

66222-242

02-16-2012

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U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs
Registration Division (7505P)
Ariel Rios Building
1200 Pennsylvania Ave., NW
Washington, D.C. 20460

EPA Reg.

Number:

66222-242

Date of Issuance:

FEB 16 2012

NOTICE OF PESTICIDE:

[x] Registration
[ ] Reregistration
(under FIFRA, as amended)

Term of Issuance: Unconditional

Name of Pesticide Product:

Fomesafen 2SL

Ann M. Tillman
Makhteshim Agan of North America, Inc
4515 Falls of Neuse Rd., Suite 300
Raleigh, NC 27609

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act. Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA sec. 3(c)(5) provided that you:

- 1. Submit and/or cite all data required for registration/reregistration review of your product when the Agency requires all registrants of similar products to submit data.
2. Revise the EPA Reg. No. to 66222-242
3. Assure that the establishment number and net content are also added to the label.
4. Data requirements for both storage stability (830.6317) and corrosion characteristics (830.6320) have not been satisfied. It is recommended that the observation be made at 0,3,6,9 and 12 month intervals. This data must be submitted within eighteen months of the date of this letter. The results must be submitted to the Agency in electronic and hard copy format.
5. A stamped copy of the label is enclosed for your records. Submit one (1) copy of the final printed label before you release the product for shipment.
6. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

If you have any questions regarding this notice, please contact Grant Rowland at (703) 347-0254 or at rowland.grant@epa.gov.

Kathryn V. Montague
Product Manager 23
Herbicide Branch
Registration Division (7505P)
Office of Pesticide Programs

[Handwritten signature of Kathryn V. Montague]

Date:

FEB 16 2012



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**ACCEPTED**

**FEB 16 2012**

Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 66222-242

# FOMESAFEN 2SL

**Herbicide For Control of Certain Weeds in Cotton, Dry Beans, Potatoes, Snap Beans, Soybeans and Pine Seedling Nurseries**

**ACTIVE INGREDIENT:**

Sodium Salt of fomesafen:  
5-[2-chloro-4-(trifluoromethyl)Phenoxy]-N-(methylsulfonyl)-2-nitrobenzamide ..... 22.8%

**OTHER INGREDIENTS:** ..... 77.2%

**TOTAL:** ..... 100.0%

Equivalent to 21.7% or 2 pounds per U.S. gallon or 240 grams per liter of fomesafen active ingredient.

EPA Reg. No. 66222-

EPA Est. No.

**Manufactured for:**

Makhteshim Agan of North America, Inc.  
4515 Falls of Neuse Rd., Suite 300  
Raleigh, NC 27609

NET CONTENTS: \_\_\_ Gallon(s)

**KEEP OUT OF REACH OF CHILDREN**

## DANGER/PELIGRO

Si usted no entienda 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	
<b>IF IN EYES</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>IF SWALLOWED</b>	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<b>IF ON SKIN OR CLOTHING</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>IF INHALED</b>	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact PROSAR at 1-877-250-9291 for emergency medical treatment information.	
<b>NOTE TO PHYSICIAN</b> – Probably mucosal damage may contraindicate the use of gastric lavage.	



**PRECAUTIONARY STATEMENTS  
HAZARDS TO HUMANS AND DOMESTIC ANIMALS  
DANGER**

CORROSIVE. CAUSES IRREVERSIBLE EYE DAMAGE. DUE TO CORROSIVE NATURE, MAY BE HARMFUL OR FATAL IF SWALLOWED. HARMFUL IF INHALED OR ABSORBED THROUGH SKIN. Do not get in eyes, on skin or on clothing. Avoid breathing vapors or spray mist.

**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

In addition for aerial applications, mixers and loaders handling more than 140 gallons of Fomesafen 2SL Herbicide in any single workday must wear a dust/mist filtering NIOSH-approved respirator with any N, R, P, or HE filter.

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 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**

**For Terrestrial Uses:** Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters. Do not apply when weather conditions favor drift from target area.

**Groundwater Advisory:** 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.

**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

Prior to using Fomesafen 2SL, be sure to read and follow all directions in this label.

Fomesafen 2SL can be applied postemergence and/or preemergence to cotton, pine seedling nurseries, potatoes, soybeans, dry beans and snap beans for control/partial control of grasses, sedges and broadleaf weeds. It may also be applied as a preplant surface treatment.

**Preplant Surface Applications and Preemergence Applications:** Preplant surface or preemergence applications of Fomesafen 2SL will provide control or partial control of some species of germinating broadleaf weeds, sedges and grasses by soil residual activity. Fomesafen 2SL is activated in the soil by moisture and weed control may be reduced if there is dry weather following treatment. When there is inadequate moisture following an application of this product, the effectiveness of Fomesafen 2SL may be improved by overhead irrigation. In such circumstances, irrigation of at least a ¼ inch of water should be provided.

**Postemergence Applications:** As Fomesafen 2SL works by contact action, thorough spray coverage will provide the most effective control of emerged weeds. Generally, Fomesafen 2SL is most effective as a postemergence treatment. For best results and broadspectrum control, apply this product early to actively growing susceptible broadleaf weeds. The optimum application time is usually 14-28 days following planting. Users must follow the specific directions regarding weed growth stages and rates in the weed control tables below.

For the most effective postemergence treatment with Fomesafen 2SL, there must be period of 1 hour without rain post-application.

Following postemergence treatment with this product, labeled crops may experience crinkling, spotting or bronzing; however, these effects will be temporary and crops will develop normally.

**Environmental and Agronomic Conditions:** If weeds/labeled crops are treated with this product when they are under stress from extremes of temperature/drought, excessive water, chemical injury, mechanical injury, low humidity, cultivation or low soil fertility, the effectiveness of Fomesafen 2SL may be



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reduced and/or there may be increased crop injury. Fomesafen 2SL must therefore be applied during environmental conditions that are favorable to active weed growth.

**Soil Characteristics:** Higher rates of Fomesafen 2SL may be required when applications are made to soil with high clay content and or high organic matter. Refer to the specific crop use sections, weed control tables and to the "Regional Boundaries/Definition" section of this label for directions on use rates according to soil type/texture.

**Cultivation:** Weed control effectiveness may be reduced if cultivation takes place prior to a postemergence application of Fomesafen 2SL because it may put weeds under stress. Cultivation 1-3 weeks following treatment with this product may assist in controlling weeds.

**Weed Resistance:** When reduced effectiveness of this product cannot be connected to adverse environmental/agronomic conditions or incorrect application, there may be some naturally occurring weed resistance. Some broadleaf species have naturally occurring biotypes which may display some resistance to Fomesafen 2SL and products with the same/similar mode of action. Reduced effectiveness may be the result of selection of resistant biotypes through repeated application of Fomesafen 2SL and related products. Where there is such resistance, discontinue use of this product and refer to an agricultural advisor or a local company representative for assistance and advice.

### 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 nontarget 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, nontarget plants) is minimal (i.e., when the wind is blowing away from the sensitive area).

**Spray Additives:** Spray mixtures may only use spray additives cleared for use on growing crops under 40 CFR 180.1001.

**When Using Fomesafen 2SL as a Postemergence Application, Always Add ONE of the Following Adjuvants (EXCEPT in a Tank Mix That Contains a Product/Products that Prohibit Spray Additives):**

**IMPORTANT:** An adjuvant is not required where Fomesafen 2SL is applied as a preplant surface or preemergence treatment unless it is being used to burndown emerged weeds.

**Crop Oil Concentrate –** Crop Oil Concentrate can improve control of target weeds, but may cause a small reduction in crop tolerance. Any Crop Oil Concentrate used must be nonphytotoxic and must contain 15 to 20% approved emulsifier, at 0.5-1% v/v (or 0.5 – 1 gallon per 100 gallons) of the finished spray volume.

**Nonionic Surfactant –** Any Nonionic Surfactant used must contain 75% or more surface active agent at 0.25 to 0.5% v/v (or 1-2 quarts per 100 gallons) of the finished spray volume.

An adjuvant that is not a Nonionic Surfactant or a Crop Oil Concentrate may be used if it meets ALL the following criteria:

- It only contains ingredients that are EPA exempt;
- It is compatible in a mixture (established by jar test);
- It is not phytotoxic to the target crop; and
- It is approved locally for use with this product on target crops by university and extension recommendations and by proven field trials.

#### Mixing Method:

1. Put half the required amount of water into the spray tank and begin agitation.†
2. Add pesticides that are dry formulations.



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3. Add Fomesafen 2SL.
4. Add pesticides that are liquid.
5. Add spray adjuvant.
6. Add fertilizer (if used).
7. Add the remaining half of the required water.
8. Agitation must be maintained throughout the spray operation.

\* Compatibility Agent: 1 gallon per 500 gallons of water (0.2% v/v) may be added as needed.

#### **Tank-Mix Compatibility Test:**

Ensure the compatibility of Fomesafen 2SL with other products prior to tank mixing through the use of a compatibility test:

1. In a clear quart jar, add tank mix partners in proportional amounts and in the recommended order of mixing.
2. Invert, or gently shake the sealed jar and let stand for 15-30 minutes.
3. If the test mixture forms flakes, clumps, oily layers or films or other precipitates, the combination of tank mix partners is not compatible and the tank mix should not be applied.

### **RESTRICTIONS AND PRECAUTIONS**

- Fomesafen 2SL is NOT to be applied through any irrigation system except center pivot irrigation (see Center Pivot Irrigation Application section).
- Region 1: a maximum of 1.5 pints of this product (0.375 pounds of active ingredient from any product containing fomesafen) may be applied per acre per year. Refer to the Regional Boundaries section of this label for a definition of Region 1.
- Region 2: a maximum of 1.5 pints of this product (0.375 pounds of active ingredient from any product containing fomesafen) may be applied in ALTERNATE years. Refer to the Regional Boundaries section of this label for a definition of Region 2.
- Region 3: a maximum of 1.25 pints of this product (0.313 pounds of active ingredient from any product containing fomesafen) may be applied in ALTERNATE years. Refer to the Regional Boundaries section of this label for a definition of Region 3.
- Region 4: a maximum of 1 pint of this product (0.25 pounds of active ingredient from any product containing fomesafen) may be applied in ALTERNATE years. Refer to the Regional Boundaries section of this label for a definition of Region 4.
- Region 5: a maximum of 0.75 pints of this product (0.1875 pounds of active ingredient from any product containing fomesafen) may be applied in ALTERNATE years. Refer to the Regional Boundaries section of this label for a definition of Region 5.
- Do not exceed a ground speed of 10 mph during application to ensure sufficient coverage.
- Ensure that spray swaths do not overlap. Overlapping spray swaths may cause injury to rotational crops.
- Severe injury may be caused to crops other than labeled crops and crops in nontarget areas by spray drift. Avoid spray to nontarget areas.
- Do not apply Fomesafen 2SL when wind speed is greater than 15 mph.
- Do not apply Fomesafen 2SL by ground application or by aerial application during a temperature inversion.
- Tank mix this product only with other products specified in this label or in supplemental labels approved by Makhteshim Agan of North America. Mixing Fomesafen 2SL with unspecified products may result in incompatibility, crop injury or reduced control.



- Prior to use and after use, wash the spray system thoroughly with a commercial tank cleaner and water.

### GROUND APPLICATION

**Preplant Surface and Preemergence Application:** Apply Fomesafen 2SL using a minimum of 10 gallons per acre, being sure to use a nozzle that is compatible with the manufacturer's recommendations for spray pressure and volume.

**Postemergence Application:** Because thorough spray coverage with Fomesafen 2SL will provide the most effective control of emerged weeds, be sure there is sufficient spray volume and pressure for complete coverage of the target weed. For the most effective postemergence application, use flat fan nozzles that are configured to deliver medium quality spray (ASAE Standard S-572).

Use a spray volume of 10-20 gallons per acre with pressure at the nozzle tip of 30-60 psi. Where Fomesafen 2SL is being used to treat dense foliage and/or large weeds, use 20 gallons per acre and pressure at the nozzle tip of 60 psi to ensure complete coverage.

**IMPORTANT:** Do not use flood type nozzles or nozzles that deliver large, coarse droplets

### BAND APPLICATION

The amount of Fomesafen and water needed can be calculated using the following:

<u>Band width (inches)</u>	x	Broadcast rate per acre	=	Band herbicide rate per acre
Row width (inches)				
<u>Band width (inches)</u>	x	Broadcast volume per acre	=	Band water volume per acre
Row width (inches)				

Thorough spray coverage with Fomesafen 2SL will provide the most effective control of emerged weeds. Application over the top of the row with a single nozzle is suitable for preemergence. To ensure thorough postemergence coverage, use at least 2 nozzles, directing one at each side of the planted row.

Untreated areas may require cultivation after band applications. If cultivation is taking place at the same time as band application of Fomesafen 2SL, dust can interfere with the spray, reducing coverage and weed control. In order to minimize dust in the area being sprayed, ensure the nozzles are positioned in advance of the cultivation equipment.

### AERIAL APPLICATION

Thorough spray coverage with Fomesafen 2SL will provide the most effective control of emerged weeds. In order to achieve thorough coverage apply 5 gallons per acre of spray mixture (minimum) at a maximum of 40 psi. Where there is dense foliage, 10 gallons per acre (minimum) should be applied to ensure thorough coverage.

### CENTER PIVOT IRRIGATION APPLICATION

Fomesafen 2SL may be applied as a preemergence treatment in irrigation water via center pivot irrigation at the rates specified within this label. Fomesafen 2SL may be applied on its own or in a tank mixture with other products labeled for application by center pivot irrigation.



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For crops where postemergence applications are permitted in this label, Fomesafen 2SL may be applied as a postemergence treatment and may be applied preemergence to weeds in crops.

Fomesafen 2SL must not be applied through any irrigation system other than a center pivot irrigation system. The effectiveness of Fomesafen 2SL can be adversely affected by a non-uniform application of the product. Non-uniform application may also result in crop injury and/or illegal pesticide residue. All restrictions must be followed with regard to application timing, height and rate in order to avoid illegal residues.

Questions regarding the calibration of center pivot irrigation equipment should be directed to State Extension specialists, the equipment manufacturers themselves, or other experts.

Any irrigation system used in the application of pesticides (including greenhouse systems) must not be connected to a public water system, except those irrigation systems that are equipped with safety devices for public water systems prescribed in this label.

All necessary adjustments to the center pivot irrigation system, including system shut down, must be carried out by a person responsible for and knowledgeable of the chemigation system or a person under the supervision of the responsible person.

#### **Operating Instructions for Center Pivot Irrigation Applications:**

In order to prevent contamination of the water source from backflow, the center pivot irrigation system must contain a vacuum relief valve, a functional check-valve, and low pressure drain located appropriately on the irrigation pipeline.

In order to prevent fluid flowing back toward the injection pump, the pesticide injection pipeline must contain a functional, quick-closing, automatic check-valve.

In order to prevent fluid from being withdrawn from the supply tank when the center pivot irrigation system has been automatically or manually shut down, the pesticide injection pipeline must contain a functional solenoid-operated valve which is normally closed. This valve must be connected to the system interlock and must be located on the intake side of the injection pump.

For circumstances where the water pump motor stops, the center pivot irrigation system must contain functional interlocking controls which will shut off the pesticide injection pump automatically.

For circumstances where water pressure decreases so much that distribution of Fomesafen SL is affected adversely, the water pump or irrigation line must include a functional pressure switch. This pressure switch will stop the water pump where the drop in pressure means that pesticide distribution will be adversely affected.

Center pivot irrigation systems used to apply Fomesafen 2SL must have a metering pump which is capable of being fitted with a system interlock and is compatible with pesticides, for example, a positive displacement injection pump (piston pump or diaphragm pump).

Fomesafen 2SL must not be applied when the product being applied will drift beyond the target area due to the wind speed.

The solution to be applied via center pivot irrigation system must be prepared with 1 part herbicide(s) to a minimum of 1 part water. The solution must then be injected into the center pivot system. More accurate calibration of the application equipment will usually be achieved by injecting a larger volume of a more dilute mixture per hour.



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Applicators must ensure they continue to agitate the solution throughout application in order to keep the herbicide(s) in suspension. Applicators must also meter into irrigation water during the entire period of application.

Apply Fomesafen 2SL in 1/2-1 inch of water. When applying Fomesafen 2SL to coarser soils, use the lower water volume (1/2 inch). For fine textured soils, use the higher water volume (1 inch).

Control of target weeds may be reduced if there is more than 1 inch of water at application because the herbicide may be moved beneath the zone where the product can take effect in the soil.

**PRECAUTION:** Unacceptable weed control may result where sprinkler patterns on the center pivot irrigation equipment do not overlap sufficiently. Conversely, crop injury may occur where sprinkler patterns overlap excessively.

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 2 1/2 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.

#### Chemigation Systems Connected to Public Water

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.

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.

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 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



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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, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.

Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) 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.

### REPLANTING AND ROTATIONAL CROPS

**Replanting:** Replanting of potatoes, snap beans, soybeans, dry beans or cotton may be carried out in fields where Fomesafen 2SL has previously been applied. When replanting, undertake the minimum tillage in order to maintain weed control through the Fomesafen 2SL barrier.

Do not apply additional Fomesafen 2SL to the area previously treated as this may result in illegally high residue in crops and/or crop damage.

If this product is combined in a tank mix, refer to and follow all product labels for further replanting directions.

**Rotational Crops:** Refer to the following table for rotational crops that may be planted following an application of this product at the specified rates:

Crop	Minimum Time After Last Application of Fomesafen 2SL Before Planting (Minimum Rotation Interval)
Cotton, dry beans, potatoes, snap beans, and soybeans	0 months
Small grains such as wheat, barley, rye, peppers (transplanted), tomatoes (transplanted)	4 months
Corn <sup>1</sup> , peanuts, peas, rice, seed corn	10 months
To avoid crop injury do not plant sunflowers, alfalfa, sorghum <sup>2</sup> , sugarbeets, or any other crop within 18 months of application.	

NOTE: When small grain crops are rotated, do not graze or harvest forage or straw for livestock.

<sup>1</sup> For popcorn in Region 4 (Illinois, Indiana, Ohio, Kentucky and Iowa): Use a minimum 12-month rotation interval when this product is applied at the rate equal to or greater than 1.0 pint per acre.

<sup>1</sup> For sweet corn in Region 5 (New York, New Hampshire, Rhode Island, Vermont, Connecticut, Massachusetts and Maine): Use a minimum 18-month rotation interval when this product is applied at the rate equal to or greater than 1.0 pint per acre.

<sup>2</sup> In Region 1, Sorghum may be planted back after 10 months.

(Refer to the Regional Boundaries section of this label for a definition of region boundaries)



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**USE RATES AND WEEDS CONTROLLED**

<b>Regional Boundaries / Definitions</b>		
<b>Region</b>	<b>Maximum Rate</b>	<b>States / Portions of States where Fomesafen 2SL May be Applied</b>
<b>1</b>	1.5 pints per acre per year	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)
<b>2</b>	1.5 pints per acre alternate years	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.
<b>3</b>	1.25 pints per acre alternate years	Connecticut, Iowa, Maine, Massachusetts, Missouri (all counties except for those listed in Region 1), New Hampshire, New Jersey, New York, 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 the following states: Indiana, Illinois and Ohio
<b>4</b>	1 pint per acre alternate years	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 Barren, Chippewa, Clark, Door, Dunn, Eau Claire, Kewaunee, Marathon, Menominee, Oconto, Polk, Shawano, and St. Croix counties. The following counties are excluded: Adam, 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)
<b>5</b>	0.75 pint per acre alternate years	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)



### WEEDS CONTROLLED

**Table 1**

Weeds controlled / partially <sup>1</sup> controlled by preemergence applications of Fomesafen 2SL when applied at a rate of 1 to 1.5 pints per acre <sup>2</sup> in all soil types / textures with up to 5% organic matter		
Amaranth, Palmer Croton, tropic <sup>3</sup> Eclipta Galinsoga spp. Lambsquarters, common Morningglory, Smallflower Nightshade, black Nightshade, Eastern black Pigweed, redroot	Pigweed, smooth Poinsettia, wild Purslane, common Ragweed, common <sup>3</sup> Sida, prickly <sup>3</sup> Starbur, bristly Anoda, spurred <sup>1</sup> Cocklebur, common <sup>1</sup> Morningglory, entireleaf <sup>1</sup>	Morningglory, ivyleaf <sup>1</sup> Morningglory, pitted <sup>1</sup> Morningglory, red/scarlet <sup>1</sup> Morningglory, tall <sup>1</sup> Nightshade, hairy <sup>1</sup> Ragweed, giant <sup>1</sup> Waterhemp, common <sup>1</sup>  Sedge, yellow nutsedge <sup>1</sup>
<sup>1</sup> Partial control of weeds with Fomesafen 2SL: significant activity/control but may not provide a level of control that is acceptable for commercial weed control. <sup>2</sup> Where dense weeds are anticipated, apply Fomesafen 2SL at the higher rate <sup>3</sup> Only partial control of this weed will be achieved at rates of less than 1.5 pints per acre		

**Table 2: Weeds Controlled or Partially Controlled\* - Postemergence Application of Fomesafen 2SL**

Weed Controlled / Partially Controlled	Maximum Growth Stage (Number of True Leaves) for Control at the Specified Rate			
	0.75 pint per acre	1 pint per acre	1.25 pints per acre	1.5 pints per acre
Anoda, Spurred	--	--	--	2
Balloonvine	--	--	2 <sup>***</sup>	2
Carpetweed	--	6" Diameter Size	Multi-leaf 6" Diameter	Unlimited Size
Citron (Wild Watermelon)	--	2	2	4
Cocklebur, Common <sup>**</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>**</sup>	--	--	4	6
Horsenettle <sup>**</sup>	--	2 <sup>***</sup>	3 <sup>***</sup>	4 <sup>***</sup>
Jimsonweed	2	4	6	8
Ladysthumb	--	2	2	4



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Weed Controlled / Partially Controlled	Maximum Growth Stage (Number of True Leaves) for Control at the Specified Rate			
	0.75 pint per acre	1 pint per acre	1.25 pints per acre	1.5 pints per acre
Lambsquarters, Common <sup>***</sup>	--	2	2	2
Mexicanweed	--	2 <sup>***</sup>	2 <sup>***</sup>	2
Morningglory spp.				
Cypressvine	--	4	4	6
Entireleaf var.	2 <sup>***</sup>	2	2	4
Ivyleaf	2 <sup>***</sup>	2	2	4
Purple Moonflower	--	2	4	4
Red (Scarlet)	--	2	2	4
Smallflower	--	2	2	4
Pitted (Smallwhite)	--	4	4	4
Tall (Common)	2 <sup>***</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>***</sup>	4	4	6
Amaranth, Spiny	2 <sup>***</sup>	2	2	4
Redroot	2 <sup>***</sup>	4	6	6
Smooth	2 <sup>***</sup>	4	4	6
Poinsettia, Wild	--	--	--	3
Purslane, Common	--	Multi-Leaf 6" Diameter	Multi-Leaf 6" Diameter	Multi-Leaf 8" Diameter
Pusley, Florida	--	--	--	2
Ragweed, Common	2	4	4	6
Ragweed, Giant <sup>**</sup>	--	--	4	4
Redweed	--	--	--	3 <sup>***</sup>
Sesbania, Hemp	--	6	6	12
Sicklepod	--	--	-	Cotyledon <sup>***</sup>
Sida, Prickly	--	--	--	Cotyledon <sup>***</sup>
Smartweed, Pennsylvania	2 <sup>***</sup>	4	4	6
Smellmelon	--	--	--	2
Spurge, Prostrate	--	--	--	1" Diameter <sup>***</sup>
Spurge, Spotted	--	--	--	2 <sup>***</sup>
Starbur, Bristly	--	2	2	4
Sunflower, Common	--	--	--	2
Velvetleaf <sup>**</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"



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Weed Controlled / Partially Controlled	Maximum Growth Stage (Number of True Leaves) for Control at the Specified Rate			
	0.75 pint per acre	1 pint per acre	1.25 pints per acre	1.5 pints per acre
Waterhemp, Common	2 <sup>***</sup>	2	2	4
Waterhemp, Tall	2 <sup>***</sup>	2	2	4
Yellow Rocket	2	4	6	6

\* Partial control of weeds with Fomesafen 2SL: Significant activity/control, but may not provide a level of control that is acceptable for commercial weed control.  
 \*\* Regions 2 and 3 (soybeans only): Use 1% MSO and 2.5% UAN v/v as an adjuvant for effective control of this weed. For common cocklebur, do not apply in the cotyledon stage.  
 \*\*\* Partial control only.

### SPECIAL USE DIRECTIONS FOR ADDITIONAL WEED PROBLEMS

NOTE: Partial control means significant activity but may not provide a level of control that is acceptable for commercial weed control.

### PARTIAL CONTROL OF ANNUAL GRASSES

Partial control of broadleaf signalgrass, goosegrass, crabgrass and Texas panicum may be achieved by preemergence applications of Fomesafen 2SL at a rate of 1-1.5 pints per acre.

Partial control of barnyardgrass, broadleaf signalgrass, goosegrass, crabgrass, Texas panicum, foxtail (Giant, Green, Yellow), Fall Panicum and Johnsongrass (seedling) may be achieved by **postemergence** applications of Fomesafen 2SL at a rate of 1-1.5 pints per acre.

### PARTIAL CONTROL OF PERENNIAL WEEDS

Postemergence application of Fomesafen 2SL at a rate of 1-1.5 pints per acre to Bindweed (field and hedge), Milkweed, (climbing, honeyvine) and trumpetcreeper will help to suppress the above ground part of the weed until the crop canopy aids in weed suppression. Although control of the above ground portion of weeds may be achieved by applications of Fomesafen 2SL/crop canopy coverage, perennial weeds will regrow from below the surface stocks of roots, and re-establishment of the weeds will occur in subsequent years.

### CROP USE DIRECTIONS

#### COTTON

**Preemergence Application:** Fomesafen 2SL must not be applied over the top of emerged cotton as cotton foliage is not tolerant of this product. If Fomesafen 2SL is applied to cotton foliage, severe crop injury will result.

Cotton plants are tolerant to preemergence applications of Fomesafen 2SL when applied at recommended rates and to coarse textured soil types. Some crinkling or spotting of cotton foliage or stunting may occur, especially if there is heavy rainfall during or soon after cotton emergence, but cotton plants normally outgrow these effects and develop normally.

When applying Fomesafen 2SL as a preemergence treatment, do not apply to medium/fine textured soils as crop injury may result. Treat only coarse textured soils (i.e., loamy sand, sandy clay loam, sandy loam). See **Early Preplant Application on Medium and Fine-Textured Soil for Weed Control** in



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**Cotton** below for use only in the states of Alabama, Arkansas, Louisiana, Missouri, Mississippi, Tennessee and South Carolina.

For partial control of the weeds listed in Table 1 (above), apply Fomesafen 2SL as a preemergence treatment at a rate of 1-1.5 pints acre.

In order to increase the spectrum of weeds that may be treated and controlled, tank mix Fomesafen 2SL with other herbicides that may be applied preemergence, for example: Direx®, Staple®, Karmex®, Cotoran®, Solicam®, Caparol®

In order to control emerged weeds, tank mix Fomesafen 2SL with a burndown herbicide product, for example: Parazone® 3SL or a glyphosate product labeled for cotton such as Glyphogan® or Glyphogan® Plus .

**Applying Fomesafen 2SL in reduced tillage plantings:** apply Fomesafen 2SL with a burndown herbicide product at planting or up to 14 days prior to planting. Read and follow the directions and restrictions in the tank-mix partner label(s). The most restrictive directions of those ingredients in the tank mix must be followed.

**Post-Directed Application:** Post-directed applications provide contact control of emerged weeds specified in this label. Once Fomesafen 2SL has been activated by rainfall or irrigation, post-directed applications will also provide residual preemergence control of specified weeds. See the above sections for application rates/directions, lists of weeds controlled, and weed growth stages.

Fomesafen 2SL must not be applied over the top of emerged cotton as cotton foliage is not tolerant of this product and severe crop injury will result. Calibrate application equipment (i.e., nozzle type, pressure, orifice size and configuration) to ensure spray droplets do not contact foliage and green cotton stems.

Post-directed applications of Fomesafen 2SL may be banded or broadcast. Use precision, hooded/shielded post-directed application equipment in order to achieve comprehensive coverage of weeds in emerged cotton. Use a rate of 1-1.5 pints per acre, and 10 gallons of spray solution per acre minimum.

Apply Fomesafen 2SL to emerged weeds with a non-ionic surfactant at 0.25 to 0.5% v/v, or crop oil concentrate at 1% v/v. Do not add liquid nitrogen (28% or similar) to this product or to tank mixes that contain Fomesafen 2SL.

Fomesafen 2SL may be tank mixed in order to increase the weed species controlled. Tank mix Fomesafen 2SL with other products labeled for post-directed applications, for example: Direx, Suprend®, Envoke®, DSMA®, Caparol®, Karmex®, Dual MAGNUM®, Sequence®, MSMA®, or Layby™ Pro.

When Fomesafen 2SL is applied in a tank mix with a burn down herbicide product labeled for use on cotton such as Parazone® 3SL or a glyphosate product labeled for cotton such as Glyphogan® or Glyphogan® Plus , it must be applied using a shielded or hooded sprayer. Read and follow the directions and restrictions in the tank-mix partner label(s). The most restrictive directions of those ingredients in the tank mix must be followed.

**Timing of Post-Directed Applications in Cotton:** Refer to and follow application timing directions below. Cotton must be at least 6 inches in height for a post-directed application of Fomesafen 2SL through lay-by. Calibrate application equipment (i.e., nozzle type, pressure, orifice size and configuration) to ensure spray droplets do not contact foliage and green cotton stems.

**Hooded/Shield Applications:** Apply this product as a post-directed application only with shielded or hooded spray equipment in cotton that is 6 - 12 inches high. In order to avoid crop injury, do not contact foliage or the cotton stem with spray. Treat with Fomesafen 2SL as a precision post-directed application to the base of the cotton. Adjust nozzles to provide full coverage of emerged target weeds.

**Lay-by Applications:** When treating with Fomesafen 2SL as a post-directed application, apply to the base of the cotton plant. In order to prevent crop injury, use post-directed precision equipment (or hooded/shielded sprayers) and do not contact any non-barked portion of the cotton foliage or plant with this product. Apply only to cotton that has developed at least 4 inches of brown bark through layby. Configure application equipment in order to provide comprehensive coverage of targeted emerged weeds.



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**Restrictions:**

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

**EARLY PREPLANT APPLICATION ON MEDIUM AND FINE-TEXTURED SOILS FOR WEED CONTROL IN COTTON (ONLY in Alabama,, Arkansas,, Louisiana,, Missouri, , Mississippi,, Tennessee and South Carolina)**

For control of weeds listed in this label, apply Fomesafen 2SL at 1 pint per acre to medium and fine-textured soils (i.e., soil types heavier than coarse textured soils) as a preplant surface application up to 21 days prior to planting cotton, and after the last tillage operation is completed. A minimum of 0.5 inch of rainfall or overhead irrigation must occur before planting cotton. Fomesafen 2SL will provide preemergence control of Palmer amaranth (including glyphosate-resistant Palmer amaranth) pigweed species, and control or partial control of other broadleaf weeds, sedges and grasses listed on the federal label.

To broaden the weed control spectrum, Fomesafen 2SL may be tank mixed with other preemergence 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 dicamba, Parazone Parazone<sup>®</sup> 3SL or a glyphosate product labeled for cotton such as Glyphogan<sup>®</sup> or Glyphogan <sup>®</sup> Plus . Refer to the tank-mix partner label for use directions, restrictions and limitations. The most restrictive product labeling applies.

Cotton plants are tolerant to preplant applications of Fomesafen 2SL when applied at the recommended rate and application use directions. Some crinkling or spotting of cotton foliage or stunting may occur, but cotton plants normally outgrow these effects and develop normally.

**Restrictions:**

- After Fomesafen 2SL application, a minimum of 0.5 inch of rainfall or overhead irrigation must occur before planting cotton on medium or fine-textured soils. Failure to follow these use directions will result in severe crop injury.
- Do not disturb or re-work the seedbed following a Fomesafen 2SL application.
- Cotton must be planted at least 0.75 inch in depth.
- Avoid overlapping spray swaths.
- The use of an in-furrow or seed applied fungicide will generally assist with seedling establishment and development.

**COTTON WEED CONTROL, INCLUDING GLYPHOSATE-RESISTANT PALMER AMARANTH AND LAKEWEED IN TEXAS**

**Important:** This use of Fomesafen 2SL is restricted in Texas only in the following geography: West of Highway 277 from Wichita falls to Anson, and north of Highway 180 to the New Mexico and Oklahoma state lines including fisher, Scurry, Borden and Dawson counties and excluding Gaines county.

**Early Preplant Application for Irrigated and Non-irrigated Cotton:** Apply Fomesafen 2SL at 1 pint per acre from 14 to 21 days prior to planting cotton. A minimum 14-day interval must be maintained and a minimum of 0.5 inch of rainfall or overhead sprinkler irrigation must occur before planting of cotton. Refer to the list of weeds controlled and application directions on this label.

**Preemergence Application for Overhead Broadcast Sprinkler Irrigated Cotton Only:** For overhead broadcast sprinkler irrigated cotton only, Fomesafen 2SL may be applied at 1 pint per acre immediately after planting of cotton provided that 0.5 inch of irrigation is applied prior to cotton cracking the soil surface. Refer to the list of weeds controlled and application directions on this label.



To broaden the weed control spectrum, Fomesafen 2SL may be tank mixed with other residual 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 Parazone<sup>®</sup> 3SL or a glyphosate product labeled for cotton such as Glyphogan<sup>®</sup> or Glyphogan <sup>®</sup> Plus . Refer to the tank-mix partner label for use directions, restrictions and limitations. The most restrictive product labeling applies.

Cotton plants are tolerant to preplant applications of Fomesafen 2SL when applied at the recommended rate and application use directions. Some crinkling or spotting of cotton foliage or stunting may occur, 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 for Irrigated and Non-irrigated cotton:** Apply Fomesafen 2SL in emerged cotton as a post-directed, hooded or shielded application equipment to provide complete coverage of emerged weeds. Apply Fomesafen 2SL at 1 pint 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 control of labeled weeds (once activated by rainfall or irrigation). Refer to the list of weeds controlled and the applications directions on this label. A post-directed application may be made up to July 10.

Fomesafen 2SL 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. Do not add liquid nitrogen (28% or similar) to Fomesafen 2SL, or Fomesafen 2SL tank mixes in cotton.

To broaden the weed control spectrum, post-directed applications of Fomesafen 2SL may be tank mixed with other labeled post-directed herbicides such as Caparol<sup>®</sup>, DSMA<sup>®</sup>, Direx, Dual MAGNUM<sup>®</sup>, Karmex<sup>®</sup>, Layby Pro, MSMA, or Sequence<sup>®</sup>. When applied with hooded or shielded sprayers, Fomesafen 2SL, or Fomesafen 2SL tank mixes may be applied with burndown products such as Parazone<sup>®</sup> 3SL or a glyphosate product labeled for cotton such as Glyphogan<sup>®</sup> or Glyphogan <sup>®</sup> Plus. 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. Application equipment should be calibrated (spray pressure, nozzle type, orifice size and configuration) to avoid fine spray droplets contacting green cotton stems and foliage.

**Post-Directed Application Timing in Irrigated and Non-Irrigated Cotton:** Fomesafen 2SL may be applied to cotton at least 6 inches in height through layby as a postdirected 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 Fomesafen 2SL application at 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 a minimum 6 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 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 for full coverage of emerged target weeds.



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**Rotational Crop Restrictions for Irrigated and Non-irrigated Cotton in West Texas**

The irrigation method must be overhead broadcast sprinkler irrigations only. For a Fomesafen 2SL early preplant or preemergence application, a total of 13 inches of irrigation must be applied following applications through August 31. For a Fomesafen 2SL post-directed application, a minimum of 10 inches of irrigation must be applied following application through August 31. A post-direct application may be made up to July 10.

The following table provides rotational crop intervals for overhead broadcast sprinkler irrigated cotton. If irrigation practices are not implemented as described above, follow the rotational crop intervals for non-irrigated cotton (see Rotational Crop Restrictions for Non-Irrigated Cotton table below).

Rotational Crop	Minimum Rotational Interval after Fomesafen 2SL Application (Months)	Fomesafen 2SL Rate and Application Frequency in Cotton
Cotton, dry beans, snap beans and soybeans	0	Up to 1 pint/A applied once every year
Peanuts	10	Up to 1 pint/A applied once every two years
Field Corn (soils <1.5% OM)	24	Up to 1 pint/A applied once every two years
Field Corn (soil >=1.5% OM)	34	Up to 1 pint/A applied once every two years
Wheat (soils <=2% OM)	15	Up to 1 pint/A applied once every two years
Wheat (soils >2% OM)	24	Up to 1 pint/A applied once every two years
Sorghum	> 36*	Up to 1 pint/A applied once every three years
All other crops	> 36*	Up to 1 pint/A applied once every three years

\* To avoid crop injury a successful field bioassay (refer to Field Bioassay Instructions section) must be conducted prior to planting sorghum or other rotational crops not listed in the table.

**Rotational Crop Restrictions for Non-Irrigated Cotton in West Texas**

For non-irrigated cotton, follow the rotational crop intervals indicated in the table below.

Rotational Crop	Minimum Rotational Interval after Fomesafen 2SL Application (Months)	Fomesafen 2SL Rate and Application Frequency in Cotton
Cotton, dry beans, snap beans and soybeans	0	Up to 1 pint/A applied once every year
Peanuts	10	Up to 1 pint/A applied once every two years
Wheat	24	
Field Corn	34	Up to 1 pint/A applied once every three years
Sorghum	> 36*	Up to 1 pint/A applied once every three years
All other crops	> 36*	Up to 1 pint/A applied once every three years

\* To avoid crop injury a successful field bioassay (refer to Field Bioassay Instructions section) must be conducted prior to planting sorghum or other rotational crops not listed in the table.



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**Restrictions for early preplant, preemergence and post-directed applications in irrigated and non-irrigated cotton in West Texas**

- Do not apply Fomesafen 2SL later than 70 days before harvest.
- Do not apply more than 1 pt/A of Fomesafen 2sL in any year.

**SPECIAL USE DIRECTIONS FOR THE SUPPRESSION OF WOOLLYLEAF BURSAGE (LAKEWEED), AMBROSIA GRAYI, IN WEST TEXAS IN IRRIGATED AND NON-IRRIGATED COTTON**

Apply Fomesafen 2SL with ground equipment as a spot treatment at 1.5 pints per acre to areas of cropland that are cultivated in the fall or spring. For suppression of woollyleaf bursage, incorporate Fomesafen 2SL to a depth of 2-3 inches. Although an adjuvant is not necessary, it will significantly improve the initial burndown of emerged woollyleaf bursage. However, this effect is temporary. Only use adjuvants specified in the Spray Additives section above. Applicators may not see significant suppression until 6-8 months following after application of Fomesafen 2SL. However, suppression should then continue for at least 2 years following treatment.

**Rotational Crop Restrictions when Using Fomesafen 2SL for Suppression of Woollyleaf Bursage in West Texas:** Soybeans may be planted immediately after application. Cotton planted within 12 months of application may have significant damage. A minimum 3-year interval from last application to planting AND a successful field bioassay (refer to Field Bioassay Instructions section) must be conducted before planting all other crops.

**Restrictions for the Suppression of Woollyleaf Bursage in West Texas**

- Do not apply Fomesafen 2SL later than 70 days before harvest.
- 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.

**Field Bioassay Instructions**

Using typical tillage, planting dates and seeding rates, plant several strips of the desired crop variety across the field which has been previously treated with Fomesafen 2SL. Plant the strips perpendicular to the direction Fomesafen 2SL was applied. The strips should be located so that all the different field conditions are encountered, including differences in soil texture, organic matter, pH, and drainage. If the crop does not show visible symptoms of injury, stand reduction, and/or yield reduction, this field can be seeded with this crop the next growing season after the bioassay. If visible injury, stand reduction, or yield reduction occurs, this crop must not be seeded, and the bioassay must be repeated the next growing season.

**DRY BEANS AND SNAP BEANS**

**Preemergence and Preplant Surface Applications:** Regions 1, 2, 3, and 4 only: For control/partial control of weeds specified in Table 1 above, apply Fomesafen 2SL as a preemergence or preplant surface application. Apply Fomesafen 2SL in a tank mix, on its own, or make an application of Fomesafen 2SL followed by another/other herbicide(s) labeled for treatment of dry bean or snap beans. Tank mixing or subsequent application of other herbicides labeled for treatment of dry bean or snap beans may increase the species of weeds that may be controlled/partially controlled and/or assist with the control of weeds that are newly emerged. For further information, see the Sequential Application and Tank Mix sections above.

Temporary crop injury may result if newly emerged seedlings are splashed by soil treated with Fomesafen 2SL. However, seedlings usually outgrow these effects and develop as normal.

For definitions of the Regions, see the Regional Boundaries/Definition Section above.

**Postemergence Application:** Regions 1, 2, 3, 4 and 5: For control/partial control of weeds listed in Table 2 and in the Special Use Directions For Additional Weed Problems section, Apply Fomesafen 2SL



as a postemergence broadcast application at a rate specific to the listed weed species and the growth stage. If required, two applications of Fomesafen 2SL can be made, but applicators must not exceed the maximum rate specified for the relevant Region. (For definitions of the Regions, see the Regional Boundaries/Definition Section above).

For spray additives that can be used with Fomesafen 2SL, see the Spray Additive section above. Weed control may be improved by the addition of a crop oil concentrate although crop tolerance may be slightly reduced. Do not use ammonium sulfate or UAN (28% or similar) on snap beans or dry beans as severe crop injury may occur.

Apply Fomesafen 2SL when snap beans or dry beans have one or more fully expanded trifoliolate leaf either in a tank mix, on its own, or make an application of Fomesafen 2SL followed by another/other herbicide(s) labeled for application to dry beans or snap beans. Tank mixing or subsequent application of other herbicides labeled for application to dry bean or snap beans may increase the species of weeds that can be treated and/or assist with the control of weeds that are newly emerged. For further information, see the Sequential Application and Tank Mix sections above. Bronzing, spotting or crinkling of snap beans or dry beans may take place after a postemergence application. However, the plants outgrow these effects and will develop as normal.

**Sequential Applications and Tank Mixes for Snap Beans and Dry Beans:** Fomesafen 2SL can be mixed with or used sequentially with the following broadleaf herbicides:

**Dry Beans and Snap Beans**

- Assure II®
- Basagran®
- Dual MAGNUM
- Eptam®
- Poast®
- Prowl®
- Pursuit®
- Raptor®
- Treflan®

**Dry Beans Only**

- Frontier®
- Select®
- Sonalan®

A reduction in the activity of any postemergence grass herbicide in the mix may occur under certain conditions if Fomesafen 2SL is tank mixed with one or more of the above products.

If Fomesafen 2SL is applied first in a sequential application of products, apply the grass herbicide product when the grass weeds start to grow new leaves (usually around 7 days). If not, allow 2-3 days after treatment with a postemergence grass herbicide before a sequential application of Fomesafen 2SL.

Important: Applications of tank mixtures/sequential applications may result in an increased risk of crop injury when compared with any of the products in the tank mix/sequential application being used on its own. Read and follow the directions and restrictions in the tank-mix partner label or on those products that are to be used in a sequential application. The most restrictive directions of those products must be followed.

**Restrictions for Snap Beans and Dry 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.
- Regions 2, 3, 4 or 5: do not apply Fomesafen 2SL more than once every two years.



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**Restrictions for Snap Beans:**

- Do not apply more than 1.5 pints per acre of Fomesafen 2SL per year and follow the maximum rate that may be applied in each region (see the Regional Boundaries/Definition section above for maximum rates of this product (or other products containing fomesafen)
- Do not graze treated areas or harvest for hay or forage.
- Do not use hay or straw for animal feed or bedding.
- Do not apply Fomesafen 2SL within 30 days of harvest.

**Restrictions for Dry Beans:**

- Do not apply more than 1.5 pints per acre Fomesafen 2SL in any one year and follow the maximum rate that may be applied in each region (see the Regional Boundaries/Definition section above for maximum rates of this product (or other products containing fomesafen)
- Do not graze livestock on stubble or green forage.
- Do not use hay or straw for animal feed or bedding.
- Do not apply Fomesafen 2SL within 45 days of harvest.

**DRY BEAN WEED CONTROL IN COLORADO AND NEBRASKA ONLY**

Important: This use of Fomesafen 2SL may be applied only in all CO and NE counties where dry beans are grown under sprinkler or center pivot irrigation.

Apply Fomesafen 2SL as a postemergent broadcast application for control or suppression of the weeds listed in Table 2 of this label. Application rate depends on weed growth stage, but not to exceed 1 pint per acre. Refer to the Spray Additive Section on this label for spray additive use directions. Use of crop oil concentrate can improve weed control but may reduce crop tolerance. Do not use liquid nitrogen (28% or similar) or ammonium sulfate as an additive due to potential crop injury. Use a spray volume of 10-20 GPA by ground application and a minimum of 5 GPA by aerial application. Do not exceed 1 pint (0.25 lb ai) per acre in any one year. Do not apply to any field more than once every two years.

**Restrictions**

- This Fomesafen 2SL use on dry beans can only be applied to dry beans that are grown under sprinkler or center pivot irrigation. If the dry bean crop is lost and normal irrigation amounts for growing the dry bean crop are not followed, do not rotate to corn the following growing season; only rotate to dry beans, peas and snap beans, soybeans, or small grains according to the plant-back intervals noted on this label.
- Do not apply Fomesafen 2SL to dry beans that are not grown under irrigation or are furrow irrigated.
- 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.

**Tank Mix and Sequential Applications** Fomesafen 2SL can be used sequentially or in tank mix with the following products: Assure II<sup>®</sup>, Basagran<sup>®</sup>, Dual MAGNUM<sup>®</sup>, Eptam<sup>®</sup>, Frontier<sup>®</sup>, Poast<sup>®</sup>, Prowl<sup>®</sup>, Pursuit<sup>®</sup>, Raptor<sup>®</sup>, Select<sup>®</sup>, Sonalan<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 postemergence grass herbicide in the mixture.

For sequential applications allow 2-3 days after the application of the grass herbicide before applying Fomesafen 2SL or Fomesafen 2SL mixtures. Where Fomesafen 2SL or the Fomesafen 2SL mixture is



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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.

Chemigation: Do not apply this product through any type of irrigation system.

## POTATOES

**Important:** Crop response to an application of Fomesafen 2SL varies dependent upon the species of potato. Applicators should test crop tolerance before using Fomesafen 2SL for the first time on a particular variety of potato.

Before potato emergence but after planting, apply Fomesafen 2SL as a preemergence broadcast application at a rate of 1 pint per acre in order to control or partially control weeds listed in Table 1. Weed control will be reduced if later cultural practices expose untreated soil. For directions on how to apply Fomesafen 2SL using center pivot irrigation, see the Center Pivot Irrigation Application section.

**Tank Mixtures:** Fomesafen 2SL may be tank mixed with other registered products labeled for use in potatoes. Read and follow all labeled directions of all products in the tank mix. The most restrictive directions must be followed. In cases where a tank mixture has not been tried in the past, determine compatibility prior to any large scale mixture.

For preemergence applications, ensure the product(s) in the tank mix are labeled for preemergence applications and follow the directions of each product accordingly. (refer to the Tank Mix Compatibility Test section).

### Restrictions for Potatoes

- Do not exceed 1 pint per acre of Fomesafen 2SL per season. See the RESTRICTIONS AND PRECAUTIONS section above for maximum rates according to region for Fomesafen 2SL and other products containing fomesafen.
- Crop injury may result if Fomesafen 2SL is applied as a preplant incorporated treatment
- Severe crop injury will result if Fomesafen 2SL is applied to emerged potato plants
- Fomesafen 2SL must not be applied to sweet potatoes or yams
- Potatoes must not be harvested within 70 days of treatment with Fomesafen 2SL

## SOYBEANS

**Preemergence and Preplant Surface Applications:** Regions 1, 2, 3, and 4 only: To achieve control/partial control of weeds listed in Table 1 above, apply Fomesafen 2SL as a preemergence or preplant surface application. Apply Fomesafen 2SL in a tank mix, on its own, or make an application of Fomesafen 2SL followed by another/other herbicide(s) labeled for application to soybeans. Tank mixing or subsequent application of other herbicides labeled for treatment of soybeans may increase the species of weeds that may be controlled/partially controlled and/or assist with the control of weeds that are newly emerged. For further information, see the Sequential Application and Tank Mix sections above.

Fomesafen 2SL may be tank mixed with a burndown herbicide in order to control emerged weeds. For example, Fomesafen 2SL may be tank mixed with glyphosate products labeled for use on soybeans such as Glyphogan® and Glyphogan® Plus or Parazone® 3SL. Where there are plantings with reduced tillage, apply Fomesafen 2SL with a burndown herbicide at planting or up to 14 days prior to planting.

**Postemergence Application:** Regions 1, 2, 3, 4 and 5: For control/partial control of weeds listed in Table 2 and in the Special Use Directions For Additional Weed Problems section, apply Fomesafen 2SL as a postemergence broadcast application. The appropriate application rate will depend on the target weed species and the stage of growth.



To increase postemergence control of listed broadleaf weeds, Fomesafen 2SL may be mixed with 2.5% (minimum) of liquid nitrogen (28% or similar) or 10 pounds (minimum) of ammonium sulfate per 100 gallons of spray volume. See the Spray Additive section above for spray additives that can be mixed with this product.

Apply Fomesafen 2SL in a tank mix with other postemergence herbicides labeled for use on soybeans. Tank mixing may increase the species of weeds that may be controlled/partially controlled. For further information, see the Sequential Application and Tank Mix sections above.

Crinkling, bronzing or spotting may occur in soybean leaves following postemergence applications of Fomesafen 2SL, but soybeans will outgrow this and will develop as normal.

**Sequential Applications/Tank Mixes For Soybeans:** Fomesafen 2SL can be tank mixed, or used in sequence with one or more of the following products:

- |                   |                               |                   |
|-------------------|-------------------------------|-------------------|
| • Assure II       | • Fusilade® DX                | • Poast Plus®     |
| • Basagran        | • Prowl                       | • Raptor          |
| • Boundary®       | • Fusion®                     | • Resource®       |
| • Butyrac®        | • Glyphogan or Glyphogan Plus | • Select®         |
| • Classic®        | • Parazone3SL                 | • Sequence        |
| • Dual MAGNUM     | • Harmony® GT XP              | • Sceptor®        |
| • Dual II MAGNUM® | • Pursuit                     | • Synchrony® STS® |
| • FirstRate®      | • Poast                       |                   |

A reduction in the activity of any postemergence grass herbicide in the mix may occur under certain conditions if Fomesafen 2SL is tank mixed with one or more of the above products.

If Fomesafen 2SL or a tank mix containing Fomesafen 2SL is applied as the first product in a sequential application, apply a postemergence grass herbicide once the target grass weeds start to grow new leaves (generally after approximately 7 days). Where Fomesafen 2SL or a tank mixture containing Fomesafen 2SL is applied in sequence following other products, apply Fomesafen 2SL after allowing 2-3 days following treatment with a postemergence grass herbicide.

**Important:**

- Do not exceed 1 fl. oz. of Butyrac per acre when tank mixed with Fomesafen 2SL.
- Do not exceed 0.25 oz. per acre of Synchrony® STS® in a tank mix with Fomesafen 2SL on non-STS varieties. Apply a tank mix of Synchrony® STS® and Fomesafen 2SL to soybeans in order to achieve greater control of broadleaf species. For more information on crop rotation restrictions, read and follow the directions in the Synchrony® STS® label.
- Tank-mix applications can increase the risk of crop injury when compared to individual products being used on their own.
- Read and follow the directions and restrictions for all products whether tank mixed, applied sequentially or used on their own. Where there is a tank mix or a sequential application, follow the most restrictive labeling of the products in the mix/sequential application.

**Roundup Ready® (Glyphosate Tolerant) Soybean Tank Mixes:** Fomesafen 2SL can be mixed with glyphosate products that are labeled for treatment of Roundup Ready soybeans (i.e. glyphosate tolerant). Examples of glyphosate products for Roundup Ready crops include Glyphogan, Glyphogan Plus,, Roundup and Touchdown. Fomesafen 2SL should be applied in the tank mix at a rate of 6-12 oz. per acre. Tank mixing Fomesafen 2SL with a Roundup Ready glyphosate product may improve postemergence control of a number of target weeds, including waterhemp, hemp sesbania, black nightshade and morningglory spp., i.e. species which have a tolerance to glyphosate products, but are susceptible to Fomesafen 2SL.

Read and follow the directions for the use of spray additives in the tank mix on the glyphosate product label.

Even very small quantities of this tank mix can cause death or severe crop damage to non-target species. Do not allow this tank mix to contact any vegetation other than that targeted.



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**Important:** If this tank mix is applied postemergence to soybeans which do not contain the Roundup Ready gene, the result will be death or severe injury to the soybean crop.

Read and follow the directions and restrictions in all tank-mix partner labels. The most restrictive directions of those products must be followed.

**Restrictions for Soybeans:**

- Do not exceed 1.5 pints of Fomesafen 2SL per acre in any one year. Note and adhere to the maximum rate for each geographic region (see the Regional Boundaries/Definition section above).
- Do not harvest treated areas for hay or forage.
- Do not graze treated areas.
- Do not apply Fomesafen 2SL within 45 days of harvest.
- Regions 2, 3, 4 or 5: do not apply Fomesafen 2SL more than once every two years to any field.

**WITCHWEED CONTROL IN SOYBEANS AND IDLE CROPLAND/NON-CROPLAND (ONLY IN SOUTH CAROLINA AND NORTH CAROLINA)**

**Important:** For use only in the USDA witchweed eradication program to control witchweed in soybeans, idle cropland/non-cropland.

For witchweed control in soybeans in South Carolina and North Carolina, apply Fomesafen 2SL at or before the R-1 growth stage (one open flower at any node on the main stem) of the soybeans. Make only one postemergence application of Fomesafen 2SL at a rate up to 1.5 pints per acre (0.375 lbs ai/Acre). Apply as a postemergence directed spray to the witchweed plants before they bloom. Position nozzles such that there is minimal interception of spray by the soybean plants and maximum coverage of emerged witchweed, exposed soil and host grasses through the field.

For witchweed control in idle/non-cropland in South Carolina and North Carolina, apply Fomesafen 2SL as a direct spray to the witchweed plants before they bloom. Make one application of Fomesafen 2SL at a rate up to 1.5 pints per acre (0.375 lbs ai/Acre). Add nonionic surfactant containing at least 75% surface active agent at 0.25 to 0.55 (1/2 to 1 pint per 25 gallons) of the finished spray volume to improve contact activity.

**Crop Rotation:** After an application of Fomesafen 2SL on soybeans or idle cropland for witchweed control, the following crops can be planted after a designated waiting period: small grains such as wheat, barley and rye (4 months); alfalfa, beans, peas, corn, cotton, peanuts and rice (10 months); sunflower, sugar beets, sorghum or any other crop not listed above (18 months).

**Restrictions:**

- Do not graze rotated small grain crops or harvest for livestock forage or straw. In the event of a crop loss due to weather conditions, soybeans can be planted.
- Do not apply this product through any type of irrigation system.



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## **PINE SEEDLING NURSERIES (ONLY IN ALABAMA, ARKANSAS, MISSISSIPPI, NORTH CAROLINA AND TEXAS)**

Use Fomesafen 2SL in pine seedling nurseries in Alabama, Arkansas, Mississippi, North Carolina and Texas as part of an overall integrated pest management (IPM) program for control yellow nutsedge (*Cyperus esculentus*). One application of Fomesafen 2SL will not eliminate yellow nutsedge. It must be used as part of an integrated program to keep nutsedge weak and suppressed.

**Preemergence Application:** Apply Fomesafen 2SL immediately after seeding as a preemergence spray in 30 to 40 gallons of water per acre. Apply mulch for seed cover. For best results, irrigate with 1/2 inch of water immediately after application.

**Postemergence Application:** Apply Fomesafen 2SL as a postemergence spray in 30 to 40 gallons of water per acre. Make application at least 8 weeks after seedling emergence. DO NOT use a spray adjuvant (i.e., crop oil or surfactant, etc.) with Fomesafen 2SL as severe pine seedling injury may result. Fomesafen 2SL may cause temporary chlorotic (yellow) spots on pine seedlings. Scout fields and apply to nutsedge patches. For best results, irrigate with 1/2 inch of water within one week of application.

### **Rates and State Specific Use Directions:**

**Alabama:** Use is restricted to longleaf, slash and loblolly pines only. For preemergence and postemergence uses, apply Fomesafen 2SL at 1.5 pints per acre. Do not exceed a total of 1.5 pints per acre per year.

**Arkansas:** For preemergence use, apply Fomesafen 2SL on coarse textured soil only at a rate of 2 pints per acre. For postemergence use, apply Fomesafen 2SL at 1.5 pints per acre. Do not exceed a total of 2 pints per acre per year.

**Mississippi and North Carolina:** For preemergence use, apply Fomesafen 2SL at 2 pints per acre and for postemergence use apply Fomesafen 2SL at 1.5 pints per acre. Do not exceed a total of 2 pints per acre per year.

**Texas:** For preemergence and postemergence use, apply Fomesafen 2SL at 1.5 pints per acre. Do not exceed a total of 1.5 pints per acre per year.

### **Restrictions for Pine Seedling Nurseries**

- Do not apply a preemergence application and a postemergence application to the same area during the same year.
- Do not apply Fomesafen 2SL through any type of irrigation system.

## **AERIAL SPRAY DRIFT MANAGEMENT ADVISORY**

### **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  $\frac{3}{4}$  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 should be familiar with and take into account the information covered in the Aerial Drift Reduction Advisory Information.

### Aerial Drift Reduction Advisory Information

#### 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 the 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  $\frac{3}{4}$  of the wingspan or rotor length may further reduce drift without reducing swath width.

#### APPLICATION HEIGHT

Applications should 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 should be avoided below 2 mph due to variable wind direction and high inversion potential.

NOTE: Local terrain can influence wind patterns. Every applicator should 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 should 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



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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 should only be applied when the potential for drift to adjacent sensitive areas (e.g., residential areas, bodies of water, known habitat for threatened or endangered species, nontarget crops) is minimal (e.g., when wind is blowing away from the sensitive areas).

**Table 3 Scientific Names of Weeds in this Label**

COMMON NAME	SCIENTIFIC NAME
Amaranth, Palmer	<i>Amaranthus palmeri</i>
Amaranth, Spiny	<i>Amaranthus spinosus</i>
Anoda, Spurred	<i>Anoda cristata</i>
Balloonvine	<i>Cadiospermum halicacabum</i>
Barnyardgrass	<i>Echinochloa crus-galli</i>
Bindweed, Field	<i>Convolvulus arvensis</i>
Bindweed, Hedge	<i>Calystegia sepium</i>
Broadleaf Signalgrass	<i>Brachiaria platyphylla</i>
Carpetweed	<i>Mollugo verticillata</i>
Citron (Wild Watermelon)	<i>Citrullus vulgaris</i>
Cocklebur, Common	<i>Xanthium strumarium</i>
Copperleaf, Hophornbeam	<i>Acalypha ostryifolia</i>
Copperleaf, Virginia	<i>Acalypha virginica</i>
Crabgrass	<i>Digitaria spp.</i>
Crotalaria, Showy	<i>Crotalaria spectabilis</i>
Croton, Tropic	<i>Croton glandulosus</i>
Cucumber, Volunteer	<i>Cucumis sativas</i>
Eclipta	<i>Eclipta prostrate</i>
Foxtail, Giant	<i>Setaria faberi</i>
Foxtail, Green	<i>Setaria viridis</i>
Foxtail, Yellow	<i>Setaria glauca</i>
Goosegrass	<i>Eleusine indica</i>
Groundcherry, Cutleaf	<i>Physalis angulata</i>
Hemp	<i>Cannabis sativa</i>
Horsenettle	<i>Solanum carolinense</i>
Jimsonweed	<i>Datura stramonium</i>
Johnsongrass, Seedling	<i>Sorghum halepense</i>
Ladysthumb	<i>Polygonum persicaria</i>
Lambsquarters, Common	<i>Chenopodium album</i>
Mexicanweed	<i>Caperonia castaniifolia</i>
Milkweed, Climbing	<i>Sarcostemma cyanchoides</i>
Milkweed, Honeyvine	<i>Ampelamus albidus</i>
Morningglory	
Cypressvine	<i>Ipomoea quamoclit</i>
Entireleaf var.	<i>Ipomoea hederacea var. integriuscula</i>
Ivyleaf	<i>Ipomoea hederacea var. hederacea</i>
Purple Moonflower	<i>Ipomoea turbinata</i>
Red (Scarlet)	<i>Ipomoea coccinea</i>
Smallflower	<i>Jacquemontia tamnifolia</i>
Pitted (Smallwhite)	<i>Ipomoea lacunose</i>
Tall (Common)	<i>Ipomoea purpurea</i>



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COMMON NAME	SCIENTIFIC NAME
Palmleaf (Willowleaf)	<i>Ipomoea wrightii</i>
Mustard, Wild	<i>Brassica kaber</i>
Nightshade, Black	<i>Solanum nigrum</i>
Nightshade, Eastern Black	<i>Solanum ptychanthum</i>
Nightshade, Hairy	<i>Solanum physalifolium</i>
Nutsedge, Yellow	<i>Cyperus esculentus</i>
Panicum, Fall	<i>Panicum dichotomiflorum</i>
Panicum, Texas	<i>Panicum texanum</i>
Pigweed, Amaranth	<i>Amaranthus palmeri</i>
Pigweed, Redroot	<i>Amaranthus retroflexus</i>
Pigweed, Smooth	<i>Amaranthus hybridus</i>
Poinsettia, Wild	<i>Euphorbia heterophylla</i>
Purslane, Common	<i>Portulaca oleracea</i>
Pusley, Florida	<i>Richardia scabra</i>
Ragweed, Common	<i>Ambrosia artemisifolia</i>
Ragweed, Giant	<i>Ambrosia trifida</i>
Redweed	<i>Melochia corchorifolia</i>
Sesbania, Hemp	<i>Sesbania exaltata</i>
Sicklepod	<i>Cassia obtusifolia</i>
Sida, Prickly	<i>Sida spinosa</i>
Signalgrass, Broadleaf	<i>Brachiaria platyphylla</i>
Smartweed, Pennsylvania	<i>Polygonum pennsylvanicum</i>
Smellmelon	<i>Cucumis melo</i>
Spurge, Prostrate	<i>Euphorbia supina</i>
Spurge, Spotted	<i>Euphorbia maculata</i>
Starbur, Bristly	<i>Acanthospermum hispidum</i>
Sunflower, Common	<i>Helianthus annuus</i>
Trumpetcreeper	<i>Campsis radicans</i>
Velvetleaf	<i>Abutilon theophrasti</i>
Venice Mallow	<i>Hibiscus trionum</i>
Waterhemp, Common	<i>Amaranthus rudis</i>
Waterhemp, Tall	<i>Amaranthus tuberculatos</i>
Witchweed	<i>Striga asiatica</i>
Yellow Rocket	<i>Barbarea vulgaris</i>

### 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:**

**Nonrefillable Container (five gallons or less):** Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container 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



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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. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**Nonrefillable Container (greater than five gallons):** Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container 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.

**Refillable Container:** Refillable container. Refill this container with Fomesafen 2 SL. 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.

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

**LIMITATION OF WARRANTY AND LIABILITY**

Read the entire directions for use, conditions 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**.

**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 Makhteshim Agan of North America, Inc. All such risks shall be assumed by the user or buyer.

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**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 Makhteshim Agan of North America, Inc.'s election, the replacement of product.

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[EPA approval date]