

BENTAZON 480 booklet

BENTAZON 480

GROUP

6

HERBICIDE

**SOLUTION
COMMERCIAL (AGRICULTURAL)**

For selective post-emergence broadleaf weed control in soybeans, dry and snap common beans, peas, lima beans, fababeans, corn (grain, silage, sweet and seed), flax (including low linolenic acid varieties), peanuts, blueberries, turf, spring wheat (excluding durum), snow peas, seedling and established forage legumes and seedling forage grasses (seed production only for forage legumes and grasses), newly-planted fruit trees - apple, apricot, cherry, peach, and pear and nectarine (directed use only).

ACTIVE INGREDIENT: Bentazon (present as the sodium salt) 480 g/L

REGISTRATION NO. 34988 PEST CONTROL PRODUCTS ACT

**READ THE LABEL AND ATTACHED BOOKLET BEFORE USING
KEEP OUT OF REACH OF CHILDREN**



POISON

**DANGER – EYE AND SKIN IRRITANT
POTENTIAL SKIN SENSITIZER**

NET CONTENTS: 1 L - Bulk

**For Hazardous Materials [or Dangerous Goods] Incident Spill, Leak, Fire, Exposure, or
Accident Call CANUTEC 1-613-996-6666**

Farmer's Business Network Canada, Inc.
PO Box 5607
High River, Alberta
Canada T1V 1M7
1-844-200-FARM (3276)

GENERAL INFORMATION

BENTAZON 480 is a liquid herbicide for selective post-emergence control of many broadleaf weeds, yellow nutsedge, cleavers, stork's bill and volunteer canola in soybeans, dry and snap common beans, peas, lima beans, fababeans, corn (grain, silage, sweet and seed), flax (including low linolenic acid varieties), peanuts, spring wheat (excluding durum), snow peas, seedling forages (alfalfa*, red clover**, alsike clover**, sainfoin**, brome grass**, creeping red fescue**, meadow foxtail**, orchardgrass**, timothy and crested wheatgrass**), established forages (alfalfa*, red clover*, sainfoin* and sweet clover*) and newly-planted fruit trees - apple, apricot, cherry, peach, and pear and nectarine. (Directed use only. Do not overspray.)

BENTAZON 480 will also control yellow nutsedge in blueberries (directed spray only) and turf (sod farms and golf courses only).

* For seed production only.

** For seed production only in Western Canada.

BENTAZON 480 does not control grasses.

BENTAZON 480 is a herbicide with mainly contact action. Uptake into the plant occurs primarily through the leaves. Thorough coverage of foliage is important for consistent weed control. Failure to penetrate crop or weed leaf canopies with the spray will result in incomplete control of small weeds growing underneath.

Cool weather conditions or drought will delay herbicidal activity and if prolonged, may result in poor weed control. Use of **BENTAZON 480** in hot, humid weather may result in temporary leaf yellowing, leaf flecking, bronzing or burning. The crop usually outgrows this condition within 10 days (see Restrictions and Limitations).

PRECAUTIONS

1. **KEEP OUT OF REACH OF CHILDREN.**
2. Severely irritating to the eye. DO NOT get in eyes. May irritate skin, Avoid contact with skin.
3. Do not take internally.
4. Avoid inhalation of vapour, dust or spray mist.
5. Avoid contact with eyes, skin or clothing. Potential skin sensitizer.
6. Wash thoroughly after handling and before eating, drinking or smoking.
7. Wear coveralls over a long-sleeved shirt, long pants, chemical-resistant gloves, chemical-resistant boots and a respirator with a NIOSH-approved organic-vapour-removing cartridge with a prefilter approved for pesticides OR a NIOSH-approved canister approved for pesticides. In addition, wear protective eyewear (goggles or face shield) during mixing, loading, clean-up and repair. Gloves are not required during application within a closed cab.
8. If clothing becomes contaminated, remove and wash separately from household laundry before re-use.
9. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.
10. **DO NOT** enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 12 hours. For golf courses and sod farms, **DO NOT** allow worker entry into treated areas to conduct

tasks involving contact with treated turf (including mowing) during the restricted-entry interval (REI) of 12 hours. For all other activities, **DO NOT** enter or allow entry until sprays have dried. **DO NOT** allow golfers to enter the treated areas until sprays have dried.

11. When tank-mixes are permitted, read and observe all label directions, including rates and restrictions for each product used in the tank-mix. Follow the more stringent label precautionary measures for mixing, loading and applying stated on both product labels.
12. Clean spray equipment thoroughly after use. When tank mixing **BENTAZON 480** with **PINNACLE, REFLEX** or **2, 4-D amine** or **ester**, refer to **PINNACLE, REFLEX** or **2, 4-D amine** or **ester** label for sprayer cleanup.
13. **CAUTION:** Do not graze the treated crops or cut for hay; sufficient data are not available to support such use.
14. **CAUTION:** Except for alfalfa, do not graze the treated crops or cut for hay; sufficient data are not available to support such use.

If this pest control product is to be used on a commodity that may be exported to the U.S. and you require information on acceptable residue levels in the U.S., visit CropLife Canada's web site at www.croplife.ca

FIRST AID

If swallowed: Call a poison control centre or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person.

If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15–20 minutes. Call a poison control centre or doctor for treatment advice.

If inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control centre or doctor for further treatment advice.

If in eyes: Hold eye open and rinse slowly and gently with water for 15–20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control centre or doctor for treatment advice.

Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

TOXICOLOGICAL INFORMATION

Treat symptomatically.

ENVIRONMENTAL PRECAUTIONS

- Toxic to non-target terrestrial plants. Observe spray buffer zones specified under DIRECTIONS FOR USE.
- This product demonstrates the properties and characteristics associated with chemicals detected in groundwater. The use of this product in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

- To reduce runoff from treated areas into aquatic habitats avoid application to areas with a moderate to steep slope, compacted soil, or clay.
- Avoid application when heavy rain is forecast.
- Contamination of aquatic areas as a result of runoff may be reduced by including a vegetative filter strip between the treated area and the edge of the water body.

STORAGE

1. Store this product away from food or feed.
2. Store in original tightly closed container.
3. Do not ship or store near food, feed, seed and fertilizers.
4. Store in cool, dry, locked, well-ventilated area without floor drain.
5. Herbicides should be shipped or stored separately from other pesticides to avoid cross-contamination.
6. Freezing will not harm **BENTAZON 480**. Should product freeze, warm to room temperature and shake well before using.

DISPOSAL

For Recyclable Containers

DO NOT reuse this container for any purpose. This is a recyclable container, and is to be disposed of at a container collection site. Contact your local distributor/dealer or municipality for the location of the nearest collection site. Before taking the container to the collection site:

1. Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.
2. Make the empty, rinsed container unsuitable for further use.

If there is no container collection site in your area, dispose of the container in accordance with provincial requirements.

For Returnable Containers

DO NOT reuse this container for any purpose. For disposal, this empty container may be returned to the point of purchase (distributor/dealer).

For Refillable Containers

For disposal, this container may be returned to the point of purchase (distributor/dealer). It must be refilled by the distributor/dealer with the same product. Do not reuse this container for any other purpose.

Disposal of unused, unwanted product

For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean-up of spills.

NOTICE TO USER

This pest control product is to be used only in accordance with the directions on the label. It is an offence under the *Pest Control Products Act* to use this product in a way that is inconsistent with the directions on the label.

DIRECTIONS FOR USE

As this product is not registered for the control of pests in aquatic systems, DO NOT use to control aquatic pests.

DO NOT contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.

Timing of Application

Apply **BENTAZON 480** when broadleaf weeds are small and actively growing and before the weeds reach the maximum size recommended for treatment as listed in the **BENTAZON 480** Weed Control and Application Rate Table. **BENTAZON 480** should be applied when the main weed of concern is in the suggested growth stage for treatment.

Early treatment of weeds with **BENTAZON 480** is important to maximize crop yield potential through elimination of early weed competition and permits optimum coverage of the weeds, thereby increasing the performance of **BENTAZON 480**.

Although the timing of application should be primarily in relation to the stage of weed growth, the crop must be in a tolerant stage as shown below. The information on usual stage of crop for optimum weed control may also serve as a guide to spray timing.

Blueberries

Apply **BENTAZON 480** at the rate of 1.75 L/ha plus **ASSIST**[®] Oil Concentrate adjuvant not to exceed 2L/ha when yellow nutsedge is 15-20 centimetres tall.

Use as a directed spray only. Do not overspray.

Apply by ground in sufficient water volume of 100-400 L of water per hectare at 140 kPa spray pressure. Repeat application in 7-10 days but do not apply **BENTAZON 480** more than two times per year.

BENTAZON 480 may not be applied within 25 days of harvest.

Snow Peas

Apply **BENTAZON 480** at the rate of 1.75 L/ha plus **ASSIST** oil concentrate at 1 to 2 L/ha once a year at or after 3-leaf stage of the crop.

Apply by ground in sufficient water volume of 300 L of water per hectare.

Do not apply **BENTAZON 480** within 30 days of harvest.

Turf

For optimum control in turf, treat when nutsedge is young and actively growing. An additional application may be necessary at an interval of 10 to 14 days. Do not apply more than two applications of **BENTAZON 480** per year. For best results, do not mow grass 3 to 5 days before or after application. Do not treat newly-seeded turf until seedlings are well established as injury may result.

ADDITIVES

Use **ASSIST® Oil Concentrate** or **XA™ Oil Concentrate** at the rate of 1.0 to 2.0 L/ha (depending on climatic conditions and the spray volume used) for improved control of broadleaf weeds and yellow nutsedge on all crops. Either **CITOWETT® PLUS** or **ASSIST** or **XA Oil Concentrate** can be used on peas. Refer to Spraying Instructions table on page 6.

Additives in Soybeans Only

Add 6 L/ha ammonium sulphate or 10 L /ha 28% urea ammonium nitrate (UAN) for improved and more consistent control of velvetleaf and lamb's-quarters in soybeans. The addition of either form of nitrogen source to **BENTAZON 480** may cause slight leaf burn, but the new growth is normal and crop vigour is not reduced.

A high quality source of 28% UAN or ammonium sulphate should be used to avoid solids or contaminants that may interfere with spray application (clogging nozzle tips) or reduced product performance. Do not use brass or aluminum nozzles when spraying **BENTAZON 480** plus a nitrogen source.

Note: Do not add nitrogen source when tank mixing BENTAZON 480 with PINNACLE® and ASSIST or XA Oil Concentrate.

Additive in Dry Beans (pinto, great northern, pink and small red)

The addition of ammonium sulphate at 1.5% v/v will result in more consistent weed control. The addition of ammonium sulphate may cause some leaf burn, but new growth is normal and yield is not reduced. The potential for leaf burn is increased when relative humidity and temperature are high. Use with **ASSIST** Oil Concentrate.

Do not apply **BENTAZON 480 + ASSIST** or **XA Oil Concentrate** with the addition of either 28% **UREA AMMONIUM NITRATE** or **AMMONIUM SULPHATE** by air.

In some cases, tank mixing a pest control product with another pest control product or a fertilizer can result in biological effects that could include but are not limited to: reduced pest efficacy or increased host crop injury. The user should contact Farmer's Business Network Canada, Inc. at 1-844-200-FARM (3276) or www.fbn.com for information before mixing any pesticide or fertilizer that is not specifically recommended on this label.

TANK MIX COMBINATIONS

Soybeans

BENTAZON 480 can be tank mixed with **PINNACLE** plus **ASSIST** or **XA Oil Concentrate** (in soybeans only) for improved control of lamb's-quarters and redroot pigweed. For further details refer to the **BENTAZON 480** Weed Control and Application Rate Table. Always refer to the **PINNACLE** label for precautions and use limitations.

BENTAZON 480 + NITROGEN SOURCE

Benefit (over BENTAZON 480 alone):

Improved control of velvetleaf and lamb's-quarters.

Rate:

Add 6 L/ha ammonium sulphate or 10 L/ha 28% urea ammonium nitrate (UAN) to either the 2.25 L/ha or the 1.75 L/ha rate of **BENTAZON 480**.

Notes:

The addition of ammonium sulphate or 28% urea ammonium nitrate to **BENTAZON 480** will result in more consistent control of velvetleaf and lamb's-quarters, especially under cool conditions, heavy weed pressures or at the maximum growth stages indicated in the **BENTAZON 480** Weed Application Timing (Tables 2 and 3).

The addition of either form of nitrogen source to **BENTAZON 480** may cause slight leaf burn, but the new growth is normal and crop vigour is not reduced. A high quality source of 28% UAN or ammonium sulphate should be used to avoid solids or contaminants that may interfere with spray application (clogging nozzle tips) or reduced product performance. Do not use brass or aluminum nozzles when spraying **BENTAZON 480** plus a nitrogen source.

BENTAZON 480 + PINNACLE (SOYBEANS ONLY)

Benefit (over BENTAZON 480 alone):

Improved control of redroot pigweed and of lamb's-quarters.

BENTAZON 480 2.25 L/ha + PINNACLE 5.5 or 8.0 g/ha or BENTAZON 480 1.75 L/ha + PINNACLE 5.5 or 8.0 g/ha

Add **PINNACLE** at 5.5 or 8.0 g/ha to either the 2.25 L/ha or the 1.75 L/ha rate of **BENTAZON 480** for improved control of certain broadleaf weeds, including lamb's-quarters and redroot pigweed as well as all the weeds listed in the corresponding "**BENTAZON 480 Weed Application Timing Tables 2 and 3**" for **BENTAZON 480** alone. The following table details the leaf stages where control of redroot pigweed and lamb's-quarters can be expected.

All weeds controlled by **BENTAZON 480** plus the following:

WEEDS SPECIES CONTROLLED	MAXIMUM LEAF STAGE
Redroot pigweed	6-leaf
+Lamb's-quarters	8-leaf

+Use 8.0 g/ha rate of **PINNACLE** for advanced leaf staging.

* For control of common ragweed, use the 2.25 L/ha rate of **BENTAZON 480**.

* For additional weeds controlled by the tank mix of **BENTAZON 480** and **PINNACLE**, consult Table 4 for maximum weed leaf stages or weed heights.

Notes:

The addition of **PINNACLE** to **BENTAZON 480** provides excellent control of redroot pigweed and lamb's-quarters. However, even though redroot pigweed growth is rapidly stopped, typical symptoms of dying weeds may not be noticeable for 1 to 3 weeks after application, depending on growing conditions.

The combination of **BENTAZON 480** and **PINNACLE** does not provide residual weed control. Weeds that emerge after application will not be controlled.

Do not add nitrogen source or any other additive when tank mixing **BENTAZON 480** with **PINNACLE**.

Always refer to the **PINNACLE** label for use, precautions, sprayer cleanup, first aid, storage and disposal of **PINNACLE**.

Dry Common Beans

BENTAZON 480 can be tank mixed with **REFLEX**[®] plus **ASSIST** or **XA Oil Concentrate** for suppression of redroot pigweed and control of lamb's-quarters, common ragweed and lady's thumb. For further details, refer to the **BENTAZON 480** Weed Control and Application Rate Table. Always refer to the **REFLEX** label for precautions and use limitations.

BENTAZON 480 and **REFLEX** tank mix (ground application only) is registered in dry common beans only.

Dry Edible Beans in the Red River Valley of Manitoba

BENTAZON 480 can be tank mixed with **REFLEX** for selective post-emergence broadleaf weed control in dry edible beans in the Red River Valley of Manitoba. See **REFLEX** label for weeds controlled in addition to those listed on the **BENTAZON 480** label.

Apply **BENTAZON 480** at the rate of 1.75 L/ha plus **REFLEX** at 0.58 L/ha plus **AGRAL® 90** at 0.10% v/v at 1 to 2 trifoliolate leaf stage of the crop and 3 to 4 leaf stage of the weeds.

Apply once a year, post-emergent and by ground only. Always refer to the **REFLEX** label for precautions and use limitations.

Do not apply this tank mix within 84 days of harvest.

Spring Wheat (excluding durum)

When tank mixed with **2,4-D amine** or **ester** formulation, **BENTAZON 480** will control lady's thumb, bluebur, burdock (< 4-leaf), cocklebur, common plantain, daisy fleabane, false flax, flixweed, goat's beard, lamb's-quarters, mustard (except dog and tansy), prickly lettuce, ragweed, redroot pigweed, Russian pigweed, Russian thistle, shepherd's purse, stinging nettle, stinkweed, sweet clover, volunteer canola, wild radish and wild sunflower.

All of the above-mentioned broadleaf weeds will be controlled if applied from the weed 2-4 leaf stage. For further details, refer to the **BENTAZON 480** Weed Control and Application Rate Table. Always refer to the **2, 4-D amine** or **ester** label for precautions and use limitations.

RESISTANCE-MANAGEMENT RECOMMENDATIONS

For resistance management, **BENTAZON 480** is a Group 4 herbicide. Any weed population may contain or develop plants naturally resistant to **BENTAZON 480** and other Group 6 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same field. Other resistance mechanisms that are not linked to site of action, but specific for individual chemicals, such as enhanced metabolism, may also exist. Appropriate resistance-management strategies should be followed.

To delay herbicide resistance:

- Where possible, rotate the use of **BENTAZON 480** or other Group 6 herbicides within a growing season (sequence) or among growing seasons with different herbicide groups that control the same weeds in a field.
- Use tank mixtures with herbicides from a different group when such use is permitted. To delay resistance, the less resistance-prone partner should control the target weed(s) as effectively as the more resistance-prone partner.
- Herbicide use should be based on an integrated weed management program that includes scouting, historical information related to herbicide use and crop rotation, and considers tillage (or other mechanical control methods), cultural (for example, higher crop seeding rates; precision fertilizer application method and timing to favour the crop and not the weeds), biological (weed-competitive crops or varieties) and other management practices.
- Monitor weed populations after herbicide application for signs of resistance development (for example, only one weed species on the herbicide label not controlled). If resistance is suspected, prevent weed seed production in the affected area if possible by an alternative herbicide from a different group. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields, and planting clean seed.
- Have suspected resistant weed seeds tested by a qualified laboratory to confirm

- resistance and identify alternative herbicide options.
- Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes.
- For further information or to report suspected resistance, contact Farmer's Business Network Canada, Inc. at 1-844-200-FARM (3276).

SPECIMEN

SPRAYING INSTRUCTIONS

Ground Application

Use sprayers equipped with standard flat fan pesticide nozzles with the recommended spray volume, pressure and additives. Tilt spray nozzles 45 degrees forward to ensure better coverage.

SPRAY VOLUME	SPRAY PRESSURE	ADDITIVES
Minimum 100 L/ha. Use larger water volumes (up to 400 L/ha) for weeds at the upper limit of their recommended stage of treatment.	Minimum 275 kPa. Use higher pressure (up to 425 kPa) for weeds at the upper limit of their recommended stage for treatment.	Use 1 litre of ASSIST or XA Oil Concentrate per 100 litres of water with a maximum application rate of 2 L/ha. Under hot, humid conditions, restrict ASSIST or XA Oil Concentrate rate to 1 L/ha. Alternatively, CITOWETT PLUS may be used on peas only at a rate of 2.5 L per 1000 L of spray solution.

NOTE: Use a minimum of 200 L/ha if crop canopy or heavy weed population interferes with thorough spray coverage, or under cool temperature.

TIMING OF APPLICATION RATE TABLE

CROP	TOLERANT STAGE	USUAL STAGE OF CROP FOR OPTIMUM WEED CONTROL
Soybeans	Tolerant at any growth stage	Unifoliate to two expanded trifoliate leaves, usually 18-28 days after planting
Lima beans, dry common beans ¹ (<i>Phaseolus vulgaris</i> only – including but not limited to: white, kidney, black, pinto, great northern, pink, small red, cranberry and otebo) and most snap common beans including snap beans	Tolerant after 1 st trifoliate leaf has fully expanded	1 to 3 trifoliate leaves
Corn (grain, silage, sweet, seed)	Tolerant at any growth stage	1 to 5-leaf stage
Peas (field and processing)	Tolerant after 3 pairs of leaves (or 3 nodes) are present but prior to crop flowering	Soon after 3 pairs of leaves form

Fababeans	Tolerant after 2 to 3-leaf stage or crop is 10 cm high	Soon after 3-leaf stage
Peanuts	Tolerant at any growth stage	Unifoliolate to two expanded trifoliolate leaves
Flax (including low linolenic acid varieties)	Tolerant when crop is 5 cm or higher	Soon after crop reaches 5 cm
Spring wheat (excluding durum)	Tolerant at any growth stage	2 to 4 leaves
Turf (sod farms and golf courses) for yellow nutsedge control only	Tolerant on established turf	When turf is actively growing in late spring and early summer
Blueberries for yellow nutsedge control only	Tolerant as a directed spray only. Do not overspray.	
Snow peas		Soon after 3-leaf stage
Newly-planted fruit trees (apple, apricot, cherry, peach, and pear, and nectarine)	Tolerant as a directed spray only. Do not overspray.	

SPECIMEN

TIMING OF APPLICATION RATE TABLE (Continued)

CROP	TOLERANT STAGE	USUAL STAGE OF CROP FOR OPTIMUM WEED CONTROL
Seed Production¹ for annual broadleaf weed control		
Forage Grasses (Seedling) o Bromegrass o Creeping Red Fescue o Meadow Foxtail o Orchardgrass o Timothy o Crested Wheatgrass	Tolerant at 1- 7-leaf growth stage ²	2 – 5-leaf of seedling forage grasses
Forage Legumes (Seedling) o Alfalfa o Red Clover o Alsike Clover o Sainfoin	Tolerant after third trifoliolate stage ²	3 – 5 trifoliolate. Approximately 4-6 weeks after planting.
Forage Legumes (Established) o Alfalfa ³	Tolerant before crop canopy closes, prior to flowering ²	
Forage Legumes (Established) ² o Red clover o Sainfoin o Sweet clover	Tolerant between 7.5 and 25 cm high ²	After crop is 7.5 cm and before crop canopy closes.

¹ All crops listed for seed production are Western Canada only with the exception of alfalfa, and established sainfoin, sweet clover and red clover.

² For seed production, only one application of **BENTAZON 480** per season is recommended. Crop injury may occur under hot, humid conditions. Speed of recovery will be influenced by growing conditions and weed control. **(SEE RESTRICTIONS AND LIMITATIONS SECTION)**

³ Some leaf scorch may appear but the effect is transient and will outgrow within 3-4 weeks.

BENTAZON 480 WEED CONTROL AND APPLICATION RATE TABLE

WEED SPECIES	RECOMMENDED TREATMENT HEIGHT (CM) FOR WEEDS	TOO LATE FOR BEST RESULTS	
		HEIGHT (CM)	LEAF STAGE
BENTAZON 480 at 2.25 L/ha + ASSIST or XA Oil Concentrate at 1-2 L/ha			
Bird rape*	5.0 – 10.0	over 10	6-leaf
Buttercup	5.0 – 10.0	over 10	
Cleavers	4.0 – 8.0	over 8	1-3 whorl
Cocklebur	17.5 – 30.0	over 30	10-leaf
Common chickweed	1-3 weeks after emergence	Later than 3 weeks after emergence	
Common groundsel*	5.0 – 10.0	over 10	
Common ragweed*	2.5 – 5.0	over 5	6-leaf
Corn spurry	2.5 – 10.0	over 10	
Flower-of-an hour	5.0 – 10.0	over 10	
Giant ragweed	5.0 – 15.0	over 15	4-leaf
Hairy galinsoga	5.0 – 7.5	over 7.5	
Hairy nightshade	0.5 – 2.0	over 2	6-leaf
Jimsonweed	5.0 – 15.0	over 15	10-leaf
Lady's-thumb (smartweed)	7.5 – 20.0	over 20	10-leaf
Lamb's-quarters*	1.25 – 2.5	over 2.5	8-leaf
Low cudweed	2.5 – 5.0	over 5	6-leaf
Purslane	2.5 – 5.0	over 5	6-leaf
Redroot pigweed* (suppression only)	1.25 – 3.75	over 3.75	4-leaf
Russian thistle	2.5 – 7.5	over 7.5	
Shepherd's-purse	10.0 – 25.0	over 25	6-leaf
Stinkweed	5.0 – 15.0	over 15	6-leaf
Stork's bill	4.0 – 10.0	over 10	2-6-leaf
Velvetleaf**	10.0 – 15.0	over 15	6-leaf
Volunteer canola	2.0 – 15.0	over 15	8-leaf
Wild mustard	12.5 – 25.0	over 25	10-leaf
Wild radish	2.0 – 5.0	over 5	6-leaf
SOYBEANS ONLY:			
BENTAZON 480 at 2.25 L/ha + PINNACLE at 5.5-8.0 g/ha + ASSIST or XA Oil Concentrate at 1-2 L/ha			
Controls all the above listed weed species with the following improvements:			
+Lamb's-quarters*	1.25 – 10.0	over 10	8-leaf
Redroot pigweed*	1.25 – 10.0	over 10	6-leaf
BENTAZON 480 at 1.75 L/ha + ASSIST or XA Oil Concentrate at 1-2 L/ha			
Bird rape*	2.5 – 5.0	over 5	
Cocklebur	7.5 – 17.5	over 17.5	
Flower-of-an-hour	2.5 – 5.0	over 5	
Lady's-thumb (smartweed)	2.5 – 7.5	over 7.5	
Shepherd's-purse	Rosette – 10.0	over 10	
Stinkweed	Rosette – 5.0	over 5	
Velvetleaf**	5.0 – 10.0	over 10	
Volunteer canola	2.0 – 15.0	over 15	8-leaf
Wild Mustard	2.5 – 12.5	over 12.5	

BENTAZON 480 WEED CONTROL AND APPLICATION RATE TABLE (Continued)

WEED SPECIES	RECOMMENDED TREATMENT HEIGHT (CM) FOR WEEDS	TOO LATE FOR BEST RESULTS	
		HEIGHT (CM)	LEAF STAGE
DRY COMMON BEANS ONLY:			
BENTAZON 480 at 1.75 L/ha + REFLEX at 0.58 L/ha + ASSIST or XA Oil Concentrate at 2 L/ha			
Controls all the above listed weed species with the following improvements:			
++Common ragweed*	1.25 – 5.0	Over 5	6-leaf
++Lamb's-quarters*	1.25 – 2.5	over 2.5	8-leaf
++Redroot Pigweed* (suppression only)	1.25 – 3.75	over 3.75	4-leaf
SOYBEANS ONLY:			
BENTAZON 480 at 1.75 L/ha + PINNACLE at 5.5-8.0 g/ha + ASSIST or XA Oil Concentrate at 1- 2 L/ha			
Controls all the above listed weed species with the following improvements:			
+Lamb's-quarters*	1.25 – 10.0	Over 10	8-leaf
Redroot Pigweed*	1.25 – 10.0	over 10	6-leaf
PERENNIAL WEEDS:			
BENTAZON 480 at 1.75 L/ha + ASSIST or XA Oil Concentrate at 1-2 L/ha			
Repeat application 7 to 15 days after 1 st application (if necessary):			
Canada thistle	15 – 20	Over 20	
Field bindweed*** (suppression only)	2.5 – 6	over 6	
Yellow nutsedge	15 – 20	over 20	
SPRING WHEAT (excluding durum):			
BENTAZON 480 at 1.0 L/ha + 2,4-D amine or ester (470 g/L) at 0.75-1.0 L/ha			
WEEDS	RECOMMENDED APPLICATION TIMING		
Lady's-thumb	2 – 4 leaf		
Bluebur	2 – 4 leaf		
Burdock	< 4 leaf		
Cocklebur	2 – 4 leaf		
Common plantain	2 – 4 leaf		
Daisy fleabane	2 – 4 leaf		
False flax	2 – 4 leaf		
Flixweed	2 – 4 leaf		
Goat's beard	2 – 4 leaf		
Lamb's-quarters	2 – 4 leaf		
Mustard (except dog and tansy)	2 – 4 leaf		
Prickly lettuce	2 – 4 leaf		
Ragweed	2 – 4 leaf		
Redroot pigweed	2 – 4 leaf		
Russian pigweed	2 – 4 leaf		
Russian thistle	2 – 4 leaf		
Shepherd's purse	2 – 4 leaf		
Stinging nettle	2 – 4 leaf		
Stinkweed	2 – 4 leaf		
Sweet clover	2 – 4 leaf		

Volunteer canola	2 – 4 leaf
Wild radish	2 – 4 leaf
Wild sunflower	2 – 4 leaf

- + Use 8.0 g/ha rate of **PINNACLE** for advanced leaf staging.
- ++Second flushes of these weeds will not be controlled.
- * Triazine resistant strains of these weeds are controlled by **BENTA ZON 480**.
- ** **BENTA ZON 480** will defoliate velvetleaf 15 cm or taller, but regrowth may occur.
- *** Treat field bindweed before it is dark green and has begun to trail.

BENTA ZON 480 BANDING TECHNIQUES

1. Spray a minimum of 25 cm wide band.
2. Minimize the amount of dust striking target weeds to ensure adequate coverage and penetration.
3. Do not use cultivation equipment when spraying.
4. Adjust the **BENTA ZON 480** rate to proportion of the total area to be sprayed.

AIRCRAFT APPLICATIONS

DO NOT APPLY **BENTA ZON 480** BY AIR TO: Corn, peas, fababeans, peanuts, flax, blueberries, snow peas, turf, newly-planted fruit trees, spring wheat, forage grasses and forage legumes.

Aerial applications are allowed on soybeans, dry and snap common beans only.

Apply **BENTA ZON 480** when weeds are in the early stages of growth recommended for treatment. Crop canopy should not be so dense as to prevent spray from thoroughly covering weeds. Use spray volumes, pressure and additives as recommended below:

SPRAY VOLUME	SPRAY PRESSURE	ADDITIVES
50 to 100 L/ha	Minimum 275 kPa	0.125 to 0.25 L ASSIST or XA Oil Concentrate per hectare

Do not use **ASSIST** or **XA Oil Concentrate** in excess of 0.25 L/ha as substantial crop injury could occur.

Treat when wind is less than 8 kilometres per hour. Do not apply when weather conditions may cause spray drift from target areas to adjacent crops.

Field Sprayer Application

DO NOT apply during periods of dead calm. Avoid application of this product when winds are gusty. DO NOT apply with spray droplets smaller than the American Society of Agricultural Engineers (ASAE S572.1) medium classification. Boom height must be 60 cm or less above the

crop or ground.

Aerial Application

DO NOT apply during periods of dead calm. Avoid application of this product when winds are gusty. DO NOT apply when wind speed is greater than 8 km/h at flying height at the site of application. DO NOT apply with spray droplets smaller than the American Society of Agricultural Engineers (ASAE S572.1) medium classification. Reduce drift caused by turbulent wingtip vortices.

Nozzle distribution along the spray boom length MUST NOT exceed 65% of the wing- or rotorspan.

Apply only by fixed-wing or rotary aircraft equipment which has been functionally and operationally calibrated for the atmospheric conditions of the area and the application rates and conditions of this label.

Label rates, conditions and precautions are product specific. Read and understand the entire label before opening this product. Apply only at the rate recommended for aerial application on this label. Where no rate for aerial application appears for the specific use, this product cannot be applied by any type of aerial equipment.

Ensure uniform application. To avoid streaked, uneven or overlapped application, use appropriate marking devices.

Use Precautions

Apply only when meteorological conditions at the treatment site allow for complete and even crop coverage. Apply only under conditions of good practice specific to aerial application as outlined in the National Aerial Pesticide Application Manual, developed by the Federal/Provincial/Territorial Committee on Pest Management and Pesticides.

Operator Precautions

Do not allow the pilot to mix chemicals to be loaded onto the aircraft. Loading of premixed chemicals with a closed system is permitted.

It is desirable that the pilot have communication capabilities at each treatment site at the time of application.

The field crew and the mixer/loaders must wear chemical resistant gloves, coveralls and goggles or face shield during mixing/loading, cleanup and repair. Follow the more stringent label precautions in cases where the operator precautions exceed the generic label recommendations on the existing ground boom label.

All personnel on the job site must wash hands and face thoroughly before eating and drinking. Protective clothing, aircraft cockpit and vehicle cabs must be decontaminated regularly.

Product Specific Precautions

Read and understand the entire label before opening this product. If you have questions, call the manufacturer at 1-844-200-FARM (3276) or obtain technical advice from the distributor or your provincial agricultural representative.

Volume: Apply the recommended rate in a minimum spray volume of 50-100 litres per hectare.

SPRAY BUFFER ZONES

A spray buffer zone is NOT required for uses with hand-held application equipment permitted on this label.

The spray buffer zones specified in the table below are required between the point of direct application and the closest downwind edge of sensitive terrestrial habitats (such as grasslands, forested areas, shelter belts, woodlots, hedgerows, riparian areas and shrublands).

Method of application	Crop	Spray Buffer zones (metres) required for the protection of:	
		Terrestrial Habitat	
Field sprayer	Snow peas, peas (field and processing), seedling forage grasses/legumes and established forage legumes (for seed production)	1	
	Red and alsike clover	1	
	Turf, soybeans, corn, peanuts, beans (snap, lima, faba), dry beans, flax, newly planted fruit trees, blueberries, spring wheat, alfalfa	2	
Aerial	Dry common beans	Fixed and rotary wing	20
	Soybeans, snap beans	Fixed wing	35
		Rotary wing	30

When tank mixes are permitted, consult the labels of the tank-mix partners and observe the largest (most restrictive) spray buffer zone of the products involved in the tank mixture and apply using the coarsest spray (ASAE) category indicated on the labels for those tank mix partners.

The spray buffer zones for this product can be modified based on weather conditions and spray equipment configuration by accessing the Spray Buffer Zone Calculator on the Pesticides portion of the Canada.ca website.

MIXING

1. Clean spray tank and fill half full with clean water. Start agitation or by-pass system.
2. If required add correct amount of nitrogen source. **Note: Do not add nitrogen source when tank mixing BENTAZON 480 with PINNACLE, REFLEX or 2, 4-D amine or ester and ASSIST or XA Oil Concentrate.**
3. If required, add the correct amount of **PINNACLE or PURSUIT** (for use on soybeans only), **REFLEX** (for use on dry common beans only) or **2, 4-D amine or ester** (for use on spring wheat

[excluding durum]). Continuous agitation is required to keep **PINNACLE, PURSUIT, REFLEX** or **2, 4-D amine** or **ester** in suspension.

NOTE: On repeat tank loads, prepare a **PINNACLE**/water slurry in a separate container with clean water before adding to spray tank.

4. Add correct amount of **BENTAZON 480** and agitate 2 to 3 minutes.
5. Add correct amount of **ASSIST** or **XA Oil Concentrate** or **CITOWETT PLUS** and agitate 2 to 3 minutes. When tank mixing **BENTAZON 480** with **PINNACLE, REFLEX** or **2, 4- D amine** or **ester**, only **ASSIST** or **XA Oil Concentrate** may be used.
6. Add remainder of water, agitate and spray.
7. If an oil film starts to build up in the tank, drain and clean tank with a strong detergent solution.
8. Thoroughly clean spray tank immediately after use. Refer to specific tank mix partner label for cleanup instructions.

RESTRICTIONS AND LIMITATIONS

Do not treat any crops not listed on this label.

DO NOT use **BENTAZON 480** with additives, pesticides or fertilizers not specifically recommended on this label.

Do not add nitrogen source when tank mixing **BENTAZON 480** with **PINNACLE, REFLEX** or **2,4-D amine** or **ester** and **ASSIST** or **XA Oil Concentrate**.

Do not allow livestock to graze on **BENTAZON 480** treated turf.

Do not apply **BENTAZON 480** to any crops that have been subjected to stress from conditions such as hail damage, flooding, hot, humid weather, drought, widely fluctuating temperature conditions, prolonged cold weather or injury from prior herbicide applications, as crop injury may result.

Do not apply **BENTAZON 480** to newly-seeded turf until seedlings are well established. Rainfall within 6 to 8 hours of application may reduce effectiveness of spray.

When **BENTAZON 480** is applied beyond recommended weed growth stages, limited to unsatisfactory weed control will result.

Cool weather conditions or drought will delay herbicide activity and if prolonged, may result in poor weed control.

BENTAZON 480 and **PINNACLE** tank mix is registered for use in soybeans only (ground application only).

BENTAZON 480 and **REFLEX** tank mix (ground application only) is registered in dry common beans only.

BENTAZON 480 and **2, 4-D amine** or **ester** tank mix is registered for use in spring wheat (excluding durum) only. **Do not apply this tank mix by air.** A fifty (50) day pre-harvest interval is required after application, before harvesting the treated crop.

Do not apply **BENTAZON 480** within 36 days of harvest of red clover grown for seed production

DO NOT graze treated alfalfa or cut for hay within 20 days of application.

Apply only when the potential for drift beyond the area to be treated is minimal. Take into consideration wind speed, wind direction, temperature inversions, application equipment, and sprayer settings.

WARNING

Do not apply **BENTAZON 480** when weather conditions may cause spray drift from treated areas to adjacent crops.

Lentils, adzuki and mung beans, cucumbers, sugar beets and sunflowers can be injured by **BENTAZON 480**.

SPECIMEN

BENTAZON 480 container label

BENTAZON 480

GROUP	6	HERBICIDE
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For selective post-emergence broadleaf weed control in soybeans, dry and snap common beans, peas, lima beans, fababeans, corn (grain, silage, sweet and seed), flax (including low linolenic acid varieties), peanuts, blueberries, turf, spring wheat (excluding durum), snow peas, seedling and established forage legumes and seedling forage grasses (seed production only for forage legumes and grasses), newly-planted fruit trees - apple, apricot, cherry, peach, and pear and nectarine (directed use only).

SOLUTION COMMERCIAL (AGRICULTURAL)

ACTIVE INGREDIENT: Bentazon (present as the sodium salt) 480 g/L

REGISTRATION NO. 34988 PEST CONTROL PRODUCTS ACT

READ THE LABEL AND ATTACHED BOOKLET BEFORE USING
KEEP OUT OF REACH OF CHILDREN

POISON



DANGER – EYE AND SKIN IRRITANT

POTENTIAL SKIN SENSITIZER

NET CONTENTS: 1 L - Bulk

For Hazardous Materials [or Dangerous Goods] Incident Spill, Leak, Fire, Exposure, or Accident Call CANUTEC 1-613-996-6666

Farmer's Business Network Canada, Inc.
PO Box 5607
High River, Alberta
Canada T1V 1M7
1-844-200-FARM (3276)

PRECAUTIONS

1. **KEEP OUT OF REACH OF CHILDREN.**
2. Severely irritating to the eye. DO NOT get in eyes. May irritate skin, Avoid contact with skin.
3. Do not take internally.
4. Avoid inhalation of vapour, dust or spray mist.
5. Avoid contact with eyes, skin or clothing. Potential skin sensitizer.
6. Wash thoroughly after handling and before eating, drinking or smoking.
7. Wear coveralls over a long-sleeved shirt, long pants, chemical-resistant gloves, chemical-resistant boots and a respirator with a NIOSH-approved organic-vapour-removing cartridge with a prefilter approved for pesticides OR a NIOSH-approved canister approved for pesticides. In addition, wear protective eyewear (goggles or face shield) during mixing, loading, clean-up and repair. Gloves are not required during application within a closed cab.
8. If clothing becomes contaminated, remove and wash separately from household laundry before re-use.
9. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.
10. **DO NOT** enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 12 hours. For golf courses and sod farms, **DO NOT** allow worker entry into treated areas to conduct tasks involving contact with treated turf (including mowing) during the restricted-entry interval (REI) of 12 hours. For all other activities, **DO NOT** enter or allow entry until sprays have dried. **DO NOT** allow golfers to enter the treated areas until sprays have dried.
11. When tank-mixes are permitted, read and observe all label directions, including rates and restrictions for each product used in the tank-mix. Follow the more stringent label precautionary measures for mixing, loading and applying stated on both product labels.
12. Clean spray equipment thoroughly after use. When tank mixing **BENTAZON 480** with **PINNACLE, REFLEX** or **2, 4-D amine** or **ester**, refer to **PINNACLE, REFLEX** or **2, 4-D amine** or **ester** label for sprayer cleanup.
13. **CAUTION:** Do not graze the treated crops or cut for hay; sufficient data are not available to support such use.
14. **CAUTION:** Except for alfalfa, do not graze the treated crops or cut for hay; sufficient data are not available to support such use.

If this pest control product is to be used on a commodity that may be exported to the U.S. and you require information on acceptable residue levels in the U.S., visit CropLife Canada's web site at www.croplife.ca.

FIRST AID

If swallowed: Call a poison control centre or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person.

If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15–20 minutes. Call a poison control centre or doctor for treatment advice.

If inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control centre or doctor for further treatment advice.

If in eyes: Hold eye open and rinse slowly and gently with water for 15–20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control centre or doctor for treatment advice.

Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

TOXICOLOGICAL INFORMATION

Treat symptomatically.

ENVIRONMENTAL PRECAUTIONS

Toxic to non-target terrestrial plants. Observe spray buffer zones specified under DIRECTIONS FOR USE.

This product demonstrates the properties and characteristics associated with chemicals detected in groundwater. The use of this product in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

To reduce runoff from treated areas into aquatic habitats avoid application to areas with a moderate to steep slope, compacted soil, or clay.

Avoid application when heavy rain is forecast.

Contamination of aquatic areas as a result of runoff may be reduced by including a vegetative filter strip between the treated area and the edge of the water body.

STORAGE

1. Store this product away from food or feed.
2. Store in original tightly closed container.
3. Do not ship or store near food, feed, seed and fertilizers.
4. Store in cool, dry, locked, well-ventilated area without floor drain.
5. Herbicides should be shipped or stored separately from other pesticides to avoid cross-contamination.
6. Freezing will not harm **BENTAZON 480**. Should product freeze, warm to room temperature and shake well before using.

DISPOSAL

For Recyclable Containers

DO NOT reuse this container for any purpose. This is a recyclable container, and is to be

disposed of at a container collection site. Contact your local distributor/dealer or municipality for the location of the nearest collection site. Before taking the container to the collection site:

1. Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.
2. Make the empty, rinsed container unsuitable for further use.

If there is no container collection site in your area, dispose of the container in accordance with provincial requirements.

For Returnable Containers

DO NOT reuse this container for any purpose. For disposal, this empty container may be returned to the point of purchase (distributor/dealer).

For Refillable Containers

For disposal, this container may be returned to the point of purchase (distributor/dealer). It must be refilled by the distributor/dealer with the same product. Do not reuse this container for any other purpose.

Disposal of unused, unwanted product

For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean-up of spills.

NOTICE TO USER

This pest control product is to be used only in accordance with the directions on the label. It is an offence under the *Pest Control Products Act* to use this product in a way that is inconsistent with the directions on the label.

All other products mentioned are trademarks of their respective holders.