

# **VIKING™** Bentazon Herbicide

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).

**REGISTRATION NO. 34758 PEST CONTROL PRODUCTS ACT** 

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

NET CONTENTS: 4 L - 1020 L

READ THE LABEL AND ATTACHED BOOKLET BEFORE USING

**KEEP OUT OF REACH OF CHILDREN** 

**CAUTION** 



POISON

**POTENTIAL SKIN SENSITIZER** 

In case of emergency call the 24 hour Emergency Response Number 1-800-424-9300 or 1-703-527-3887

**Viking Crop Production Partners Inc.** 

Box 18033 RPO Shawnessy Calgary, AB. T2Y 0K3 1-587-743-1029

#### **GENERAL INFORMATION**

**VIKING Bentazon Herbicide** 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\*\*, bromegrass\*\*, 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.)

**VIKING Bentazon Herbicide** 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.

VIKING Bentazon Herbicide does not control grasses.

**VIKING Bentazon Herbicide** is a herbicide with mainly contact action. Uptake into the plant occurs primarily through the leaves. Thorough cover age 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 **VIKING Bentazon Herbicide** 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).

### **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 **VIKING Bentazon Herbicide** when broadleaf weeds are small and actively growing and before the weeds reach the maximum size recommended for treatment as listed in the **VIKING Bentazon Herbicide** Weed Control and Application R at e Table. **VIKING Bentazon Herbicide** should be applied when the main weed of concern is in the suggested growth stage for treatment.

Early treatment of weeds with **VIKING Bentazon Herbicide** 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 **VIKING Bentazon Herbicide**.

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 **VIKING Bentazon Herbicide** at the rate of 1.75 L/ha plus **ASSIST® Oil Concentrate** adjuvant not to exceed 2 L/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 **VIKING Bentazon Herbicide** more than two times per year.

VIKING Bentazon Herbicide may not be applied within 25 days of harvest.

#### **Snow Peas**

Apply **VIKING Bentazon Herbicide** 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 **VIKING Bentazon Herbicide** 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 **VIKING Bentazon Herbicide** 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<sup>™</sup> 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 **VIKING Bentazon Herbicide** 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 **VIKING Bentazon Herbicide** plus a nitrogen source.

Note: Do not add nitrogen source when tank mixing VIKING Bentazon Herbicide with PINNACLE TOSS-N-GO HERBICIDE® 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 VIKING Bentazon Herbicide + ASSIST or XA Oil Concentrate with the addition of either 28% UREA AMMONIUM NITRATE or AMMONIUM SULPHATE by air.

This product may be tank mixed with a fertilizer, a supplement, or with registered pest control products, whose labels also allow tank mixing, provided the entirety of both labels, including Directions For Use, Precautions, Restrictions, Environmental Precautions, and Spray Buffer Zones are followed for each product. In cases where these requirements differ between the tank mix partner labels, the most restrictive label must be followed. Do not tank mix products containing the same active ingredient unless specifically listed on this label.

In some cases, tank mixing pest control products can result in reduced pesticide efficacy or increased host crop injury. The user should contact Viking Crop Production Partners Inc. at 1-587-743-1029 for information before applying any tank mix that is not specifically recommended on this label.

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.

### TANK MIX COMBINATIONS

### Soybeans

**VIKING Bentazon Herbicide** can be tank mixed with **PINNACLE TOSS-N-GO HERBICIDE** 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 **VIKING Bentazon Herbicide** Weed Control and Application Rate Table.

### **Dry Common Beans**

**VIKING Bentazon Herbicide** 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 **VIKING Bentazon Herbicide** Weed Control and Application Rate Table.

**VIKING Bentazon Herbicide** and **REFLEX** tank mix (ground application only) is registered in dry common beans only.

### Dry Edible Beans in the Red River Valley of Manitoba

**VIKING Bentazon Herbicide** 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 **VIKING Bentazon Herbicide** label.

Apply **VIKING Bentazon Herbicide** 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 trifoliate leaf stage of the crop and 3 to 4 leaf stage of the weeds.

Apply once a year, post-emergent and by ground only.

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, **VIKING Bentazon Herbicide** 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 **VIKING Bentazon Herbicide** Weed Control and Application Rate Table.

#### RESISTANCE-MANAGEMENT RECOMMENDATIONS

For resistance management, **VIKING Bentazon Herbicide** is a Group 4 herbicide. Any weed population may contain or develop plants naturally resistant to **VIKING Bentazon Herbicide** 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 VIKING Bentazon Herbicide 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
  chemical control practices.
- Monitor weed populations after herbicide application for signs of resistance (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 resistancemanagement and/or integrated weed-management recommendations for specific crops and weed biotypes.
- For further information or to report suspected resistance, contact Viking Crop Production Partners Inc. at 1-587-743-1029.

#### **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.

### 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 18-20 days after planting
Lima beans, dry common beans¹ ( <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		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	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	Unifoliate to two expanded trifoliate 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.	

<sup>&</sup>lt;sup>1</sup> Dry common bean varieties may vary in their tolerance to herbicides, including **VIKING Bentazon Herbicide**. Since not all dry common bean varieties have been tested for tolerance to **VIKING Bentazon Herbicide**, first use of **VIKING Bentazon Herbicide** should be limited to a small area of each variety to confirm tolerance prior to adoption as a general field practice. Additionally, consult your seed supplier for information on the tolerance of specific varieties of dry common beans to **VIKING Bentazon Herbicide**.

# TIMING OF APPLICATION RATE TABLE (Continued)

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

<sup>&</sup>lt;sup>1</sup> All crops listed for seed production are Western Canada only with the exception of alfalfa, and established sainfoin, sweet clover and red clover.

<sup>&</sup>lt;sup>2</sup> For seed production, only one application of **VIKING Bentazon Herbicide** 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**)

<sup>&</sup>lt;sup>3</sup> Some leaf scorch may appear but the effect is transient and will outgrow within 3-4 weeks.

# VIKING BENTAZON WEED CONTROL AND APPLICATION RATE TABLE

WEED SPECIES	RECOMMENDED TREATMENT	TOO LATE FOR BES	T RESULTS	
	HEIGHT (CM) FOR WEEDS	HEIGHT (CM)	LEAF STAGE	
VIKING Bentazon Herbicide at 2.25 L/	/IKING Bentazon Herbicide 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:			
VIKING Bentazon Herbicide at 2.25 L/ha + PINNACLE TOSS-N-GO HERBICIDE at 5.5-8.0 g/ha + ASSIST or XA			
Oil Concentrate at 1-2 L/ha			
Controls all the a	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
VIKING Bentazon Herbicide at 1.75	L/ha + ASSIST or XA Oil Conce	ntrate 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	

# VIKING BENTAZON WEED CONTROL AND APPLICATION RATE TABLE (Continued)

WEED SPECIES	RECOMMENDED TREATMENT	TOO LATE FOR BES	T RESULTS	
	HEIGHT (CM) FOR WEEDS	HEIGHT (CM)	LEAF STAGE	
DRY COMMON BEANS ONLY:				
VIKING Bentazon Herbicide at 1.75 L	./ha + REFLEX at 0.58 L/ha + ASS	SIST or XA Oil Concentra	te at 2 L/ha	
Controls all the abo	ve listed weed species with the fo	llowing 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	1.25 - 3.75	over 3.75	4-leaf	
only)				
SOYBEANS ONLY:				
VIKING Bentazon Herbicide at 1.75 L	./ha + PINNACLE TOSS-N-GO HE	ERBICIDE at 5.5-8.0 g/ha	+ ASSIST or	
XA Oil Concentrate at 1- 2 L/ha				
Controls all the abo	ve listed weed species with the fo	llowing improvements:		
+Lamb's-quarters*	1.25 - 10.0	Over 10	8-leaf	
Redroot Pigweed*	1.25 - 10.0	over 10	6-leaf	
PERENNIAL WEEDS:				
VIKING Bentazon Herbicide at 1.75 L/ha + ASSIST or XA Oil Concentrate at 1-2 L/ha				
Repeat application 7 to 15 days after 1st 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):			
VIKING Bentazon Herbicide 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 TOSS-N-GO HERBICIDE** for advanced leaf staging.
- ++Second flushes of these weeds will not be controlled.
- \* Triazine resistant strains of these weeds are controlled by VIKING Bentazon Herbicide.
- \*\* VIKING Bentazon Herbicide will defoliate velvetleaf 15 cm or taller, but regrowth may occur.
- \*\*\* Treat field bindweed before it is dark green and has begun to trail.

#### VIKING BENTAZON HERBICIDE 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 **VIKING Bentazon Herbicide** rate to proportion of the total area to be sprayed.

### **AIRCRAFT APPLICATIONS**

DO NOT APPLY **VIKING BENTAZON** 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 **VIKING Bentazon Herbicide** 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.

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 1-587-743-1029 or obtain technical advice from the distributor or your provincial agricultural representative.

### SPRAY DRIFT MANAGEMENT FOR GROUND AND AERIAL APPLICATION

#### **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.

### **Spray Buffer Zones**

Use of the following spray methods or equipment DO NOT require a spray buffer zone: hand-held or backpack sprayer, interrow hooded sprayer, spot treatment, soil drench and soil incorporation.

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			Spray Buffer Zone (metres) required for the protection of:
			Terrestrial Habitat
Field sprayer 1			1
		and processing), seedling and established forage ction)	
	Turf, soybeans, corn, peanuts, beans (snap, lima, faba), dry beans, flax, newly planted fruit trees, blueberries, spring wheat		2
Aerial	Dry common beans	Fixed and rotary wing	20
	Soybeans, snap beans	Fixed wing	35
		Rotary wing	30

<sup>&</sup>lt;sup>1</sup> For field sprayer application, spray buffer zones can be reduced with the use of drift reducing spray shields. When using a spray boom fitted with a full shield (shroud, curtain) that extends to the crop canopy, the labelled spray buffer zone can be reduced by 70%. When using a spray boom where individual nozzles are fitted with coneshaped shields that are no more than 30 cm above the crop canopy, the labelled spray buffer zone can be reduced by 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.

#### **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 VIKING Bentazon Herbicide with PINNACLE TOSS-N-GO HERBICIDE, REFLEX or 2, 4-D amine or ester and ASSIST or XA Oil Concentrate.
- 3. If required, add the correct amount of **PINNACLE TOSS-N-GO HERBICIDE** (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 TOSS-N-GO HERBICIDE, REFLEX or 2, 4-D amine or ester in suspension.
- 4. **NOTE:** On repeat tank loads, prepare a **PINNACLE TOSS-N-GO HERBICIDE**/water slurry in a separate container with clean water before adding to spray tank.
- 5. Add correct amount of VIKING Bentazon Herbicide and agitate 2 to 3 minutes.
- Add correct amount of ASSIST or XA Oil Concentrate or CITOWETT PLUS and agitate 2 to 3 minutes. When tank mixing VIKING Bentazon Herbicide with PINNACLE TOSS-N-GO HERBICIDE, REFLEX or 2, 4- D amine or ester, only ASSIST or XA Oil Concentrate may be used.
- 7. Add remainder of water, agitate and spray.
- 8. If an oil film starts to build up in the tank, drain and clean tank with a strong detergent solution.

#### RESTRICTIONS AND LIMITATIONS

Do not treat any crops not listed on this label.

Do not add nitrogen source when tank mixing VIKING Bentazon Herbicide with PINNACLE TOSS-N-GO HERBICIDE, REFLEX or 2,4-D amine or ester and ASSIST or XA Oil Concentrate.

Do not allow livestock to graze on VIKING Bentazon Herbicide treated turf.

Do not apply **VIKING Bentazon Herbicide** 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 in jury from prior herbicide applications, as crop injury may result.

Do not apply VIKING Bentazon Herbicide to newly-seeded turf until seedlings are well established.

Rainfall within 6 to 8 hours of application may reduce effectiveness of spray.

When **VIKING Bentazon Herbicide** 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.

**VIKING Bentazon Herbicide** and **PINNACLE TOSS-N-GO HERBICIDE** tank mix is registered for use in soybeans only (ground application only).

**VIKING Bentazon Herbicide** and **REFLEX** tank mix (ground application only) is registered in dry common beans only.

**VIKING Bentazon Herbicide** 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 VIKING Bentazon Herbicide within 36 days of harvest of red clover grown for seed production

#### **WARNING**

Do not apply **VIKING Bentazon Herbicide** 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 **VIKING Bentazon Herbicide.** 

### **ENVIRONMENTAL PRECAUTIONS**

- TOXIC to non-target terrestrial plants. Observe spray buffer zones specified under SPRAY DRIFT MANAGEMENT FOR GROUND AND AERIAL APPLICATION.
- 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

### **PRECAUTIONS**

### 1. KEEP OUT OF REACH OF CHILDREN

- 2. Do not take internally.
- 3. Avoid inhalation of vapour, dust or spray mist.
- 4. Avoid contact with eyes, skin or clothing. Potential skin sensitizer.
- 5. Wash thoroughly after handling and before eating, drinking or smoking.
- 6. Wear protective equipment and clothing, including: goggles or face shield, approved respirator, gloves (rubber, PVC, neoprene or nitrile), hat, long-sleeved shirt, trousers and rubber boots.
- 7. If clothing becomes contaminated, remove and wash separately from household laundry before re-use.
- 8. 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.
- 9. DO NOT enter or allow worker entry into treated areas for 12 hours following application.
- 10. Clean spray equipment thoroughly after use. When tank mixing VIKING Bentazon Herbicide with PINNACLE TOSS-N-GO HERBICIDE, REFLEX or 2, 4-D amine or ester, refer to PINNACLE TOSS-N-GO HERBICIDE, REFLEX or 2, 4-D amine or ester label for sprayer cleanup.
- 11. CAUTION: Do not graze the treated crops or cut for hay; sufficient data are not available to support such use.

### **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.

### **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 **VIKING Bentazon Herbicide**. 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 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.

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 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.



# **VIKING™** Bentazon Herbicide

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).

#### **REGISTRATION NO. 34758 PEST CONTROL PRODUCTS ACT**

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

**NET CONTENTS:** 4 L – 1020 L

### READ THE LABEL AND ATTACHED BOOKLET BEFORE USING

**KEEP OUT OF REACH OF CHILDREN** 

**CAUTION** 



**POISON** 

### **POTENTIAL SKIN SENSITIZER**

In case of emergency call the 24 hour Emergency Response Number 1-800-424-9300 or 1-703-527-3887

**Viking Crop Production Partners Inc.** 

Box 18033 RPO Shawnessy Calgary, AB. T2Y 0K3 1-587-743-1029

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All other products mentioned are trademarks of their respective holders.