

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

July 28, 2016

Kt Woodall Agent for RedEagle International, LLC RedEagle International, LLC c/o Wagner Regulatory Associates, Inc. P.O. Box 640 Hockessin, DE 19707

Subject: Label Amendment – Adding potatoes, other minor label revisions Product Name: Fomesafen 2 SL EPA Registration Number: 85678-38 Application Date: 07/06/2016 Decision Number: 519291

Dear Ms. Woodall:

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

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

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under 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.

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

Page 2 of 2 EPA Reg. No. 85678-38 Decision No. 519291

with FIFRA section 6. If you have any questions, please contact Lisa Pahel by phone at (703) 347-0459, or via email at pahel.lisa@epa.gov.

Sincerely,

Ein the for

Erik Kraft, Acting Product Manager 24 Fungicide and Herbicide Branch Registration Division (7505P) Office of Pesticide Programs

Enclosure

# Fomesafen 2SL

# For Control of Certain Weeds in Cotton, Dry Beans, Potatoes, Snap Beans, and Soybeans

Active Ingredient:	
Sodium salt of fomesafen:	
5-[2-chloro-4-(trifluoromethyl)phenoxy]-N-(methylsulfonyl)-2-nitrobenzamide	22.8%
Other Ingredients:	<u>77.2%</u>
Total:	100.0%
Equivalent to 21.7% or 2 pounds per U.S. gallon or 240 grams per liter of fomesafen active ingredier	nt.

# KEEP OUT OF REACH OF CHILDREN DANGER/PELIGRO

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.)

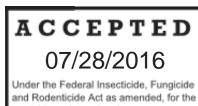
	FIRST AID
IF IN EYES	Hold eye open and rinse slowly and gently with water for 15-20 minutes.
	• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing.
	Call a poison control center or doctor for treatment advice.
IF ON SKIN	Take off contaminated clothing.
OR	• Rinse skin immediately with plenty of water for 15-20 minutes.
CLOTHING	Call a poison control center or doctor for treatment advice.
IF INHALED	Move person to fresh air.
	• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.
	Call a poison control center or doctor for further treatment advice.
NOTE TO PHYS	ICIAN
Probable mucc	sal damage may contraindicate the use of gastric lavage.
	EMERGENCY NUMBERS
Have the produ	act container or label with you when calling a poison control center or doctor or going for treatment.
For 24 Hour N	Addical Emorgonov Assistance (Human or Animal) Call 1 800 222 1222 Ear Chamical Emorgonov

For 24 Hour Medical Emergency Assistance (Human or Animal), Call **1-800-222-1222**. For Chemical Emergency Assistance (Spill, Leak, Fire, or Accident), Call ChemTrec at **1-800-424-9300**.

[See [additional] [complete] Precautionary Statements, and Directions For Use inside booklet.]

Manufactured [in China] For:

RedEagle International LLC 5143 S. Lakeland Dr., Suite 3 Lakeland, FL 33813



and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 85678-38 EPA Reg. No.: 85678-38 EPA Est.:\_\_\_\_\_

Net Contents:\_\_\_\_\_

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

**DANGER.** Corrosive. Causes irreversible eye damage. Harmful if swallowed or absorbed through skin. Do not get in eyes or on clothing. Avoid contact with skin.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

#### 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

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.

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**

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 washwaters. Do not apply when weather conditions favor drift from target area. This chemical is known to leach through soil into groundwater under certain conditions as a result of label use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

#### **GROUNDWATER ADVISORY**

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

#### SURFACE WATER ADVISORY

This product 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

# **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.

PPE required 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, is:

- Coveralls
- Chemical-resistant gloves such as barrier laminate or viton
- Shoes plus socks
- Protective eyewear

## PRODUCT INFORMATION Read all label directions before using.

Fomesafen 2SL is a selective herbicide which may be applied pre-plant surface, pre-emergence and/or post-Emergence for control or partial control of broadleaf weeds, grasses and sedges in cotton, dry beans, potatoes, snap beans, and soybeans.

## **Pre-Plant Surface and Pre-Emergence Applications**

Certain germinating broadleaf weeds, grasses and sedges can be controlled or partially controlled by soil residual activity from either pre-plant surface or pre-emergence applications of Fomesafen 2SL.

Moisture is necessary to activate Fomesafen 2SL in soil for residual weed control. Dry weather following applications of Fomesafen 2SL may reduce effectiveness. When adequate moisture is not received after a Fomesafen 2SL application, weed control may be improved by overhead irrigation with at least a 1/4 inch of water.

#### **Post-Emergence Applications**

Fomesafen 2SL is generally most effective when used post-Emergence, working through contact action. Therefore, emerged weeds must have thorough spray coverage for effective control. Best broad spectrum post-emergence control of susceptible broadleaf weeds is obtained when Fomesafen 2SL is applied early to actively growing weeds.

This usually occurs within 14 to 28 days after planting. Refer to the weed control tables for specific directions on weed growth stages and rates. Some bronzing, crinkling or spotting of labeled crop leaves may occur following post-emergence applications, but labeled crops soon outgrow these effects and develop normally.

#### **Soil Characteristics**

Application of Fomesafen 2SL to soils with high organic matter and/or high clay content may require higher rates than soils with low organic matter and/or low clay content. Refer to the "**Regional Boundaries/Definitions**" section of this label, weed control tables, and specific crop use sections for directions on use rates based on soil texture.

#### **Environmental and Agronomic Conditions**

Always apply Fomesafen 2SL under favorable environmental conditions that promote active weed growth. Avoid applying Fomesafen 2SL to weeds or labeled crops which are under stress from drought, extreme temperatures, excessive water, low humidity, low soil fertility, mechanical or chemical injury as reduced weed control and/or increased crop injury may result.

#### Rainfastness

Fomesafen 2SL requires a 1 hour rain-free period for best results when applied post-emergence.

#### Cultivation

Cultivation prior to post-Emergence application is not recommended. Cultivation may put weeds under stress, reducing weed control. Timely cultivation 1-3 weeks after applying Fomesafen 2SL may assist weed control.

#### **RESISTANT WEED MANAGEMENT**

Fomesafen 2SL contains the active ingredient fomesafen which inhibits the enzyme, protoporphyrinogen oxidase (PPO or PROTOX, Site of Action Group 14). Some naturally occurring weed populations have been identified as resistant to Group 14 herbicides. Selection of resistant biotypes, through repeated use of these herbicides or lower than directed 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. If resistance is suspected, contact your local X representative and/or agricultural advisor for assistance. Principles of herbicide resistant weed management:

• Employ integrated weed management practices. Use multiple herbicide sites-of-action with overlapping weed spectrums in rotation, sequences, or mixtures.

- Use the full directed herbicide rate and proper application timing for the hardest to control weed species present in the field.
- Scout fields after herbicide application to ensure control has been achieved.
- Avoid allowing weeds to reproduce by seed or to proliferate vegetatively.
- Monitor site and clean equipment between sites.
- Start with a clean field and control weeds early by using a burndown treatment or tillage in combination with a pre-emergence residual herbicide as appropriate.
- Use cultural practices such as cultivation and crop rotation, where appropriate.
- Use good agronomic principles that enhance crop competitiveness.

# **APPLICATION DIRECTIONS**

**Drift Management:** Avoiding spray drift at the application site is the responsibility of the applicator and the grower. The interaction of many equipment and weather-related factors determines the potential for spray drift. The applicator and grower must consider the interaction of equipment and weather-related factors to ensure that the potential for drift to sensitive non-target plants is minimal. This pesticide may only be applied when the potential for drift to adjacent sensitive areas (e.g., residential areas, bodies of water, non-target plants) is minimal (i.e., when the wind is blowing away from the sensitive area).

Spray Additives: Only spray additives cleared for use on growing crops under 40 CFR 180.1001 may be used in spray mixture.

# For Post-Emergence Applications Always Add One Of The Following Except in Tank Mix With Products Prohibiting Spray Additives:

Nonionic Surfactant (NIS) - Use NIS containing at least 75% surface active agent at 0.25 to 0.5% v/v (1-2 qts./100 gals.) of the finished spray volume.

**Crop Oil Concentrate (COC)** - Use a nonphytotoxic COC containing 15-20% approved emulsifier, at 0.5-1% v/v (0.5-1 gal./100 gals.) of the finished spray volume. COC can improve weed control but may slightly reduce crop tolerance.

**Other Adjuvants -** Adjuvants other than COC or NIS may be used providing the product meets the following criteria:

- 1. Contains only EPA exempt ingredients.
- 2. Is nonphytotoxic to the target crop.
- 3. Is compatible in mixture. (May be established through a jar test.)
- 4. Is supported locally for use with Fomesafen 2SL on the target crop through proven field trials and through university and extension recommendations.

**Note:** No adjuvants are needed for pre-plant surface or pre-emergence applications unless Fomesafen 2SL is being used in a burndown on emerged weeds.

#### Mixing Order:

- 1. Fill the spray tank with half the required amount of water and begin agitation.\*
- 2. Add dry pesticide formulations.
- 3. Add Fomesafen 2SL.
- 4. Add liquid pesticide formulations.
- 5. Add spray adjuvant and fertilizer (if used).
- 6. Add the remaining water and maintain agitation throughout the spray operation.

\*Compatibility agent, 1 gallon/500 gallons of water or 0.2% v/v, may be added as needed.

#### **GROUND APPLICATION**

**Pre-Plant Surface and Pre-Emergence Application:** Use a minimum of 10 gallons per acre. Nozzle selection should meet manufacturer's gallonage and pressure recommendations for pre-plant surface or pre-emergence applications.

**Post-Emergence Application:** Use sufficient spray volume and pressure to ensure complete coverage of the target weed. A spray volume of 10-20 gallons per acre and 30-60 psi at the nozzle tip is recommended. On large weeds and/or dense foliage, use 60 psi and a minimum of 20 gallons per acre to ensure coverage of weed foliage. The use of flat fan nozzles will result in the most effective post-emergence application of Fomesafen 2SL. Use nozzles that are set up to deliver medium quality spray (ASAE Standard S-572).

# DO NOT USE FLOOD TYPE OR OTHER SPRAY NOZZLES, WHICH DELIVER COARSE, LARGE DROPLET SPRAYS.

#### **BAND APPLICATIONS**

Calculate the amount of herbicide and water volume needed for band treatment by the following formulas:

Band width in inches row width in inches	х	broadcast rate per acre	=	Band herbicide rate per acre
Band width in inches row width in inches	х	<u>broadcast volume</u> per acre	=	Band water volume per acre

**Note:** Thorough weed coverage is important for post-Emergence band applications. Best coverage is obtained with a minimum of two nozzles, one directed to each side of the planted row. Application with a single nozzle directed over the top of the row is not recommended for post-Emergence applications but is suitable for pre-emergence applications. Cultivation of untreated areas may be needed following band applications. When making post-Emergence band applications and cultivating in the same operation, position nozzles in advance of the cultivation device. This will reduce dust in the spray area. Dust can intercept spray, reducing weed coverage resulting in less than adequate weed control.

**AERIAL APPLICATION:** Use sufficient spray volume and pressure to ensure complete coverage of the target. A minimum of 5 gallons per acre of spray mixture should be applied with a maximum of 40 PSI pressure. When foliage is dense, use a minimum of 10 gallons per acre to ensure coverage of weed foliage.

# DO NOT APPLY THIS PRODUCT THROUGH ANY TYPE OF IRRIGATION SYSTEM. EXCEPT CENTER PIVOT SYSTEMS.

# **CENTER PIVOT IRRIGATION APPLICATION**

Fomesafen 2SL alone or in tank mixture with other herbicides on this label, which are registered for center pivot application, may be applied in irrigation water pre-emergence (after planting but before weeds or crop emerge) at rates specified on this label. Fomesafen 2SL also may be applied post-emergence to the crop and pre-emergence to weeds in crops where post-emergence applications are allowed on this label. Follow all restrictions (height, timing, rate, etc.) to avoid illegal residues. Apply this product only through a center pivot irrigation system. Do not apply this product through any other type of irrigation system. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water. If you have questions about calibration, you should contact State Extension specialists, equipment manufacturers, or other experts. Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system, unless the pesticide label-prescribed safety devices for public water systems are in place. A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

## **Operating Instructions**

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

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

Posting of areas to be chemigated is required when 1) any part of a treated area is within 300 feet of sensitive areas such as residential areas, labor camps, businesses, day care centers, hospitals, in-patient clinics, nursing homes or any public areas such as schools, parks, playgrounds, or other public facilities not including public roads, or 2) when the chemigated area is open to the public such as golf courses or retail greenhouses.

Posting must conform to the following requirements. Treated areas shall be posted with signs at all usual points of entry and along likely routes of approach from the listed sensitive area. When there are no usual points of entry, signs must be posted in the corners of the treated areas and in any other locations affording maximum visibility to sensitive areas. The printed side of the sign should face away from the treated area towards the sensitive area. The signs shall be printed in English. Signs must be posted prior to application and must remain posted until foliage has dried and soil surface water has disappeared. Signs may remain in place indefinitely as long as they are composed of materials to prevent deterioration and maintain legibility for the duration of the posting period.

All words shall consist of letters at least 2½ inches tall, and all letters and the symbol shall be a color which sharply contrasts with their immediate background. At the top of the sign shall be the words KEEP OUT, followed by an octagonal stop sign symbol at least 8 inches in diameter containing the word STOP. Below the symbol shall be the words PESTICIDES IN IRRIGATION WATER.

Posting required for chemigation does not replace other posting and reentry interval requirements for farm worker safety.

# Specific Instructions for Public Water Systems

- 1. Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.
- 2. Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, back-flow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.
- 3. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- 4. The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- 5. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.
- 6. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- 7. Do not apply when wind speed favors drift beyond the area intended for treatment.

# **USE PRECAUTIONS**

- Thoroughly clean the spray system with water and a commercial tank cleaner before and after each use.
- Tank mixes of Fomesafen 2SL with other pesticides, fertilizers or any other additives except as specified on this label or other approved RedEagle International LLC supplemental labels may result in tank-mix incompatibility, unsatisfactory performance or unsatisfactory crop injury.

# USE RESTRICTIONS

# (see "Regional Boundaries/Definitions" section of this label for Regional Boundaries)

- Avoid overlapping spray swaths, as injury may occur to rotational crops.
- Do not exceed ground speed of 10 mph during application for adequate coverage.
- Do not allow Fomesafen 2SL to drift to all other crops and non-target areas. Crops other than those labeled may be severely injured by drift.
- Do not apply when wind velocity exceeds 15 mph.
- Do not make ground or aerial application during temperature inversions.
- Do not use on potatoes in Nassau and Suffolk Counties, New York.
- Region 1: A maximum of 1.5 pts. of Fomesafen 2SL (or a maximum of 0.375 lb. a.i./A of fomesafen from any product containing fomesafen) may be applied per acre per year.
- Region 2: A maximum of 1.5 pts. of Fomesafen 2SL (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.
- Region 3: A maximum of 1.25 pts. of Fomesafen 2SL (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.
- Region 4: A maximum of 1 pt. of Fomesafen 2SL (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.
- Region 5: A maximum of 0.75 pt. of Fomesafen 2SL (or a maximum of 0.1875 lb. a.i./A of fomesafen from any product containing fomesafen) may be applied per acre in ALTERNATE years.

# **Region Boundaries/Definitions**

**REGION 1 (Maximum Rate 1.5 pts./A per year)** - Includes the following states or portion of states where Fomesafen 2SL may be applied: Alabama, Arkansas, Florida (except Miami-Dade county), Georgia, Louisiana, Mississippi, Missouri (counties of Bollinger, Butler, Cape Girardeau, Dunklin, Madison, Mississippi, New Madrid, Pemiscot, Perry, Ripley, Scott, Stoddard and Wayne), North Carolina, Oklahoma (East of U.S. Highway 75 and East of Indian Nation Parkway), South Carolina, Tennessee, and Texas (includes area East of U.S. Highway 77 to State Road 239 including all of Calhoun County).

**REGION 2 (Maximum Rate 1.5 pts./A, alternate years)** - Includes the following states or portion of states where Fomesafen 2SL may be applied: Delaware, Kentucky, Maryland, Virginia, West Virginia, South of Interstate 70 in the following states: Illinois, Indiana and Ohio and 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 in Pennsylvania.

**REGION 3 (Maximum Rate 1.25 pts./A, alternate years)** - Includes the following states or portion of states where Fomesafen 2SL may be applied: Connecticut, Iowa, Maine, Massachusetts, Missouri (all counties except for those listed in Region 1), New Hampshire, New Jersey, New York (Do not use on potatoes in Nassau and Suffolk counties.), Pennsylvania (all areas except those listed in Region 2), Rhode Island, Vermont and Wisconsin (South of U.S. Highway 18 between Prairie Du Chien and Madison, and South of Interstate 94 between Madison and Milwaukee), and North of Interstate 70 in following states: Indiana, Illinois and Ohio.

**REGION 4 (Maximum Rate 1 pint per acre, alternate years)** - Includes the following states or portion of states where Fomesafen 2SL 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), and Wisconsin (all areas, except those in Region 3, South of Interstate 94 from Minnesota state line to Eau Claire and South of U.S. Highway 29 from Eau Claire to Green Bay plus Barron, Chippewa, Clark, Door, Dunn, Eau Claire, Kewaunee, Marathon, Menominee, Oconto, Polk, Shawano, and St. Croix counties. The following counties are excluded: Adams, Marquette, Portage, Waupaca, Waushara and Wood). 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 Road 34 and U.S. Highway 281 to the Nebraska state line).

**REGION 5 (Maximum Rate 0.75 pint per acre, alternate years)** - Includes the following states or portion of states where Fomesafen 2SL may be applied: North Dakota (all areas East of U.S. Highway 281 except those areas in Region 4), South Dakota (all areas East of U.S. Highway 281 except those areas in Region 4) and Minnesota (all areas South of U.S. Highway 2 except those areas in Region 4).

# Replanting

If replanting is necessary in fields previously treated with Fomesafen 2SL, the field may be replanted to cotton, dry beans, potatoes, snap beans or soybeans. During replanting, a minimum of tillage is recommended to preserve the herbicide barrier for effective weed control. Do not apply a second application of Fomesafen 2SL or other fomesafen containing product as crop injury or illegal residues may occur in harvested crops. If tank-mix combinations were used, refer to product labels for any additional replanting instructions.

# **ROTATIONAL CROP RESTRICTIONS**

The following rotational crops may be planted after applying Fomesafen 2SL at specified rates:

Crop To Be Planted	Minimum Rotation Interval (Months After Last Fomesafen 2SL Application)
Cotton, dry beans, potatoes, snap beans, and soybeans	0
Small grains such as wheat, barley, rye	4
Corn*, peanuts, peas, rice, seed corn	10
To avoid crop injury do not plant alfalfa, sunflowers, sugar beets, sorghum** or any other crop within	18

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

\*Use a 12 month minimum rotation interval for popcorn in the states of Ohio, Kentucky, Illinois, Indiana, Iowa, and Region 4 when applied at rates of 1.0 pint per acre or more.

\*Use 18 month minimum rotation interval for sweet corn in the states of Connecticut, Maine, Massachusetts, New Hampshire, New York, Rhode Island, Vermont and Region 5.

\*\*Sorghum may be planted back after 10 months in Region 1.

#### USE RATES AND WEEDS CONTROLLED WEEDS CONTROLLED

 Table 1. Weeds Controlled or Partially Controlled\* by Pre-Emergence Activity of Fomesafen 2SL at 1 to 1.5 pts./A<sup>1</sup>.

 Broadleaf Weeds Controlled
 Soil Texture
 Organic Matter

 Amaranth, Palmer
 Croton, tropic<sup>2</sup>
 Image: Controlled
 Image: Controlled

Amaranth, Palmer		
Croton, tropic <sup>2</sup>		
Eclipta		
Galinsoga spp.		
Lambsquarters, common		
Morningglory, smallflower		
Nightshade, black		
Nightshade, Eastern black		
Pigweed, redroot		
Pigweed, smooth		
Poinsettia, wild		
Purslane, common		
Ragweed, common <sup>2</sup>	All soil types	Up to 5%
Sida, prickly <sup>2</sup>	All soli types	001003/8
Starbur, bristly		
Anoda, spurred		
Cocklebur, common		
Morningglory, entireleaf		
Morningglory, ivyleaf		
Morningglory, pitted		
Morningglory, red/scarlet		
Morningglory, tall		
Nightshade, hairy		
Ragweed, giant		
Waterhemp, common		
Sedges Partially Controlled*		
Sedge, yellow nutsedge		
*Partial control means significant activity bu	it not always at a level considered acceptable fo	or commercial weed control.
<sup>1</sup> Use the higher end of the rate range when		
<sup>2</sup> Rates less than 1.5 pts./A will provide only	partial control of this weed.	

# Table 2. Weeds Controlled or Partially Controlled\* by Post-Emergence Activity of Fomesafen 2SL

	Fomesafen 2SL Rate (pt./A) Maximum Growth Stage Controlled At				
Weed	0.75 pt./A 1 pt./A 1.25 pts./A 1.5 pts./A				
	No. of True Leaves	No. of True Leaves	No. of True Leaves	No. of True Leaves	
Anoda, Spurred				2	
Balloonvine			2 <sup>c</sup>	2	
Carpetweed		6" Diameter Size	 Multi-leaf 6" Diameter	Unlimited Size	
Citron (Wild Watermelon)		2	2	4	
Cocklebur, Common <sup>a,b</sup>			2	4	
Copperleaf, Hophornbeam		2	2	4	
Copperleaf, Virginia		2	2	4	
Crotalaria, Showy		4	4	6	
Croton, Tropic		2	2	4	
Cucumber, Volunteer		4	4	6	
Eclipta		2	2	4	
Groundcherry, Cutleaf		4	4	6	
Hemp <sup>b</sup>			4	6	
Horsenettle <sup>b</sup>		2 <sup>c</sup>	3 <sup>c</sup>	4 <sup>c</sup>	
imsonweed	2	4	6	8	
adysthumb		2	2	4	
ambsquarters, Common <sup>c</sup>		2	2	2	
Mexicanweed		2 <sup>c</sup>	2 <sup>c</sup>	2	
Vorningglory					
Cypressvine		4	4	6	
Entireleaf var.	2 <sup>c</sup>	2	2	4	
vyleaf	2°	2	2	4	
Purple Moonflower		2	4	4	
Red (Scarlet)		2	2	4	
Smallflower		2	2	4	
Pitted (Smallwhite)		4	4	4	
Fall (Common)	2 <sup>c</sup>	2	2	3	
Palmleaf (Willowleaf)		2	2	4	
Mustard, Wild	2	4	6	8	
Nightshade, Black	2	4	4	4	
Nutsedge, Yellow				Suppression Only	
Pigweed, spp.					
Amaranth, Palmer	2 <sup>c</sup>	4	4	6	
Amaranth, Spiny	2 <sup>c</sup>	2	2	4	
Redroot	2°	4	6	6	
Smooth	2 <sup>c</sup>	4	4	6	
Waterhemp, Common	2 <sup>c</sup>	2	2	4	
Waterhemp, Tall	2 <sup>c</sup>	2	2	4	
Poinsettia, Wild				3	
Purslane, Common		Multi-Leaf 6" Diameter	Multi-Leaf 6" Diameter	Multi-Leaf 8" Diamete	
Pusley, Florida				2	
Ragweed, Common	2	4	4	6	
Ragweed, Giant <sup>b</sup>			4	4	
Redweed				3 <sup>c</sup>	
Sesbania, Hemp		6	6	12	
Sicklepod				Cotyledon <sup>c</sup>	
Sida, Prickly				Cotyledon <sup>c</sup>	
Smartweed, Pennsylvania	2 <sup>c</sup>	4	4	6	
Smellmelon				2	
Spurge, Prostrate				1" Diameter <sup>c</sup>	
Spurge, Spotted				2 <sup>c</sup>	
Starbur, Bristly		2	2	4	

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

<sup>a</sup>Do not apply in cotyledon stage.

<sup>b</sup>For effective control of this weed it is necessary to use 1% MSO and 2.5% UAN v/v as an adjuvant in Regions 2 and 3 (soybeans only). <sup>c</sup>Partial control.

## Table 2. Weeds controlled or partially controlled\* by Post-Emergence activity of Fomesafen 2SL (continued)

	Fomesafen 2SL Rate (pt./A)				
Weed		Maximum Growth Stage Controlled At			
weed	0.75 pt./A No. of True Leaves	1 pt./A No. of True Leaves	1.25 pts./A No. of True Leaves	1.5 pts./A No. of True Leaves	
Sunflower, Common				2	
Velvetleaf <sup>b</sup>			2	4	
Venice Mallow	2	4	4	6	
Witchweed		Multi-Leaf Up to 7"	Multi-Leaf Up to 7"	Multi-Leaf Up to 10"	
Yellow Rocket	2	4	6	6	
*Partial control means sign	ificant activity but not always	avs at a level considered ac	centable for commercial we	ed control	

\*Partial control means significant activity but not always at a level considered acceptable for commercial weed control. <sup>a</sup>Do not apply in cotyledon stage.

<sup>b</sup>For effective control of this weed it is necessary to use 1% MSO and 2.5% UAN v/v as an adjuvant in Regions 2 and 3 (soybeans only). <sup>c</sup>Partial control.

## SPECIAL USE DIRECTIONS FOR ADDITIONAL WEED PROBLEMS

#### Partial Control\* of Annual Grasses (Crabgrass, Goosegrass, Texas Panicum, Broadleaf Signalgrass)

The grasses listed above may be partially controlled by pre-emergence applications of Fomesafen 2SL at 1-1.5 pts./A.

The grasses listed below may be partially controlled by post-emergence applications of Fomesafen 2SL at 1-1.5 pts./A.			
Barnyardgrass	Signalgrass, broadleaf	Crabgrass	Foxtail (Giant, Green, Yellow)
Goosegrass	Johnsongrass, Seedling	Panicum, Fall	Panicum, Texas

## **Partial Control\* of Perennial Weeds**

Use of Fomesafen 2SL post-emergence at rates of 1-1.5 pts./A will aid in suppressing the above-ground portions of the weeds listed below until crop canopy can assist in suppression. Perennial weeds continue to regrow from underground rootstocks even if aboveground foliage is temporarily controlled or retarded. Even though Fomesafen 2SL and crop competition can suppress perennial weeds for a growing season, the rootstocks will continue to live and reestablishment will occur in subsequent years.

Milkweed, (Climbing & Honeyvine)

Bindweed (Field & Hedge) Trumpetcreeper

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

#### **CROP USE DIRECTIONS**

# **COTTON Pre-Emergence Application:** Apply Fomesafen 2SL pre-emergence at 1-1.5 pts./A in cotton in Region 1 for control or partial control of the weeds listed in Table 1. Apply as a pre-emergence treatment only to coarse textured soils (sandy loam, loamy sand, sandy clay loam). **Do not** apply as a pre-emergence treatment to medium or fine-textured soils as crop injury will likely occur.

To broaden the weed control spectrum, Fomesafen 2SL may be tank mixed with other pre-emergence herbicides such as Caparol<sup>®</sup>, Cotoran<sup>®</sup>, Direx<sup>®</sup>, Karmex<sup>®</sup>, Solicam<sup>®</sup>, or Staple<sup>®</sup>. For control of emerged weeds, Fomesafen 2SL may be tank mixed with a burndown herbicide such as Gramoxone Inteon<sup>™</sup> or glyphosate brands (such as Touchdown<sup>®</sup>, Roundup<sup>®</sup>) labeled in cotton. In reduced tillage plantings, Fomesafen 2SL can be applied up to 14 days prior to planting or at planting with a burndown herbicide. Refer to the tank-mix partner label for use directions, restrictions and limitations. The most restrictive product labeling applies. Cotton plants are tolerant to pre-emergence applications of Fomesafen 2SL when applied at specified rates and to coarse textured soil types. Some crinkling or spotting of cotton foliage or stunting may occur, especially if heavy rainfall occurs during or soon after cotton emergence, but cotton plants normally outgrow these effects and develop normally.

Cotton foliage is not tolerant to Fomesafen 2SL. Do not apply Fomesafen 2SL over the top of emerged cotton as unacceptable cotton injury will occur.

**Post-Directed Application:** Apply Fomesafen 2SL 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 Fomesafen 2SL at 1-1.5 pints per acre in a minimum of 10 gallons spray solution per acre. Applications may be made broadcast or banded. Post-directed applications of Fomesafen 2SL will provide contact control of labeled emerged weeds and residual pre-emergence control of labeled weeds (once activated by rainfall or irrigation). See previous label sections for a list of weeds controlled, specified application rates, weed growth stages, and application directions.

Apply Fomesafen 2SL with a non-ionic surfactant at 0.25 to 0.5% v/v, or crop oil concentrate at 1% v/v to emerged weeds. Do not add liquid nitrogen (28% or similar) to Fomesafen 2SL, or Fomesafen 2SL tank mixes in cotton. To broaden the weed control spectrum, tank mix post-directed applications of Fomesafen 2SL with other labeled post-directed herbicides such as Caparol, DSMA, Direx, Dual MAGNUM<sup>®</sup>, Envoke<sup>®</sup>, Karmex, Layby<sup>™</sup> Pro, MSMA, Sequence<sup>®</sup>, or Suprend<sup>®</sup>. When applied with hooded or shielded sprayers, Fomesafen 2SL and Fomesafen 2SL tank mixes may be applied with burndown products such as Gramoxone Inteon, Sequence or glyphosate brands (such as Touchdown, Roundup) labeled for in crop application in cotton. Refer to the tank-mix partner label for use directions, restrictions and limitations. The most restrictive product labeling applies.

Cotton foliage is not tolerant to Fomesafen 2SL applications. Avoid contact to cotton foliage as unacceptable injury will occur. 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:** Fomesafen 2SL may be applied to cotton at least 6 inches in height through lay-by as a post-directed application. All post-directed applications must avoid spray contact with any green non-barked parts of the cotton plant or foliage as unacceptable injury will occur. Follow the application timing instructions below for post-directed applications in cotton.

**Shield and Hooded Applications:** Make a precision post-directed Fomesafen 2SL 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 Fomesafen 2SL in cotton that is 6 inches to 12 inches in height. Adjust nozzles to provide full coverage of emerged target weeds.

**Layby Applications:** Make a post-directed Fomesafen 2SL application to the base of the cotton plant avoiding contact with any nonbarked 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. Configure application equipment to provide full coverage of emerged target weeds.

# **Restrictions - Cotton**

- Do not apply Fomesafen 2SL later than 70 days before harvest.
- Do not apply more than 1.5 pints per acre of Fomesafen 2SL in any year.

# Special Use Directions for the Suppression of Woollyleaf Bursage (Lakeweed), Ambrosia grayi, in Texas

Apply Fomesafen 2SL to cultivated areas of cropland in the fall or spring as a spot treatment at a rate of 1.5 pints per acre and incorporate to a depth of 2-3 inches for suppression of woollyleaf bursage.

Make applications with ground equipment.

The use of adjuvants, as specified under the Spray Additives section, will significantly improve the initial burndown of any emerged woollyleaf bursage, but this effect is only temporary. Therefore, an adjuvant may be used if desired, but is not necessary.

Significant suppression may not be seen until 6-8 months after application, but should then continue for at least 2 years after application. Cotton or soybeans may be planted in treated areas. Under certain conditions, significant damage may occur to cotton planted within 18 months of application. A 3-year interval from last application to planting is required for all other crops.

# Restrictions - For the Suppression of Woollyleaf Bursage (Lakeweed), Ambrosia grayi, in Texas

- Do not make more than one application of Fomesafen 2SL per year.
- Do not apply more than 1.5 pints per acre of Fomesafen 2SL in any year.
- If two consecutive year applications are made, allow a 2 year interval before another application.

# DRY BEANS AND SNAP BEANS

**Pre-Plant Surface and Pre-Emergence Application:** Apply Fomesafen 2SL as a pre-plant surface or pre-emergence application in Regions 1, 2, 3, and 4 only for control or partial control of the weeds listed in Table 1. Fomesafen 2SL can be applied alone, or tank mixed or followed sequentially with other labeled dry bean or snap bean herbicides to broaden the weed control spectrum or control newly emerged weeds. Refer to the **Tank Mix and Sequential Application** section for additional information.

**NOTE:** Treated soil that is splashed onto newly emerged seedings may result in temporary crop injury but plants normally outgrow these effects and develop normally.

**Post-Emergence Application:** Apply as a post-emergent broadcast application in Regions 1, 2, 3, 4, and 5 for control or partial control of the weeds listed in Table 2 and in the **Special Use Directions For Additional Weed Problems** section. Application rate depends on weed species and growth stage. Two applications may be made if necessary but not to exceed the maximum rate specified per geographic region. (Refer to "**Regional Boundaries/Definitions**" section of this label for Definition of Specified Geographic Regions). Refer to the Spray Additive section for recommended spray additives. Use of crop oil concentrate can improve weed control but may slightly reduce crop tolerance. Do not use UAN (28% or similar) or ammonium sulfate on dry beans or snap beans as severe crop injury may occur. Apply when dry beans or snap beans have at least one fully expanded trifoliate leaf. Fomesafen 2SL can be applied alone or in tank mix with other labeled dry bean or snap bean post-emergence herbicides to broaden the weed control spectrum. Refer to the **Tank Mix and Sequential Application** section. Some bronzing, crinkling or spotting of dry bean or snap bean leaves may occur following post-emergent applications, but dry beans and snap beans soon outgrow these effects and develop normally.

# Tank Mix and Sequential Applications for Dry Beans and Snap Beans

Fomesafen 2SL can be used sequentially or in tank mix with the following products: Assure II<sup>®</sup>, Basagran<sup>®</sup>, Dual MAGNUM, Eptam<sup>®</sup>, Poast<sup>®</sup>, Prowl<sup>®</sup>, Pursuit<sup>®</sup>, Raptor<sup>®</sup>, or Treflan<sup>®</sup>. Under certain conditions, the mixture of Fomesafen 2SL with one or more of the above mentioned broadleaf herbicides may cause a reduction in activity of any Post-Emergence grass herbicide in the mixture.

For sequential applications, allow 2-3 days after the application of the post-emergence grass herbicide before applying or Fomesafen 2SL mixtures. Where Fomesafen 2SL or the Fomesafen 2SL mixture is applied first, apply the grass herbicide when the grass weeds begin to develop new leaves (generally around 7 days).

**NOTE:** Tank-mix applications can result in increased crop injury as compared to either product used alone.

Always read and follow the use directions, restrictions and limitations for all products whether used alone, sequentially or in a tank mix. The most restrictive labeling of any product used applies.

## **Restrictions – Dry Beans and Snap Beans**

- Refer to "**Regional Boundaries/Definitions**" section of this label for the maximum rate of Fomesafen 2SL (or other Fomesafen containing products) that may be applied in each geographic region.
- Do not apply to any field in Regions 2, 3, 4, or 5 more than once every two years.
- For snap beans: Do not exceed 1.5 pints of Fomesafen 2SL per acre in any one year and also adhere to the maximum rate that may be applied in each geographic region (refer to the "Regional Boundaries/Definitions" section of this label). Do not graze treated areas or harvest for forage or hay. Do not utilize hay or straw for animal feed or bedding. Do not apply within 30 days of harvest.
- For dry beans: Do not exceed 1.5 pints of Fomesafen 2SL per acre in any one year and also adhere to the maximum specified rate that may be applied in each geographic region (See "Regional Boundaries/Definitions" section of this label). Do not graze animals on green forage or stubble. Do not utilize hay or straw for animal feed or bedding. Do not apply within 45 days of harvest.

## POTATOES

Apply Fomesafen 2SL at 1 pt./A as a broadcast pre-emergence application after planting but before potato emergence for control or partial control of weeds listed in Table 1. Effectiveness will be reduced if later cultural practices expose untreated soil. For application by center pivot irrigation, see the **Center Pivot Irrigation Application section** of this label.

**Note:** Potato varieties may vary in their response to Fomesafen 2SL. When using Fomesafen 2SL for the first time on a particular variety, always determine crop tolerance before using.

## **Tank Mix and Sequential Applications for Potatoes**

For pre-emergence applications in potatoes, Fomesafen 2SL may be tank mixed with other pesticide products registered for use in this way and timing in potatoes. Follow the directions for use, observe the stated precautions, and abide by the limitations and restrictions on the most restrictive of the product labels. If you have no previous experience mixing these products under your conditions, perform a compatibility test before attempting large-scale mixing (see **Tank Mix Compatibility Test** section of this label).

#### **Restrictions – Potatoes**

- Do not exceed 1 pt./A of Fomesafen 2SL per year. Refer to "**Region Boundaries/Definitions**" section for the maximum rate of Fomesafen 2SL (or other fomesafen containing products) that may be applied per year or alternate year in each geographic region.
- Do not harvest potatoes treated with Fomesafen 2SL within 70 days of application.
- Do not apply Fomesafen 2SL to sweet potatoes or yams.
- Do not apply Fomesafen 2SL as a preplant incorporated application in potatoes or crop injury may occur.
- Do not apply to emerged potato plants or severe crop injury will occur.
- Do not use on potatoes in Nassau and Suffolk Counties, New York.

#### SOYBEANS

**Pre-Plant Surface and Pre-Emergence Application:** Apply Fomesafen 2SL as a pre-plant surface or pre-emergence application in Regions 1, 2, 3, and 4 only for control or partial control of the weeds listed in Table 1. Fomesafen 2SL can be applied alone or tank mixed or followed sequentially with other labeled soybean herbicides to broaden the weed control spectrum or control newly emerged weeds. Refer to the **Tank Mix and Sequential Application** section for additional information.

For control of emerged weeds, Fomesafen 2SL may be tank mixed with a burndown herbicide such as Gramoxone Inteon or glyphosate brands (such as Touchdown or Roundup) labeled in soybeans. In reduced tillage plantings, Fomesafen 2SL can be applied up to 14 days prior to planting or at planting with a burndown herbicide.

**Post-Emergence Application:** Apply Fomesafen 2SL as a post-Emergence broadcast application in Regions 1, 2, 3, 4, and 5 for control or partial control of weeds listed in Table 2 and in the **Special Use Directions For Additional Weed Problems** section. Application rate depends on weed species and growth stage. Refer to the Spray Additive section for spray additives. To enhance post-Emergence control of susceptible broadleaf weeds (**soybeans only**) in Regions 2, 3, 4, and 5 (see "**Regional Boundaries/Definitions**" section of this label). Fomesafen 2SL can be used with a minimum of 2.5% liquid nitrogen (28% or similar) or a minimum of 10 pounds ammonium sulfate per 100 gallons of spray volume. Fomesafen 2SL can be applied alone or in combination with other labeled soybean Post-Emergence herbicides to broaden the weed control spectrum. Refer to the **Tank Mix and Sequential Application** section. Some bronzing, crinkling or spotting of soybean leaves may occur following post-emergent applications, but soybeans soon outgrow these effects and develop normally.

## Tank Mix and Sequential Applications For Soybeans

Fomesafen 2SL can be used sequentially or in tank mix with one or more of the following products: Assure II, Basagran, Boundary<sup>®</sup>, Butyrac<sup>®</sup>, Classic<sup>®</sup>, Dual MAGNUM, Dual II MAGNUM<sup>®</sup>, FirstRate<sup>®</sup>, Fusilade<sup>®</sup> DX, Fusion<sup>®</sup>, Glyphosate (such as Touchdown, Roundup or Glyphomax<sup>™</sup>), Gramoxone Inteon, Harmony<sup>®</sup> GT XP, Pursuit, Poast, Poast Plus<sup>®</sup>, Prowl, Raptor, Resource<sup>®</sup>, Select<sup>®</sup>, Sequence, Scepter<sup>®</sup>, and Synchrony<sup>®</sup> STS<sup>®</sup>.

Under certain conditions, the mixture of Fomesafen 2SL with one or more of the above mentioned broadleaf herbicides may cause a reduction in activity of any post-Emergence grass herbicide in the mixture. For sequential applications allow 2-3 days after the application of the post-emergence grass herbicide before applying Fomesafen 2SL or Fomesafen 2SL mixtures. Where Fomesafen 2SL or the Fomesafen 2SL mixture is applied first, apply the post-emergence grass herbicide when the grass weeds begin to develop new leaves (generally around 7 days).

# NOTE:

- Tank-mix applications can result in increased crop injury as compared to either product used alone.
- Do not exceed 1 fl. oz. of Butyrac per acre in mixture with Fomesafen 2SL.
- Do not exceed 0.25 oz./A of Synchrony STS herbicide in the tank with labeled rates of Fomesafen 2SL on non-STS varieties. This tank mix can be applied post-emergence to any soybean variety for additional broadleaf weed control. Refer to the Synchrony STS label for more information and crop rotation restrictions.
- Always read and follow the directions, restrictions and limitations for all products whether used alone, sequentially or in a tank mix. The most restrictive labeling of any product used applies.

## Roundup Ready® (Glyphosate Tolerant) Soybean Tank Mixes

Fomesafen 2SL at 6-12 oz./A, can be tank mixed with glyphosate products (such as Touchdown or Roundup) that are labeled for Roundup Ready (glyphosate tolerant) soybeans for improved post-emergence control of many weeds such as morningglory spp., hemp sesbania, waterhemp, and black nightshade which are known to have tolerance to glyphosate, but are susceptible to Fomesafen 2SL.

## FOLLOW THE DIRECTIONS ON THE GLYPHOSATE PRODUCT LABEL FOR THE USE OF SPRAY ADDITIVES IN THIS TANK MIX.

Do not allow this tank mix to move off target as contact by even minute quantities can cause severe damage or death to any non-target vegetation.

**NOTE:** Post-emergence application of this tank mix on soybean varieties which do not contain the Roundup Ready gene will result in severe crop injury or death of the soybean crop. Always read and follow the use directions, restrictions and limitations for all products used. The most restrictive labeling of any product applies.

#### **Restrictions – Soybeans**

- Refer to "Regional Boundaries/Definitions" section of this label for the maximum rate of Fomesafen 2SL (or other fomesafen containing products) that may be applied in each geographic region. Do not apply to any field in Regions 2, 3, 4, or 5 more than once every two years.
- Do not exceed 1.5 pints of Fomesafen 2SL per acre in any one year and also adhere to the maximum rate that may be applied in each geographic region (refer to the "**Regional Boundaries/Definitions**" section of this label). Do not graze treated areas or harvest for forage or hay. Do not apply within 45 days of harvest.

#### SPRAY DRIFT MANAGEMENT

#### **AERIAL SPRAY DRIFT MANAGEMENT**

AVOIDING SPRAY DRIFT AT THE APPLICATION SITE IS THE RESPONSIBILITY OF THE APPLICATOR. The interaction of many equipment and weather related factors determines the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions. The following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops. These requirements do not apply to forestry applications, public health uses or to applications using dry formulations.

- 1. The distance of the outer most nozzles on the boom must not exceed 3/4 the length of the wingspan or rotor.
- 2. Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.
- 3. Where states have more stringent regulations, they should be observed.
- 4. The applicator shall be familiar with and take into account the information covered in the **AERIAL DRIFT REDUCTION** section.

# **AERIAL DRIFT REDUCTION**

#### IMPORTANCE OF DROPLET SIZE

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (See **Wind, Temperature and Humidity,** and **Temperature Inversion** sections of this label).

# CONTROLLING DROPLET SIZE

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

#### **BOOM LENGTH**

For some use patterns, reducing the effective boom length to less than 3/4 of the wingspan or rotor length may further reduce drift without reducing swath width.

#### **APPLICATION HEIGHT**

Applications shall not be made at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

#### SWATH ADJUSTMENT

When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase with increasing drift potential (higher wind, smaller drops, etc.).

#### WIND

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

**NOTE:** Local terrain can influence wind patterns. Every applicator shall be familiar with local wind patterns and how they affect spray drift.

#### **TEMPERATURE AND HUMIDITY**

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

#### **TEMPERATURE INVERSIONS**

Applications shall not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions.

Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

#### SENSITIVE AREAS

The pesticide shall 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).

Table 3. Scientific Names of Weeds in the Fomesafen 2SL label			
COMMON NAME	SCIENTIFIC NAME		
Amaranth, Palmer	Amaranthus palmeri		
Amaranth, Spiny	Amaranthus spinosus		
Anoda, Spurred	Anoda cristata		
Balloonvine	Cardiospermum halicacabum		
Barnyardgrass	Echinochloa crus-galli		
Bindweed, Field	Convolvulus arvensis		
Bindweed, Hedge	Calystegia sepium		
Broadleaf Signalgrass	Brachiaria platyphylla		
Carpetweed	Mollugo verticillata		
Citron (Wild Watermelon)	Citrullus vulgaris		
Cocklebur, Common	Xanthium strumarium		
Copperleaf, Hophornbeam	Acalypha ostryifolia		
Copperleaf, Virginia	Acalypha virginica		
Crabgrass	Digitaria spp.		
Crotalaria, Showy	Crotalaria spectabilis		
Croton, Tropic	Croton glandulosus		
Cucumber, Volunteer	Cucumis sativus		
Eclipta	Eclipta prostrata		
Foxtail, Giant	Setaria faberi		
Foxtail, Green	Setaria viridis		
Foxtail, Yellow	Setaria glauca		
Goosegrass	Eleusine indica		
Groundcherry, Cutleaf	Physalis angulata		
Hemp	Cannabis sativa		
Horsenettle	Solanum carolinense		
Jimsonweed	Datura stramonium		
Johnsongrass, Seedling	Sorghum halepense		
Ladysthumb	Polygonum persicaria Chenopodium album		
Lambsquarters, Common Mexicanweed	Caperonia castaneifolia		
Milkweed, Climbing	Sarcostemma cynanchoides		
Milkweed, Honeyvine	Ampelamus albidus		
Morningglory,	Ipomoea quamoclit		
Entireleaf	Ipomoea hederacea var. integriuscula		
Ivyleaf	Ipomoea hederacea var. hederacea		
Purple Moonflower	Ipomoea turbinata		
Red (Scarlet)	Ipomoea coccinea		
Smallflower	Jacquemontia tamnifolia		
Pitted (Smallwhite)	Ipomoea lacunosa		
Tall (Common)	Ipomoea purpurea		
Palmleaf (Willowleaf)	Ipomoea wrightii		
Mustard, Wild	Brassica kaber		
Nightshade, Black	Solanum nigrum		
Nightshade Eastern Black ,	Solanum ptychanthum		
Nightshade, Hairy	Solanum physalifolium		
Nutsedge, Yellow	Cyperus esculentus		
Panicum, Fall	Panicum dichotomiflorum		
Panicum, Texas	Panicum texanum		
Pigweed, Amaranth	Amaranthus palmeri		
Pigweed, Redroot	Amaranthus retroflexus		
Pigweed, Smooth	Amaranthus hybridus		
Poinsettia, Wild	Euphorbia heterophylla		
Purslane, Common	Portulaca oleracea		
Pusley, Florida	Richardia scabra		
Ragweed, Common	Ambrosia artemisiifolia		
Ragweed, Giant	Ambrosia trifida		
Redweed	Melochia corchorifolia		
Sesbania, Hemp	Sesbania exaltata		
Sicklepod	Cassia obtusifolia		
Sida, Prickly	Sida spinosa		
Signalgrass, Broadleaf	Brachiaria platyphylla		

# Table 3. Scientific Names of Weeds in the Fomesafen 2SL label

COMMON NAME	SCIENTIFIC NAME
Smartweed Pennsylvania,	Polygonum pennsylvanicum
Smellmelon	Cucumis melo
Spurge, Prostrate	Euphorbia humistrata
Spurge, Spotted	Euphorbia maculata
Starbur, Bristly	Acanthospermum hispidum
Sunflower, Common	Helianthus annuus
Trumpetcreeper	Campsis radicans
Velvetleaf	Abutilon theophrasti
Venice Mallow	Hibiscus trionum
Waterhemp, Common	Amaranthus rudis
Waterhemp, Tall	Amaranthus tuberculatus
Witchweed	Striga asiatica
Yellow Rocket	Barbarea vulgaris

# STORAGE AND DISPOSAL

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

Prohibitions: Open dumping is prohibited. Do not reuse empty container.

**Pesticide Storage:** Store above 32°F in original containers only. If product freezes, return to room temperature and agitate to reconstitute. Keep container closed when not in use. Do not store near food or feed. In case of spill or leak on floor or paved surfaces, soak up with sand, earth or synthetic absorbent. Remove to chemical waste area.

**Pesticide Disposal:** Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of federal law. If these wastes cannot be disposed of by 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:** 

**Metal Containers:** Nonrefillable container. Do not reuse or refill this container. 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. Offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill or by other procedures approved by state and local authorities.

**Plastic Containers:** Nonrefillable container. Do not reuse or refill this container. 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. Offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, by incineration or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

#### Bulk and Mini-Bulk Containers

Container Handling: REFILLABLE CONTAINER. REFILL WITH PESTICIDE ONLY. DO NOT REUSE THE 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.

**Container Precautions:** Before refilling, inspect thoroughly for damage, such as cracks, punctures, bulges, dents, abrasions and damaged or worn threads on closure devices. After filling and before transporting, check for leaks. Do not refill or transport damaged or leaking container.

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

#### WARRANTY AND DISCLAIMER STATEMENT

**NOTICE:** Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties and Limitations of Liability. Treatment of highly mechanically damaged seed, or seed of known low vigor and poor quality may result in reduced germination and/or reduction of seed and seedling vigor. Treat and conduct germination tests on a small portion of seed before committing the total seed lot to a selected chemical treatment. Due to seed quality conditions beyond the control of RedEagle International LLC, no claims are made to guarantee germination of carry-over seed.

CONDITIONS: The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of RedEagle International LLC. To the extent allowable under State law, all such risks shall be assumed by the user or buyer.

DISCLAIMER OF WARRANTIES: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, REDEAGLE INTERNATIONAL LLC MAKES NO WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, THAT EXTEND BEYOND THE STATEMENTS MADE ON THIS LABEL. No agent of RedEagle International LLC is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, REDEAGLE INTERNATIONAL LLC DISCLAIMS ANY LIABILITY WHATSOEVER FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

LIMITATIONS OF LIABILITY: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, SHALL NOT EXCEED THE PURCHASE PRICE PAID, OR AT REDEAGLE INTERNATIONAL LLC'S ELECTION, THE REPLACEMENT OF PRODUCT.

Boundary<sup>®</sup>, Caparol<sup>®</sup>, Dual MAGNUM<sup>®</sup>, Dual II MAGNUM<sup>®</sup>, Envoke<sup>®</sup>, Fusilade<sup>®</sup>, Fusion<sup>®</sup>, Gramoxone Inteon<sup>™</sup>, Sequence<sup>®</sup>, Solicam<sup>®</sup>, Suprend<sup>®</sup>, and Touchdown<sup>®</sup> are trademarks of Syngenta Crop Protection.

Assure II®, Classic®, Harmony®, Layby™ Pro, Staple®, and Synchrony® STS® trademarks of E. I. du Pont de Nemours & Co., Inc.

Basagran<sup>®</sup>, Poast<sup>®</sup>, Poast Plus<sup>®</sup>, Prowl<sup>®</sup>, Pursuit<sup>®</sup>, Raptor<sup>®</sup>, Scepter<sup>®</sup> trademarks of BASF Ag Products.

Butyrac<sup>®</sup> trademark of Albaugh Inc.

Resource<sup>®</sup> and Select<sup>®</sup> trademarks of Agricultural Products.

Roundup Ready<sup>®</sup> and Roundup<sup>®</sup> trademarks of Monsanto Company.

FirstRate<sup>®</sup> and Glyphomax<sup>™</sup> trademarks of Dow AgroSciences.

Cotoran<sup>®</sup>, Direx<sup>®</sup> and Karmex<sup>®</sup> trademarks of Griffin LLC.

DSMA and MSMA trademarks of Helena Chemical Company.

Eptam® trademark of Gowan Company.

Treflan® trademark of UAP - Loveland Products, Inc.