

2018-0159

2018-02-16

MPOWER BOA booklet (red clover for seed production),

GROUP	6	HERBICIDE
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## MPOWER BOA

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).

### COMMERCIAL (AGRICULTURAL)

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

**REGISTRATION NO. 33011**

**PEST CONTROL PRODUCTS ACT**



CAUTION

POISON

**POTENTIAL SKIN SENSITIZER**

**IN CASE OF EMERGENCY ENDANGERING LIFE OR PROPERTY INVOLVING THIS  
PRODUCT, CALL DAY OR NIGHT  
1-613-996-6666**

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

**NET CONTENTS:** 4 L to 200 L

**NewAgco Inc.**  
320 – 22<sup>nd</sup> Street East  
Saskatoon, Saskatchewan  
Canada S7K 0H1  
1-(877)-362-3276

**Distributed by:**  
**AgraCity Crop & Nutrition Ltd.**  
320 – 22<sup>nd</sup> Street East  
Saskatoon, Saskatchewan  
Canada S7K 0H1  
1-(877)-362-3276

## GENERAL INFORMATION

**MPOWER BOA** 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.)

**MPOWER BOA** 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.

**MPOWER BOA** does not control grasses.

**MPOWER BOA** 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 **MPOWER BOA** 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

### Timing of Application

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

Early treatment of weeds with **MPOWER BOA** 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 **MPOWER BOA**.

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 **MPOWER BOA** at the rate of 1.75 L/ha plus **ASSIST® Oil Concentrate** 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 **MPOWER BOA** more than two times per year.

**MPOWER BOA** may not be applied within 25 days of harvest.

### **Snow Peas**

Apply **MPOWER BOA** 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 **MPOWER BOA** 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 **MPOWER BOA** 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 **MPOWER BOA** 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 **MPOWER BOA** plus a nitrogen source.

**Note: Do not add nitrogen source when tank mixing MPOWER BOA 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 **MPOWER BOA + ASSIST** or **XA Oil Concentrate** with the addition of either 28% **UREA AMMONIUM NITRATE** or **AMMONIUM SULPHATE** by air.

Do not use any additives not specifically registered under the *Pest Control Products Act* for use with **MPOWER BOA**.

## **TANK MIX COMBINATIONS**

### **Soybeans**

**MPOWER BOA** can be tank mixed with **PINNACLE**<sup>®</sup> plus **ASSIST** or **XA Oil Concentrate** (in soybeans only) for improved control of lamb's-quarters and red root pigweed. For further details refer to the **MPOWER BOA** Weed Control and Application Rate Table. Always refer to the **PINNACLE** label for precautions and use limitations.

### **Dry Common Beans**

**MPOWER BOA** can be tank mixed with **REFLEX**<sup>®</sup> 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 **MPOWER BOA** Weed Control and Application Rate Table. Always refer to the **REFLEX** label for precautions and use limitations.

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

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

**MPOWER BOA** 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 **MPOWER BOA** label.

Apply **MPOWER BOA** at the rate of 1.75 L/ha plus **REFLEX** at 0.58 L/ha plus **AGRAL**<sup>®</sup> **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, **MPOWER BOA** 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 **MPOWER BOA** 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, **MPOWER BOA** is a Group 6 herbicide. Any weed population may contain or develop plants naturally resistant to **MPOWER BOA** 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 **MPOWER BOA** or other Group 6 herbicides 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.
- Herbicide use should be based on an IPM program that includes scouting, historical information related to herbicide use and crop rotation, and considers tillage (or other mechanical), cultural, biological and other chemical control practices.
- Monitor treated weed populations for resistance development.
- Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment and planting clean seed.
- 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 NewAgco Inc. at 1-877-362-3276.

## 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 <b>ASSIST</b> or <b>XA Oil Concentrate</b> rate to 1 L/ha. Alternatively, <b>CITOWETT PLUS</b> may be used on peas only at a rate of 2.5 L per 1000 L of spray solution.

**TIMING OF APPLICATION RATE TABLE**

<b>CROP</b>	<b>TOLERANT STAGE</b>	<b>USUAL STAGE OF CROP FOR OPTIMUM WEED CONTROL</b>
Soybeans	Tolerant at any growth stage	Unifoliate to two expanded trifoliate leaves, usually 18-20 days after planting
Lima beans, dry common beans <sup>1</sup> ( <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 1st 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	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>1</sup> Dry common bean varieties may vary in their tolerance to herbicides, including **MPOWER BOA**. Since not all dry common bean varieties have been tested for tolerance to **MPOWER BOA**, first use of **MPOWER BOA** 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 **MPOWER BOA**.





## MPOWER BOA WEED CONTROL AND APPLICATION RATE TABLE

WEED SPECIES	RECOMMENDED TREATMENT HEIGHT (CM) FOR WEEDS	TOO LATE FOR BEST RESULTS	
		HEIGHT (CM)	LEAF STAGE
<b>MPOWER BOA at 2.25 L/ha + ASSIST or XA Oil Concentrate at 1-2 L/ha</b>			
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
<b>SOYBEANS ONLY:</b>			
<b>MPOWER BOA at 2.25 L/ha + PINNACLE at 5.5-8.0 g/ha + ASSIST or XA Oil Concentrate at 1-2 L/ha</b>			
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
<b>MPOWER BOA at 1.75 L/ha + ASSIST or XA Oil Concentrate at 1-2 L/ha</b>			
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	

+ 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 **MPOWER BOA**.

\*\* **MPOWER BOA** will defoliate velvetleaf 15 cm or taller, but regrowth may occur.

\*\*\* Treat field bindweed before it is dark green and has begun to trail.

**MPOWER BOA WEED CONTROL AND APPLICATION RATE TABLE (Continued)**

WEED SPECIES	RECOMMENDED TREATMENT HEIGHT (CM) FOR WEEDS	TOO LATE FOR BEST RESULTS	
		HEIGHT (CM)	LEAF STAGE
<b>DRY COMMON BEANS ONLY:</b> <b>MPOWER BOA at 1.75 L/ha + REFLEX at 0.58 L/ha + ASSIST or XA Oil Concentrate at 2 L/ha</b>			
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
<b>SOYBEANS ONLY:</b> <b>MPOWER BOA at 1.75 L/ha + PINNACLE at 5.5-8.0 g/ha + ASSIST or XA Oil Concentrate at 1- 2 L/ha</b>			
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
<b>PERENNIAL WEEDS:</b> <b>MPOWER BOA at 1.75 L/ha + ASSIST or XA Oil Concentrate at 1-2 L/ha</b>			
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	
<b>SPRING WHEAT (excluding durum):</b> <b>MPOWER BOA at 1.0 L/ha + 2,4-D amine or ester (470 g/L) at 0.75-1.0 L/ha</b>			
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 **MPOWER BOA**.

\*\* **MPOWER BOA** will defoliate velvetleaf 15 cm or taller, but regrowth may occur.

\*\*\* Treat field bindweed before it is dark green and has begun to trail.

## **MPOWER BOA 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 **MPOWER BOA** rate to proportion of the total area to be sprayed.

## **AIRCRAFT APPLICATIONS**

DO NOT APPLY **MPOWER BOA** 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 **MPOWER BOA** 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:

<b>SPRAY VOLUME</b>	<b>SPRAY PRESSURE</b>	<b>ADDITIVES</b>
50 to 100 L/ha	Minimum 275 kPa	0.125 to 0.25 L <b>ASSIST</b> or <b>XA Oil Concentrate</b> 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.

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.

Do not apply to any body of water. Avoid drifting of spray onto any body of water or other non-target areas. Specific buffer zones should be observed.

Coarse sprays are less likely to drift, therefore, avoid combinations of pressure and nozzle type that will result in finer particles (mist). Do not apply during periods of dead calm or when wind velocity and direction pose a risk of spray drift. Do not spray when the wind is blowing towards a nearby sensitive crop, garden, terrestrial habitat (such as shelter-belt) or aquatic habitat.

### **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.

Read and understand the entire label before opening this product. If you have questions, call the manufacturer at 1-877-362-3276 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) 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) medium classification. To reduce drift caused by turbulent wingtip vortices, the nozzle distribution along the spray boom length MUST NOT exceed 65% of the wing or rotorspan.

## Buffer Zones

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

The 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		Buffer zone (metres) required for the protection of:
			Terrestrial Habitat
Field sprayer <sup>1</sup>	Snow peas, peas (field and processing), seedling forage grasses/legumes and established forage legumes (for seed production)		1
	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>1</sup> For field sprayer application, 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 buffer zone can be reduced by 70%. When using a spray boom where individual nozzles are fitted with cone-shaped shields that are no more than 30 cm above the crop canopy, the labelled buffer zone can be reduced by 30%.

When a tank mixture is used, consult the labels of the tank-mix partners and observe the largest (most restrictive) buffer zone of the products involved in the tank mixture.

## 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 MPOWER BOA 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** (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, 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 **MPOWER BOA** 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 **MPOWER BOA** 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.

## **RESTRICTIONS AND LIMITATIONS**

Do not treat any crops not listed on this label.

Do not use **MPOWER BOA** with additives, pesticides or fertilizers not specifically recommended on this label. **NOTE: Do not add nitrogen source when tank mixing MPOWER BOA with PINNACLE, REFLEX or 2,4-D amine or ester and ASSIST or XA Oil Concentrate.**

Do not allow livestock to graze on **MPOWER BOA HERBICIDE** treated turf.

Do not apply **MPOWER BOA** 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 **MPOWER BOA** to newly-seeded turf until seedlings are well established.

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

When **MPOWER BOA** 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.

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

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

**MPOWER BOA** 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 **MPOWER BOA** within 36 days of harvest of red clover grown for seed production

## **WARNING**

Do not apply **MPOWER BOA** 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 **MPOWER BOA**.

## **ENVIRONMENTAL HAZARDS**

The use of this chemical may result in contamination of groundwater, particularly in areas where soils are permeable (e.g. sandy soil) or the water table is shallow.

DO NOT apply this product directly to freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs and wetlands), or to estuarine/marine habitats.

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

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

## **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 **MPOWER BOA** 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.
11. **CAUTION:** 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](http://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.



## STORAGE

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

## DISPOSAL

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 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

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ASSIST® and CITOWETT® PLUS are registered trademarks of BASF.

®All other products listed are registered trademarks of their respective companies.

MPOWER BOA container label (red clover for seed production),

GROUP	<b>6</b>	HERBICIDE
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## MPOWER BOA

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).

### COMMERCIAL (AGRICULTURAL)

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

**REGISTRATION NO. 33011**

**PEST CONTROL PRODUCTS ACT**



**CAUTION**

**POISON**

**POTENTIAL SKIN SENSITIZER**

**IN CASE OF EMERGENCY ENDANGERING LIFE OR PROPERTY  
INVOLVING THIS PRODUCT, CALL DAY OR NIGHT  
1-613-996-6666**

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

**NET CONTENTS:** 4 L to 200 L

**NewAgco Inc.**  
320 – 22<sup>nd</sup> Street East  
Saskatoon, Saskatchewan  
Canada S7K 0H1  
1-(877)-362-3276

**Distributed by:**  
**AgraCity Crop & Nutrition Ltd.**  
320 – 22<sup>nd</sup> Street East  
Saskatoon, Saskatchewan  
Canada S7K 0H1  
1-(877)-362-3276

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## ENVIRONMENTAL HAZARDS

The use of this chemical may result in contamination of groundwater, particularly in areas where soils are permeable (e.g. sandy soil) or the water table is shallow.

DO NOT apply this product directly to freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs and wetlands), or to estuarine/marine habitats.

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

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