should be calibrated to apply at least 35 L/ha with droplets between 200 to 250 microns and swaths overlapping to prevent striping. Avoid droplets smaller than 200 micron as they are susceptible to evaporation.

DO NOT APPLY under hot and dry conditions. Best results are obtained from late afternoon or early morning spraying.

DO NOT APPLY under strong or gusty wind conditions (more than 5 knots) as striping will occur.

# Split Application

Weeds do not germinate at once and application should not be delayed to catch later germinations. When late germinations of weeds occur a second application is advisable before crop canopy closes.

#### The Effects of Stressed Weeds and Weather

Application is not recommended to crops suffering from stress induced by drought, water logging, hail damage, frost or injury from other pesticides or crop injury may occur. Such stress conditions may also harden weeds making them more difficult to kill. Apparent Bentazone 480 SL Herbicide is a water soluble concentration and hot, dry conditions may cause spray to evaporate reducing covering and the performance on weeds. Rain within eight hours of spraying is likely to reduce the effectiveness of Apparent Bentazone 480 SL Herbicide resulting in poor weed control.

#### **Wetting Agent**

In Tasmania (only) a non-ionic wetting agent such as \*BS1000 at 125 mL per 100 litres of the volume should be added when Apparent Bentazone 480 SL Herbicide is sprayed on navy (Haricot) beans and green (Dwarf French) beans. In general, the addition of wetter does not improve control of weeds in other areas. However, with less susceptible weeds or if spray coverage is less than optimum the addition of \*BS1000 may improve control.

#### MIXING

Apparent Bentazone 480 SL Herbicide mixes readily with water. Add the required amount of Apparent Bentazone 480 SL Herbicide to the spray tank when filling and agitate to give even mixing.

#### COMPATIBILITY

Apparent Bentazone 480 SL Herbicide can be applied after pre-planting application of trifluralin or EPTC.

## PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

Do NOT contaminate streams, rivers or waterways with Apparent Bentazone 480 SL Herbicide or used containers.

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

DO NOT apply under meteorological conditions or from spraying equipment which could be expected to cause spray to drift onto nearby susceptible plants, adiacent crops, crop lands or pasture.

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#### **CROP SAFETY**

**Green beans, navy beans, red kidney beans, red mexican beans:** Beans are tolerant of Apparent Bentazone 480 SL Herbicide after the first two trifoliate leaves are fully expanded. There may be leaf scorch but this will not affect yields. DO NOT apply unless two trifoliate leaves are present except as per directions for use in Tasmania on green beans or severe damage may result. When used in Tasmania do not apply after flower bud formation.

**Peanuts:** Apply after the crop is 12 cm high.

**Soybeans:** Soybeans are tolerant of Apparent Bentazone 480 SL Herbicide at all stages of growth. Mild leaf scorching may occur but will not affect yield.

#### STORAGE AND DISPOSAL

Store in the closed, original container in a well-ventilated area, as cool as possible. Do NOT store for prolonged periods in direct sunlight. Triple or (preferably) pressure rinse containers before disposal. Add rinsings to spray tank. DO NOT dispose of undiluted chemicals on-site. Break, crush, puncture and bury empty containers in a local authority landfill. If not available, bury the containers below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, vegetation and roots. Empty containers and product should NOT be burnt.

#### SAFETY DIRECTIONS

May irritate the eyes and skin. Avoid contact with eyes and skin. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water.

#### **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 is available from the supplier.

#### **CONDITIONS OF SALE**

The use of Apparent Bentazone 480 SL Herbicide being beyond the control of the manufacturer no warranty expressed or implied is given by Apparent Pty Ltd 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 Apparent Pty Ltd accepts with no responsibility for any consequences whatsoever resulting from the use of this product.

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