

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

September 20, 2019

Odette Alexander- Watkins Senior Regulatory Product Manager Syngenta Crop Protection, LLC P.O.Box 18300 Greensboro, NC 27419

Subject: Registration Review Label Mitigation for Fomesafen

Product Name: PREFIX® HERBICIDE EPA Registration Number: 100-1268

Application Date: 06/26/2018 Decision Number: 555229

Dear Ms. Alexander-Watkins:

The Agency, in accordance with the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, has completed reviewing all of the information submitted with your application to support the Registration Review of the above referenced product in connection with the Fomesafen Interim Decision, and has concluded that your submission is acceptable. The label referred to above, submitted in connection with registration under FIFRA, as amended, is acceptable.

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 the Federal Insecticide Fungicide and Rodenticide Act 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.

A copy of your label stamped "Accepted" is enclosed. Products shipped after 12 months from the date of this amendment must bear the new revised label. Your release for shipment of the product bearing the amended label 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.

Page 2 of 2 EPA Reg. No. 100-1268 Decision No. 555229

If you have any questions about this letter, please contact Srijana Shrestha by phone at 703-305-6471, or via email at Shrestha.srijana@epa.gov.

Sincerely,

Linda Arrington, Branch Chief

Risk Management and Implementation Branch 4

Pesticide Re-Evaluation Division

Office of Pesticide Programs

Enclosure

## [MASTER LABEL]

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

FOMESAFEN	GROUP	14	HERBICIDE
S-METOLACHLOR	GROUP	15	HERBICIDE

#### Prefix® Herbicide

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

Active Ingredients:

S-metolachlor*	46.4%
Sodium Salt of Fomesafen**	
Other Ingredients:	43.4%
Total:	100.0%

Prefix Herbicide is formulated as an emulsifiable concentrate (EC).

Prefix Herbicide contains 4.34 lb of *S*-metolachlor and 0.95 lb of the sodium salt of fomesafen per gallon.

\*CAS No. 87392-12-9 \*\*CAS No. 108731-70-0

## 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.

See additional precautionary statements and directions for use inside booklet.

EPA Reg. No. 100-1268 EPA Est.

**SCP 1268A** 

gallons

**Net Contents** 

ACCEPTED

Sep 20, 2019

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 100-1268

	FIRST AID			
If in eyes	Hold eye open and rinse slowly and gently with water for 15-20 minutes.			
	<ul> <li>Remove contact lenses, if present, after the first 5 minutes then continue rinsing eye.</li> </ul>			
	Call a poison control center or doctor for treatment advice.			
If swallowed	Call a poison control center or doctor immediately for treatment advice.			
	Have person sip a glass of water if able to swallow.			
	Do not induce vomiting unless told to do so by the poison control center or doctor.			
	Do not give anything by mouth to an unconscious person.			
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 center or doctor for further treatment advice.			
If on skin or	Take off contaminated clothing.			
clothing	Rinse skin immediately with plenty of water for 15-20 minutes.			
	Call a poison control center or doctor for treatment advice.			
Have the product	Have the product container or label with you when calling a poison control center or			
doctor, or going for treatment.				
HOT LINE NUMBER				
For 24 Hour Medical Emergency Assistance (Human or Animal) or				
Chemical Emergency Assistance (Spill, Leak, Fire, or Accident),				
	Call <b>1-800-888-8372</b>			

## PRECAUTIONARY STATEMENTS

## **Hazards to Humans and Domestic Animals**

## WARNING/AVISO

Causes substantial but temporary eye injury. Do not get in eyes or on clothing. Wear protective eyewear such as goggles, face shield, or safety glasses. Harmful if swallowed. 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.

## **Personal Protective Equipment (PPE)**

## Mixers, loaders, applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves such as barrier laminate or Viton®
- Shoes plus socks
- Protective eyewear

## **User Safety Requirements**

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. 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**

Mixers and loaders supporting aerial applications are required to use closed systems. The closed system must be used in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)]. When using the closed system, the mixers' and loaders' PPE requirements may be reduced or modified as specified in the WPS.

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 [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

## **User Safety Recommendations: Users should:**

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove 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**

## Non-target Organism Advisory

This product is toxic to plants and may adversely impact the forage and habitat of non-target organisms, including pollinators, in areas adjacent to the treated site. Protect the forage and habitat of non-target organisms by following label directions intended to minimize spray drift.

For Terrestrial Uses: Do not apply directly to water, or 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. Do not apply when weather conditions favor drift from target area.

Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated area.

## **Ground Water Advisory**

S-metolachlor is known to leach through soil into ground water under certain conditions as a result of label use. This chemical may leach into ground water if used in areas where soils are permeable, particularly where the water table is shallow.

Fomesafen is known to leach through soil into ground water under certain conditions as a result of label use. This chemical may leach into ground water if used in areas where soils are permeable, particularly where the water table is shallow.

## **Surface Water Advisory**

S-metolachlor may impact surface water quality due to spray drift and runoff of rain water. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having high potential for reaching surface water via runoff for several months after application. A level, well-maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential loading of fomesafen from runoff water and sediment. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours. See the manual for "Conservation Buffers to Reduce Pesticide Losses" at the following internet address: http://www.wsi.nrcs.usda.gov/products/W2Q/pest/core4.html ."

## Mixing/Loading Instructions

Product must be used in a manner which will prevent back siphoning in wells, spills or improper disposal of excess pesticide, spray mixtures or rinsates.

All mixing and/or irrigation equipment used for Prefix Herbicide must be equipped with check valves or other devices to prevent siphoning.

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.

## **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 24 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:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves such as barrier laminate or Viton
- Shoes plus socks
- Protective eyewear

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

#### PRODUCT INFORMATION

Prefix Herbicide is a selective herbicide for the control or partial control of certain grass, broadleaf and sedge weeds in soybeans and cotton. Prefix Herbicide may be applied as a preplant surface, preplant incorporated, preemergence, or postemergence treatment in soybeans and as a post-directed treatment in cotton.

#### RESISTANT WEED MANAGEMENT

FOMESAFEN	GROUP	14	HERBICIDE
S-METOLACHLOR	GROUP	15	HERBICIDE

Prefix Herbicide contains the active ingredients fomesafen which inhibits the enzyme protoporphyrinogen oxidase (PPO or PROTOX, Site of Action Group 14) and S-metolachlor which inhibits the formation of very long chain fatty acids (VLCFA, Site of Action Group 15). Some naturally occurring weed populations have been identified as resistant to Group 14 and Group 15 herbicides. Selection of resistant biotypes, through repeated use of these herbicides or lower than recommended 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.

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. If resistant biotypes have been reported, use the full labeled rate of this product, apply at the labeled timing, and tank-mix with a different mode of action product so there are multiple effective modes of application for each suspected resistant weed.

# 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.

## **SPRAY DRIFT MANAGEMENT**

## SPRAY DRIFT Aerial Applications:

- 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 S572.1).
- For all other applications, applicators are required to use a Medium or coarser droplet size (ASABE S572.1).
- For aerial applications: Do not apply when wind speeds exceed 15 mph at the application site. If the wind speed is greater than 10 mph, the boom length must be 65% or less of the wingspan for fixed wing aircraft and 75% or less of the rotor blade diameter for helicopters. Otherwise, the boom length must be 75% or less of the wingspan for fixed wing aircraft and 90% or less 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 15 miles per hour at the application site.
- Do not apply during temperature inversions.

## SPRAY DRIFT Ground Boom Applications:

- User must only apply with the nozzle height recommended by the manufacturer, but no more than 3 feet above the ground or crop canopy unless making a turf, pasture, or rangeland application, in which case applicators may apply with a nozzle height no more than 4 feet above the ground.
- For applications prior to the emergence of crops and target weeds, applicators are required to use a Coarse or coarser droplet size (ASABE S572.1).
- For all other applications, applicators are required to use a Medium or coarser droplet size (ASABE S572.1).
- Do not apply when wind speeds exceed 15 miles per hour at the application site.
- Do not apply during temperature inversions.

#### SPRAY DRIFT ADVISORIES

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT. BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.

#### 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 – Ground Boom**

- Volume Increasing the spray volume so that larger droplets are produced will reduce spray drift. Use the highest practical spray volume for the application. If a greater spray volume is needed, consider using a nozzle with a higher flow rate.
- Pressure Use the lowest spray pressure recommended for the nozzle to produce the target spray volume and droplet size.
- Spray Nozzle Use a spray nozzle that is designed for the intended application. Consider using nozzles designed to reduce drift.

## **Controlling Droplet Size – Aircraft**

 Adjust Nozzles - Follow nozzle manufacturers recommendations for setting up nozzles. Generally, to reduce fine droplets, nozzles should be oriented parallel with the airflow in flight.

#### **BOOM HEIGHT - Ground Boom**

Use the lowest boom height that is compatible with the spray nozzles that will provide uniform coverage. For ground equipment, the boom should remain level with the crop and have minimal bounce.

## **RELEASE HEIGHT - Aircraft**

Higher release heights increase the potential for spray drift.

#### SHIELDED SPRAYERS

Shielding the boom or individual nozzles can reduce spray drift. Consider using shielded sprayers. Verify that the shields are not interfering with the uniform deposition of the spray on the target area.

## **TEMPERATURE AND HUMIDITY**

When making applications in hot and dry conditions, use larger droplets to reduce effects of evaporation.

#### **TEMPERATURE INVERSIONS**

Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. The presence of an inversion can be indicated

by ground fog or 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. Avoid applications during temperature inversions.

#### **WIND**

Drift potential generally increases with wind speed. AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS.

Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

#### **MIXING INSTRUCTIONS**

Prepare no more spray mixture than is needed for the immediate operation. Thoroughly clean the spray equipment before using Prefix 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**

**Prefix Herbicide Alone:** Add ⅓ of the required amount of water or fluid fertilizer to the spray or mixing tank. With the agitator running, add Prefix 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 Prefix Herbicide has completely dispersed in the water or fluid fertilizer. Maintain agitation until all of the mixture has been applied.

**Prefix Herbicide + Tank Mixtures:** Add  $\frac{1}{3}$  of the required amount of water or fluid fertilizer to the mix tank. Start the agitator running before adding any tank mix partners. In general, tank mix partners should be added in this order: products packaged in water-soluble packaging, wettable powders, wettable granules (dry flowables), liquid flowables, liquids such as Prefix 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.

**Notes:** (1) When using Prefix Herbicide in tank mixtures, all products in water-soluble packaging should be added to the tank and mixed with plain water before any other tank mix partner, including Prefix 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.

Prefix Herbicide is compatible with most common tank mix partners. However, the physical compatibility of Prefix Herbicide with tank mix partners should be tested before use. To determine the physical compatibility of Prefix Herbicide with other products, use a jar test, as described below.

**Precaution:** Do not use nitrogen solutions or fluid fertilizers as a complete or partial spray carrier when applying Prefix Herbicide as a postemergence application to soybeans as these combinations may cause crop injury.

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

## **Tank-Mix Compatibility Test**

A jar test is recommended before tank mixing to ensure compatibility of Prefix 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 for preplant surface, preplant incorporated, or preemergence applications only. 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**

- 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 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.

#### **APPLICATION INSTRUCTIONS**

#### Activation

A small amount of soil moisture is required to activate Prefix Herbicide following application. In areas of low rainfall, a preemergence application to dry soil should be followed with light irrigation of 0.25-0.5 inch of water. As with many surface-applied herbicides, weed control and crop tolerance may vary with rainfall and/or soil texture. If rainfall or irrigation within 7-10 days does not occur, cultivate uniformly with shallow tilling equipment such as a rotary hoe that will not damage soybeans.

**Ground Application:** Apply Prefix 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 Prefix Herbicide tank mixtures with wettable powder or dry flowable formulations, use screens and strainers no finer than 50-mesh.

## **Band Applications**

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

<u>Band width in inches</u> X broadcast rate = amount needed Row width in inches per acre per acre of field

**Chemigation:** Do not apply Prefix Herbicide through any type of irrigation system.

**Aerial Application:** Apply Prefix Herbicide in water using a minimum spray volume of 5 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 soybeans with low-drift nozzles at a maximum pressure of 40 psi.

Avoid application to humans or animals. Flagmen and loaders should avoid inhalation of spray mist and prolonged contact with skin.

#### **Sensitive Areas**

Prefix Herbicide should only be applied 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).

## **Cleaning Equipment After Application**

Because some crops, other than soybeans, are sensitive to low rates of Prefix 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®.
- 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. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean water mark. Do not contaminate water when disposing of equipment wash water or rinsate. Do not apply when weather conditions favor drift from target area.
- 6. Repeat steps 2-5.

- 7. Remove nozzles, screens, diaphragm check valves and strainers and clean separately in the ammonia cleaning solution after completing the above procedures.
- 8. Rinse the complete spraying system with clean water.

#### **RESTRICTIONS**

- A maximum of 3 pt of Prefix Herbicide (or a maximum of 0.375 lb ai/A of fomesafen from any product containing fomesafen) may be applied per acre per year in Region 1 (see Regional Use Map).
- A maximum of 3 pt of Prefix Herbicide (or a maximum of 0.375 lb ai/A of fomesafen from any product containing fomesafen) may be applied per acre in ALTERNATE years in Region 2 (see Regional Use Map).
- A maximum of 2.5 pt of Prefix Herbicide (or a maximum of 0.313 lb ai/A of fomesafen from any product containing fomesafen) may be applied per acre in ALTERNATE years in Region 3 (see Regional Use Map).
- A maximum of 2 pt of Prefix Herbicide (or a maximum of 0.25 lb ai/A of fomesafen from any product containing fomesafen) may be applied per acre in ALTERNATE years in Region 4 (see Regional Use Map).
- A maximum of 2 pt of Prefix Herbicide (or a maximum of 0.25 lb ai/A of fomesafen from any product containing fomesafen) may be applied per acre in ALTERNATE years in Region 4a (see Regional Use Map). Apply only to soybeans in Region 4a. Do not make a Prefix Herbicide application later than June 10<sup>th</sup>. Cumulative rainfall plus overhead irrigation must total 15 inches from the period of Prefix Herbicide application to soybean crop maturity to allow planting of rotational crops listed in this label (refer to Crop Rotation Intervals Following Prefix Herbicide Application section). If the soybean crop is lost or the required cumulative rainfall plus irrigation is not received as outlined above, plant only soybeans the following growing season.
- Do not graze treated areas or harvest for forage or hay.
- Do not exceed 2.48 lb ai/A/crop of S-metolachlor (0.571 gallon/A Prefix Herbicide).
- Do not exceed 2.48 lb ai/A per year of S-metolachlor from applications of Prefix or any other metolachlor-containing product.
- To prevent off-site movement due to runoff or wind erosion:
  - Do not treat powdery dry or light sand soils when conditions are favorable for wind erosion. Under these conditions, the soil surface should first be settled by rainfall or irrigation.

- 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.

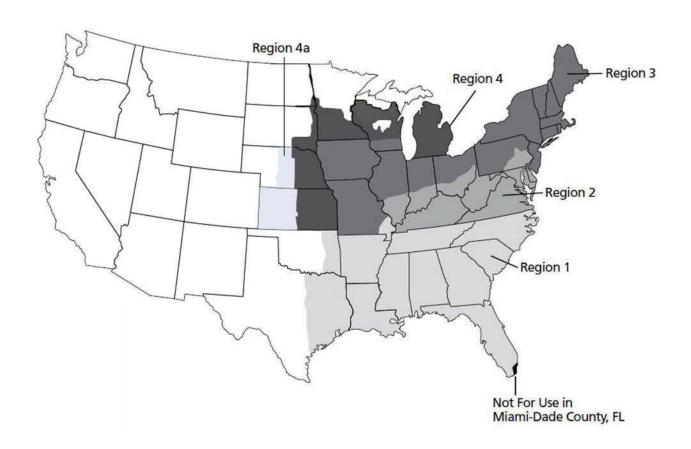
## **PRECAUTIONS**

• Avoid overlapping spray swaths, as injury may occur to rotational crops.

## PREFIX HERBICIDE - USE RATES AND WEEDS CONTROLLED

# REFER TO MAP FOR DEFINITION OF SPECIFIED GEOGRAPHIC REGIONS

## PREFIX HERBICIDE REGIONAL USE MAP



REGION 1 (Maximum Rate 3 pt/A per year)



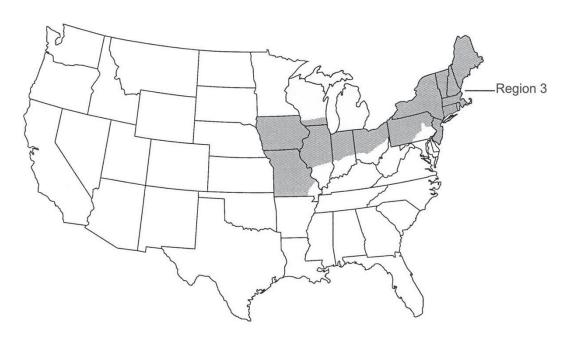
Includes the	Includes the following states or portion of states where Prefix Herbicide may be applied:			
	Alabama	All areas.		
	Arkansas	All areas.		
	Florida	All areas except Miami-Dade County.		
	Georgia	All areas.		
	Louisiana	All areas.		
	Mississippi	All areas.		
Missouri  Region 1		Counties of Bollinger, Butler, Cape Giradeau, Dunklin,		
		Madison, Mississippi, New Madrid, Pemiscot, Perry,		
		Ripley, Scott, Stoddard and Wayne.		
	North Carolina	All areas.		
	Oklahoma	All areas east of U.S. Highway 75 and east of Indian		
		Nation Parkway.		
	South Carolina	All areas.		
	Tennessee	All areas.		
	Texas	All areas east of U. S. Highway 77 to State Road 239		
		including all of Calhoun County.		

REGION 2 (Maximum Rate 3 pt/A, alternate years)



Includes the following states or portion of states where Prefix Herbicide may be applied:				
	Delaware	All areas.		
	Illinois	All areas south of interstate 70.		
	Indiana	All areas south of interstate 70.		
	Kentucky	All areas.		
	Maryland	All areas.		
Region 2	gion 2 Ohio All areas south of interstate 70.			
	Pennsylvania	All areas south of Interstate 80 to the intersection of U.S.		
		Highway 15 and east of U.S. Highway 15 and U.S.		
		Highway 522.		
	Virginia	All areas.		
	West Virginia	All areas.		

REGION 3 (Maximum Rate 2.5 pt/A, alternate years)



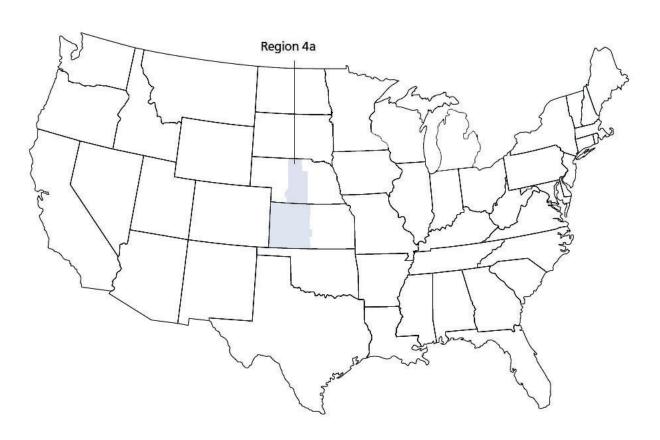
Includes the	Includes the following states or portion of states where Prefix Herbicide may be applied:				
	Connecticut	All areas.			
	Illinois	All areas north of Interstate 70.			
	Indiana	All areas north of Interstate 70.			
	Iowa	All areas.			
	Maine	All areas.			
	Massachusetts	All areas.			
	Missouri	All areas except those listed in Region 1			
	New	All areas.			
Region 3	Hampshire				
Region 3	New Jersey All areas.				
	New York	All areas.			
	Ohio	All areas north of Interstate 70.			
	Pennsylvania	All areas except those listed in Region 2			
	Rhode Island	All areas.			
	Vermont	All areas.			
	Wisconsin	All areas south of U.S. Highway 18 between Prairie Du			
		Chien and Madison, and south of Interstate 94 between			
		Madison and Milwaukee.			

REGION 4 (Maximum Rate 2 pt/A, alternate years)



Includes the following states or portion of states where Prefix Herbicide may be applied:				
	Kansas All counties east of or intersected by U.S. Highway 281.			
	Michigan	Southern Peninsula.		
	Minnesota	All areas south of Interstate 94.		
	Nebraska	All counties east of or intersected by U.S. Highway 281.		
	North Dakota	All areas east of Interstate 29 from Fargo south to the		
		South Dakota state line.		
	South Dakota	All areas east of Interstate 29 from the North Dakota state		
		line to Watertown, all areas east of Highway 81 from		
		Watertown to Madison and all areas east and south of State		
Region 4		Road 34 and U.S. Highway 281 to the Nebraska state line.		
	Wisconsin	All areas south of Interstate 94 (except those in Region 3)		
		from Minnesota state line to Eau Claire and south of U.S.		
		Highway 29 from Eau Claire to Green Bay plus Barron,		
		Burnett, Chippewa, Clark, Door, Dunn, Eau Claire,		
		Kewaunee, Langlade, Lincoln, Marathon, Marinette,		
		Menominee, Oconto, Polk, Price, Rusk, Shawano, and St.		
		Croix, Taylor, and Washburn counties. The following		
		counties are excluded: Adams, Marquette, Portage,		
		Waupaca, Waushara and Wood.		

REGION 4a (Maximum Rate 2 pt/A, alternate years\*)



Includes the following states or portion of states where Prefix Herbicide may be applied:			
	Kansas	All areas west of U.S. Highway 281 to the Colorado state line	
Region 4a	Nebraska	All areas that intersect west of U.S. Highway 281 and east of	
		U.S. Highway 83	

\*Note: Refer to the Restrictions section for additional requirements that must be followed to use Prefix Herbicide in Region 4a. Refer to the Precautions section for information for the use of Prefix Herbicide in Region 4a.

## Replanting

If replanting is necessary in fields previously treated with Prefix Herbicide, the field may be replanted to soybeans. During planting, a minimum of tillage is recommended. Do not apply a second application of Prefix Herbicide or any product that contains metolachlor, fomesafen, or S-metolachlor as crop injury or illegal residues may occur in harvested soybeans.

## **Rotational Crops**

Do not rotate to food or feed crops other than those listed below.

Table 1: Crop Rotation Intervals Following Prefix Herbicide Application<sup>1</sup>

Rotational Crops	Planting Time From Last Prefix Herbicide Application
Bean, Dry	
Bean, Snap	0 11
Soybean	0 months
Soybean, Succulent (edamame)	
Cotton	1 month
Potato	1 month
Bean, Lima	
Pea, Succulent	4 months
Peanut	
Barley	
Oat	4.5 months
Rye	4.5 months
Wheat	
Corn, Field	
Corn, Seed	
Corn, Sweet <sup>5</sup>	
Pepper (transplanted) <sup>1</sup>	
Popcorn <sup>4</sup>	10 months
Pumpkin <sup>2</sup>	
Rice	
Tomato (transplanted) <sup>1</sup>	
Watermelon <sup>2</sup>	
Bean, Succulent (other than edamame, snap bean and	
lima bean)	
Cantaloupe <sup>2</sup>	
Cucumber <sup>2</sup>	
Edible-podded beans and peas not otherwise specified in	12 months
this table	
Eggplant	
Pea, Dried	
Pepper (direct seeded)	

Rotational Crops	Planting Time From Last Prefix Herbicide Application
Squash, Summer	
Squash, Winter <sup>2</sup>	
Sunflower	
Sweet Potato	
Tomato (direct seeded)	
Sorghum <sup>3</sup>	18 months
All other crops not listed above	18 months

<sup>&</sup>lt;sup>1</sup>4 months in Region 1

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.

Do not graze rotated small grain crops or harvest forage or straw for livestock.

## **Cover Crops**

A cover crop can be an important tool for the overall farm cropping system. Cover crops are planted for conservation purposes, soil erosion control, soil health improvement, water quality improvement and weed management. A cover crop can be a single crop or a combination of crops, including grasses and/or broadleaf crops. After harvest of a Prefix Herbicide treated crop, planting of a cover crop is allowed provided the cover crop is not grazed or fed to livestock nor harvested for food. Terminate the cover crop through natural causes such as frost or intentional termination by herbicide application, crimping, rolling, tillage or cutting. All possible cover crops or cover crop combinations have not been tested for tolerance to this product. Before planting the cover crop, determine the level of tolerance for the intended cover crops by conducting a field bioassay. Refer to the **Field Bioassay for Cover Crops** section for instructions on how to conduct a field bioassay.

## **Field Bioassay for Cover Crops**

A field bioassay is a method of determining if herbicide residues are present in the soil at concentrations high enough to adversely affect crop growth. Conduct the field bioassay by planting several strips of the desired cover crop across the field which has been previously treated with Prefix Herbicide. Plant the cover crop strips perpendicular to the direction of the product application. Locate the strips so that all the different field conditions are encountered, including differences in field terrain, soil texture, organic matter, pH, and drainage. If the cover crop does not show adverse effects such as crop injury and/or stand reduction, the field can be planted to this cover crop. If injury and/or

<sup>&</sup>lt;sup>2</sup>8 months in Region 1

<sup>&</sup>lt;sup>3</sup>10 months in Region 1

<sup>&</sup>lt;sup>4</sup>12 months in the states of Ohio, Kentucky, Illinois, Indiana, Iowa, Region 4 and Region 4a when applied at 2 pints per acre or more.

<sup>&</sup>lt;sup>5</sup>18 months in the states of Connecticut, Maine, Massachusetts, New Hampshire, New York, Rhode Island, and Vermont.

stand reduction are visible, wait two to four weeks for further herbicide degradation to occur and repeat the bioassay. Alternatively, select a different cover crop and repeat the bioassay. Only plant cover crops that show acceptable tolerance in the field bioassay.

## **Rate Ranges**

Where a rate range is within a soil texture/organic matter classification, use a lower rate on soils that are relatively 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.

Prefix Herbicide, when applied as directed, will control or partially control the following weeds.

Table 2: Weeds Controlled or Partially Controlled\* by Prefix Herbicide

Wasal	C = Control PC = Partial	Mr. d	C = Control PC = Partial
Weed Annual Grasses	Control	Weed	Control
Barnyardgrass	С	Junglerice	С
Crabgrass spp.	C	Panicum, fall	C
Crowfootgrass	C	Panicum, Texas	PC
Cupgrass, prairie	C	Red rice	PC
	C		C
Cupgrass, southwestern	C	Signalgrass, broadleaf	PC
Foxtail spp.	C	Sandbur spp. Shattercane	PC
Goosegrass	PC		C
Johnsongrass, seedling	PC	Witchgrass	C
Broadleaves			
Carpetweed	С	Purslane, common	С
Cocklebur, common	PC	Pusley, Florida	С
Ecliptia	С	Ragweed, common	С
Galinsoga spp.	С	Ragweed, giant	PC
Horseweed/marestail	PC	Redweed	С
Jimsonweed	PC	Sida, prickly/teaweed	PC
Lambsquarters, common	С	Smartweed, ladysthumb	С
Morningglory spp.	PC	Smartweed, Pennsylvania	С
Nightshade, eastern black	С	Spurge, spotted	С
Nightshade, hairy	PC	Starbur, bristly	С
Pennycress, field	С	Sunflower, common	PC
Pepperweed, Virginia	С	Velvetleaf	PC
Pigweed spp.	С	Waterhemp spp.	С
Poinsettia, wild	С		
Sedges			
Nutsedge, yellow	PC		
radiocage, yellow	10	<u> </u>	1

<sup>\*</sup>Partial control means significant activity, but not always at a level considered acceptable for commercial weed control.

## **COTTON**

## **Post-Directed Application**

Apply Prefix Herbicide in emerged cotton as a post-directed treatment using precision post-directed, hooded or shielded application equipment to provide complete coverage of emerged weeds. Apply Prefix Herbicide at 2-2.33 pints per acre. Prefix Herbicide will control or partially control certain emerged broadleaf weeds such as hemp

sesbania, waterhemp, pigweed species and morningglory species. Apply when broadleaf weeds have 2-4 true leaves in a minimum of 10 gallons spray solution per acre. Prefix Herbicide should be applied with a non-ionic surfactant at 0.25 to 0.5% v/v or crop oil concentrate at 1% v/v to emerged weeds if applied alone or in a tank mix with products that do not contain a built-in adjuvant. Do not add liquid nitrogen (28% or similar) to Prefix Herbicide, or Prefix Herbicide tank mixes in cotton. Refer to Table 2 for weeds controlled or partially controlled with soil activation of Prefix Herbicide if rainfall or irrigation occurs within 7-10 days after application.

To broaden the weed control spectrum, Prefix Herbicide may be tank mixed with other labeled post-directed herbicides such as Caparol, DSMA, Direx, Envoke®, Karmex, Layby™ Pro, MSMA, Suprend® or glyphosate (such as Roundup® brands for use in glyphosate-tolerant cotton only). Refer to the tank-mix partner label for precautionary statements, restrictions, rates and a list of weeds controlled.

Cotton foliage is not tolerant to Prefix Herbicide applications. Avoid contact to cotton foliage and stems that are not fully barked as unacceptable injury will occur. Application equipment should be calibrated (spray pressure, nozzle type and configuration, and orifice size) to avoid fine spray droplets contacting green cotton stems and foliage.

## **Post-Directed Application Timing in Cotton**

Prefix Herbicide may be applied to cotton at least 6 inches in height through layby as a post-directed application. All post-directed applications should avoid spray contact with any green non-barked parts of the cotton plant or foliage as unacceptable injury will occur. Follow the application timing recommendations below for post-directed applications in cotton.

## **Shielded and Hooded Applications**

Make a precision post-directed Prefix Herbicide application to the base of the cotton plant avoiding contact with the cotton stem or foliage when cotton is at least 6 inches in height to avoid cotton injury. Use only hooded or shielded spray equipment to apply Prefix Herbicide in cotton that is at least to 6 inches in height. Adjust nozzles to provide full coverage of emerged target weeds.

## **Layby Applications**

Make a post-directed Prefix Herbicide application to the base of the cotton plant avoiding contact with any non-barked portion of the cotton plant or foliage. Use precision post-directed equipment or hooded or shielded sprayers on cotton that has developed a minimum of 4 inches of brown bark through layby. Application equipment should be configured to provide full coverage of emerged target weeds.

#### **Restrictions - Cotton**

- Do not apply Prefix Herbicide later than 80 days before harvest.
- Do not apply more than 2.33 pints per acre of Prefix Herbicide in any year and also adhere to the maximum rate that may be applied in each geographic region (refer to the Prefix Herbicide Regional Use Map).
- Do not graze or feed forage or fodder from cotton to livestock.

#### **SOYBEAN**

## PREFIX HERBICIDE FOUNDATION TREATMENT FOR PLANNED TWO-PASS WEED CONTROL PROGRAMS IN ALL TILLAGE SYSTEMS

Prefix Herbicide at 2 pt/A may be applied as a preemergence application on all soils to reduce competition from weeds for a period of up to 5 weeks when followed by a planned postemergence herbicide application in conventional or herbicide-tolerant soybeans. Refer to Table 2 for weeds controlled or partially controlled. For the postemergence herbicide application, consult the selected postemergence herbicide manufacturer's label for weeds controlled, optimum weed size, application rate, additional use directions, precautions, and limitations before use.

**Preplant Surface Applied:** For minimum-tillage or no-tillage systems only, Prefix Herbicide may be applied at 2 pt/A prior to soybean planting. If weeds are present at the time of treatment, apply Prefix Herbicide in a tank mixture with a burndown herbicide (such as, Gramoxone® brands or glyphosate brands). To the extent possible, minimize movement of treated soil out of the row or untreated soil to the surface during planting, or weed control will be diminished. Follow with a postemergence herbicide applied at the labeled rate and within the specific growth stage for soybeans and weed spectrum. Recommended postemergence treatments include any product or combination of products labeled to control the specific weeds remaining in the field.

**Preplant Incorporated:** Apply Prefix Herbicide at 2 pt/A in conventional tillage systems where incorporation into the top 2 inches of soil occurs within 7 days after application using a finishing disk, harrow, rolling cultivator or similar implement capable of providing uniform 2-inch incorporation. Follow with a postemergence herbicide applied at the labeled rate and within the specific growth stage for soybeans and weed spectrum. Recommended postemergence treatments include any product or combination of products labeled to control the specific weeds remaining in the field.

**Preemergence:** Apply Prefix Herbicide at 2 pt/A during planting (behind the planter), or after planting, but before weeds or soybeans emerge in conventional, conservation, or no-till systems. If weeds are present at the time of treatment, apply Prefix Herbicide in a tank mixture with a burndown herbicide (such as, Gramoxone SL 2.0 or glyphosate brands). Follow with a postemergence herbicide applied at the labeled rate and within

the specific growth stage for soybeans and weed spectrum. Recommended postemergence treatments include any product or combination of products labeled to control the specific weeds remaining in the field.

#### PREFIX HERBICIDE IN CONVENTIONAL TILLAGE SYSTEMS

For conventional tillage systems, Prefix Herbicide may be applied preplant incorporated or preemergence for control or partial control of weeds listed in Table 2. Prefix Herbicide may be applied alone, or in tank mix or followed sequentially with postemergence herbicides to broaden the weed control spectrum or control newly emerged weeds. Refer to Table 3 for Prefix Herbicide rates.

## **Preplant Incorporated Application**

Incorporate Prefix Herbicide uniformly into the top 2 inches of soil within 7 days after application and before planting using a disk, field cultivator, rolling cultivator, or similar implement. Apply Prefix Herbicide preplant incorporated if furrow irrigation is used or when a period of dry weather after application is expected.

## **Preemergence Application**

Apply during planting (behind the planter), or after planting, but before weeds or soybeans emerge. Dry weather following preemergence application of Prefix Herbicide may reduce effectiveness. If weeds develop, cultivate uniformly with shallow tilling equipment such as a rotary hoe that will not damage soybeans.

Table 3: Prefix Herbicide Use Rates - Conventional Tillage Systems (Broadcast Rates)

		Pints/A	
		0.5 to 3%	Over 3%
Soil Texture	Regions	Organic Matter	Organic Matter
COARSE (Sand, loamy sand, sandy	1, 2	2	2-2.25
loam)	3	2	2-2.25
	4, 4a	2	2
MEDIUM (Loam, silt loam, silt)	1, 2	2.25-2.5	2.5-2.75
	3	2-2.25	2.25-2.5
	4, 4a	2	2
FINE (Sandy clay loam, sandy clay,	1, 2	2.75-3	2.75-3
silty clay, silty clay loam, clay,	3	2.5*	2.5*
clay loam)	4, 4a	2*	2*

<sup>\*</sup>If weeds emerge before full canopy closure, apply an appropriate postemergence product.

#### PREFIX HERBICIDE USE RATES FOR REDUCED AND NO-TILL SYSTEMS

## **Preplant Surface and Preemergence Application**

Prefix Herbicide may be used in reduced-till and no-till systems. Prefix Herbicide may be applied up to 15 days before planting or preemergence, but before soybean emergence. For control or partial control of weeds listed in Table 2, use the high end of the rate range for Prefix Herbicide applications made 15 days before planting. Refer to Table 4 for Prefix Herbicide rates. If weeds are present at time of application, burndown herbicides may be tank mixed with Prefix Herbicide (see **Burndown Weed Control** section). Prefix Herbicide may be followed sequentially with postemergence herbicides to broaden the weed control spectrum or control newly emerged weeds.

Table 4: Prefix Herbicide Use Rates for Reduced-Till and No-Till Systems (Broadcast Rates)

Soil Texture	Regions	Pints/A <sup>1</sup>
COARSE (Sand, loamy sand, sandy loam)	1, 2	2-2.5
	3	2-2.25
	4, 4a	2*
MEDIUM (Loam, silt loam, silt, sandy clay,	1, 2	2.5-2.75
sandy clay loam)	3	2.25-2.5
	4, 4a	2*
FINE (Sandy clay loam, sandy clay, silty clay,	1, 2	2.75-3
silty clay loam, clay, clay loam)	3	2.5*
· · · · · · · · · · · · · · · · · · ·	4, 4a	2*

<sup>\*</sup>If weeds emerge before full canopy closure, apply an appropriate postemergence product.

<sup>1</sup>Use the lower 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.

#### **BURNDOWN WEED CONTROL**

Prefix Herbicide can be used as part of a burndown herbicide program for control of existing vegetation prior to soybean planting and/or emergence in conservation tillage (reduced-tillage/no-till systems). Prefix Herbicide may be tank mixed with 2,4-D, dicamba, Fusilade® DX, Fusion®, glyphosate brands, Gramoxone brands, Poast Plus®, or Select® for control of emerged weeds prior to soybean planting or crop emergence. Refer to the tank mix product labels for specific rates, use directions, precautions, restrictions and limitations.

## HERBICIDES THAT MAY BE APPLIED POSTEMERGENCE FOLLOWING PREFIX HERBICIDE

If required, application of Prefix Herbicide alone or in tank mixture may be followed by an application of a postemergence herbicide to provide additional control of certain weeds. Postemergence herbicides such as those listed below but not limited to may be applied:

Aim®	Fusilade DX	Raptor®
Arrow®	Fusion	Resource®
Assure® II	Glyphosate <sup>1</sup>	Scepter®
Basagran®	Harmony® GT XP	Select
Classic®	Liberty® <sup>2</sup>	Synchrony® STS®
Cobra®	Poast®	Synchrony® XP
Extreme®1	Poast Plus	Ultra Blazer®
FirstRate®	Pursuit®	
		, ,

<sup>&</sup>lt;sup>1</sup>Glyphosate-tolerant soybeans only.

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

#### POSTEMERGENCE APPLICATION

Prefix Herbicide may be applied at 2-2.33 pt/A as an early postemergence application in soybeans. Necrotic spotting, bronzing, crinkling or curling of soybean leaves may occur following postemergence application, but soybeans soon outgrow these effects and develop normally. Refer to Table 2 for weeds controlled or partially controlled with soil activation of Prefix Herbicide if rainfall or irrigation occurs within 7-10 days after postemergence application. Prefix Herbicide alone may control or partially control certain emerged broadleaf weeds, however, for broad spectrum control, tank mix Prefix Herbicide with glyphosate (such as Roundup brands) in glyphosate-tolerant soybeans

<sup>&</sup>lt;sup>2</sup>LibertyLink® soybeans only.

only. Add nonionic surfactant (NIS) containing at least 75% surface- active agent, at 0.25% v/v to the final spray volume if Prefix Herbicide is applied alone or tank mixed with glyphosate products that do not contain a built-in adjuvant. The use of crop oil concentrate (COC) is not advised when applying Prefix Herbicide postemergence as these spray adjuvants may increase soybean injury.

## Tank Mixtures for Postemergence Applications in Soybeans:

Postemergence herbicides such as those listed below but not limited to may be tank mixed with Prefix Herbicide:

Fusilade DX
Fusion
Glyphosate (Glyphosate-tolerant soybeans only)
Glufosinate (Glufosinate-tolerant soybeans only)

Tank mixes may cause necrotic spotting, bronzing, crinkling or curling of soybean leaves that are present at the time of the postemergence application.

Prefix Herbicide may be tank mixed with the following insecticide:

Karate® Insecticide with Zeon Technology

Refer to this label and the labels of the tank mix partners for application methods and timings, precautionary statements, restrictions, rates, and weeds or insects controlled.

## **Restrictions for Postemergence Application to Soybeans**

- Apply only in water as the carrier for postemergence applications.
- Do not use Prefix Herbicide postemergence on soybeans that are under stress including but not limited to that caused by drought, insect, disease, or injury from cultivation.
- Do not exceed 2.33 pt/A of Prefix Herbicide in a single postemergence application.
- Do not exceed 3.0 pt/A of Prefix Herbicide per acre per season. Refer to Regional Use Map for maximum rate that may be applied within a specific region.
- Do not exceed 2.48 lb ai/A per year of S-metolachlor from applications of Prefix Herbicide or any other metolachlor-containing product.
- Make postemergence applications at least 90 days before harvest.
- Do not graze or feed treated forage or hay from soybeans to livestock following a postemergence application of Prefix Herbicide.

#### STORAGE AND DISPOSAL

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

## **Pesticide Storage**

This product will freeze at a temperature of approximately 5°F, but upon warming will thaw out to a fully homogeneous product.

## **Pesticide Disposal**

Open dumping is prohibited. Wastes resulting from the use of this product are toxic. Improper disposal of unused pesticide, spray mixture, or rinsate is a violation of federal law. Pesticide, spray mixture, or rinsate that cannot be used according to label instructions must be disposed of according to federal, state, or local procedures. For guidance in proper disposal methods, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office.

## 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 or disposal. Drain for 10 seconds after the flow begins to drip. 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 Prefix Herbicide 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 refiller. 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 approved by state and local authorities.

#### **Container Handling [greater than 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. Fill the container ½ 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.

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.

CONTAINER IS NOT SAFE FOR FOOD, FEED OR DRINKING WATER!

#### 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 consistent with 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 consistent with 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 consistent with 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 consistent with 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 CONSISTENT WITH 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.

Fusilade DX®, Fusion®, Gramoxone®, Karate® Insecticide with Zeon Technology, Prefix®, the ALLIANCE FRAME the SYNGENTA Logo and the PURPOSE ICON are Trademarks of a Syngenta Group Company

Aim® trademark of FMC Corporation

Arrow® trademark of Agriliance, LLC

Assure II® trademark of Nissan Chemical Industries, Ltd.

Basagran®, Extreme®, Poast®, Poast Plus®, Pursuit®, Raptor®, and Scepter® trademarks of BASF Ag Products

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

Clorox® trademark of The Clorox Company.

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

Compex® trademark of KALO, Inc.

FirstRate® and Glyphomax® trademarks of Dow AgroSciences

Liberty® and LibertyLink® trademarks of Bayer CropScience

Roundup® trademark of Monsanto Company

Ultra Blazer® trademark of United Phosphorus, Inc.

Unite® trademark of United Agri Products

Viton® is a trademark of E. I. duPont de Nemours and Company, Inc.

©201X 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

Prefix Herbicide 1268 MAS 0715 AMEND JUN2018-Ver B-mar –9/17/18 000100-01268.20160625B.PREFIX\_HERB.AMEND-JUN2018.PDF Prefix Herbicide 1268 MAS 0715 AMEND JUN2018-Ver B -HI-mar –9/17/18 000100-01268.20160625B.PREFIX\_HERB.AMEND-JUN2018-HI.PDF

Prefix Herbicide 1268 MAS 0715 AMEND JUN2018-HI  $\,-$  mar - 06/25/18 000100-01268.20160625.PREFIX\_HERB.AMEND-JUN2018-HI.PDF