

100-993

05/31/2006

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MAY 31 2006

OFFICE OF
PREVENTION, PESTICIDES
AND TOXIC SUBSTANCES

Thomas J Parshley
Syngenta Crop Protection
P.O. Box 18300
Greensboro, NC 27419-8300

Dear Mr. Parshley:

Subject: Add Use on Cotton, Snap Beans and Dry Beans and a Soybean 45 Day
Pre-Harvest Interval
Reflex Herbicide
EPA Registration No. 100-993
Your Submissions Dated January 4 and March 27, 2006

The amendment referred to above, submitted in connection with registration under section 3(c)(7)(A) of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), is acceptable provided that you:

1. Submit/cite all data required for registration/reregistration of your product under FIFRA section 3(c)(5) or 4(a) when the Agency requires all registrants of similar products to submit such data.

2. Submit by May 31, 2009 the following Studies conducted on accordance with the Good Laboratory Practice Standards, 40 CFR Part 160 and appropriate test guidelines as referenced in EPA's Data Requirements for Registration Regulations, 40 CFR Part 158:

- a. 869.1200 Acute Dermal Toxicity Study - Technical Fomesafen
- b. 870.1300 Acute Inhalation Toxicity Study - Technical Fomesafen
- c. 869.2600 Skin Sensitization Study - Technical Fomesafen
- d. 870.7600 Dermal Penetration Study
- e. 860.1850 Confined Rotational Crop Study
- f. Cotton Metabolism supporting Data
- g. Raw Data to Support Method Validation for cotton, soybean and corn analytical methods
- h. Modify the Analytical Method to include instructions for the extraction and analysis of dry bean, snap bean, and soybean aspirated grain fractions. The modified method should then be forwarded to FDA for inclusion in the Pesticide Analytical Manual (PAM) Volume II.

- i. Submit multi-residue testing for fomesafen
 - j. Data are required depicting the stability of residues of fomesafen in/on the following commodities: cotton gin byproducts stored frozen for up to 11 months; soybean hulls and oil stored frozen for up to 10 months; corn cob stored frozen for up to 7 months; wheat forage and straw during frozen storage for up to 13 months; and field corn or sorghum forage and stover during frozen storage for up to 10 months
 - k. The following data are required to upgrade the available crop field trial data to support the proposed use on cotton.
 - A summary of weather conditions at the individual sites, indication as to whether irrigation was used, and average historical data for temperature and rainfall for the duration of the field intervals of the trials.
 - Soil characteristics data (percent organic matter, pH, and cation exchange capacity) for the individual sites.
 - Raw data including at least: (i) field notes and/or reports on application (including which spray adjuvant was used), plot maintenance, and sample harvest; (ii) calibration of application equipment (for confirmation of application rate); and (iii) a specific description (which may be in the field notes) as to how and where (within the plot) the sample was taken and what was done to ensure that samples were representative of the test plot.
 - l. Develop alternate confirmatory methods for the proposed new enforcement methods for soybeans and cotton. The currently proposed confirmatory methods involve substitution of columns with only slight polarity differences and likely very similar elution times and are not considered sufficient for confirmation of an enforcement method
 - m. Should EPA determine that 2-chloro-4-trifluoromethyl phenol is a residue of concern in rotated crops, the following method validation data are required to support the submitted wheat and corn rotational crop data. Data to support the reported method limit of quantification are required, as are data demonstrating that the method can extract weathered residues of 2-chloro-4-trifluoromethyl phenol from field samples.
 - n. 860.1900 - Field Accumulation in Rotational Crops. Data demonstrating that recoveries of the internal standard are linear relative to recoveries of fomesafen are required and information on the timing of sample fortification is required. Additionally, data to support the reported method limit of quantification of 0.01 ppm are required, as is information on the identity of the matrices fortified in the method validation.
3. This registration expires on May 31, 2010.
 4. Make the labeling changes listed below before you release the product for shipment bearing the amended labeling:

- a. In the section with the title "Ground Application", revise the text as follows:

The use of flat fan nozzles will result in the most effective application of Reflex. Use nozzles that are set up to deliver medium quality spray (ASAE Standard S-572).

- b. Add the heading "Drift Management" and the following spray drift language in the application directions:

Avoiding spray drift at the application site is the responsibility of the applicator and the grower. The interaction of many equipment and weather related factors determines the potential for spray drift. The applicator and grower must consider the interaction of equipment and weather related factors to ensure that the potential for drift to sensitive non-target plants is minimal.

This pesticide may only be applied when the potential for drift to adjacent sensitive areas (e.g, residential areas, bodies of water, non-target plants) is minimal (i.e., when the wind is blowing away from the sensitive area).

In addition, add the updated aerial Spray Drift Management language. See the enclosed attachment. Delete any duplicate drift text in the Use Precautions section.

- c. At the beginning of the list of Personal Protective Equipment (PPE) within the Precautionary Statements, and within the list of PPE for early re-entry in the Agricultural Use Requirements box, delete "waterproof gloves" and add a statement similar to the following:

Chemical-resistant gloves such as barrier laminate or viton

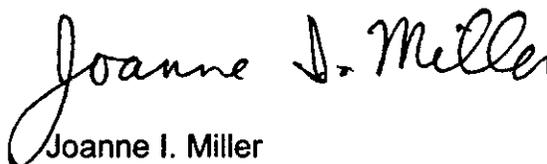
- d. In the directions for snap beans remove Frontier as a recommended tank mix partner.
- e. Revise the label to specify a 45-day PHI for dry beans.
- f. In the Hazards to Humans section delete "This product contains fomesafen....wearing the protective clothing specified elsewhere on this label." These statements are not required text.
- g. Delete the heading "General Use....". This term is an implied safety claim which is prohibited by 40 CFR Part 156.10(a)(5).
- h. In the heading on the front panel of the base label add Cotton, Dry Beans and Snap Beans.

3. Submit one (1) copy of your final printed labeling before you release the product for shipment. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). Your release for shipment of the product bearing the amended labeling constitutes acceptance of these conditions.

A stamped copy of the label is enclosed for your records.

If you have any questions concerning this letter, please contact Mr. James Stone at 703-305-7391.

Sincerely yours,



Joanne I. Miller
Product Manager (23)
Herbicide Branch
Registration Division (7505P)

Enclosure

5/37

Reflex®
Herbicide

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

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% fomesafen or 2 pounds fomesafen active ingredient per gallon.

KEEP OUT OF REACH OF CHILDREN.

DANGER/PELIGRO

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

See additional precautionary statements and directions for use inside booklet.

EPA Reg. No. 100-993
EPA Est. 100-NE-001

Product of United Kingdom
Formulated in the USA

SCP 993A-L1 0502B

2.5 gallons
U.S. Standard Measure

ACCEPTED
with COMMENTS
In EPA Letter Dated:
MAY 31 2006

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

100-993

FIRST AID	
If in eyes	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. • Call a poison control center or doctor for treatment advice.
If swallowed	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to by a poison control center or doctor. • Do not give anything by mouth to an unconscious person.
If on skin or clothing	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
If inhaled	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. • Call a poison control center or doctor for further treatment advice.
NOTE TO PHYSICIAN	
Probable mucosal damage may contraindicate the use of gastric lavage.	
Have the product container or label with you when calling a poison control center or doctor or going for treatment.	
HOTLINE NUMBER	
For 24 Hour Medical Emergency Assistance (Human or Animal) Or Chemical Emergency Assistance (Spill, Leak, Fire or Accident) Call 1-800-888-8372	

PRECAUTIONARY STATEMENTS**Hazards To Humans And Domestic Animals****DANGER**

This product contains fomesafen which has been determined to cause tumors in laboratory animals (mice). Risks can be reduced by closely following use directions and precautions and by wearing the protective clothing specified elsewhere on this label.

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
- Waterproof gloves
- Shoes plus socks
- Protective eyewear

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, 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

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

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

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

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

The Directions for Use of this product should be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of Syngenta Crop Protection, Inc. or Seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold Syngenta and Seller harmless for any claims relating to such factors.

Syngenta warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. This warranty does not extend to the use of this product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or Syngenta, and Buyer and User assume the risk of any such use. SYNGENTA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

In no event shall Syngenta or Seller be liable for any incidental, consequential or special damages resulting from the use or handling of this product. **THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF SYNGENTA AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF SYNGENTA OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

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

DIRECTIONS FOR USE

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

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

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

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 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
- Waterproof gloves
- Shoes plus socks
- Protective eyewear

STORAGE AND DISPOSAL

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

Prohibitions

Open dumping is prohibited. Do not reuse empty container.

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 DISPOSAL

Metal Containers: Triple rinse (or equivalent); then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill or by other procedures approved by state and local authorities.

Plastic Containers: Triple rinse (or equivalent); then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, by incineration or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Bulk and Mini-Bulk Containers

Container Disposal: When the container is empty, replace the cap and seal all openings that have been opened during use; and return the container to the point of purchase, or to a designated location named at the time of purchase of the product. This container must only be refilled with this pesticide product. **DO NOT REUSE THE CONTAINER FOR ANY OTHER PURPOSE.** Prior to refilling, inspect carefully for damage such as cracks, punctures, abrasions, worn-out threads and closure devices. Check for leaks after refilling and before transplanting. Do not transport if this container is damaged or leaking. If the container is damaged, leaking or obsolete, contact Syngenta at 1-800-888-8372. If not returned to the point of purchase or to a designated location, triple rinse emptied container and offer for recycling. Disposal of this container must be in compliance with state and local regulations.

Container Precautions: Before refilling, inspect thoroughly for damage, such as cracks, punctures, bulges, dents, abrasions and damaged or worn threads on closure devices.

REFILL ONLY WITH REFLEX. The contents of this container cannot be completely removed by cleaning. Refilling with materials other than Reflex will result in contamination and may weaken container.

After filling and before transporting, check for leaks.

Do not refill or transport damaged or leaking container.

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

GENERAL INFORMATION

Read all label directions before using.

Reflex is a selective herbicide which may be applied preplant, preemergence and/or postemergence for control and suppression of broadleaf weeds, grasses and sedges.

Reflex is generally most effective and consistent when used postemergence, working through contact action. Therefore, emerged weeds must be thoroughly covered with spray. Some bronzing, crinkling or spotting of labeled crop leaves may occur following postemergent applications, but labeled crops soon outgrow these effects and develop normally.

Optimum broad spectrum weed control is achieved by postemergent applications of Reflex to young actively growing broadleaf weeds that are not under stress from moisture, temperature, low soil fertility, mechanical or chemical injury.

Certain germinating broadleaf weeds, grasses and sedges may be controlled or suppressed by soil residual activity from either preplant, preemergent or postemergent applications if rainfall occurs shortly after application. The extent and consistency of soil activity is dependent upon soil type, ground cover at time of application, amount of rainfall and the rate of Reflex used.

APPLICATION DIRECTIONS

Timing - Best broad spectrum postemergence control of susceptible broadleaf weeds is obtained when Reflex is applied early to actively growing weeds. This usually occurs 14 to 28 days after planting. Refer to the weed tables for specific recommendations on weed growth stages, rates, and regions.

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

For best broad spectrum postemergence control of susceptible broadleaf weeds in Regions 2, 3, 4 and 5 (see Regional Use Maps), Reflex can be used with a minimum of 2.5% liquid nitrogen (28% or similar) or a minimum of 10 pounds ammonium sulfate per 100 gallons of spray volume.

For Postemergence Applications Always Add One Of The Following: except in tank mix with products prohibiting spray additives (see Tank-Mix Directions for Use):

Nonionic Surfactant (NIS) - Use NIS containing at least 75% surface active agent at 0.25 to 0.5% (1/2 to 1 pint per 25 gallons) of the finished spray volume (Region 1 and East of Interstates 79 and 77 for Regions 2 and 3).

Crop Oil Concentrate (COC) - Use a nonphytotoxic COC or a once-refined vegetable oil concentrate (VOC, MSO) containing 15-20% approved emulsifier, at 0.5-1% (1-2 pints per 25 gallons) of the finished spray volume. COC can improve weed control but may slightly reduce crop tolerance.

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

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

Note: no adjuvants are needed for preplant or preemergence applications unless Reflex is being used in a burndown.

Recommended Mixing Order:

1. Half required amount of water, begin agitation.*
2. Dry pesticide formulations.
3. Reflex herbicide.
4. Liquid pesticide formulation.
5. Adjuvant (MOS, COC or NIS) and fertilizer.

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

GROUND APPLICATION - Use sufficient spray volume and pressure to ensure complete coverage of the target. A spray volume of 10-20 gallons per acre and 30-60 psi at the nozzle tip is recommended. On large weeds and/or dense foliage, use 60 psi and a minimum of 20 gallons per acre to ensure coverage of weed foliage.

Use only hollow cone or flat fan nozzles. The sprayer must be calibrated to provide the proper volume and rate per acre. In addition, the boom and nozzle height must be adjusted to provide complete coverage of the target.

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

DO NOT APPLY THIS PRODUCT THROUGH ANY TYPE OF IRRIGATION SYSTEM.

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

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

$$\frac{\text{Band width in inches}}{\text{row width in inches}} \times \text{broadcast rate per acre} = \text{Band herbicide rate per acre}$$

$$\frac{\text{Band width in inches}}{\text{row width in inches}} \times \text{broadcast volume per acre} = \text{Band water volume per acre}$$

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

CULTIVATION - Cultivation prior to application is not recommended. Cultivation may put weeds under stress, reducing weed control. Timely cultivation 1-3 weeks after applying Reflex may assist weed control.

GENERAL USE PRECAUTIONS

- A maximum of 1.5 pts. of Reflex herbicide (or a maximum of 0.375 lb. a.i./A of fomesafen from any product containing fomesafen) may be applied per acre per year in Region 1 (see Regional Use Map).

- A maximum of 1.5 pts. of Reflex herbicide (**or a maximum of 0.375 lb. a.i./A of fomesafen from any product containing fomesafen**) may be applied per acre in ALTERNATE years in Region 2 (see Regional Use Map).
- A maximum of 1.25 pts. of Reflex herbicide (**or a maximum of 0.313 lb. a.i./A of fomesafen from any product containing fomesafen**) may be applied per acre in ALTERNATE years in Region 3 (see Regional Use Map).
- A maximum of 1 pt. of Reflex herbicide (**or a maximum of 0.25 lb. a.i./A of fomesafen from any product containing fomesafen**) may be applied per acre in ALTERNATE years in Region 4 (see Regional Use Map).
- A maximum of 0.75 pt. of Reflex herbicide (**or a maximum of 0.1875 lb. a.i./A of fomesafen from any product containing fomesafen**) may be applied per acre in ALTERNATE years in Region 5 (see Regional Use Map).
- Thoroughly clean the spray system with water and a commercial tank cleaner before and after each use.
- Tank mixes of Reflex herbicide with other pesticides, fertilizers or any other additives except as specified on this label or other approved Syngenta supplemental labels may result in tank-mix incompatibility, unsatisfactory performance or unsatisfactory crop injury.
- Reflex herbicide requires a 1-hour rain-free period for best results when applied postemergence.
- Apply postemergence to actively growing weeds. Avoid applying Reflex to weeds or labeled crops which are under stress from moisture, temperature, low soil fertility, mechanical or chemical injury, as reduced weed control and/or increased crop injury may result.
- Avoid overlapping spray swaths, as injury may occur to rotational crops.
- To provide adequate coverage, it is recommended that ground speed not exceed 10 mph during application.
- Do not graze treated areas or harvest for forage or hay.
- Avoid drift to all other crops and nontarget areas. Crops other than those labeled may be severely injured by drift. Do not apply when wind velocity exceeds 15 mph.
- Do not make ground or aerial application during temperature inversions.

ROTATIONAL CROP RESTRICTIONS

The following rotational crops may be planted after applying Reflex at recommended rates:

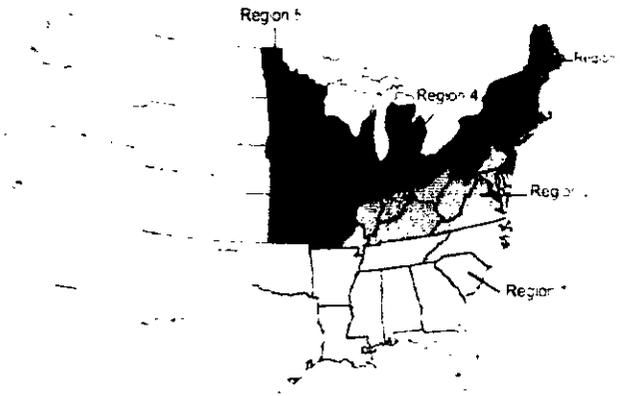
<u>Crop To Be Planted</u>	<u>Minimum Rotation Interval (Months After Last Reflex Application)</u>
Wheat	3
Small grains such as barley, rye	4
Corn*	8
Beans, cotton, peanuts, peas, rice, seed corn	10
To avoid crop injury do not plant alfalfa, sunflowers, sugar beets, sorghum** or any other crop within	18

Do not graze rotated small grain crops or harvest forage or straw for livestock. In the event of a crop loss due to weather conditions cotton, dry beans, snap beans or soybeans can be replanted.

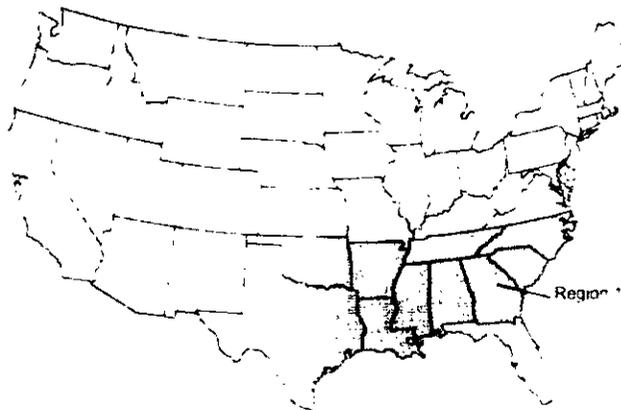
- * Use a 12 month minimum rotation interval for popcorn in the states of Ohio, Kentucky, Illinois, Indiana, Iowa, and Region 4 when applied at rates of 1.0 pints per acre or more.
- * Use 18 month minimum rotation interval for sweet corn in the states of Connecticut, Maine, Massachusetts, New Hampshire, New York, Rhode Island, Vermont and Region 5.
- **Sorghum may be planted back after 10 months in Region 1.

USE RATES AND WEEDS CONTROLLED

REFLEX REGIONAL USE MAP



**REGION 1
(Maximum Rate 1.5 pts./A per year)**



REGION 1 - Includes the following states or portion of states where Reflex may be applied: Alabama, Arkansas, Georgia, Louisiana, Mississippi, Missouri (counties of Bollinger, Butler, Cape Girardeau, Dunklin, Madison, Mississippi, New Madrid, Pemiscot, Perry, Ripley, Scott, Stoddard and Wayne), North Carolina, Oklahoma (East of U.S. Highway 75 and East of Indian Nation Parkway), South Carolina, Tennessee, and Texas (includes area east of U. S. Highway 77 to State Road 239 including all of Calhoun County).

REGION 2
(Maximum Rate 1.5 pts./A, alternate years)



REGION 2 - Includes the following states or portion of states where Reflex may be applied: Delaware, Kentucky, Maryland, Virginia, West Virginia, South of Interstate 70 in the following states: Illinois, Indiana and Ohio and all areas South of Interstate 80 to the intersection of U.S. Highway 15 and East of U.S. Highway 15 and U.S. Highway 522 in Pennsylvania.

REGION 3
(Maximum Rate 1.25 pts./A, alternate years)



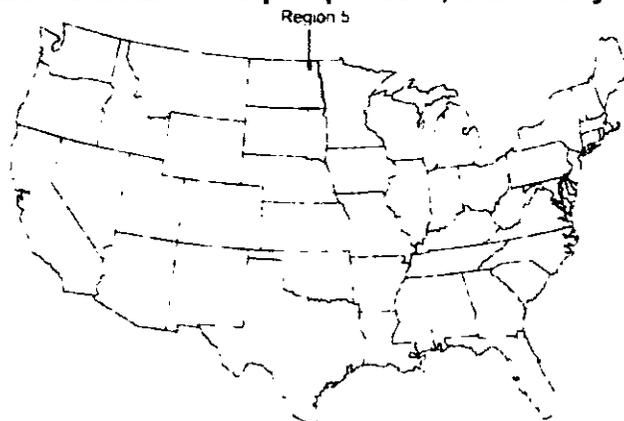
REGION 3 - Includes the following states or portion of states where Reflex may be applied: Connecticut, Iowa, Maine, Massachusetts, Missouri (all counties except for those listed in Region 1), New Hampshire, New Jersey, New York, Pennsylvania (all areas except those listed in Region 2), Rhode Island, 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 following states: Indiana, Illinois and Ohio.

REGION 4
(Maximum Rate 1 pint per acre, alternate years)



REGION 4 - Includes the following states or portion of states where Reflex may be applied: Kansas (all counties east of or intersected by U.S. Highway 281), Michigan (Southern Peninsula), Minnesota (all areas South of Interstate 94), Nebraska (all counties east of or intersected by U.S. Highway 281), and Wisconsin (all areas, except those in Region 3, South of Interstate 94 from Minnesota state line to Eau Claire and South of U.S. Highway 29 from Eau Claire to Green Bay plus Door and Kewaunee counties. The following counties are excluded: Clark, Marathon, Wood, Portage, Adams, Shawano, Waupaca, Waushara and Marquette). North Dakota (all areas East of Interstate 29 from Fargo south to the South Dakota state line). South Dakota (all areas East of Interstate 29 from the North Dakota state line to Watertown, all areas east of Highway 81 from Watertown to Madison and all areas East and South of State Road 34 and U.S. Highway 281 to the Nebraska state line).

REGION 5
(Maximum Rate 0.75 pint per acre, alternate years)



REGION 5 - Includes the following states or portion of states where Reflex may be applied: North Dakota (all areas East of U.S. Highway 281 except those areas in Region 4), South Dakota (all areas East of U.S. Highway 281 except those areas in Region 4) and Minnesota (all areas South of U.S. Highway 2 except those areas in Region 4).

APPLICATION RATES FOR WEED GROWTH STAGES

Weed	Reflex Rate (Pts/A)			
	Maximum Growth Stage Controlled At			
	3/4 pt./A No. of True Leaves	1 pt./A No. of True Leaves	1.25 pts./A No. of True Leaves	1.5 pts./A No. of True Leaves
Anoda, Spurred	--	--	--	2
Balloonvine	--	--	2 ^c	2
Carpetweed	--	6" Diameter Size	Multi-leaf 6" Diameter	Unlimited Size
Citron (Wild Watermelon)	--	2	2	4
Cocklebur, Common ^{a,b,d}	--	-	2	4
Copperleaf, Hophornbeam ^d	--	2	2	4
Copperleaf, Virginia	--	2	2	4
Crotalaria, Showy	--	4	4	6
Croton, Tropic ^d	--	2	2	4
Cucumber, Volunteer	--	4	4	6
Eclipta	--	2	2	4
Groundcherry, Cutleaf	--	4	4	6
Hemp ^b	--	--	4	6
Horsenettle ^b	--	2 ^c	3 ^c	4 ^c
Jimsonweed ^d	2	4	6	8
Ladysthumb	--	2	2	4
Lambsquarters, Common ^c	--	2	2	2
Mexicanweed	--	2 ^c	2 ^c	2
Morningglory ^d				
Cypressvine	--	4	4	6
Entireleaf var.	2 ^c	2	2	4
Ivyleaf	2 ^c	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 ^c	2	2	3
Palmleaf (Willowleaf)	--	2	2	4

Weed	Reflex Rate (Pts/A)			
	Maximum Growth Stage Controlled At			
	3/4 pt./A No. of True Leaves	1 pt./A No. of True Leaves	1.25 pts./A No. of True Leaves	1.5 pts./A No. of True Leaves
Mustard, Wild	2	4	6	8
Nightshade, Black	2	4	4	4
Nutsedge, Yellow ^d	--	--	--	Suppression Only
Pigweed, spp. ^d				
Amaranth, Palmer	2 ^c	4	4	6
Amaranth, Spiny	2 ^c	2	2	4
Redroot	2 ^c	4	6	6
Smooth	2 ^c	4	4	6
Waterhemp, Common	2 ^c	2	2	4
Waterhemp, Tall	2 ^c	2	2	4
Poinsettia, Wild	--	--	--	3
Purslane, Common	--	Multi-Leaf 6" Diameter	Multi-Leaf 6" Diameter	Multi-Leaf 8" Diameter
Pusley, Florida	--	--	--	2
Ragweed, Common ^d	2	4	4	6
Ragweed, Giant ^b	--	--	4	4
Redweed	--	--	--	3 ^c
Sesbania, Hemp	--	6	6	12
Sicklepod	--	--	--	Cotyledon ^c
Sida, Prickly ^d	--	--	--	Cotyledon ^c
Smartweed, Pennsylvania	2 ^c	4	4	6
Smellmelon	--	--	--	2
Spurge, Prostrate	--	--	--	1" Diameter ^c
Spurge, Spotted	--	--	--	2 ^c
Starbur, Bristly	--	2	2	4
Sunflower, Common	--	--	--	2
Velvetleaf ^b	--	--	2	4
Venice Mallow	2	4	4	6
Witchweed	--	Multi-leaf Up to 7"	Multi-leaf Up to 7"	Multi-leaf Up to 10"
Yellow Rocket	2	4	6	6

^aDo not apply in cotyledon stage.

^bIt is necessary to use 1% MSO and 2.5% UAN v/v as an adjuvant in Regions 2 and 3.

^cSuppression only.

^dReflex may provide preemergence activity at 1-1.5 pints/A.

SPECIAL USE DIRECTIONS FOR ADDITIONAL WEED PROBLEMS

Suppression of Annual Grasses

The grasses listed below may be suppressed by postemergence applications and controlled or suppressed by preemergence applications of Reflex at 1 to 1½ pints/acre. Consult Use Rate Table for maximum rate in each region. For full-season broad-spectrum annual grass control, consult tank-mix section.

- Barnyardgrass
- Broadleaf Signalgrass
- Crabgrass
- Foxtail
 - Giant
 - Green
 - Yellow
- Goosegrass
- Johnsongrass, Seedling
- Panicum, Fall
- Panicum, Texas

Suppression of Perennial Weeds

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

- Milkweed, Climbing
- Milkweed, Honeyvine
- Bindweed, Field
- Bindweed, Hedge
- Trumpet creeper

Crop Use Directions**Cotton:****Preemergence**

Apply Reflex preemergence at 1-1.5 pints per acre in cotton. Apply as a preemergence treatment only to coarse textured soils (sandy loam, loamy sand, sandy clay loam). **Do**

not apply as a preemergence treatment to medium or fine-textured soils as crop injury will likely occur.

Apply preemergence as a broadcast or banded treatment in a minimum of 10 gallons spray solution per acre. Adequate rainfall or irrigation within 7 days of application is required for Reflex activation. Preemerge applications of Reflex will provide improved residual control of difficult to control weeds such as wild poinsettia, eclipta, cocklebur, morningglory species, prickly sida, velvetleaf, lambsquarter, spurred anoda, common ragweed and pigweed species (including herbicide resistant *Palmer amaranth*). Reflex is effective on yellow nutsedge tubers prior to emergence. The extent of yellow nutsedge activity is dependent upon the time lapsed between tillage and application and between application and rainfall or irrigation.

To broaden the weed control spectrum, Reflex may be tank mixed with other preemergence herbicides such as Caparol®, Cotoran®, Direx®, Dual MAGNUM®, Karmex®, Staple®, or Zorial®. For control of emerged weeds, Reflex may be tank mixed with a burndown herbicide such as Gramoxone® Max, Gramoxone® Inteon or glyphosate brands (such as Touchdown®, Roundup®) labeled in cotton. In reduced tillage plantings, Reflex can be applied up to 14 days prior to planting or at planting with a burndown herbicide. Refer to the tank-mix partner label for use directions, restrictions and limitations. The most restrictive labeling applies.

Cotton plants are tolerant to preemergence applications of Reflex when applied at recommended rates. Some crinkling or spotting of cotton foliage or stunting may occur, especially if heavy rainfall occurs during or soon after cotton emergence, but cotton plants normally outgrow these effects and develop normally.

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

Do not apply more than 1.5 pints per acre of Reflex in any year.

Post-Directed Application

Apply Reflex in emerged cotton as a post-directed treatment using precision post-directed, hooded or shielded application equipment to provide complete coverage of emerged weeds. Apply Reflex at 1-1.5 pints per acre in a minimum of 10 gallons spray solution per acre. Applications may be made broadcast or banded. Post-directed applications of Reflex will provide contact control of labeled emerged weeds and residual preemergence control of labeled weeds (once activated by rainfall or irrigation). See previous label sections for a list of weeds controlled, recommended application rates, weed growth stages, and application directions.

Reflex 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 Reflex, or Reflex tank mixes in cotton.

Always apply Reflex under favorable environmental conditions that promote active weed growth. Emerged weeds should be actively growing and not under stress due to drought, extreme temperatures, excessive water or low humidity.

To broaden the weed control spectrum, post-directed applications of Reflex may be tank mixed with other labeled post-directed herbicides such as Caparol, DSMA, Direx, Dual MAGNUM, Envoke®, Karmex, Layby™ Pro, MSMA, Sequence®, or Suprend®. When applied with hooded or shielded sprayers, Reflex and Reflex tank mixes may be applied with burndown products such as Gramoxone Max, Gramoxone Inteon, Sequence or glyphosate brands (such as Touchdown, Roundup) labeled for in crop application in cotton. Refer to the tank mix partner label for use directions, restrictions and limitations. The most restrictive labeling applies.

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

Post-Directed Application Timing in Cotton

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

Shield and Hooded Applications:

Make a precision post-directed Reflex application to the base of the cotton plant avoiding contact with the cotton stem or foliage when cotton is at least 6 inches in height with less than 4 inches of brown bark. Use only hooded or shielded spray equipment to apply Reflex in cotton that is 6 inches to 12 inches in height. Adjust nozzles to provide full coverage of emerged target weeds.

Layby Applications:

Make a post-directed Reflex 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 lay-by. Application equipment should be configured to provide full coverage of emerged target weeds.

Do not apply Reflex later than 70 days before harvest.

Do not apply more than 1.5 pints per acre of Reflex in any year.

Suppression of Woollyleaf Bursage (Lakeweed), *Ambrosia grayi*, in Texas

Apply Reflex to cultivated areas of cropland in the fall or spring as a spot treatment at a rate of 1.5 pints per acre and incorporate to a depth of 2-3 inches for suppression of woollyleaf bursage. Applications should be made with ground equipment only in a minimum of 10 gallons of water per acre using 20-40 psi at the nozzle tip. Significant suppression may not be seen until 6-8 months after application, but should then continue for at least 2 years after application.

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

Cotton or soybean may be planted in treated areas. Under certain conditions, significant damage may occur to cotton planted within 18 months of application. A 3-year interval from last application to planting is required for all other crops.

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

Dry Beans:

Apply Reflex as a postemergent broadcast application for control or suppression of weeds listed in the **Application Rates For Weed Growth Stages** table and **Special Use Directions For Additional Weed Problems**. Application rate depends on weed growth stage, but not to exceed the maximum rate specified per geographic region (Refer to Map For Definition of Specified Geographic Regions). Refer to the Spray Additive Section and include in the application when the beans have at least four fully expanded trifoliolate leaves. Do not use liquid nitrogen (28% or similar) on dry beans. Two applications may be made if necessary but the total yearly dose does not exceed 1.5 pints (0.375 lbs. active) per acre.

Do not exceed 1.5 pints (0.375 lbs.) per acre in any one year. Do not apply to any field in Regions 2, 3, or 4 more than once every two years. Do not graze animals on green forage or stubble. Do not utilize hay or straw for animal feed or bedding. Do not apply within 30 days of harvest.

Tank Mix and Sequential Applications

Reflex can be used sequentially or in tank mix with the following products: Assure II®, Basagran®, Dual MAGNUM, Eptam®, Frontier®, Poast®, Prowl®, Pursuit®, Raptor®, Select®, Sonalan®, or Trefflan®.

Under certain conditions, the mixture of Reflex 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 Reflex or Reflex mixtures. Where Reflex or the Reflex mixture is applied first, apply the grass herbicide when the grass weeds begin to develop new leaves (generally around 7 days).

NOTE:

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

Snap Beans:

Apply Reflex as a postemergent broadcast application for control or suppression of weeds listed in the **Application Rates For Weed Growth Stages** table and **Special Use Directions For Additional Weed Problems**. Application rate depends on weed growth stage, but not to exceed the maximum rate specified per geographic region (Refer to Map For Definition of Specified Geographic Regions). Apply with NIS, COC or other adjuvant when the snap beans have at least one fully expanded trifoliate leaf. Do not use liquid nitrogen (28% or similar) on snap beans. Two applications may be made if necessary but the total yearly dose does not exceed 1.5 pints (0.375 lbs. active) per acre.

Do not exceed 1.5 pints (0.375 lbs. active) per acre in any one year. Do not apply to any field in Regions 2, 3, or 4 more than once every two years. Do not graze treated areas or harvest for forage or hay. Do not utilize hay or straw for animal feed or bedding. Do not apply within 30 days of harvest.

Tank Mix and Sequential Applications

Reflex can be used sequentially or in tank mix with the following products: Assure II, Basagran, Dual MAGNUM, Eptam, Frontier, Poast, Prowl, Pursuit, Raptor or Treflan.

Under certain conditions, the mixture of Reflex 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 Reflex or Reflex mixtures. Where Reflex or the Reflex mixture is applied first, apply the grass herbicide when the grass weeds begin to develop new leaves (generally around 7 days).

NOTE:

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

Soybeans:

Reflex Alone:

Apply Reflex either preplant, preemergence, or postemergence using the appropriate rate for geographical region, weed spectrum, and stage of growth.

Preplant Surface Applied or Preemergence:

Apply Reflex preplant surface or preemergence in Regions 1, 2, 3, and 4 at a rate not exceeding the maximum lbs./A. If weeds are present at the time of application, add a burndown herbicide.

Certain germinating broadleaf weeds, grasses, and sedges may be controlled or suppressed by soil residual activity if rainfall occurs shortly after application. The extent and consistency of soil activity is dependent on soil type, ground cover at time of application, amount of rainfall and rate of Reflex used.

Postemergence

Apply Reflex postemergence for control of weeds listed in the “**Application Rates For Weed Growth Stages**” according to the rate limits specified per regional map. Emerged weeds must be thoroughly covered with spray. Some bronzing, crinkling or spotting of soybeans leaves may occur following postemergent applications, but soybeans soon outgrow these effects and develop normally.

Do not apply within 45 days of harvest.

TANK MIX AND SEQUENTIAL APPLICATIONS FOR SOYBEANS

Reflex can be used sequentially or in tank mix with one or more of the following products: Assure II, Basagran, Butyrac®, Classic®, FirstRate®, Fusilade® DX, Fusion®, Glyphosate (such as Touchdown, Roundup or Glyphomax), Gramoxone Max, Harmony® GT, Harmony® GT XP, Pursuit, Poast, Poast Plus®, Raptor, Resource®, Select, Scepter®, and Synchrony® STS®.

Under certain conditions, the mixture of Reflex 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 Reflex or Reflex mixtures. In case Reflex or the Reflex mixture is applied first, apply the grass herbicide when the grass weeds begin to develop new leaves (generally around 7 days).

NOTE:

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

ROUNDUP READY® SOYBEAN TANK MIXES

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

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

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

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

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 determine the potential for spray drift. The applicator is responsible for considering all these factors when making decisions.

The following drift management requirements must be followed to avoid off-target movement from aerial applications to agricultural field crops. These requirements do not apply to forestry applications, public health uses or to applications using dry formulations.

1. The distance of the outer most nozzles on the boom must not exceed 3/4 the length of the wingspan or rotor.
2. Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.

Where states have more stringent regulations, they should be observed.

The applicator should be familiar with and take into account the information covered in the **Aerial Drift Reduction Advisory**.

Aerial Drift Reduction Advisory

[This section is advisory in nature and does not supersede the mandatory label requirements.]

INFORMATION ON 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 Inversions).

CONTROLLING DROPLET SIZE

- Volume - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.

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

BOOM LENGTH

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

APPLICATION HEIGHT

Applications should not be made at a height greater than 10 feet above the top of the target 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 should 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 winds 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 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).

APPENDIX

Scientific names are listed for those weeds referred to in the Reflex 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>Cardiospermum 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 prostrata</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>

COMMON NAME	SCIENTIFIC NAME
Milkweed, Honeyvine	<i>Ampelamus albidus</i>
Morningglory, Cypressvine	<i>Ipomoea quamoclit</i>
Entireleaf	<i>Ipomoea hederacea</i> var. <i>integriuscula</i>
Ivyleaf	<i>Ipomoea hederacea</i> var. <i>hederacea</i>
Purple Moonflower	<i>Ipomoea turbinata</i>
Red (Scarlet)	<i>Ipomoea coccinea</i>
Smallflower	<i>Jacquemontia tamnifolia</i>
Pitted (Smallwhite)	<i>Ipomoea lacunosa</i>
Tall (Common)	<i>Ipomoea purpurea</i>
Palmleaf (Willowleaf)	<i>Ipomoea wrightii</i>
Mustard, Wild	<i>Brassica kaber</i>
Nightshade, Black	<i>Solanum nigrum</i>
Nutsedge, Yellow	<i>Cyperus esculentus</i>
Panicum, Fall	<i>Panicum dichotomiflorum</i>
Panicum, Texas	<i>Panicum texanum</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 artemisiifolia</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>
Smartweed, Pennsylvania	<i>Polygonum pennsylvanicum</i>
Smellmelon	<i>Cucumis melo</i>
Spurge, Prostrate	<i>Euphorbia humistrata</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>

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Syngenta Crop Protection at 1-800-334-9481

Syngenta Crop Protection, Inc.
Greensboro, North Carolina 27409
www.syngenta-us.com

SCP 993A-L1 0502B

BASE LABEL

Reflex®
Herbicide

For Control of Weeds in Soybeans

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% fomesafen or 2 pounds fomesafen active ingredient per gallon.

KEEP OUT OF REACH OF CHILDREN.

DANGER - PELIGRO

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

See additional precautionary statements and directions for use inside booklet.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to supplemental labeling under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.

EPA Reg. No. 100-993
EPA Est. No. 100-NE-001

2.5 gallons
U.S. Standard Measure

FIRST AID	
If in eyes	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. • Call a Poison Control Center or doctor for treatment advice.
If swallowed	<ul style="list-style-type: none"> • Call a Poison Control Center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to by a Poison Control Center or doctor. • Do not give anything by mouth to an unconscious person.
If on skin or clothing	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a Poison Control Center or doctor for treatment advice.
If inhaled	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. • Call a Poison Control Center or doctor for further treatment advice.
NOTE TO PHYSICIAN	
Probable mucosal damage may contraindicate the use of gastric lavage.	
Have the product container or label with you when calling a poison control center or doctor or going for treatment.	
HOTLINE NUMBER	
For 24 Hour Medical Emergency Assistance (Human or Animal) Or Chemical Emergency Assistance (Spill, Leak, Fire or Accident) Call 1-800-888-8372	

PRECAUTIONARY STATEMENTS**Hazards To Humans And Domestic Animals****DANGER**

This product contains fomesafen which has been determined to cause tumors in laboratory animals (mice). Risks can be reduced by closely following use directions and precautions and by wearing the protective clothing specified elsewhere on this label.

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
- Waterproof gloves
- Shoes plus socks
- Protective eyewear

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, 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

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

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

STORAGE AND DISPOSAL

Prohibitions: Do not contaminate water, food or feed by storage or disposal. Open dumping is prohibited. Do not reuse empty container.

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 Disposal: Triple rinse (or equivalent); then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, by incineration or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

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