

#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

September 2, 2020

Amanda Foderaro Regulatory Specialist Syngenta Crop Protection, LLC P.O. Box 18300 Greensboro, NC 27419

Subject: PRIA Label Amendment – Amend Soybean Use (increase maximum annual rate to 3.71 lb ai/A and decrease PHI to 75 days) and Other Changes Product Name: BOUNDARY 6.5EC HERBICIDE EPA Registration Number: 100-1162 Application Date: May 14, 2019 Decision Number: 551026

Dear Ms. Foderaro:

The amended label referred to above, including supplemental label, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, is acceptable. This approval does not affect any conditions that were previously imposed on this registration. You continue to be subject to existing conditions on your registration and any deadlines connected with them.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under FIFRA and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

Page 2 of 2 EPA Reg. No. 100-1162 Decision No. 551026

Your release for shipment of the product constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6.

If you have any questions, please contact Grant Rowland by phone at 703-347-0254, or via email at rowland.grant@epa.gov.

Sincerely,

Mindy Ondish

Mindy Ondish Product Manager 23 Herbicide Branch Registration Division (7505P) Office of Pesticide Programs

Enclosure

Sale, use and distribution of this product in Nassau and Suffolk Counties in the State of New York is prohibited.

S-METOLACHLOR	GROUP	15	HERBICIDE
METRIBUZIN	GROUP	5	HERBICIDE

#### Boundary® 6.5EC Herbicide

For control of certain grasses and broadleaf weeds in potatoes and soybeans

Active Ingredients:	
S-metolachlor*:	
Metribuzin**:	
Other Ingredients***:	28.0%
Total:	100.0%

\*CAS No. 87392-12-9 \*\*CAS No. 21087-64-9

Boundary® 6.5EC Herbicide is formulated as an emulsifiable concentrate (EC) containing 5.25 lb of *S*-metolachlor and 1.25 lb of metribuzin per gallon.

\*\*\*Contains approximately 14% petroleum distillates.

## KEEP OUT OF REACH OF CHILDREN

## WARNING/AVISO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail).

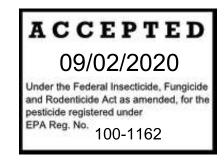
See additional precautionary statements and directions for use inside booklet.

EPA Reg. No. 100-1162

EPA Est.

SCP 1162A

\_\_\_\_ gallons Net Contents



	FIRST AID				
If in eyes	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes then</li> </ul>				
	<ul> <li>Call a poison control center or doctor for treatment advice.</li> </ul>				
If swallowed	<ul> <li>Immediately call a poison control center or doctor.</li> <li>Do not induce vomiting unless told to by a poison control center or doctor.</li> <li>Do not give any liquid to the person.</li> <li>Do not give anything to an unconscious person.</li> </ul>				
If on skin or clothing	<ul> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>				
If inhaled	<ul> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>				
may cause asp	<b>NOTE TO PHYSICIAN</b> leum distillates. May pose an aspiration pneumonia hazard. Vomiting iration pneumonia.				
doctor, or going					
	HOTLINE NUMBER 24-Hour Medical Emergency Assistance (Human or Animal) or emical Emergency Assistance (Spill, Leak, Fire, or Accident), Call 1-800-888-8372				

## PRECAUTIONARY STATEMENTS

#### Hazards to Humans and Domestic Animals

#### WARNING/AVISO

Causes substantial, but temporary eye injury. Harmful if swallowed or absorbed through skin. Do not get in eyes, on skin, or on clothing. Harmful if swallowed. Avoid contact with skin. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

Contains petroleum distillates.

This product may cause skin sensitization reactions in some people.

## Personal Protective Equipment (PPE)

### Applicators and other handlers must wear:

- Protective eyewear
- Coveralls over a short-sleeved shirt and short pants
- Chemical-resistant footwear plus socks
- Chemical-resistant gloves made of barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils or Viton® ≥ 14 mils
- Chemical-resistant headgear for overhead exposure
- Chemical-resistant apron when mixing/loading and cleaning equipment

### **User Safety Requirements**

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

### **Engineering Controls**

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides, the handler PPE requirements may be reduced or modified as specified in the WPS.

## User Safety Recommendations: Users should:

- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove clothing/PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

## **Environmental Hazards**

Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash water or rinsate.

## Groundwater Advisory

S-metolachlor is known to leach through soil into groundwater under certain conditions as a result of label use. This chemical may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow. Metribuzin is a chemical which can travel (seep or leach) through soil and can contaminate groundwater which may be used as drinking water. Metribuzin has been found in groundwater as a result of agricultural use. Users are advised not to apply metribuzin where the water table (groundwater) is close to the surface and where the soils are very permeable, i.e., well-drained soils such as loamy sands. Your local agricultural agencies can provide further information on the type of soil in your area and the location of groundwater.

## Surface Water Advisory

S-metolachlor has the potential to contaminate surface water through ground spray drift. Under some conditions, S-metolachlor may also have a high potential for runoff into surface water (primarily via dissolution in runoff water) for several months postapplication. These include poorly draining or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, areas overlaying extremely shallow groundwater, areas with in-field canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and areas overlaying tile drainage systems that drain to surface water.

## **Mixing/Loading Instructions**

Take care when using this product to prevent back-siphoning into wells, spills, or improper disposal of excess pesticide, spray mixtures, or rinsates.

Use check-valves or antisiphoning devices on all mixing and/or irrigation equipment.

This product may not be mixed or loaded within 50 ft of perennial or intermittent streams and rivers, natural or impounded lakes and reservoirs. This product may not be mixed/loaded or used within 50 ft of all wells, including abandoned wells, drainage wells, and sink holes. Operations that involve mixing, loading, rinsing, or washing of this product into or from pesticide handling or application equipment or containers within 50 ft of any well are prohibited, unless conducted on an impervious pad constructed to withstand the weight of the heaviest load that may be positioned on or moved across the pad. Such a pad shall be designed and maintained to contain any product spills or equipment leaks, container or equipment rinse or wash water, and rain water that may fall on the pad. Surface water shall not be allowed to either flow over or from the pad, which means the pad must be self-contained. The pad shall be sloped to facilitate material removal. An unroofed pad shall be of sufficient capacity to contain at a minimum 110% of the capacity of the largest pesticide container or application equipment on the pad. A pad that is covered by a roof of sufficient size to completely exclude precipitation from contact with the pad shall have a minimum containment capacity of 100% of the capacity of the largest pesticide container or application equipment on the pad. Containment capacities as described above shall be maintained at all times. The above-specified minimum containment capacities do not apply to vehicles when delivering pesticide shipments to the mixing/loading site.

#### CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

**NOTICE:** Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of SYNGENTA CROP PROTECTION, LLC or Seller. To the extent permitted by applicable law, Buyer and User agree to hold SYNGENTA and Seller harmless for any claims relating to such factors.

SYNGENTA warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. To the extent permitted by applicable law: (1) this warranty does not extend to the use of the product contrary to label instructions, or under conditions not reasonably foreseeable to or beyond the control of Seller or SYNGENTA, and (2) Buyer and User assume the risk of any such use. TO THE EXTENT PERMITTED BY APPLICABLE LAW, SYNGENTA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS WARRANTED BY THIS LABEL.

To the extent permitted by applicable law, in no event shall SYNGENTA be liable for any incidental, consequential or special damages resulting from the use or handling of this product. TO THE EXTENT PERMITTED BY APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF SYNGENTA AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF SYNGENTA OR SELLER, THE REPLACEMENT OF THE PRODUCT.

SYNGENTA and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitation of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of SYNGENTA.

## DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

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. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

## AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

**Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 12 hours.** Exception: If the product is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

For early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, wear:

- Protective eyewear
- Coveralls over short-sleeved shirt and short pants
- Chemical-resistant gloves made of barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils or Viton ≥ 14 mils
- Chemical-resistant footwear
- Chemical-resistant headgear for overhead exposure

Sale, use and distribution of this product in Nassau and Suffolk Counties in the State of New York is prohibited.

#### FAILURE TO FOLLOW THE DIRECTIONS FOR USE AND PRECAUTIONS ON THIS LABEL MAY RESULT IN POOR WEED CONTROL, CROP INJURY, AND/OR ILLEGAL RESIDUES.

#### **PRODUCT INFORMATION**

Observe all precautions and restrictions on the labels of each product used in tank mixtures. Tank mixture partners must be registered in states where they are used. Refer to and follow the label for each tank mix product used.

Do not apply under conditions which favor runoff or wind erosion of soil containing this product to non-target areas.

To prevent off-site movement due to runoff or wind erosion:

- Avoid treating powdery dry or light sand soils when conditions are favorable for wind erosion. Under these conditions, ensure that the soil surface is settled by rainfall or irrigation first.
- Do not apply to impervious substrates, such as paved or highly compacted surfaces.
- Do not use tailwater from the first flood or furrow irrigation of treated fields to treat non-target crops, unless at least ½ inch of rainfall has occurred between application and the first irrigation.

#### WEED RESISTANCE MANAGEMENT

S-METOLACHLOR	GROUP	15	HERBICIDE
METRIBUZIN	GROUP	5	HERBICIDE

To reduce the potential for herbicide resistance issues, the end use product, Boundary 6.5EC Herbicide label contains the following label language that provides the user with information on resistant weed management.

Boundary 6.5EC Herbicide contains the active ingredients *S*-metolachlor which inhibits the formation of very long chain fatty acids (VLCFA, Site of Action Group 15) and metribuzin which inhibits the photosynthetic pathway of photosystem II (PSII, Site of Action Group 5). Some naturally-occurring weed populations have been identified as resistant to Group 5 and 15 herbicides. Selection of resistant biotypes, through repeated use of these herbicides or lower than labeled use rates in the same field, may result in weed control failures. A resistant biotype may be present where poor performance cannot be attributed to adverse environmental conditions or improper application methods.

#### **Principles of Herbicide Resistant Weed Management**

Scout and know your field

- Know weed species present in the field to be treated through scouting and field history. An understanding of weed biology is useful in designing a resistance management strategy. Ensure the weed management program will control all weeds present.
- Fields should be scouted prior to application to determine species present and growth stage. Always apply this herbicide at the full labeled rate and correct timing for the weeds present in the field.

## Utilize non-herbicidal practices to add diversity

• Use diversified management tactics such as cover crops, mechanical weed control, harvest weed seed control, and crop rotation as appropriate.

## Use good agronomic practices, start clean and stay clean

- Use good agronomic practices that enhance crop competitiveness.
- Plant into weed-free fields utilizing tillage or an effective burndown herbicide for control of emerged weeds.
- Sanitize farm equipment to avoid spreading seed or vegetative propagules prior to leaving fields.

## Difficult to control weeds

- Fields with difficult to control weeds should be planted in rotation with crops that allow the use of herbicides with an alternative mode of action or different management practices.
- Difficult to control weeds may require sequential applications, such as a broad spectrum preemergence herbicide followed by one or more postemergence herbicide applications. Utilize herbicides containing different modes of action effective on the target weeds in sequential applications.

## Do not overuse the technology

 Do not use more than two applications of this or any other herbicide with the same mode of action in a single growing season unless mixed with an herbicide with a different mode of action which provides overlapping spectrum for the difficult to control weeds.

## Scout and inspect fields following application

- Prevent an influx of weeds into the field by controlling weeds in field borders.
- Scout fields after application to verify that the treatment was effective.
- Suspected herbicide resistant weeds may be identified by these indicators

- Failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds;
- A spreading patch of non-controlled plants of a particular weed species; and
- Surviving plants mixed with controlled individuals of the same species.
- Report non-performance of this product to your Syngenta retailer, Syngenta representative, or call 1-866-Syngent(a) (866-796-4368). If resistance is suspected ensure weed escapes are controlled using an herbicide with an effective mode of action and/or use non-chemical means to prevent further seed production.

## Prevent weed escapes before, during, and after harvest

 Do not allow weed escapes to produce seed or vegetative structures such as tubers or stolons which contribute to spread and survival. Consider harvest weed seed management and control weeds post-harvest to prevent seed production.

## **Resistant weeds**

 Contact your local Syngenta representative, retailer, crop advisor or extension agent to determine if weeds resistant to modes of action contained in this product are present in your area. Do not assume that each listed weed is being controlled by multiple modes of action. Premixes are intended to broaden the spectrum of weeds that are controlled. Some weeds may be controlled by only one of the active ingredients in this product. If resistant biotypes have been reported, use the full labeled rate of this product, apply at the labeled timing, and tank-mix with an additional different mode of action product so there are multiple effective modes of application for each suspected resistant weed.

## **Mixing Instructions**

Prepare no more spray mixture than is needed for the immediate operation. Thoroughly clean the spray equipment before using Boundary 6.5EC Herbicide. Vigorous agitation is necessary to maintain uniformity of the spray mixture. Maintain maximum agitation throughout the spraying operation. Do not allow spray mixture to stand overnight in the spray tank. Flush the spray equipment thoroughly following each use and apply the rinsate to a previously treated area.

## Application in Water or Fluid Fertilizers

**Boundary 6.5EC Herbicide Alone:** Add <sup>1</sup>/<sub>3</sub> of the required amount of water or fluid fertilizer to the spray or mixing tank. With the agitator running, add Boundary 6.5EC Herbicide into the spray tank. Continue agitation while adding the remainder of the water or fluid fertilizer. Begin application of the spray solution after the Boundary 6.5EC

Herbicide has completely dispersed in the water or fluid fertilizer. Maintain agitation until all of the mixture has been applied.

**Boundary 6.5EC Herbicide + Tank Mixtures:** Add <sup>1</sup>/<sub>3</sub> of the required amount of water or fluid fertilizer to the mix tank. Start the agitator running before adding any tank mix partners. Add tank mix partners in this order: products packaged in water-soluble packaging, wettable powders, wettable granules (dry flowables), liquid flowables, liquids such as Boundary 6.5EC Herbicide, and emulsifiable concentrates. Always allow each tank mix partner to become fully dispersed before adding the next product. Provide sufficient agitation while adding the remainder of the water. Maintain agitation until all of the mixture has been applied.

(1) When using Boundary 6.5EC Herbicide in tank mixtures, add all products in watersoluble packaging to the tank and mix with plain water before adding any other tank mix partner, including Boundary 6.5EC Herbicide. Allow the water-soluble packaging to completely dissolve and the product(s) to completely disperse before adding any other tank mix partner to the tank. (2) Water-soluble packets will not properly dissolve in most spray solutions that contain fluid fertilizers.

It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture. Do not exceed any label dosage rate. The most restrictive label precautions and limitations must be followed.

Boundary 6.5EC Herbicide is compatible with most common tank mix partners. However, it is advised to test the physical compatibility of Boundary 6.5EC Herbicide with tank mix partners before use. To determine the physical compatibility of Boundary 6.5EC Herbicide with other products, use a jar test, as described below.

#### **Compatibility Test**

Conduct a jar test before tank mixing to ensure compatibility of Boundary 6.5EC Herbicide with other pesticides. The following test assumes a spray volume of 25 gal/A. For other spray volumes, make appropriate changes in the ingredients.

**Note:** Nitrogen solutions or complete fluid fertilizers may replace all or part of the water in the spray. Because liquid fertilizers vary, even within the same analysis, **always check compatibility with pesticide(s) before use**. Incompatibility of tank mixtures is more common with suspensions of fertilizer and pesticides.

#### **Test Procedure**

1. Add 1.0 pt of carrier (fertilizer or water) to each of 2 one qt jars with tight lids. Note: Use the same source of water that will be used for the tank mix and conduct the test at the temperature the tank mix will be applied.

- 2. To one of the jars, add ¼ tsp or 1.2 milliliters of a compatibility agent approved for this use, such as Compex® or Unite® (¼ tsp is equivalent to 2.0 pt/100 gal spray). Shake or stir gently to mix.
- 3. To both jars, add the appropriate amount of pesticide(s) in their relative proportions based on listed label rates. If more than one pesticide is used, add them separately with dry pesticides first, flowables next, and emulsifiable concentrates last. After each addition, shake or stir gently to thoroughly mix.
- 4. After adding all ingredients, put lids on and tighten, and invert each jar ten times to mix. Let the mixtures stand 15-30 minutes and then look for separation, large flakes, precipitates, gels, heavy oily film on the jar, or other signs of incompatibility. Determine if the compatibility agent is needed in the spray mixture by comparing the two jars. If either mixture separates, but can be remixed readily, the mixture can be sprayed as long as good agitation is used. If the mixtures are incompatible, test the following methods of improving compatibility: (a) Slurry the dry pesticide(s) in water before addition, or (b) add ½ the compatibility agent to the fertilizer or water and the other ½ to the emulsifiable concentrate or flowable pesticide before addition to the mixture. If incompatibility is still observed, do not use the mixture.
- 5. After compatibility testing is complete, dispose of any pesticide wastes in accordance with the **Storage and Disposal** section in this label.

**Ground Application:** Apply Boundary 6.5EC Herbicide alone or in tank mixtures by ground equipment in a minimum of 10 gallons of spray mixture per acre, unless otherwise specified. [Optional] [For certain ground application equipment approved by Syngenta, apply in a minimum of 2 gallons of spray mixture per acre. Contact your local Syngenta representative for a list of approved equipment].

Use sprayers that provide accurate and uniform application. Calibrate the sprayer before use at the beginning of the season. For Boundary 6.5EC Herbicide tank mixtures with wettable powder or dry flowable formulations, screens and strainers should be no finer than 50-mesh.

Calculate the amount of herbicide needed for band treatment by the formula:

<u>Band width in inches</u>	v	broadcast rate	_	amount needed
Row width in inches	^	per acre	_	per acre of field

## **Center Pivot Irrigation Application**

If chemigating, apply this product only through a center pivot irrigation system. Do not apply this product through any other type of irrigation system. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform

distribution of treated water. If you have questions about calibration, contact State Extension specialists, equipment manufacturers, or other experts. Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system, unless the pesticide label-prescribed safety devices for public water systems are in place. A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments if the need arises.

## **Operating Instructions**

- The system must contain a functional check-valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water-source contamination from backflow.
- The pesticide injection pipeline must contain a functional, automatic, quick-closing check-valve to prevent the flow of fluid back toward the injection pump.
- The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump or piston pump), effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- Do not apply when wind speed favors drift beyond the area intended for treatment.
- Prepare a mixture with a minimum of 1 part water to 1 part herbicide(s) and inject this mixture into the center pivot system. Injecting a larger volume of a more dilute mixture per hour will usually provide more accurate calibration of metering equipment. Maintain sufficient agitation to keep the herbicide in suspension.
- Meter into irrigation water during entire period of water application.
- Apply in ½-1 inch of water. Use the lower water volume (½ inch) on *coarse-textured soils* and the higher volume (1 inch) on *fine-textured soils*. More than 1 inch of water

at application may reduce weed control by moving the herbicide below the effective zone in the soil.

*Precaution for center pivot applications: Where sprinkler distribution patterns do not overlap sufficiently, unacceptable weed control may result. Where sprinkler distribution patterns overlap excessively, crop injury may result.* 

**Aerial Application:** Apply Boundary 6.5EC Herbicide in water using a minimum spray volume of 2 gal/A. Avoid application under conditions where uniform coverage cannot be obtained or where excessive spray drift may occur. Make applications at a maximum height of 10 ft above the crop with low-drift nozzles at a maximum pressure of 40 psi.

## SPRAY DRIFT MANAGEMENT

- AVOIDING SPRAY DRIFT AT THE APPLICATION SITE IS THE RESPONSIBILITY OF THE APPLICATOR AND THE GROWER.
- The interaction of many equipment- and weather-related factors determines the potential for spray drift.
- The applicator and grower must consider the interaction of equipment and weatherrelated factors to ensure that the potential for drift to sensitive non-target plants is minimal.
- This pesticide may only be applied when the potential for drift to adjacent sensitive areas (e.g., residential areas, bodies of water, non-target plants) is minimal (i.e., when the wind is blowing away from the sensitive area).

## Aerial Spray Drift Management

- Do not release spray at a height greater than 10 ft above the vegetative canopy, unless a greater application height is necessary for pilot safety.
- For applications prior to the emergence of crops and target weeds, applicators are required to use a coarse or coarser droplet size (ASABE S572).
- For all other applications, applicators are required to use a medium or coarser droplet size (ASABE S572).
- The boom length must not exceed 65% of the wingspan for airplanes or 75% of the rotor blade diameter for helicopters.
- Applicators must use ½ swath displacement upwind at the downwind edge of the field.
- Nozzles must be oriented so the spray is directed toward the back of the aircraft.
- Do not apply when wind speeds exceed 10 miles per hour at the application site.
- Do not apply during temperature inversions.
- To assure that spray will not adversely affect adjacent sensitive nontarget plants, apply Boundary 6.5EC Herbicide by aircraft at a minimum upwind distance of 400 ft from sensitive plants.

## DRIFT ADVISORY INFORMATION Importance of Droplet Size

• An effective way to reduce spray drift is to apply large droplets.

- Use the largest droplets that provide target pest control.
- While applying larger droplets will reduce spray drift, the potential for drift will be greater if applications are made improperly or under unfavorable environmental conditions.

## **Controlling Droplet Size**

- **Volume** Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- **Pressure** Do not exceed the nozzle manufacturer's maximum pressures. For many nozzle types, lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- **Number of nozzles** Use the minimum number of nozzles that provide uniform coverage.
- **Nozzle Orientation** Orienting nozzles so that the spray is released parallel to the airstream produces larger droplets than other orientations and is the best practice. Significant deflection from horizontal will reduce droplet size and increase drift potential.
- **Nozzle Type** Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

## Release Height - Aircraft

- Higher release heights increase the potential for spray drift.
- When applying aerially to crops, do not release spray at a height greater than 10 ft above the crop canopy, unless a greater application height is necessary for pilot safety.

## **Application Height**

- Do not apply at a height greater than 10 ft above the top of the largest plants, unless a greater height is required for aircraft safety.
- Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

## Temperature and Humidity

- When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation.
- Droplet evaporation is greatest when conditions are both hot and dry.

### Temperature Inversions

- If possible, avoid application during a temperature inversion because drift potential is high.
- Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud.
- This cloud can move in unpredictable directions due to the light variable winds common during inversions.
- Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind.
- They begin to form as the sun sets and often continue into the morning.
- Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator.
- Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

### Wind

- Drift potential is lowest between wind speeds of 2-10 mph.
- However, many factors, including droplet size and equipment type, determine drift potential at any given speed.
- If possible, avoid application when wind speed is below 2 mph due to variable wind direction and high inversion potential.

Note: Local terrain can influence wind patterns.

## Windblown Soil Particles

- Boundary 6.5EC Herbicide has the potential to move off-site due to wind erosion.
- Soils that are subject to wind erosion usually have a high silt and/or fine to very fine sand fractions and low organic matter content.
- Other factors which can affect the movement of windblown soil include the intensity and direction of prevailing winds, vegetative cover, site slope, rainfall, and drainage patterns.
- Avoid applying Boundary 6.5EC Herbicide if prevailing local conditions may be expected to result in off-site movement.

## **Sensitive Areas**

Only apply Boundary 6.5EC Herbicide when the potential for drift to adjacent sensitive areas (e.g., residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g., when wind is blowing away from the sensitive areas).

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.

Because some non-labeled crops are sensitive to low rates of Boundary 6.5EC Herbicide, special attention must be given to cleaning equipment before spraying a crop other than those registered for use and on this label. Mix only as much spray solution as needed. Immediately after spraying, clean equipment thoroughly using the following procedure:

- 1. Flush tank, hoses, boom, and nozzles with clean water.
- 2. Prepare a cleaning solution of one gal of household ammonia per 50 gal of water. Many commercial spray tank cleaners may be used as well. Consult your Syngenta representative for a partial listing of approved tank cleaners and more information about proper tank cleaning procedures. Do not use chlorine-based cleaners such as Clorox®.
- 3. When available, use a pressure washer to clean the inside of the spray tank with this solution. Take care to wash all parts of the tank, including the inside top surface. Completely fill the sprayer with the cleaning solution to ensure contact of the cleaning solution with all internal surfaces of the tank and plumbing. Start agitation in the sprayer and thoroughly re-circulate the cleaning solution for **at least 15 minutes**. All visible deposits must be removed from the spraying system.
- 4. Flush hoses, spray lines, and nozzles for at least one minute with the cleaning solution.
- 5. Dispose of rinsate from steps 1-3 as described under the **Environmental Hazards** section of the **Precautionary Statements**.
- 6. Repeat steps 2-5.
- 7. Remove nozzles, screens, and strainers and clean separately in the ammonia cleaning solution after completing the above procedures.
- 8. Rinse the complete spraying system with clean water.

## Impregnation onto Dry Bulk Granular Fertilizers

Many dry bulk granular fertilizers may be impregnated or coated with Boundary 6.5EC Herbicide and used to control weeds. When applying Boundary 6.5EC Herbicide with dry bulk fertilizers, follow all directions for use and precautions on the Boundary 6.5EC Herbicide label regarding target crops, rates per acre, soil texture, application methods, and rotational crops.

Complying with all individual state regulations relating to dry bulk granular fertilizer blending, registration, labeling, and application is the responsibility of the individual and/or company selling the herbicide/fertilizer mixture.

Prepare the herbicide/fertilizer mixture by using any closed drum, belt, ribbon, or other commonly used dry bulk fertilizer blender. Nozzles used to spray Boundary 6.5EC Herbicide onto the fertilizer must be spaced to provide uniform spray coverage. Take care to aim the spray onto the fertilizer only, avoiding the walls of the blender.

If the herbicide/fertilizer mixture is too wet, add a highly absorptive material, such as Agsorb® FG or Celatom MP-79®, or similar granular clay or diatomaceous earth materials, to obtain a dry, free-flowing mixture. Add absorptive materials only after the herbicide has been thoroughly blended into the fertilizer mixture. Best application results will be obtained by using a granule of 6/30 particle size or of a size similar to that of the fertilizer materials being used. Generally, less than 2% by weight of absorptive material will be needed. Avoid using more than 5% absorptive material by weight.

Calculate the amount of Boundary 6.5EC Herbicide to be used by the following formula:

2,000		pt of Boundary 6.5EC		pt of Boundary 6.5EC
	Х	Herbicide	=	Herbicide
lbs of fertilizer per acre		per acre		per ton of fertilizer

#### Pneumatic (Compressed Air) Application

High humidity, high urea concentrations, low fertilizer use rates, and dusty fertilizer may cause fertilizer mixtures to build up or plug the distributor head, air tubes, or nozzle deflector plates. To minimize buildup, premix Boundary 6.5EC Herbicide with Exxon Aromatic 200 at a rate of 2.0-2.5 pt/gal of Boundary 6.5EC Herbicide. Aromatic 200 is a noncombustible/nonflammable petroleum product. Aromatic 200 may be used in either a fertilizer blender or through direct injection systems. Do not use drying agents when using Aromatic 200.

**Restrictions:** To avoid potential for explosion, (1) Do not impregnate Boundary 6.5EC Herbicide on ammonium nitrate, potassium nitrate, or sodium nitrate, either alone or in blends with other fertilizers. (2) Do not combine Boundary 6.5EC Herbicide with a single superphosphate (1-20-0) or triple superphosphate (0-46-0). (3) Do not use Boundary 6.5EC Herbicide on straight limestone, since absorption will not be achieved. Fertilizer blends containing limestone can be impregnated.

**Precautions:** (1) Use mixtures of Boundary 6.5EC Herbicide and Aromatic 200 on dry fertilizer only. Poor results or crop injury may result if these mixtures are used in water or liquid fertilizer solutions for spraying applications. (2) When impregnating Boundary 6.5EC Herbicide in a blender before application, a drier mixture can be obtained by substituting a drying agent for Aromatic 200. The use of Agsorb FG or another drying

agent of 6/30 particle size is preferred. (3) Drying agents are not endorsed for use with On-The-Go impregnation equipment.

## Application of Impregnated Dry Bulk Granular Fertilizer

Apply 200-700 lb of the herbicide/fertilizer mixture per acre. For best results, apply the mixture uniformly to the soil with properly calibrated equipment immediately after blending. Uniform application of the herbicide/fertilizer mixture is essential in order to prevent possible crop injury to subsequent rotational crops. Non-uniform application may also result in unsatisfactory weed control. To obtain satisfactory weed control in areas where conventional tillage is practiced, shallowly incorporate the mixture into the soil. On fine- or medium-textured soils in areas where soil incorporation is not planned, i.e., reduced-tillage situations or in some conventional till situations, make applications approximately 30 days before planting to allow moisture to move the herbicide/fertilizer mixture into the soil. On coarse-textured soils, make applications approximately 14 days prior to planting.

*Precautions:* To help avoid rotational crop injury, make applications as early as possible, since Boundary 6.5EC Herbicide impregnated onto dry bulk fertilizers can be expected to last longer in the soil than Boundary 6.5EC Herbicide applied as a spray in water or fluid fertilizer.

Rotational Interval After Application of Boundary 6.5EC Herbicide <sup>2</sup>				Herbicide <sup>2</sup>
4 months	4 <sup>1</sup> / <sub>2</sub> Months	8 Months	12 Months	18 Months
Corn	Winter Barley	Peas	Asparagus	Onions
	Winter Wheat	Rice <sup>4</sup>	Cotton	Sugar Beets and
	Alfalfa	Spring Barley	Forage Grasses	Other Root Crops
		Spring Wheat	Lentils	
			Sainfoin	
			Sugarcane	
			Tomatoes	
			Other Crops not	
			listed (except root	
			crops)	

## Table 1: Crop Rotation Intervals<sup>1,3</sup>

<sup>1</sup>Cover crops for soil building or erosion control may be planted any time, but do not graze or harvest for food or feed. Stand reductions may occur in some areas. <sup>2</sup>Crop rotation instructions do not include restrictions for the tank mix partner. Refer to

the label of the other product for additional restrictions.

<sup>3</sup>Refer to the specific crop use sections for additional crop rotation precautions.

<sup>4</sup>Do not rotate rice after any application to a primary crop at greater than 1.0 lb ai/a of metribuzin per season.

If replanting is necessary in fields previously treated with Boundary 6.5EC Herbicide, the field may be replanted to soybeans or potatoes. Before replanting, refer to the specific crop use sections for use directions, precautions and restrictions.

### Activation

A small amount of rainfall or irrigation is required to activate Boundary 6.5EC Herbicide following application. In areas of low rainfall, follow a preemergence application with light irrigation of  $\frac{1}{4}$  to  $\frac{1}{2}$  inch of water. Do not apply heavy irrigation immediately after application. As with many surface-applied herbicides, weed control and crop tolerance may vary with rainfall and/or soil texture.

## POTATOES (EXCEPT CALIFORNIA)

Boundary 6.5EC Herbicide may be used for preemergence weed control prior to or after potato emergence. Boundary 6.5EC Herbicide has some postemergence activity on weeds, but the consistency and spectrum of weed control is much better preemergence to weeds. There is an increased risk of crop injury with preplant incorporated applications.

### **Preemergence Applications**

Apply with ground spray equipment, aerial spray equipment, or by center pivot irrigation equipment which is capable of making a uniform broadcast application. Apply after planting but before crop emergence, or apply after drag-off if this operation is part of the usual cultural practice.

#### **Postemergence Applications**

Apply postemergence only in center pivot irrigation water, after drag-off if that is a usual cultural practice, but not closer than 60 days before harvest. Refer to the "Center Pivot Irrigation Application" section of this label for application information.

#### Table 2: Weeds Controlled by Boundary 6.5EC Herbicide

#### Annual Broadleaves\*

Anoda, spurred Beggarweed, Florida Carpetweed Chickweed, common Copperleaf, hophornbeam *Galinsoga* spp. Henbit Jimsonweed Lambsquarters, common Lettuce, prickly Mallow, Venice Mustard spp. Nightshade, black Pennycress, field Pepperweed, Virginia Pigweed spp. Redweed Sesbania spp. Shepherd's-purse Sicklepod Sida, prickly/teaweed Smartweed, Pennsylvania Spurge, spotted Starbur, bristly

Knotweed spp. Ladysthumb	Purslane, common Pusley, Florida	Thistle, Russian Waterhemp spp.
Annual Grasses		
Barnyardgrass Bluegrass, annual Crabgrass spp. Crowfootgrass Cupgrass, prairie Cupgrass, southwestern Foxtail spp.	Goosegrass Junglerice Panicum, fall Rice, red Signalgrass, broadleaf Witchgrass	
<u>Sedges</u>		
Yellow nutsedge		
		e 11 - 11 - 11 - 11 - 11 - 11 - 11 - 11

Boundary 6.5EC Herbicide will provide suppression\*\* of the following broadleaf weeds (except triazine–resistant broadleaf biotypes): cocklebur, common ragweed, kochia, velvetleaf, hairy nightshade and common sunflower and grasses such as seedling johnsongrass, Texas panicum, sandbur spp., shattercane, and the volunteer crops: barley, sorghum, and wheat.

- \*Except triazine-resistant biotypes other than *Galinsoga* spp., black nightshade, pigweed spp. and waterhemp spp.
- \*\*Suppression means significant activity, but not always at a level considered acceptable for commercial weed control.

## **Application Rates**

The application rates for Boundary 6.5EC Herbicide for use in potatoes are provided below. Where a rate range is given, use the lower end of the rate range on the more coarse-textured soils listed within that group and/or where weed pressures are known to be light; use the high end of the rate range on the more fine-textured soils listed within that group and/or where the weeds pressures are known to be heavy.

#### Table 3: Boundary 6.5EC Herbicide Preemergence Use Rates in Potatoes

Soil Texture	0.5 to 3% Organic Matter Pt/A	Over 3% Organic Matter Pt/A
<b>COARSE</b> <sup>1</sup> (Sand, loamy sand, sandy loam)	1.5-2.0	2.0-2.4
<b>MEDIUM or FINE</b> (Loam, silt loam, silt, sandy clay, sandy clay loam, silty clay, silty clay loam, clay, clay loam)	2.4-2.75	2.75-2.9

<sup>1</sup>On soils that classify as a "sand" texture do not use more than 1.5 pt/A of Boundary 6.5EC Herbicide, or more than 0.5 lb ai/A of metribuzin in total, or crop injury may occur.

# Table 4: Boundary 6.5EC Herbicide Postemergence Use Rates in Potatoes (for application in center pivot irrigation water only)

	0.5% Organic Matter and Above
Soil Texture	Pt/A
COARSE <sup>1</sup> (Sand, loamy sand, sandy loam)	1.5
<b>MEDIUM or FINE</b> (Loam, silt loam, silt, sandy clay,	1.5-2.2
sandy clay loam, silty clay, silty clay loam, clay,	
clay loam)	

<sup>1</sup>Crop injury may occur on soils that classify as a "sand" texture and have less than 0.5% organic matter.

### **Restrictions:**

- Two applications may be applied per year. For potatoes grown in soils with organic matter between 3% and 10% do not apply more than 5.1 pints (3.35 lb ai S-metolachlor) per acre/year; and in soils with organic matter between 0.5% and 3.0% do not apply more than 4.95 pints (3.25 lb ai S-metolachlor) per acre/year. Do not apply more than 1.0 lb ai of metribuzin per acre/year. Do not apply Boundary 6.5EC Herbicide to muck or peat soils.
- 2. Do not apply Boundary 6.5EC Herbicide postemergence if the weather in the next 3 days is predicted to be cool, wet or cloudy, as crop injury may occur.
- 3. Do not harvest within 60 days of the last Boundary 6.5EC Herbicide application.
- 4. Do not apply after June 30 in Idaho, Oregon, or Washington if the treated land will be planted to a crop other than potatoes in the fall.
- 5. Do not apply Boundary 6.5EC Herbicide to sweet potatoes or yams.

#### Precautions:

1. To avoid crop injury, make postemergence applications only on russetted or white skinned varieties of potatoes that are not early maturing. Avoid postemergence applications on Atlantic, Bellchip, Centennial, Chipbelle, Shepody and Superior varieties. Preemergence applications on these varieties may cause crop injury under adverse weather conditions, on coarse soils, under high soil pH and with higher use rates.

- 2. Potato varieties may vary in their response to a given herbicide application. When using Boundary 6.5EC Herbicide for the first time on a particular variety, always determine crop tolerance before using on a field-scale.
- 3. The planting of sensitive crops such as lettuce, cole crops and cucurbits during the next growing season following application of Boundary 6.5EC Herbicide may result in injury to that crop.
- 4. Certain cereal varieties are sensitive to metribuzin and are not advised to be planted during the next growing season unless the following cultural practices occur:
  - a. Potato vines left in the row as a result of harvest must be uniformly distributed over the soil surface prior to plowing, and
  - b. Plow with a moldboard plow to a depth sufficient to mix the upper 8 inches of soil.
- 5. Do not apply Boundary 6.5EC Herbicide as a preplant incorporated application in potatoes, or crop injury may occur.

## Tank Mixtures with Other Products Registered for Use in Potatoes

For preemergence applications in potatoes, Boundary 6.5EC Herbicide may be tank mixed with other pesticide products registered for use in this way and timing in potatoes. Follow the directions for use, observe the stated precautions, and abide by the limitations and restrictions on the most restrictive of the product labels. If you have no previous experience mixing these products under your conditions, perform a compatibility test before attempting large-scale mixing (see the Compatibility Test section of this label).

For postemergence applications (center pivot irrigation applications only), i.e. where potato vines are exposed, there may be increased risk of crop injury from certain product mixtures. At this application timing, tank mix Boundary 6.5EC Herbicide only with pesticide products which allow tank mixing and postemergence chemigation on their product label. Follow the directions for use, observe the stated precautions, and abide by the limitations and restrictions on the most restrictive of the product labels.

#### SOYBEANS (EXCEPT CALIFORNIA)

Boundary 6.5EC Herbicide may be applied preplant surface, preplant incorporated, preemergence, postemergence directed or as a sequential application to control weeds listed on this label.

#### **Grazing and Feeding Treated Soybean Plants**

Treated soybean plants may be grazed or fed to livestock 40 days after the last application of Boundary 6.5EC Herbicide.

#### **Rate Ranges**

Where a rate range is shown, use a lower rate on soils that are coarse-textured and/or low in organic matter. Use a higher rate on soils that are relatively fine-textured and/or high in organic matter.

## Replanting

If replanting is necessary in fields previously treated with Boundary 6.5EC Herbicide, the field may be replanted to soybeans. Excessive tillage may result in reduced weed control. Do not apply a second treatment as injury to soybeans may occur.

### **Precautions (Soybeans)**

Injury to soybeans or reduced weed control may occur when Boundary 6.5EC Herbicide is used under the following conditions; avoid these conditions wherever possible.

- When soils have a calcareous surface area or a pH of 7.5 or higher.
- Due to the sensitivity of certain soybean varieties, there is an increased risk of crop injury with use of Boundary 6.5EC Herbicide on Altona, AP 55, AP 71, Asgrow 6520, Burlison, Coker 102, Coker 156, Dassel, GL 3202, Govan, Maple Amber, NB 3665, NKS 1884, Paloma 350, Portage, Regal, Semmes, Terra-Vig 505, Terra-Vig 606, Tracy, Vansoy, and Vinton 81. If you choose to plant a newly released soybean variety, consult your seed supplier for information on its tolerance to metribuzin (an active ingredient in Boundary 6.5EC Herbicide) before using Boundary 6.5EC Herbicide.
- When applied in conjunction with soil-applied organic phosphate pesticides.
- Uneven application or improper incorporation of Boundary 6.5EC Herbicide can decrease the level of weed control and/or increase the level of crop injury.
- When applied to any soil with less than 0.5% organic matter.
- Where soil incorporation is deeper than advised.
- When sprayers were not calibrated accurately.
- When heavy rains occur soon after application, especially in poorly drained areas where water may stand for several days.

- When soybeans are planted less than 1-½" deep, particularly when Boundary 6.5EC Herbicide is applied preemergence.
- Where high soil levels of atrazine are present.
- When using poor quality soybean seed.

#### Restriction

• Do not exceed 3.71 lb ai/A/year of S-metolachlor- containing products.

Boundary 6.5EC Herbicide, when applied as directed, will control the following weeds.

#### Table 5: Weeds Controlled by Boundary 6.5EC Herbicide

#### Annual Broadleaves\*

Anoda, spurred Beggarweed, Florida Carpetweed Chickweed, common Copperleaf, hophornbeam <i>Galinsoga</i> spp. Henbit Jimsonweed Knotweed spp. Kochia Ladysthumb	Lambsquarters, common Lettuce, prickly Mallow, Venice Mustard spp. Nightshade, black Pennycress, field Pepperweed, Virginia Pigweed spp. Purslane, common Pusley, Florida	Redweed Sesbania spp. Shepherd's-purse Sicklepod Sida, prickly/teaweed Smartweed, Pennsylvania Spurge, spotted Starbur, bristly Thistle, Russian Waterhemp spp.
<u>Annual Grasses</u>		
Barnyardgrass Bluegrass, annual	Goosegrass Junglerice	

Barnyarugrass	Goosegrass
Bluegrass, annual	Junglerice
Crabgrass spp.	Panicum, fall
Crowfootgrass	Rice, red
Cupgrass, prairie	Signalgrass, broadleaf
Cupgrass, southwestern	Witchgrass
Foxtail spp.	

Boundary 6.5EC Herbicide will provide suppression\*\* of cocklebur, common ragweed, seedling johnsongrass, velvetleaf, hairy nightshade, yellow nutsedge, Texas panicum, sandbur spp., shattercane, common sunflower, and the volunteer crops barley, sorghum, and wheat.

\*Except triazine-resistant biotypes other than *Galinsoga* spp., black nightshade, pigweed spp. and waterhemp spp.

\*\*Suppression means significant activity, but not always at a level considered acceptable for commercial weed control.

# Boundary 6.5EC Herbicide Foundation Program for Planned 2-Pass Weed Control Systems

Boundary 6.5EC Herbicide may be applied preplant incorporated or preemergence at 1.5-1.8 pt/A on all soils to reduce competition from the weeds listed in Table 5 for a 30day period when followed by a planned postemergence weed control treatment. Preferred postemergence treatments include any product or combination of products labeled to control the specific weeds remaining in the field including glyphosateresistant soybean varieties. Follow all application directions for Boundary 6.5EC Herbicide used alone, either preplant incorporated or preemergence. For the postemergence herbicide application, consult the selected postemergence herbicide manufacturer's label for weeds controlled, weed size, application rate, additional use directions, precautions, and restrictions before use.

**Restriction:** On soils with pH above 7.0, use the 1.5 pt/A rate only.

## Boundary 6.5EC Herbicide in Conventional Tillage Systems

### Preplant Incorporated Application

Incorporate Boundary 6.5EC Herbicide uniformly into the top 2 inches of soil within 14 days before planting using a disk, field cultivator, rolling cultivator, or similar implement. Apply Boundary 6.5EC Herbicide preplant incorporated if furrow irrigation is used or when a period of dry weather after application is expected. If soybeans are planted on beds, apply and incorporate the tank mixture after bed formation.

#### **Preemergence Application**

Dry weather following preemergence application of Boundary 6.5EC Herbicide may reduce effectiveness. If weeds develop, cultivate uniformly with shallow tilling equipment such as a rotary hoe that will not damage soybeans.

For information on applying product in fluid or dry fertilizer, refer to **Application in Water or Fluid Fertilizers** or **Impregnation onto Dry Bulk Granular Fertilizers** and **Application of Impregnated Dry Bulk Granular Fertilizer** on this label.

# Table 6: Boundary 6.5EC Herbicide Use Rates - Conventional Tillage Systems (Broadcast Rate)

	0.5 to 3% Organic Matter	Over 3% Organic Matter <sup>2</sup>
Soil Texture	(Pt/A)	(Pt/A)
COARSE <sup>1</sup> (Loamy sand, sandy loam)	1.2-1.5 <sup>3</sup>	1.5-1.8

MEDIUM (Loam, silt loam, silt, sandy clay,	1.8-2.1	2.1-2.4
_sandy clay loam)		
<b>FINE</b> (Silty clay, silty clay loam <sup>4</sup> , clay, clay	2.4-2.7	2.4-3.0
loam)		

<sup>1</sup>Do not use on sand soils. On coarse-textured soils, do not use on loamy sand soils with less than 2% organic matter.

<sup>2</sup>For preplant incorporated application, use the lower rate.

<sup>3</sup>For Southern and Southeastern states, see section below In Coarse (Light) Soils
 <sup>4</sup>Silty clay loam soils are transitional soils and may be classified as medium-textured soils in some regions of the U.S. When using Boundary 6.5EC Herbicide, treat this soil as "fine-textured."

**Restrictions:** On soils with pH above 7.0, soybean injury caused by the metribuzin in Boundary 6.5EC Herbicide may occur at rates higher than 1.5 pt/A. To avoid injury, do not use Boundary 6.5EC Herbicide at rates greater than 1.5 pt/A on soils above pH 7.0.

### In Coarse (Light) Soils

(Only in AL, AR, FL, GA, LA, MS, MO, NC, OK, SC, TN, TX, VA)

Boundary 6.5EC Herbicide may be applied as a preplant incorporated or preemergence application in coarse-textured, low organic matter soils in the states listed above. Refer to the appropriate sections of this label for specific directions on use, precautions, and restrictions.

Weeds Controlled: Refer to Table 5.

#### Table 7: Boundary 6.5EC Herbicide Preemergence Application (Broadcast Rates)

Soil Texture	Organic Matter	Boundary 6.5EC Herbicide <sup>2</sup> (Pt/A)
<b>COARSE</b> (Sand <sup>1</sup> , loamy sand, sandy	0.5% or above	1.2-2.1
loam)		

<sup>1</sup>Not for use on sand with less than 1% organic matter.

<sup>2</sup>Use the higher rate under heavy weed pressures and/or on soils higher in organic matter. For maximum control of sicklepod, use a preemergence application.

**Restrictions:** On soils with pH above 7.0, soybean injury caused by the metribuzin in Boundary 6.5EC Herbicide may occur at rates higher than 1.5 pt/A. To avoid injury, do not use Boundary 6.5EC Herbicide at rates greater than 1.5 pt/A on soils above pH 7.0.

# Herbicides That May Be Applied Preplant, Preplant Incorporated, or Preemergence with Boundary 6.5EC Herbicide

Boundary 6.5EC Herbicide may be applied alone or in tank mixture in preplant, preplant incorporated, or preemergence applications. Residual herbicide applications can be made with, but are not limited to, the products listed below:

Canopy® 75 DG	FirstRate® 84WD	Python® 80 WDG
Command® 3 ME	Prowl® 3.3 EC	Scepter 70 DG

Refer to the above information and the individual product labels for use directions, use rates, and special precautions/restrictions.

# Herbicides That May Be Applied Postemergence Following Boundary 6.5EC Herbicide

If required, application of Boundary 6.5EC Herbicide alone or in tank mixture may be followed by an application of a postemergence herbicide to provide additional control of certain weeds. Postemergence herbicide applications can be made with, but are not limited to, the products listed below:

Aim®	Frontrow®		
Arrow™	Fusion®		
Assure® II	Harmony® GT XP		
Basagran®	Liberty® <sup>2</sup>		
Classic®	Poast®		
Cobra®	Poast Plus®		
Extreme <sup>®1</sup>	Pursuit®		
FirstRate	Raptor®		
Flexstar®	Reflex®		
Flexstar® GT 3.5 <sup>1</sup>	Resource®		
Fusilade® DX	Roundup® brands <sup>1</sup>		
<sup>1</sup> Use on glyphosate-resistant soybean varieties only.			
<sup>2</sup> Use on glufosinate-resistant	soybean varieties only.		
<sup>3</sup> Use on sulfonylurea tolerant	soybean varieties only.		

Scepter Select® Sequence®<sup>1</sup> Storm® Synchrony® XP<sup>3</sup> Ultra Blazer®

Refer to the above information and the individual product labels for use directions, use rates, and special precautions/restrictions.

#### **Burndown Weed Control**

Boundary 6.5EC Herbicide can be used as part of a burndown herbicide program for control of existing vegetation prior to soybean emergence in conservation tillage (reduced-tillage/no-till) systems. Boundary 6.5EC Herbicide may be tank mixed with 2,4-D low volatile ester (LVE), Gramoxone brands, , Roundup brands, Fusion, Poast Plus, or Select for control of emerged weeds prior to crop emergence. Boundary 6.5EC Herbicide burndown tank mixes can be applied before planting or prior to crop emergence.

### Application

Boundary 6.5EC Herbicide may be applied up to 30 days before planting or preemergence. Apply only by ground equipment when Boundary 6.5EC Herbicide is used for burndown of existing vegetation in conservation tillage systems. Use the high end of the rate range for Boundary 6.5EC Herbicide applications made 14-30 days before planting. Refer to Table 16 for rates of Boundary 6.5EC Herbicide and to the following table for rates of tank mix partners. Follow all label directions, restrictions, and precautions for tank mix partners.

*Precautions:* Do not apply these treatments after crop emergence. Observe all precautions and restrictions on the labeling of all products used in tank mixtures. Refer to the **Product Information** section of this label for additional information, precautions, and restrictions.

### Soybeans

- 1. Apply only 2,4-D low volatile ester formulations which are registered and labeled for preplant or burndown use.
- 2. Do not apply tank mixtures containing 2,4-D LVE if wind is blowing toward desired susceptible plants (i.e., cotton, tobacco, tomato, etc.) or when wind speeds exceed 6 miles per hour. Observe all precautions and restrictions of all products used in tank mixtures.

#### **Feeding Restrictions**

Soybean plants or hay treated with Boundary 6.5EC Herbicide may be grazed or fed to livestock 40 days after application. Follow the most restrictive preharvest interval of all products used in a tank mixture.

**Weeds Controlled:** Boundary 6.5EC Herbicide in tank mixtures with the herbicides listed in Table 14 will provide burndown control of the weeds listed below.

Boundary 6.5EC Herbicide +								
Weeds Controlled	2,4-D LVE	Poast Plus + 2,4-D LVE	Select + 2,4-D LVE	Fusion + 2,4-D LVE	Roundup Brands	Roundup Brands + 2,4- D LVE	Gramoxone SL 2.0	Gramoxone SL 2.0 + 2,4-D LVE
Annual Grasses			Ν	laximum E	Burndown He	ight (Inches)		
Barley		-	-	-		8	4-	6
Barnyardgrass		2-3	3-4	-		6	4-	6
Crabgrass spp.		2-3	-	-		6	4-	6
Foxtail spp.	Does	2-3	3-4	2-6		8	4-	6
Johnsongrass,	not	2-3	_	_		8	4-	6
seedling	control	-	-	-			4-	0
Panicum, fall	these	2-3	3	2-6		6	4-	
Sandbur, field	species	-	-	-		8	4-	6
Shattercane		2-3	-	-		8	4-	
Wheat, volunteer		-	-	-		6	4-	6
Witchgrass		2-3	-	-		6	4-	6
Broadleaves			Ν	laximum E	Burndown He	ight (Inches)		
Buffalobur		-			6	6	4-6	4-6
Chickweed, common		6	;		6	6	4-6	4-6
Cocklebur, common		6	i		6	8	4-6	4-6
Dandelion, common		6 d	ia¹		2 dia <sup>2</sup>	6 dia <sup>1</sup>	4 dia <sup>3</sup>	6 dia <sup>1</sup>
Henbit		4		4	4	4-6	4-6	
Horseweed/marestail	6 <sup>1</sup>		4 <sup>2</sup>	6	3	6 <sup>1</sup>		
Jimsonweed	6		6	6	4-6	4-6		
Kochia		4 <sup>1</sup>		4	4	4	4	
Ladysthumb		6		6	8	4-6	4-6	
Lambsquarters, common		6			6	8	4-6	4-6
Lettuce, prickly		6		4	6	4-6	4-6	
Mallow, Venice		6	i		6	6	4-6	4-6
Morningglory spp.		6			2	4	2	4
Mustard spp.		6			6	8	4-6	4-6
Pennycress, field		6			6	6	4-6	4-6
Pigweed spp. (annual)		6			6	8	4-6	4-6
Ragweed, common	6		6 <sup>2</sup>	8	4-6	4-6		
Ragweed, giant	61		42	6	4	6		
Shepherd's-purse	6		6	6	4-6	4-6		
Sida, prickly		6	;		4	4	4	4
Smartweed, Pennsylvania	6		6	8	4-6	4-6		
Sunflower, common	6		6	6	4-6	4-6		
Thistle, Russian		4			2-4 <sup>2</sup>	4	4	4-6
Velvetleaf		6		6	8	4-6	4-6	
Waterhemp spp.		6			6	8	4-6	4-6

## Table 8: Weeds Controlled by Burndown Rates of Boundary 6.5EC Herbicide Tank **Mixtures**

<sup>1</sup>Use 2,4-D LVE at 0.5 lb ai/A. <sup>2</sup>Use a minimum of 0.75 lb ai/A of Roundup brands.

<sup>3</sup>Suppression only.

## Boundary 6.5EC Herbicide Use Rates For Reduced and No-Till Systems

### **Preplant Surface Application**

Boundary 6.5EC Herbicide may be used in reduced-till and no-till systems. Applications may be made up to 30 days before planting or after planting, but before soybean emergence. Residual herbicides such as Canopy, FirstRate, Scepter, Command, Python, and Prowl may be tank mixed for additional weed control. If weeds are present at time of application, burndown herbicides may be added to the tank mixes (see **Burndown Weed Control** section). Refer to the tank mix product labels for specific rates and use directions.

# Table 9: Boundary 6.5EC Herbicide Use Rates for Reduced-Till and No-TillSystems (Broadcast Rates)

Soil Texture	Boundary 6.5EC Herbicide <sup>1</sup> (Pt/A)
COARSE <sup>2</sup> (Loamy sand, sandy loam)	1.2-2.1
<b>MEDIUM</b> (Loam, silt loam, silt, sandy clay, sandy clay loam)	2.1-3.0
<b>FINE</b> (Silty clay, silty clay loam <sup>3</sup> , clay, clay loam)	2.7-3.6

<sup>1</sup>Use low rate range for low residue level or soils with less than 3% organic matter. Use the higher rate range for high residue level or soils with greater than 3% organic matter.

<sup>2</sup>Do not use on sand soils. On coarse-textured soils, do not use on loamy sand soils with less than 2% organic matter.

<sup>3</sup>Silty clay loam soils are transitional soils and may be classified as medium-textured soils in some regions of the U.S. When using Boundary 6.5EC Herbicide, treat this soil as "fine-textured."

#### **Boundary 6.5EC Herbicide Sequential Application**

An early preplant (surface-applied or shallow incorporated) application of Boundary 6.5EC Herbicide, followed by a preemergence application of Boundary 6.5EC Herbicide after planting but before soybean emergence, will provide more consistent control of broadleaf and grass weeds than a single application.

A sequential application will decrease the need for tillage and/or burndown herbicides for the control of existing vegetation before planting, while providing residual control of weeds after planting.

## Application

An early preplant application may be made 15-30 days before planting soybeans. Follow this application with a preemergence overlay application of Boundary 6.5EC Herbicide after planting but before crop emergence. Follow directions on this label for sequential applications from 0-14 days before planting.

Where a rate range is specified, use the higher rates (a) in fields with a history of severe weed pressure, (b) when the time between early preplant and preemergence overlay applications approaches the maximum 30 days, (c) when the organic matter content of the soil is over 3%, and/or (d) when heavy crop residues are present on the soil surface.

When weeds exceed 1-1.5 inches in height or diameter at application, use a burndown herbicide, such as Roundup brands, Gramoxone SL 2.0, or 2,4-D LVE.

**Weeds Controlled:** In addition to weeds controlled by Boundary 6.5EC Herbicide alone, the sequential application improves control of the following annual broadleaf weeds: buffalobur, cocklebur, common ragweed, velvetleaf, and sunflower.

#### Preemergence Early Preplant Overlay Application Application **Boundary 6.5EC Boundary 6.5EC** Herbicide Herbicide Soil Texture<sup>1</sup> - Followed By -(Pt/A) (Pt/A) COARSE<sup>1</sup> (Sand, loamy - followed by -1.2-1.8 0.3-0.9 sand, sandy loam) MEDIUM (Loam, silt loam, 1.5-2.1 - followed by -0.6-1.2 sandy clay loam, silt, sandy clav)

#### Table 10: Sequential Application (Broadcast Rates)

**FINE** (Silty clay loam<sup>3</sup>, clay

loam, silty clay, clay)

<sup>1</sup>On coarse-textured soils, do not use on sand soils with less than 1% organic matter. However, on coarse-textured soils with a calcareous surface area or a pH of 7.5 or higher, do not use on sand soils with less than 2% organic matter, or on loamy sand or sandy loam soils with less than 1% organic matter.

- followed by -

0.9-1.5

1.8-2.4

<sup>2</sup>Total not to exceed 3.9 pints of Boundary 6.5EC Herbicide per acre per use season.
 <sup>3</sup>Silty clay loam soils are transitional soils and may be classified as medium-textured soils in some regions of the U.S. When using Boundary 6.5EC Herbicide, treat this soil as "fine-textured."

## Postemergence Directed Application (AR, LA, MO – Bootheel only, MS, TN)

Boundary 6.5EC Herbicide can be applied postemergence directed to soybeans to provide residual control of weeds that emerge after crop emergence in the states of Arkansas, Louisiana, Missouri - Bootheel only, Mississippi and Tennessee. A postemergence directed spray of Boundary 6.5EC Herbicide can be applied to soybeans in addition to a preemergence or preplant application of Boundary 6.5EC

Herbicide according to label directions. The total amount of Boundary 6.5EC Herbicide applied must not exceed 3.9 pints per acre per season.

See the table below for Boundary 6.5EC Herbicide postemergence directed rates according to soil type and organic matter level.

# Table 11: Boundary 6.5EC Herbicide Rates for Postemergence DirectedApplication (Broadcast Rates)

	Broadcast Rate Per Acre		
Soil Texture	0.5% to less than 3% organic matter	3% organic matter or greater	
<b>Coarse</b> Loamy sand, sandy loam (over 2% organic matter)	1.3 pt	1.5 pt	
Medium	1.5-2.0 pt	2 pt	
Fine	2 pt	2 pt	
<b>Mississippi Delta only</b> Silty clay, clay	2 pt	2 pt	

A postemergence directed application of Boundary 6.5EC Herbicide will provide residual preemergence weed control of the weeds listed in Table 5.

Apply in 10 to 20 gallons of water per acre in a 6 to 8 inch band on each side of the row when soybeans are at least 8 inches tall. Do not allow the directed spray to contact more than the lower  $\frac{1}{4}$  to  $\frac{1}{3}$  of soybean plants. Soybean leaves contacted by the spray will be killed or severely injured. Do not apply directly to soybeans or serious injury will occur.

*Precautions: If heavy rain occurs soon after application, crop injury may result, especially in poorly drained areas where water stands for several days.* 

### Postemergence Directed Application Tank Mixes - Glyphosate Tolerant Soybeans Only

Postemergence directed applications of Boundary 6.5EC Herbicide can be tank mixed with glyphosate such as Roundup brands in glyphosate-tolerant soybeans only. Refer to the tank-mix partner label for use directions, restrictions and limitations. The most restrictive product labeling applies.

## **Postemergence Directed Applications – Restrictions**

- Do not exceed a total of 3.9 pt/A/ year of Boundary 6.5EC Herbicide.
- Do not exceed 3.71 lb ai/A/year of S-metolachlor- containing products.

- Do not graze or feed treated soybean forage, hay, or straw to livestock.
- Do not apply within 75 days of soybean harvest.
- Do not Boundary 6.5EC Herbicide to sandy loam or loamy sand soils with less than 2% organic matter.

TANK-MIX TABLE		
Product Name	EPA Registration Number	Active Ingredient(s)
2,4-D LVE	numerous	2,4-D
Aim®	279-3241	carfentrazone
Arrow®	66222-60	clethodim
Assure® II	5481-646	quizalofop-p-ethyl
Basagran®	7969-112	bentazon
Canopy® 75 DG	353-444	metribuzin + chlorimuron ethyl
Classic®	353-436	chlorimuron ethyl
Cobra®	59639-34	lactofen
Command® 3ME	279-3158	clomazone
Extreme®	241-405	glyphosate + imazethapyr
FirstRate® 84 WDG	62719-275	cloransulam-methyl
Flexstar®	100-1101	fomesafen
Flexstar® GT 3.5	100-1385	glyphosate + fomesafen
Frontrow	62719-299	cloransulam-methyl + flumetsulam
Fusilade® DX	100-1070	fusilade-p-butyl
Fusion®	100-1059	fluazifop-p-butyl + fenoxaprop-p-ethyl
Gramoxone® SL 2.0	100-1431	paraquat
Gramoxone® SL 3.0	100-1652	paraquat
Harmony® GT XP	279-9577	thifensulfuron methyl
Liberty®	264-829	glufosinate-ammonium
Poast®	7969-58	sethoxydim
Poast Plus®	7969-88	sethoxydim
Prowl® 3.3 EC	241-337	pendimethalin
Pursuit®	241-310	imazethapyr
Python® 80 WDG	62719-277	flumetsulam
Raptor®	241-379	imazamox
Reflex®	100-993	fomesafen
Resource®	59639-82	flumiclorac pentyl ester
Roundup brands	524-549	glyphosate
Scepter® 70 DG	241-306	imazaquin
Select® 2 EC	59639-3	clethodim
Sequence®	100-1185	glyphosate + S-metolachlor
Storm®	70506-59	bentazon + acifluorfen
Synchrony® XP	353-648	thifensulfuron + chlorimuron ethyl
Ultra Blazer®	70506-60	acifluorfen

## STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

## Pesticide Storage

Store in a cool, dry place and in such a manner as to prevent cross-contamination with other pesticides, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area.

Handle and open container in a manner as to prevent spillage. If container is leaking, invert to prevent leakage. If the container is leaking or material is spilled for any reason or cause, carefully dam up spilled material to prevent runoff. Refer to **Precautionary Statements** on label for hazards associated with the handling of this material. Do not walk through spilled material. Absorb spilled material with absorbing type compounds and dispose of as directed for pesticides below. In spill or leak incidents, keep unauthorized people away.

## Pesticide Disposal

Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

## Container Handling [less than or equal to 5 gallons]

**Non-refillable container.** Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use and disposal. Drain for 10 seconds after the flow begins to drip. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

## Container Handling [Greater than 5 gallons]

**Non-refillable containe**r. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

## Container Handling [Greater than 5 gallons]

**Refillable container.** Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the person refilling. To clean container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to contain spills, leaks, and other accidents to prevent further exposure of facilities and equipment. Absorb spilled product with absorbing materials and dispose of in an approved waste disposal facility. In the event of a major spill, fire, or other emergency, call 1-800-888-8372, day or night.

Boundary®, Flexstar®, Flexstar® GT 3.5, Fusilade DX®, Fusion®, Gramoxone® SL 2.0, Reflex®, Sequence®, the ALLIANCE FRAME, the SYNGENTA Logo and the PURPOSE ICON are Trademarks of a Syngenta Group Company

Agsorb® trademark of Oil-Dri Corporation

Aim® and Command® trademarks of FMC Corporation

Arrow<sup>™</sup> trademark of Makhteshim Agan of North America, Inc.

Assure® II trademark of Nissan Chemical Industries, Ltd.

Basagran®, Dash® HC, Extreme®, Poast®, Poast Plus®, and Rezult® trademarks of BASF Corporation

Canopy®, Classic®, Harmony® GT XP, Synchrony® XP, and Viton® trademarks of E. I. du Pont de Nemours and Co.

Celatom® MP-79® trademark of Eagle-Picher Industries, Inc.

Clorox® trademark of The Clorox Company

Cobra®, Resource®, and Select® trademarks of Valent USA Corporation

Compex® trademark of KALO, Inc.

FirstRate®, Frontrow®, and Python® trademarks of Dow AgroSciences

Liberty® and LibertyLink® trademarks of Bayer CropScience

Prowl®, Pursuit®, Raptor®, and Scepter® trademarks of BASF Ag Products

Roundup® and Roundup Ready® trademarks of Monsanto Company

Ultra Blazer® trademark of United Phosphorus

Unite® trademark of HACO, Inc.

©20XX Syngenta

For non-emergency (e.g., current product information), call Syngenta Crop Protection at 1-800-334-9481.

Manufactured for: Syngenta Crop Protection, LLC P. O. Box 18300 Greensboro, North Carolina 27419-8300

SCP 1162A

Boundary 6.5 EC 1162 MAS 1217 AMEND-B MAY2019-CL – sv 08/26/2020 000100-01162.20190514B.BOUNDARY-6.5EC-AMEND-MAY2019-CL.pdf

#### SUPPLEMENTAL LABELING

#### Syngenta Crop Protection, LLC

P. O. Box 18300 Greensboro, North Carolina 27419-8300 **SCP** 

Sale, use and distribution of this product in Nassau and Suffolk Counties in the State of New York is prohibited.

S-METOLACHLOR	GROUP	15	HERBICIDE
METRIBUZIN	GROUP	5	HERBICIDE

#### Boundary® 6.5EC Herbicide

..

## This supplemental label expires on 09/15/2023 and must not be used or distributed after this date.

Active Ingredients:	
S-metolachlor*:	
Metribuzin**:	
Other Ingredients***:	28.0%
Total:	100.0%

Boundary® 6.5EC Herbicide is formulated as an emulsifiable concentrate (EC) containing 5.25 lb of *S*-metolachlor and 1.25 lb of metribuzin per gallon.

\*CAS No. 87392-12-9 \*\*CAS No. 21087-64-9

. .. .

\*\*\*Contains approximately 14% petroleum distillates.

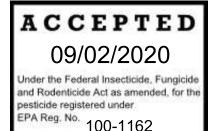
#### KEEP OUT OF REACH OF CHILDREN.

## WARNING/AVISO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted in detalle. If you do not understand the label, find someone to explain it to you in detail.

EPA Reg. No. 100-1162

All applicable directions, restrictions and precautions on the EPA registered label are to be followed. Before using Boundary 6.5EC Herbicide as permitted according to this supplemental label, read and follow all applicable directions, restrictions, and precautions on the EPA registered label on or attached to the pesticide product container. This Supplemental Labeling contains revised use instructions and or restrictions that may be different from those that appear on the container label. This Supplemental Labeling must be in the possession of the user at the time of pesticide application. It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.



Boundary 6.5EC Herbicide Page 2



## DIRECTIONS FOR USE

#### SOYBEANS (EXCEPT CALIFORNIA)

Boundary 6.5EC Herbicide may be applied preplant surface, preplant incorporated, preemergence, postemergence directed or as a sequential application to control weeds listed on this label.

#### **Grazing and Feeding Treated Soybean Plants**

Treated soybean plants may be grazed or fed to livestock 40 days after the last application of Boundary 6.5EC Herbicide.

#### **Rate Ranges**

Where a rate range is shown, use a lower rate on soils that are coarse-textured and/or low in organic matter. Use a higher rate on soils that are relatively fine-textured and/or high in organic matter.

### Replanting

If replanting is necessary in fields previously treated with Boundary 6.5EC Herbicide, the field may be replanted to soybeans. Excessive tillage may result in reduced weed control. Do not apply a second treatment as injury to soybeans may occur.

#### **Precautions (Soybeans)**

Injury to soybeans or reduced weed control may occur when Boundary 6.5EC Herbicide is used under the following conditions; avoid these conditions wherever possible.

- When soils have a calcareous surface area or a pH of 7.5 or higher.
- Due to the sensitivity of certain soybean varieties, there is an increased risk of crop injury with use of Boundary 6.5EC Herbicide on Altona, AP 55, AP 71, Asgrow 6520, Burlison, Coker 102, Coker 156, Dassel, GL 3202, Govan, Maple Amber, NB 3665, NKS 1884, Paloma 350, Portage, Regal, Semmes, Terra-Vig 505, Terra-Vig 606, Tracy, Vansoy, and Vinton 81. If you choose to plant a newly released soybean variety, consult your seed supplier for information on its tolerance to metribuzin (an active ingredient in Boundary 6.5EC Herbicide) before using Boundary 6.5EC Herbicide.
- When applied in conjunction with soil-applied organic phosphate pesticides.
- Uneven application or improper incorporation of Boundary 6.5EC Herbicide can decrease the level of weed control and/or increase the level of crop injury.
- When applied to any soil with less than 0.5% organic matter.
- Where soil incorporation is deeper than advised.

- When sprayers were not calibrated accurately.
- When heavy rains occur soon after application, especially in poorly drained areas where water may stand for several days.
- When soybeans are planted less than 1-1/2" deep, particularly when Boundary 6.5EC Herbicide is applied preemergence.
- Where high soil levels of atrazine are present.
- When using poor quality soybean seed.

#### Restriction

• Do not exceed 3.71 lb ai/A/year of S-metolachlor- containing products. ©20xx Syngenta

Boundary 6.5EC 1162 MAS 1217 AMEND SUP\_B MAY2019-CL – sv 8/26/2020 000100-01162.20190514B.BOUNDARY-6.5EC-AMEND-SUP-MAY2019-CL.pdf