

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

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

January 20, 2023

Mary Beth Endres Regulatory Manager Liberty Crop Protection, LLC. 1880 Fall River Drive, Suite 100 Loveland, CO 80538

Subject: Registration Review Label Amendments Incorporating Mitigation Measures from the Interim Decisions for S-Metolachlor and the National Marine Fisheries Services' (NMFS) Biological Opinion on the Effects of S-Metolachlor on Pacific Salmonids
 Product Name: LIBERTY PFO
 EPA Registration Number: 89168-87
 Application Dates: 04/19/2021 and 08/25/2021
 Decision Numbers: 589292 and 579102

Dear Mary Beth Endres:

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

This letter also addresses the label mitigation resulting from the NMFS' Biological Opinion on the effects of S-Metolachlor on Pacific salmonids. The Agency has concluded that your submission is also 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.

Page 2 of 2 EPA Reg. No. 89168-87 Decision No. 589292 and 579102

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 12 months from the date of this letter. After 12 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.

If you have any questions about this letter, please contact Anitha Kisanga at Kisanga.Anitha@epa.gov.

Sincerely,

Linda Arrington, Branch Chief Risk Management and Implementation Branch 4 Pesticide Re-Evaluation Division Office of Pesticide Programs

Enclosure

S-METOLACHLOR	GROUP	15	HERBICIDE
FOMESAFEN	GROUP	14	HERBICIDE

# LIBERTY PFO

#### HERBICIDE

FOR CONTROL OF CERTAIN GRASSES AND BROADLEAF WEEDS IN SOYBEANS AND COTTON

ACTIVE INGREDIENTS: %	BY WT.
S-metolachlor*	46.4%
Sodium Salt of Fomesafen**	10.2%
OTHER INGREDIENTS***:	43.4%
<b>TOTAL:</b>	00.0%
This product is formulated as an emulsifiable concentrate (EC) containing 4.34 lb of S-metolachlor and 0.95 lb of the sodi	um salt of
fomesafen (0.85 lb fomesafen acid) per gallon.	
*CAS No. 87392-12-9	
**CAS No. 108731-70-0	

\*\*\*Contains petroleum distillate.

# 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.)

For Chemical Spill, Leak, Fire, or Exposure, Call CHEMTREC (800) 424-9300

SEE INSIDE BOOKLET FOR FIRST AID AND ADDITIONAL PRECAUTIONARY STATEMENTS.

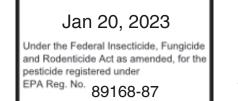
Not for Sale, Sale into, Distribution and/or Use in Nassau and Suffolk Counties of New York State.

EPA Reg. No.: 89168-87

EPA Est. No.: \_\_\_\_\_

NET CONTENTS: \_\_\_\_Gal (\_\_\_\_L)

Manufactured for: LIBERTY CROP PROTECTION, LLC 1880 Fall River Drive, Suite 100 Loveland, CO 80538



ACCEPTED

FIRST AID			
IF IN EYES:	Hold eye open and rinse slowly and gently with water for 15-20 minutes.		
	• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.		
	Call a poison control center or doctor for treatment advice.		
IF	Immediately call a poison control center or doctor.		
SWALLOWED:	• <b>DO NOT</b> induce vomiting unless told to do so by a poison control center or doctor		
	DO NOT give any liquid to the person.		
	DO NOT give anything by mouth to an unconscious person.		
IF ON SKIN OR	Take off contaminated clothing.		
CLOTHING:	<ul> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> </ul>		
	<ul> <li>Call a poison control center or doctor for treatment advice.</li> </ul>		
IF INHALED:	Move person to fresh air.		
	• If person is not breathing, call 911 or an ambulance, and then give artificial		
	respiration, preferably mouth-to mouth, if possible.		
	Call a poison control center or doctor for further treatment advice.		
	HOTLINE NUMBER		
Have the product	container or label with you when calling a poison control center or doctor, or going		
for treatment. Fo	r emergency information concerning this product, call the National Pesticides		

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For emergency information concerning this product, call the National Pesticides Information Center (NPIC) at **1-800-858-7378** or your poison control center at **1-800-222-1222**. For Chemical Spill, Leak, Fire or Exposure, call CHEMTREC **800-424-9300**.

#### NOTE TO PHYSICIAN

Contains Petroleum distillate. Vomiting may cause aspiration pneumonia.

#### PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS WARNING

Causes substantial by temporary eye injury. Harmful if swallowed. Causes skin irritation. **DO NOT** get in eyes or on clothing. Avoid contact with skin. Wash thoroughly with soap and water after handling and before eating, drinking, and 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 $\mathbb{R} \ge 14$  mils.
- 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.

#### Users should:

#### USER SAFETY RECOMMENDATIONS

- 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

**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 areas.

#### 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 treated site. Protect the forage and habitat of non-target organisms by following label directions intended to minimize spray drift.

#### Ground Water Advisory

S-metolachlor and Fomesafen are 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

This product may impact surface water quality due to runoff of rainwater. 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 weeks or 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 this product from runoff water and sediment. Runoff of this product will be reduced by avoiding applications when rainfall or irrigation is expected to occur within 48 hours. For more information, see the United States Department of Agriculture National Resource Conservation Service's manual, "Conservation Buffers to Reduce Pesticide Losses".

#### 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.

#### Reporting Ecological Incidents:

To report ecological incidents, including mortality, injury, or harm to plants and animals, call 844-425-8488.

#### 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 this product must be equipped with check valves or other devices to prevent siphoning.

This product may not be mixed or loaded within 50 feet of perennial or intermittent streams and rivers, natural or impounded lakes and reservoirs. This product may not be mixed/loaded or used within 50 eet 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 feet 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 abovespecified minimum containment capacities **DO NOT** apply to vehicles when delivering pesticide shipments to the mixing/loading site.

#### PHYSICAL OR CHEMICAL HAZARDS

DO NOT mix or allow to come in contact with oxidizing agents. Hazardous chemical reaction may occur.

#### 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 ≥ 14 mils.
- 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.**

Not for Sale, Sale Into, Distribution and/or Use in Nassau and Suffolk Counties of New York State.

#### PRODUCT INFORMATION

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

#### **Endangered Species Protection Requirements:**

It is a Federal offense to use any pesticide in a manner that results in an unauthorized "take" (e.g., kill or otherwise harm) of an endangered species and certain threatened species, under the Endangered Species Act section 9. When using this product, you must follow the measures contained in the Endangered Species Protection Bulletin for the area in which you are applying the product. You must obtain a Bulletin no earlier than six months before using this product. To obtain Bulletins, consult http://www.epa.gov/espp/, call 1-844-447-3813, or email ESPP@epa.gov. You must use the Bulletin valid for the month in which you will apply the product.

#### WEED RESISTANCE MANAGEMENT

For resistance management, this product contains both a Group 14 (fomesafen) and Group 15 (S-metolachlor) herbicide. Any weed population may contain plants naturally resistant to Group 14 and/or Group 15 herbicides. The resistant individual may dominate the weed population if these herbicides are used repeatedly in the same fields. Appropriate resistance-management strategies should be followed.

#### Weed Management

To delay herbicide resistance, take one or more of the following steps:

- Rotate the use of this product or other Group 14 and Group 15 herbicides within a growing season sequence or among growing seasons with different herbicide groups that control the same weeds in the field.
- Use tank mixtures with herbicides from a different group if such use is permitted; where information on resistance in target weed species is available, use the less resistance-prone partner at a rate that will control the target weed(s) equally as well as the more resistance-prone partner. Consult your local extension service or certified crop advisor if you are unsure as to which active ingredient is currently less prone to resistance.
- Adopt an integrated weed-management program for herbicide use that includes scouting and uses historical information related to herbicide use and crop rotation, and that considers tillage (or other mechanical control methods), cultural (e.g., higher crop seeding rates; precision fertilizer application method and timing to favor the crop and not the weeds), biological (weed-competitive crops or varieties) and other management practices.
- Scout before and after herbicide application to monitor weed populations for early signs of resistance development. Indicators of possible herbicide resistance include: (1) failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds; (2) a spreading patch of non-controlled plants of a particular weed species; (3) surviving plants mixed with controlled individuals of the same species. If resistance is suspected, prevent weed seed production in the affected area by an alternative herbicide from a different group or by a mechanical method such as hoeing or tillage. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields, and planting clean seed.
- If a weed pest population continues to progress after treatment with this product, discontinue use of this product, and switch to another management strategy or herbicide with a different mode of action, if available.
- Contact your local extension specialist or certified crop advisors for additional pesticide resistancemanagement and/or integrated weed-management recommendations for specific crops and weed biotypes.
- For further information or to report suspected resistance, contact LIBERTY CROP PROTECTION, LLC at 844-425-8488.

#### Management of Resistant Biotypes

Since the occurrence of resistant weeds cannot be determined until after product use and scientific confirmation, manufacturer is not responsible for any losses that may result from the failure of this product to control resistant weed biotypes.

The following good agronomic practices are recommended to reduce the spread of resistant biotypes:

- If a naturally occurring resistant biotype is present in your application site, this product should be tankmixed or applied sequentially with an appropriately labeled herbicide with a different mode of action to achieve control.
- Cultural and mechanical control practices (e.g. crop rotation or tillage) may also be used as appropriate.
- Scout treated application site after herbicide applications and control escaping weeds including resistant biotypes before they set seed.
- Thoroughly clean equipment before leaving fields known to contain resistant biotypes.
- Contact your local sales representative, crop advisor, or extension agent to find out if suspected resistant weeds to these Mode of Actions have been found in your region. DO NOT assume that each listed weed is being controlled by multiple mechanisms of action. Co-formulated active ingredients 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.

#### Integrated Pest (Weed) Management

This product may be integrated into an overall weed pest management strategy whenever the use of an herbicide is required. Practices known to reduce weed development (tillage, crop competition) and herbicide use (weed scouting, proper application timing, banding) should be followed wherever possible. Consult local agricultural and weed authorities for additional IPM strategies established for your area.

#### **MIXING INSTRUCTIONS**

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

**LIBERTY PFO Alone:** Add 1/3 of the required amount of water or fluid fertilizer to the spray or mixing tank. With the agitator running, add LIBERTY PFO into the spray tank. Continue agitation while adding the remainder of the water or fluid fertilizer. Begin application of the spray solution after this product has completely dispersed in the water or fluid fertilizer. Maintain agitation until all of the mixture has been applied.

**LIBERTY PFO + Tank Mixtures:** Add 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 LIBERTY PFO, 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 LIBERTY PFO 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 LIBERTY PFO. 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 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.

LIBERTY PFO is compatible with most common tank mix partners. However, the physical compatibility of this product with tank mix partners should be tested before use. To determine the physical compatibility of this product 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 this product as a postemergence application to soybeans as these combinations may cause crop injury.

#### **Compatibility Test**

A jar test is recommended before tank mixing to ensure compatibility of LIBERTY PFO with other pesticides. The following test assumes a spray volume of 25 gallons per acre. 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

- 1. Add 1.0 pint of carrier (fertilizer or water) to each of 2 one quart 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 1/4 tsp. or 1.2 milliliters of a compatibility agent approved for this use, such as [Altitude Binder™ or Innvictis Envelop™, or other appropriate product] (1/4 tsp. is equivalent to 2.0 pints per 100 gallons 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 to 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 1/2 the compatibility agent to the fertilizer or water and the other 1/2 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 DIRECTIONS

#### Activation

A small amount of soil moisture is required to activate LIBERTY PFO following application. In areas of low rainfall, a preemergence application to dry soil should be followed with light irrigation of 0.25 to 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 to 10 days does not occur, cultivate uniformly with shallow tilling equipment such as a rotary hoe that will not damage soybeans.

**Ground Application:** Apply LIBERTY PFO alone or in tank mixtures by ground equipment in a minimum of 10 gallons of spray mixture per acre, unless otherwise specified. Use sprayers that provide accurate and uniform application. Calibrate the sprayer before use at the beginning of the season. For LIBERTY PFO tank mixtures with wettable powder or dry flowable formulations, use screens and strainers no finer than 50-mesh.

[Optional] [For certain ground application equipment approved by Liberty, apply in a minimum of 2 gallons of spray mixture per acre. Contact your local Liberty Crop Protection representative for a list of approved equipment.]

#### **Band Applications**

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

Band width in inches		Dreadeast rate war as	_	Amount pooled per eare of field
Row width in inches	х	Broadcast rate per acre	=	Amount needed per acre of field

Chemigation: DO NOT apply this product through any type of irrigation system.

**Aerial Application:** Apply LIBERTY PFO in water using a minimum spray volume of 5 gallons per acre. 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 feet 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.

#### Aerial Applications

#### MANDATORY SPRAY DRIFT MANAGEMENT

• Do not release spray at a height greater than 10 feet above the vegetative canopy, unless a greater application height is necessary for pilot safety.

# • For applications prior to emergence of crops and target weeds, applicators are required to use a coarse or coarser droplet size (ASABE SS641).

- For all other applications, applicators are required to use a medium or coarser droplet size (ASABE S641).
- 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% of the wingspan for fixed wing aircraft and 75% or less of the rotor 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 diameter for helicopters. Applicators must use 1/2 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 mph at the application site.
- Do not apply during temperature inversions.

#### **Ground Boom Applications**

- Users 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 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).
- For all other applications, applicators are required to use a medium or coarser droplet size (ASABE S572).
- Do not apply when wind speeds exceed 15 mph at the application site.
- Do not apply during temperature inversions.

#### **Boomless Ground Applications:**

- Applicators are required to use a medium or coarser droplet size (ASABE S572.3) for all applications.
- **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 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.

#### **Boomless Ground Applications:**

Setting nozzles at the lowest effective height will help to reduce the potential for spray drift. Handheld Technology Applications

Take precautions to minimize spray drift.

#### **BOOM HEIGHT – Ground Boom**

Use the lowest boom height that is compatible with the spray nozzle 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, set up equipment to produce 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.

#### **Cleaning Equipment After Application**

Because some crops, other than soybeans, are sensitive to low rates of LIBERTY PFO, 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 gallons of water. Many commercial spray tank cleaners may be used as well. Consult your Atticus, LLC 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. **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.

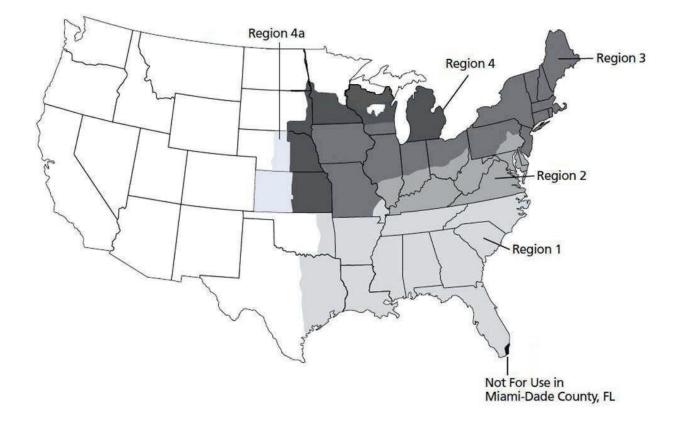
#### Precautions

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

#### Restrictions

- **REGION 1: DO NOT** apply more than 3 pints (1.63 lb ai S-metolachlor and 0.36 lb ai Fomesafen) per acre per application. A maximum of 3 pints of this product (or a maximum of 0.375 lb. a.i./A of fomesafen from any product containing fomesafen) may be applied per acre per year (see Regional Use Map section of this label). DO NOT make more than one application per year.
- **REGION 2: DO NOT** apply more than 3 pints (1.63 lb ai S-metolachlor and 0.36 lb ai Fomesafen) per acre per application. A maximum of 3 pints of this product (or a maximum of 0.375 lb. a.i./A of fomesafen from any product containing fomesafen) may be applied per acre in ALTERNATE years (see **Regional Use Map** section of this label). **DO NOT** make more than one application every other year.
- **REGION 3: DO NOT** apply more than 2.5 pints (1.36 lb ai S-metolachlor and 0.30 lb ai Fomesafen) per acre per application. A maximum of 2.5 pints of this product (or a maximum of 0.313 lb. a.i./A of fomesafen from any product containing fomesafen) may be applied per acre in ALTERNATE years (see **Regional Use Map** section of this label). **DO NOT** make more than one application every other year.
- **REGION 4: DO NOT** apply more than 2 pints (1.09 lb ai S-metolachlor and 0.24 lb ai Fomesafen) per acre per application. A maximum of 2 pints of this product (or a maximum of 0.25 lb. a.i./A of fomesafen from any product containing fomesafen) may be applied per acre in ALTERNATE years (see **Regional Use Map** section of this label). **DO NOT** make more than one application every other year.
- **REGION 4a: DO NOT** apply more than 2 pints (1.09 lb ai S-metolachlor and 0.24 lbai Fomesafen) per acre per application. A maximum of 2 pints of this product (maximum of 0.25 lb ai per acre of fomesafen from any fomesafen product) may be applied per acre in alternate years. Apply only to soybeans in Region 4a. **DO NOT** apply this product after June 10<sup>th</sup>. Cumulative rainfall plus overhead irrigation must total 15 inches from the period of application of this product to soybean crop maturity to allow planting of rotational crops listed in this label (Refer to **Rotational Crop Restrictions** 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** make more than one application every other year.
- **DO NOT** graze treated areas or harvest for forage or hay.
- DO NOT exceed 2.48 lb ai per acre per crop of S-metolachlor (0.571 gallon per acre of this product).
- **DO NOT** exceed 2.48 lb ai per acre per year of S-metolachlor from applications of this product 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 1/2 inch of rainfall has occurred between application and the first irrigation.

#### LIBERTY PFO - USE RATES AND WEEDS CONTROLLED REFER TO MAP FOR DEFINITION OF SPECIFIED GEOGRAPHIC REGIONS LIBERTY PFO REGIONAL USE MAP



**Single Use Maximum Rate:** 3 pints (1.63 lb ai S-metolachlor and 0.36 lb ai fomesafen) per acre per application.

**Maximum Use Rate:** 3 pints (1.63 lb ai S-metolachlor and 0.36 lb ai fomesafen) per acre per year. **DO NOT** make more than one application per year.



Not for use in Miami-Dade County, FL

Includes the	following states or po	rtion of states where LIBERTY PFO 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.		
Region 1 Missouri		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.

**Single Use Maximum Rate:** 3 pints (1.63 lb ai S-metolachlor and 0.36 lb ai fomesafen) per acre per application.

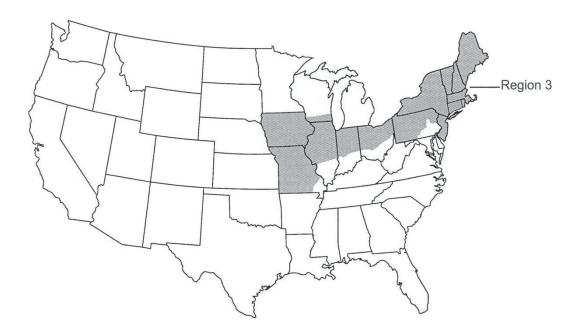
**Maximum Use Rate:** 3 pints (1.63 lb ai S-metolachlor and 0.36 lb ai fomesafen) per acre per year. **DO NOT** make more than one application every other year.



Includes the following states or portion of states where LIBERTY PFO may be applied:			
	Delaware	All areas.	
	Illinois	All areas south of interstate 70.	
	Indiana	All areas south of interstate 70.	
Kentucky Region 2	All areas.		
	Maryland	All areas.	
Region 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.	

**Single Use Maximum Rate:** 2.5 pints (1.36 lb ai S-metolachlor and 0.30 lb ai fomesafen) per acre per application.

**Maximum Use Rate:** 2.5 pints (1.36 lb ai S-metolachlor and 0.30 lb ai fomesafen) per acre, alternate years. **DO NOT** make more than one application every other year.



Includes the	following states or por	tion of states where LIBERTY PFO 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 Hampshire	All areas.	
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.

**Single Use Maximum Rate:** 2 pints (1.09 lb ai S-metolachlor and 0.24 lb ai Fomesafen) per acre per application.

**Maximum Use Rate:** 2 pints (1.09 lb ai S-metolachlor and 0.24 lb ai Fomesafen) per acre, alternate years. **DO NOT** make more than one application every other year.

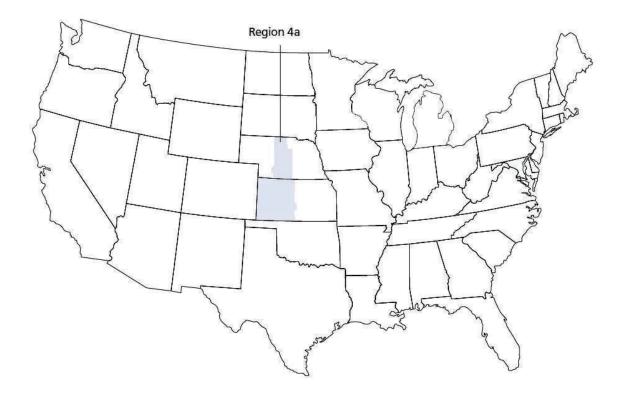


Includes the	e following states or	portion of states where LIBERTY PFO may be applied:
	Kansas	All counties east of or intersected by U.S. Highway 281.
	Michigan	Southern Peninsula.
	Minnesota	All areas south of Interstate 94.
	Nebraska	All counties east of or intersected by U.S. Highway 281.
	North Dakota	All areas east of Interstate 29 from Fargo south to the South Dakota state line.
South Dakota Region 4	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 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**

**Single Use Maximum Rate:** 2 pints (1.09 lb ai S-metolachlor and 0.24 lb ai Fomesafen) per acre per application.

**Maximum Use Rate:** 2 pints (1.09 lb ai S-metolachlor and 0.24 lb ai Fomesafen) per acre, alternate years\*. **DO NOT** make more than one application every other year.



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

\*Refer to the **Precautions** section for information for the use of this product in Region 4a. Refer to the **Restrictions** section for additional requirements that must be followed to use this product in Region 4a.

#### Replanting

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

#### **Rotational Crops**

#### Table 1: Crop Rotation Intervals Following LIBERTY PFO Application<sup>1</sup>

Rotational Crops	Planting Time from Last LIBERTY PFO Application (Months)
Bean, Dry Bean, Snap Soybean	0
Soybean, Succulent (edamame)	
Cotton Potato	1
Bean, Lima	
Pea, Succulent	4
Peanut	
Barley Oat	4.5
Rye Wheat	4.5
Corn, Field Corn, Seed Corn, Sweet <sup>5</sup>	
Pepper (transplanted) <sup>1</sup> Popcorn <sup>4</sup>	
Pumpkin <sup>2</sup>	10
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 this table	
Eggplant	
Pea, Dried	10
Pepper (direct seeded)	12
Squash, Summer	
Squash, Winter² Sunflower	
Sumower Sweet Potato	
Tomato (direct seeded)	
Sorghum <sup>3</sup>	18
All other crops not listed above	18
<sup>1</sup> 4 months in Region 1	1
<sup>2</sup> 8 months in Region 1	
<sup>3</sup> 10 months in Region 1	
<sup>4</sup> 12 months in the states of Ohio, Kentucky, Illinois, Indiana, Iowa, Reg	ion 4 and Region 4a when applie
at 2 pinto por acro or moro	ç II

at 2 pints per acre or more.

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

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.

#### Restrictions

- DO NOT rotate to food or feed crops other than those listed in Table 1.
- **DO NOT** graze rotated small grain crops or harvest forage or straw for livestock.

#### 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.

LIBERTY PFO, when applied as directed, will control or partially control the following weeds.

Table 2: weeds Controlled or	Control (C) Partial		Control (C) Partial
Weed	Control (PC)	Weed	Control (PC)
Annual Grasses			
Barnyardgrass	С	Junglerice	С
Crabgrass spp.	С	Panicum, fall	С
Crowfootgrass	С	Panicum, Texas	PC
Cupgrass, prairie	С	Red rice	PC
Cupgrass, southwestern	С	Signalgrass, broadleaf	С
Foxtail spp.	С	Sandbur spp.	PC
Goosegrass	С	Shattercane	PC
Johnsongrass, seedling	PC	Witchgrass	С
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		
*Partial control means significant activity, but not always at a level considered acceptable for commercial weed control.			

#### Table 2: Weeds Controlled or Partially Controlled\* by LIBERTY PFO

#### COTTON

#### **Post-Directed Application**

Apply LIBERTY PFO 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 this product at 2 to 2.33 pints (1.09 to 1.26 lb ai S-metolachlor and 0.24 to 0.28 lb ai fomesafen) per acre. This product 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 to 4 true leaves in a minimum of 10 gallons spray solution per acre. This product 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. Refer to Table 2 for weeds controlled or partially controlled with soil activation of this product if rainfall or irrigation occurs within 7 to 10 days after application.

**Tank-Mixtures for Post-Directed Application:** To broaden the weed control spectrum, LIBERTY PFO may be tank mixed with other labeled post-directed herbicides registered for use on cotton. 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.

**Note:** Cotton foliage is not tolerant to applications of this product. Calibrate application equipment (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

LIBERTY PFO 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 LIBERTY PFO 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 LIBERTY PFO 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 LIBERTY PFO 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.

#### **Precautions – Cotton**

• Avoid contact to cotton foliage and stems that are not fully barked as unacceptable injury will occur.

#### **Restrictions – Cotton**

- DO NOT add liquid nitrogen (28% or similar) to this product, or tank mixes of this product in cotton.
- **DO NOT** apply more than 2.33 pints (1.26 lb ai S-metolachlor and 0.28 lb ai fomesafen) per acre of this product in any year and also adhere to the maximum rate that may be applied in each geographic region (refer to the **Regional Use Map**).
- Preharvest Interval (PHI): DO NOT apply this product later than 80 days before harvest.
- DO NOT graze or feed forage or fodder from cotton to livestock.

#### SOYBEAN

# LIBERTY PFO FOUNDATION TREATMENT FOR PLANNED TWO-PASS WEED CONTROL PROGRAMS IN ALL TILLAGE SYSTEMS

LIBERTY PFO at 2 pints (1.09 lb ai S-metolachlor and 0.24 lb ai fomesafen) per acre 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 and glyphosate-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, LIBERTY PFO may be applied at 2 pints (1.09 lb ai S-metolachlor and 0.24 lb ai fomesafen) per acre prior to soybean planting. If weeds are present at the time of treatment, apply this product in a tank mixture with a burndown herbicide (such as glyphosate or paraquat). 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, including glyphosate (for use on glyphosate-tolerant soybeans only).

**Preplant Incorporated:** Apply LIBERTY PFO at 2 pints (1.09 lb ai S-metolachlor and 0.24 lb ai fomesafen) per acre 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, including glyphosate (for use on glyphosate tolerant soybeans only).

**Preemergence:** Apply LIBERTY PFO at 2 pints (1.09 lb ai S-metolachlor and 0.24 lb ai fomesafen) per acre 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 LIBERTY PFO in a tank mixture with a burndown herbicide (such as glyphosate or paraquat). 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, including glyphosate (for use on glyphosate-tolerant soybeans only).

#### LIBERTY PFO IN CONVENTIONAL TILLAGE SYSTEMS

For conventional tillage systems, LIBERTY PFO may be applied preplant incorporated or preemergence for control or partial control of weeds listed in Table 2. This product 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 LIBERTY PFO rates.

#### Preplant Incorporated Application

Incorporate LIBERTY PFO 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 this product 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 LIBERTY PFO may reduce effectiveness. If weeds develop, cultivate uniformly with shallow tilling equipment such as a rotary hoe that will not damage soybeans.

	Regions	Pints per Acre (Ib ai per acre)		
Soil Texture		0.5 to 3% Organic Matter	Over 3% Organic Matter	
<b>COARSE</b> (Sand, loamy sand, sandy loam)	1, 2	2 (1.09 lb ai S-metolachlor, 0.24 lb ai fomesafen)	2 - 2.25 (1.09 - 1.22 lb ai S- metolachlor, 0.24 - 0.27 lb ai fomesafen)	
	3	2 (1.09 lb ai S-metolachlor, 0.24 lb ai fomesafen)	2 - 2.25 (1.09 - 1.22 lb ai S- metolachlor, 0.24 - 0.27 Ib ai fomesafen)	
	4, 4a	2 (1.09 lb ai S-metolachlor, 0.24 lb ai fomesafen)	2 (1.09 lb ai S-metolachlor, 0.24 lb ai fomesafen)	
MEDIUM (Loam, silt loam, silt)	1, 2	2.25 - 2.5 (1.2 - 1.36 lb ai S- metolachlor, 0.27 - 0.30 lb ai fomesafen) 2 - 2.25	2.5 - 2.75 (1.36 - 1.49 lb ai S- metolachlor, 0.30 - 0.33 lb ai fomesafen) 2.25-2.5	
	3	(1.09 - 1.22 lb ai S- metolachlor, 0.24 - 0.27 lb ai fomesafen) 2	(1.22 - 1.36 lb ai S- metolachlor, 0.27 - 0.30 lb ai fomesafen) 2	
	4, 4a	(1.09 lb ai S-metolachlor, 0.24 lb ai fomesafen)	(1.09 lb ai S-metolachlor, 0.24 lb ai fomesafen)	

#### Table 3: LIBERTY PFO Use Rates - Conventional Tillage Systems (Broadcast Rates)

<b>FINE</b> (Sandy clay loam, sandy clay, silty clay, silty clay, silty clay loam, clay, clay loam)	1, 2	2.75 - 3 (1.49 - 1.63 lb ai S- metolachlor, 0.33 - 0.36 lb ai fomesafen)	2.75 - 3 (1.49 - 1.63 lb ai S- metolachlor, 0.33 - 0.36 lb ai fomesafen)	
	3	2.5* (1.36 lb ai S-metolachlor, 0.30 lb ai fomesafen) 2*	2.5* (1.36 lb ai S-metolachlor, 0.30 lb ai fomesafen) 2*	
	4, 4a	(1.09 lb ai S-metolachlor, 0.24 lb ai fomesafen)	(1.09 lb ai S-metolachlor, 0.24 lb ai fomesafen)	
*If weeds emerge before full canopy closure, apply an appropriate postemergence product.				

#### LIBERTY PFO USE RATES FOR REDUCED AND NO-TILL SYSTEMS Preplant Surface and Preemergence Application

LIBERTY PFO may be used in reduced-till and no-till systems. This product 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 applications of this product made 15 days before planting. Refer to Table 4 for LIBERTY PFO rates. If weeds are present at time of application, burndown herbicides may be tank mixed with this product (see **Burndown Weed Control** section). This product may be followed sequentially with postemergence herbicides to broaden the weed control spectrum or control newly emerged weeds.

Soil Texture	Regions	Pints per Acre <sup>1</sup> (Ib ai per acre)	
COARSE (Sand, loamy sand, sandy loam)	1, 2	2 - 2.5 (1.09 - 1.22 lb ai S-metolachlor, 0.24 - 0.27 lb ai fomesafen)	
	3	2 - 2.25 (1.09 - 1.22 lb ai S-metolachlor, 0.24 - 0.27 lb ai fomesafen) 2*	
	4, 4a	(1.09 lb ai S-metolachlor, 0.24 lb ai fomesafen)	
<b>MEDIUM</b> (Loam, silt loam, silt, sandy clay, sandy clay loam)	1, 2	2.5 - 2.75 (1.36 - 1.49 lb ai S-metolachlor, 0.30 - 0.33 lb ai fomesafen)	
	3	2.25 - 2.5 (1.22 - 1.36 lb ai S-metolachlor, 0.27 - 0.30 lb ai fomesafen) 2*	
	4, 4a	(1.09 lb ai S-metolachlor, 0.24 lb ai fomesafen)	
<b>FINE</b> (Sandy clay loam, sandy clay, silty clay, silty clay, silty clay loam, clay, clay loam)	1, 2	2.75 - 3 (1.49 - 1.63 lb ai S-metolachlor, 0.33 - 0.36 lb ai fomesafen) 2.5*	
	3	(1.36 lb ai S-metolachlor, 0.30 lb ai fomesafen) 2*	
	4, 4a	(1.09 lb ai S-metolachlor, 0.24 lb ai fomesafen)	
*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.			

#### Table 4: LIBERTY PFO Use Rates for Reduced-Till and No-Till Systems (Broadcast Rates)

#### **BURNDOWN WEED CONTROL**

LIBERTY PFO 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. This product may be tank mixed with other herbicides registered for the same use and timing on soybeans for control of emerged weeds prior to soybean planting or crop emergence. 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.

#### HERBICIDES THAT MAY BE APPLIED POSTEMERGENCE FOLLOWING LIBERTY PFO

To provide additional control of certain weeds, LIBERTY PFO can be applied alone or in a tank mixture and then followed by an application of a postemergence herbicide. This product can be applied with other postemergence herbicides registered for use on soybeans. 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.

#### POSTEMERGENCE APPLICATION

LIBERTY PFO may be applied at 2 to 2.33 pints (1.09 - 1.26 lb ai S-metolachlor and 0.24 - 0.28 lb ai fomesafen) per acre as an early postemergence application in soybeans. Necrotic spotting, bronzing, leaf 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 this product if rainfall or irrigation occurs within 7 to 10 days after postemergence application. LIBERTY PFO alone may control or partially control certain emerged broadleaf weeds, however, for broad spectrum control, tank mix this product with glyphosate in glyphosate-tolerant soybeans only. Add nonionic surfactant (NIS) containing at least 75% surface-active agent, at 0.25% v/v to the final spray volume if this product is applied alone or tank mixed with glyphosate products that **DO NOT** contain a built-in adjuvant.

#### Tank Mixtures for Postemergence Applications in Soybeans:

LIBERTY PFO may be tank mixed with one or more of the following herbicides:

fluazifop-p-butyl fluazifop-P-butyl plus fenoxaprop-p-ethyl glyphosate (for use on glyphosate-tolerant soybeans only)

LIBERTY PFO may be tank mixed with insecticides including Lambda-cyhalothrin.

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.

#### Precaution for Postemergence Application to Soybeans

• **DO NOT** use crop oil concentrate (COC) when applying this product postemergence as these spray adjuvants may increase soybean injury.

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

- Apply only in water as the carrier for postemergence applications.
- **DO NOT** use this product 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 pints (1.26 lb ai S-metolachlor and 0.28 lb ai fomesafen) per acre of this product in a single postemergence application.
- **DO NOT** exceed 3.0 pints (1.63 lb ai S-metolachlor and 0.36 lb ai fomesafen) per acre per year. Refer to **Regional Use Map** for maximum rate that may be applied within a specific region.

- **DO NOT** exceed 2.48 lb ai a.i. per acre per year of S-metolachlor from applications of this product or any other metolachlor-containing product.
- Preharvest Interval (PHI): 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 this product.

### STORAGE AND DISPOSAL

**DO NOT** contaminate water, food or feed by storage or disposal.

**Pesticide Storage:** Store in a tightly closed container in a cool, dry place. Store in original container and out of reach of children, preferably in a locked storage area.

**Pesticide Disposal:** Pesticide spray mixture or rinsate that cannot be used must be disposed of in a landfill approved for pesticides. Improper disposal of excess pesticide spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by the use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

#### **Container Handling**

**NONREFILLABLE CONTAINER (EQUAL TO OR LESS THAN 5 GALLONS): 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 1/4 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. Offer for recycling, if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

**NONREFILABLE CONTAINER (GREATER THAN 5 GALLONS): 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 1/4 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. Offer for recycling, if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

**Pressure rinse as follows (all sizes):** Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

**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 refiller. To clean the 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. After triple rinsing is complete, and the container is not suitable for refilling or reconditioning, offer the container 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.

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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. Ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather, presence of other materials or other influencing factors in the use of the product, which are beyond the control of LIBERTY CROP PROTECTION, LLC or Seller, TO THE EXTENT CONSISTENT WITH APPLICABLE LAW All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold LIBERTY CROP PROTECTION, LLC and Seller harmless for any claims relating to such factors.

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