This label has been updated according to the re-evaluation of Isoxaflutole RVD2022-04. While users are encouraged to follow this updated label immediately, the previously approved label is valid until "07/04/2024" in accordance with the phase out period set out in RVD2022-04. This previously approved label will be provided upon request by emailing <a href="mailto:hc.pmra.info-arla.sc@canada.ca">hc.pmra.info-arla.sc@canada.ca</a>. In your email please include the product name and Registration number of the label you are requesting.

# **BALANCE BEAN**

SUSPENSION HERBICIDE

# FOR SALE FOR USE IN EASTERN CANADA AND BRITISH COLUMBIA ONLY

CONTAINS ISOXAFLUTOLE

#### FOR USE IN ISOXAFLUTOLE TOLERANT SOYBEANS

COMMERCIAL - AGRICULTURAL

ACTIVE INGREDIENT: ISOXAFLUTOLE.... 480 g/L

CONTAINS 1,2-BENZISOTHIAZOLIN-3-ONE AT 0.01% AS A PRESERVATIVE

REGISTRATION NO: 32553 PEST CONTROL PRODUCTS ACT

IN CASE OF EMERGENCY ENDANGERING LIFE OR PROPERTY INVOLVING THIS PRODUCT, CALL DAY OR NIGHT 1-800-454-2673

READ THE LABEL AND BOOKLET BEFORE USING KEEP OUT OF REACH OF CHILDREN WARNING - EYE IRRITANT

> BASF Canada Inc. 5025 Creekbank Road Building A, 2<sup>nd</sup> Floor Mississauga, Ontario L4W 0B6

> > 1-877-371-2273

NET CONTENTS: 1L – Bulk

#### PRECAUTIONS:

KEEP OUT OF REACH OF CHILDREN. Causes moderate eye irritation. Harmful if absorbed through skin. Do not inhale or ingest. If inhaled, remove from site of exposure. Avoid contact with skin, eyes and clothing. Wear coveralls over long-sleeved shirt and long pants, and rubber boots during all activities. Wear chemical resistant gloves and protective eyewear during mixing/loading, clean-up and repair. Store the container tightly closed, away from seeds, fertilizer, plants and foodstuffs. Wash from skin or eyes immediately. Avoid breathing dust or spray mist. After use, wash hands and other exposed skin. Avoid spray drift onto crops other than those recommended. Avoid contamination of ponds, streams, rivers and other water sources. Do not spray if there is a forecast for rain during or soon after application. Maintain a buffer zone of 22 m between the last spray swath and the edge of sensitive areas such as wetlands, ponds, lakes and rivers.

Apply only to agricultural crops when the potential for drift to areas of human habitation and human activity such as houses, cottages, schools and recreational areas is minimal. Take into consideration wind speed, wind direction, temperature inversions, application equipment and sprayer settings.

#### DO NOT APPLY BY AIR

#### **ENVIRONMENTAL PRECAUTIONS:**

TOXIC to aquatic organisms and terrestrial plants. Observe buffer zones specified under DIRECTIONS FOR USE.

#### FIRST AID:

If swallowed: Call a poison control centre or doctor immediately for treatment advice. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give **any** liquid to the person. 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 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.

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.

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

TOXICOLOGICAL INFORMATION: No specific antidote. Treat symptomatically.

STORAGE: Do not contaminate water, food or feed by storage or disposal. Store in a cool, dry secured storage area. Do not store this product under wet conditions.

To prevent contamination, store this product away from food and feed.

RECYCLABLE CONTAINER 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.

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

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.

GROUP 27 HERBICIDE

# BALANCE BEAN SUSPENSION

**HERBICIDE** 

# FOR SALE FOR USE IN EASTERN CANADA AND BRITISH COLUMBIA ONLY

CONTAINS ISOXAFLUTOLE

#### FOR USE IN ISOXAFLUTOLE TOLERANT SOYBEANS

COMMERCIAL - AGRICULTURAL

ACTIVE INGREDIENT: ISOXAFLUTOLE.... 480 g/L

CONTAINS 1,2-BENZISOTHIAZOLIN-3-ONE AT 0.01% AS A PRESERVATIVE

REGISTRATION NO: 32553 PEST CONTROL PRODUCTS ACT

IN CASE OF EMERGENCY ENDANGERING LIFE OR PROPERTY INVOLVING THIS PRODUCT, CALL DAY OR NIGHT 1-800-454-2673

READ THE LABEL AND BOOKLET BEFORE USING KEEP OUT OF REACH OF CHILDREN WARNING - EYE IRRITANT

> BASF Canada Inc. 5025 Creekbank Road Building A, 2<sup>nd</sup> Floor Mississauga, Ontario L4W 0B6

> > 1-877-371-2273

NET CONTENTS: 1L – Bulk

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#### **GENERAL INFORMATION**

#### Section 1 - Notices

#### 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.

# Section 2 - The Product and General Application Information

#### THE PRODUCT:

Balance Bean Herbicide is a soluble concentrate formulation of isoxaflutole at a concentration of 480 g/L isoxaflutole. Balance Bean Herbicide is a selective herbicide for season long control of important broadleaf and grass weeds infesting isoxaflutole tolerant soybeans.

#### GENERAL APPICATION INFORMATION:

In isoxaflutole tolerant soybeans, if weed growth is present at the time of application, glyphosate can be added to the Balance Bean Herbicide for burndown control of these weeds. Do not incorporate Balance Bean Herbicide.

When activated by rainfall, Balance Bean Herbicide will control susceptible weed seedlings that are up to 5 cm in height. Weeds beyond this stage or lack of rainfall will not provide control.

Apply Balance Bean Herbicide in conventional, minimum tillage, or zero tillage crop management systems.

Apply only to agricultural crops when the potential for drift to areas of human habitation and human activity such as houses, cottages, schools and recreational areas is minimal. Take into consideration wind speed, wind direction, temperature inversions, application equipment, and sprayer settings.

**DO NOT** enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 12 hours.

#### SAFETY AND HANDLING

#### Section 3 - Precautions

#### PRECAUTIONS:

KEEP OUT OF REACH OF CHILDREN. Causes moderate eye irritation. Harmful if absorbed through skin. Do not inhale or ingest. If inhaled, remove from site of exposure. Avoid contact with skin, eyes and clothing.

Maintain a buffer zone of 22 m between the last spray swath and the edge of sensitive areas such as wetlands, ponds, lakes and rivers.

Avoid spray drift onto crops other than those recommended. Avoid contamination of ponds, streams, rivers and other water sources. Do not spray if there is a forecast for rain during or soon after application.

#### DO NOT APPLY BY AIR

#### **ENVIRONMENTAL PRECAUTIONS:**

TOXIC to aquatic organisms and terrestrial plants. Observe buffer zones specified under DIRECTIONS FOR USE.

#### PROTECTIVE CLOTHING AND EQUIPMENT:

Wear coveralls over long-sleeved shirt and long pants, and rubber boots during all activities. Wear chemical resistant gloves and protective eyewear during mixing/loading, clean-up and repair. Store the container tightly closed, away from seeds, fertilizer, plants and foodstuffs. Wash from skin or eyes immediately. Avoid breathing dust or spray mist. After use, wash hands and other exposed skin.

#### Section 4 - First Aid and Toxicological Information

#### FIRST AID:

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

TC 11 1	
If swallowed	Call a poison control centre or doctor immediately for treatment advice.
	Do not induce vomiting unless told to do so by a poison control centre or doctor.
	• Do not give any liquid to the person.
	Do not give anything by mouth to an unconscious person.
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 five minutes, then continue rinsing eye.
	Call a poison control centre or doctor for treatment advice.
If on skin or	Take off contaminated clothing.
clothing	• Rinse skin immediately with plenty of water for 15 to 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.

#### TOXICOLOGICAL INFORMATION:

No specific antidote. Treat symptomatically.

#### Section 5 - Storage

Do not contaminate water, food or feed by storage or disposal. Store in a cool, dry secured storage area. Do not store this product under wet conditions.

To prevent contamination, store this product away from food and feed.

# Section 6 - Disposal

#### RECYCLABLE CONTAINER 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.

#### RETURNABLE CONTAINER DISPOSAL:

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

#### 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.

#### Section 7 - Special Precautions

Balance Bean Herbicide may only be applied to isoxaflutole tolerant soybean varieties. Application to soybeans that are not isoxaflutole tolerant will result in significant crop injury. Contact your local BASF Representative for a list of isoxaflutole tolerant soybean varieties.

Under certain conditions, temporary yellowing of some soybean leaves may occur when the plant is in the seedling stage. These conditions include cold weather, excessive moisture and/or compacted soils. Symptoms are most visible where excessive rates have been applied, such as sprayer overlaps, but are quickly outgrown with no adverse effect on maturity or crop yield.

Do not apply Balance Bean Herbicide to soybeans grown on loamy sands or sand and/or soils with less than 2% O.M.

Harvest isoxaflutole tolerant soybean seed at normal maturity. Do not graze the treated crop or cut for hay.

#### **DIRECTIONS FOR USE**

# Section 8 – Weeds Controlled and Application Rates

#### **Surface Pre-plant and Pre-emergence:**

Balance Bean Herbicide can be applied to the soil surface up to 14 days prior to planting isoxaflutole tolerant soybeans, or after planting but before the crop emerges. Do not apply after isoxaflutole tolerant soybeans emerge or crop injury may occur.

Early season weed control refers to a planned weed management program with a post-emergent herbicide treatment. It will provide weed control through the critical crop establishment phase. Weed species escapes and their respective growth stages should be monitored to select the best appropriate post-emergence herbicide treatment option.

A single application of Balance Bean Herbicide will control the following annual broadleaf and grassy weeds:

Application Rate	Weeds Controlled
	Barnyard Grass
	Common Lamb's quarters <sup>1</sup>
	Common Ragweed <sup>1, 2</sup>
	Common Waterhemp <sup>1, 2</sup>
	Crabgrass, Smooth and Large

110 mL/Ha	Dandelion, seedling	
	Eastern Black Nightshade <sup>1</sup>	
Early Season	Green Foxtail <sup>3</sup>	
Weed Control	Mustard, Wild and Wormseed	
	Plantain, seedling	
	Redroot Pigweed <sup>1</sup>	
	Sowthistle, Annual and Spiny Annual	
	Velvetleaf	
	Witchgrass	
	Common Lamb's quarters <sup>1</sup>	
	Common Ragweed <sup>1, 2</sup>	
	Common Waterhemp <sup>1, 2</sup>	
	Crabgrass, Smooth and Large	
165 mL/Ha	Dandelion, seedling	
	Eastern Black Nightshade <sup>1</sup>	
Season-Long	Mustard, Wild and Wormseed	
Weed Control	Plantain, seedling	
	Redroot Pigweed <sup>1</sup>	
	Sowthistle, Annual and Spiny Annual	
	Velvetleaf	
	Witchgrass	
220 mL/Ha	Above-listed weeds plus:	
Season-Long	Barnyard Grass	
Weed Control	Green Foxtail	

<sup>&</sup>lt;sup>1</sup> Includes triazine and ALS resistant biotypes

# Section 9 - Application Procedures and Limitations

#### **APPLICATION PROCEDURES:**

Apply Balance Bean Herbicide alone or in tank-mixtures, by ground equipment only, in a minimum of 150 litres of water per hectare at a spray pressure of 138-275 kPa. For best results use flat fan nozzles or comparable nozzles to achieve uniform spray distribution. Do not apply with hollow cone nozzles or with other application equipment which does not provide uniform coverage.

#### DO NOT APPLY BY AIR.

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 of this product when heavy rain is forecast.

Avoid application of this product 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.

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

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

<sup>&</sup>lt;sup>2</sup> Includes glyphosate resistant biotypes

<sup>&</sup>lt;sup>3</sup> Early season suppression only

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.

## **Spray Buffer Zones:**

A spray buffer zone is not required for:

- uses with hand-held application equipment permitted on this label,
- low-clearance hooded or shielded sprayers that prevent spray contact with crop, fruit or foliage

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, woodlots, hedgerows, pastures, rangelands, and shrublands), freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs, and wetlands), and estuarine/marine habitats.

Method of	Crop	Spray Buffer Zones (metres) Required for the Protection of:				
application				Estuarine/Marine Habitat of Depths:		Terrestrial Habitat:
			Greater than 1 m	Less than 1m	Greater than 1 m	
	Isoxaflutole tolerant soybeans	1	1	1	1	15

For tank mixes, consult the labels of the tank-mix partners and observe the largest (most restrictive) 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 buffer zones for this product can be modified based on weather conditions and spray equipment configuration by accessing the Buffer Zone Calculator on the Pesticides portion of the Canada.ca website..

Section 10 - Mixing Instructions and Tank-Mixture Recommendations

#### **MIXING INSTRUCTIONS:**

Fill spray tank with ¼ to ½ of the required volume of water prior to the addition of Balance Bean Herbicide. Add Balance Bean Herbicide slowly to the tank and agitate. If Balance Bean Herbicide is applied in tank-mixtures with other pesticides, add Balance Bean Herbicide to the spray tank first and ensure that it is thoroughly dispersed before continuing to fill the spray tank and adding other pesticides. Continue to fill the tank with water to the desired volume while agitating. Continue agitation when applying to ensure a uniform spray mixture.

### TANK MIX RECOMMENDATIONS:

When tank-mixing, read and observe all label directions, including rates, personal protective equipment,

restrictions, and grazing limitations 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.

The following tank-mixtures can be applied to the soil surface up to 14 days prior to planting isoxaflutole tolerant soybeans, or after planting but before the crop emerges. Use tank-mixes for burndown control of emerged weeds in all tillage management systems and improved control of established dandelion in zero-

tillage management systems.

Tank-mix	Product Rates	Weeds controlled
<b>Balance Bean</b>	Labelled rates	Weed species listed for Balance
+	+	Bean alone, plus burndown control
Glyphosate <sup>1</sup>	900 g a.e./ha	of emerged weeds
		Weed species listed for Balance
		Bean alone, plus Early Season
	110 mL/ha	Weed Control of:
	+	
	440 mL/ha	Lady's Thumb
		Wild Buckwheat
		Yellow Foxtail
		Season-long control of weeds listed
<b>Balance Bean</b>	165 mL/ha	above, plus:
+	+	
Sencor 480 F	660 mL/ha	Lady's Thumb
		Season-long control of weeds listed
		above, plus:
	220 mL/ha	
	+	Canada Fleabane <sup>2,3</sup>
	880 mL/ha	Yellow Foxtail
		Giant Ragweed <sup>2,3</sup>
		Wild Buckwheat
Balance Bean		Weed species listed for Balance
+		Bean + Sencor 480 F, plus
Sencor 480 F	Above-listed rates	burndown control of emerged weeds
+	+	
Glyphosate <sup>1</sup>	900 g a.e./ha	

<sup>&</sup>lt;sup>1</sup> Balance Bean Herbicide is compatible with various glyphosate formulations registered for use as a preplant treatment prior to soybean emergence. These glyphosate formulations include those where glyphosate is present as an isopropylamine salt, di-ammonium salt or potassium salt. Adjust the rate of glyphosate accordingly for products of differing glyphosate content.

<sup>&</sup>lt;sup>2</sup> Includes glyphosate resistant biotypes

<sup>&</sup>lt;sup>3</sup> Up to 10 cm in diameter/height

## Section 11 - Rotational Crop Information and Field Bioassay

Balance Bean Herbicide treated soybean fields may be planted to the following crops after the indicated time after treatment:

Time after Balance Bean treatment	Crops
3 months	Winter wheat
	Alfalfa
	Barley (spring and winter)
	Field corn,
	Potato
1 year	Processing peas
	Soybean
	Spring canola
	Spring oats
	Spring wheat
	Timothy
	Tomato <sup>1</sup>
2 years	All classes of dry common beans

<sup>&</sup>lt;sup>1</sup> Caution should be used when planting tomato 1 year following an application of Balance Bean Herbicide if conditions were exceptionally dry during the season of application.

A field bioassay must be conducted the year prior to growing any other crop of interest to confirm crop safety.

#### FIELD BIOASSAY:

Select a representative area or areas of the field previously treated with Balance Bean Herbicide to plant your bioassay crop(s). Be sure to consider factors such as size of field, soil texture, drainage and turnaround areas when selecting the site(s) that are most representative of the conditions in the field. On large fields, more than one site may be needed in order to obtain reliable results. Plant the test strips perpendicular to the direction in which the field was sprayed. The strips should be long enough to cross the width of several spray swaths. Large test strip areas are more reliable than small ones. Use standard tillage and seeding equipment to plant the bioassay. Prepare a seed bed and plant the crops and varieties you want the option of growing the following year. It is important to use the same planting time, conditions, techniques and cultural practices you normally use to plant and grow the bioassay crop(s). Also, plant into an adjacent area not treated with Balance Bean Herbicide to use as a comparison. As the crop(s) emerges and grows, examine these key points in Balance Bean Herbicide-treated and non-treated areas:

crop stand

plant colour and vigour

root development

yield

rate of growth

Allow the bioassay crop(s) to grow to maturity while making your observations. Do not overspray the test strips with herbicides that may damage the bioassay crop(s). If the bioassay indicates that Balance Bean Herbicide residues are still present, continue cropping only to those crops listed on the label, and do not rotate to other crops until bioassay results indicate that susceptible crops indicate normal growth with no yield reductions.

Failure to follow the recropping guidelines could result in injury to seeded crop(s).

#### Section 12 - Resistance Management Recommendations

For resistance management, Balance Bean Herbicide is a Group 27 herbicide. Any weed population may contain or develop plants naturally resistant to Balance Bean Herbicide and other Group 27 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 Balance Bean Herbicide or other Group 27 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 BASF Canada Inc. at 1-877-371-2273 or at www.agsolutions.ca.