

9/28/2012



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON D C 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

Dr Adora Clark
Senior Regulatory Product Manager
Syngenta Crop Protection Inc
P O Box 18300
Greensboro NC 27419 8300

SEP 28 2012

Subject Label Amendment – Expanding Cotton Use to Allow Applications to Medium or Fine
Textured Soils & Other Minor Changes to Master Label Supplemental Label Included
Product Name Reflex Herbicide
EPA Registration Number 100 993
Submission Date June 4 2012
Decision Number 465862

Dear Dr Clark

The label amendment referred to above submitted in connection with registration under the Federal Insecticide Fungicide and Rodenticide Act (FIFRA) as amended is acceptable

Please note that marketing claims made on the pesticide label must be substantiated by data maintained in your files If data supporting the marketing claims made on the product label is not available then those claims must be removed

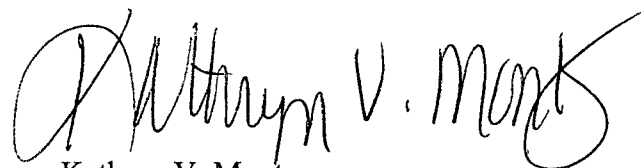
Should you wish to add/retain a reference to the company's website on your label then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency If the website is false or misleading the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E) 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading In addition regardless of whether a website is referenced on your product's label claims made on the website may not substantially differ from those claims approved through the registration process Therefore should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration the website will be referred to the EPA's Office of Enforcement and Compliance

Products shipped after 18 months from the date on this notice or the next printing of the master label whichever occurs first, must bear the new label language If these conditions are not complied with the registration will be subject to cancellation in accordance with FIFRA Your release for shipment of this product constitutes acceptance of these conditions As required, you must submit one copy of the final printed label before the product is released for shipment If you have any questions please contact Michael Walsh by phone at (703) 308 2972 or via email at walsh.michael@epa.gov

SEE NEXT PAGE

Page 2 of 2
Label Amendment
Product Name Reflex Herbicide
EPA Registration Number 100 993
Decision Number 465862

Sincerely

A handwritten signature in black ink that reads "Kathryn V. Montague". The signature is written in a cursive style with a large, looping initial 'K'.

Kathryn V Montague
Product Manager (23)
Herbicide Branch
Registration Division (7505P)

Enclosure

ACCEPTED

SEP 28 2012

Under the Federal Insecticide,
Fungicide, and Rodenticide Act
I, the undersigned, do hereby certify
that this product complies with
the requirements of EPA Reg. 100-993

SUPPLEMENTAL LABELING

Syngenta Crop Protection LLC
 P O Box 18300
 Greensboro North Carolina 27419 8300
 SCP 993A S7 0611

GROUP 14 HERBICIDE

Reflex® Herbicide

This supplemental label expires on September 27, 2015 and must not be used or distributed after this date

Active Ingredient/Guarantee	
Sodium salt of fomesafen	
5 [2 chloro 4 (trifluoromethyl)phenoxy] N (methylsulfonyl) 2-nitrobenzamide	22 8%
Other Ingredients	77 2%
Total	100 0%

Contains 1 2 benzisothiazolin 3-one at 0 02% as a preservative

Equivalent to 21 7% or 2 pounds per U S gallon or 240 grams per liter of fomesafen active ingredient

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)

EPA Reg 100 993

All applicable directions restrictions and precautions on the EPA registered label are to be followed Before using Reflex Herbicide as permitted according to this supplemental labeling, read and follow all applicable directions, restrictions, and precautions on the EPA registered label on or attached to the pesticide product container This Supplemental Labeling contains revised use instructions and or restrictions that may be different from those that appear on the container label This Supplemental Labeling must be in the possession of the user at the time of pesticide application It is a violation of Federal law to use this product in a manner inconsistent with its labeling



DIRECTIONS FOR USE

CROP USE DIRECTIONS

COTTON

Preemergence Application to Coarse Textured Soils

Apply Reflex Herbicide at 1.15 pts /A as a preemergence application to coarse textured soils (sandy loam, loamy sand, sandy clay loam) only. Refer to Table 1 for a list of weeds controlled or partially controlled. Do not apply as a preemergence application to medium or fine textured soils as crop injury will likely occur.

Preplant Surface Application to Medium or Fine Textured Soils

Apply Reflex Herbicide at 1 pt /A as a preplant surface application to medium or fine textured soils (i.e. soil types heavier than coarse textured soils) up to 21 days prior to planting cotton. Apply after the last tillage operation is completed. Refer to Table 1 for a list of weeds controlled or partially controlled. Do not exceed 1 pt /A of Reflex Herbicide on medium or fine textured soils. Also, to avoid severe crop injury, the following directions must be followed when application is made to medium or fine textured soils:

- After Reflex Herbicide application, a minimum of 0.5 inch of rainfall or overhead irrigation must occur before planting cotton.
- Cotton must be planted at least 0.75 inch in depth.
- Avoid overlapping spray swaths.
- Do not disturb or re-work the seedbed following application.

The use of an in-furrow or seed-applied fungicide will generally assist with seedling establishment and development.

Cotton plants are tolerant to preplant surface or preemergence applications of Reflex Herbicide when applied at recommended rates 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 Reflex Herbicide. Do not apply Reflex Herbicide over the top of emerged cotton as unacceptable cotton injury will occur.

Reflex Tank Mixes for Preplant Surface or Preemergence Application

To broaden the weed control spectrum, Reflex Herbicide may be tank mixed with other preemergence herbicides such as Caparol®, Cotoran®, Direx®, Karmex®, Solicam®, or Staple®. For control of emerged weeds, Reflex Herbicide may be tank mixed with a burndown herbicide such as dicamba, Gramoxone® brands or glyphosate brands (such

as Touchdown® Roundup®) labeled in cotton. Refer to the tank mix partner label for use directions, restrictions and limitations. The most restrictive product labeling applies.

Post Directed Application (All Soil Types)

Apply Reflex Herbicide in emerged cotton as a post directed treatment using precision post directed, hooded or shielded application equipment to provide complete coverage of emerged weeds. Apply Reflex Herbicide at 1.15 pts /A in a minimum of 10 gallons spray solution per acre. Applications may be made broadcast or banded. Post-directed applications of Reflex Herbicide will provide contact control of labeled emerged weeds and residual preemergence control of labeled weeds (once activated by rainfall or irrigation). Refer to the **Weeds Controlled** section for a list of weeds controlled, recommended application rates, weed growth stages, and application directions.

Reflex Herbicide should be applied with a non-ionic surfactant at 0.25 to 0.5% v/v or crop oil concentrate at 1% v/v to emerged weeds. Do not add liquid nitrogen (28% or similar) to Reflex Herbicide or Reflex Herbicide tank mixes in cotton.

To broaden the weed control spectrum, post directed applications of Reflex Herbicide 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 Herbicide and Reflex Herbicide tank mixes may be applied with burndown products such as Gramoxone brands, Sequence or glyphosate brands (such as Touchdown, Roundup) labeled for in-crop application in cotton. Refer to the tank mix partner label for use directions, restrictions and limitations. The most restrictive product labeling applies.

Cotton foliage is not tolerant to Reflex Herbicide 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 cotton stems and foliage.

Post Directed Application Timing in Cotton

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

Shield and Hooded Applications

Make a precision post directed Reflex Herbicide application to the base of the cotton plant, avoiding contact with the cotton stem or foliage when cotton is at least 6 inches in height to avoid cotton injury. Use only hooded or shielded spray equipment to apply Reflex Herbicide 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 Herbicide application to the base of the cotton plant avoiding contact with any non barked portion of the cotton plant or foliage. Use precision post directed equipment or hooded or shielded sprayers on cotton that has developed a minimum of 4 inches of brown bark through layby. Application equipment should be configured to provide full coverage of emerged target weeds.

Product Use Restrictions Cotton

Do not apply Reflex Herbicide later than 70 days before harvest.

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

Do not apply more than 1 pint per acre of Reflex Herbicide as a preplant surface application to medium or fine textured soils.

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

Apply Reflex Herbicide 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.

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

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

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

Reflex® and the Syngenta logo are trademarks of a Syngenta Group Company.

©2012 Syngenta

REF 993A S7 0611 – bb – 6-4 12

REF 993A S7 0611 B – bb – 9 27 12

ACCEPTED 7/46
SEP 28 2012
for the Federal Insecticide
and Fungicide Act,
100-993

IMPORTANT NOTICE
U S LABEL – It is a violation of United States law to use this product in the United States in a manner inconsistent with its United States labeling

GROUP 14 HERBICIDE

Reflex® Herbicide

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

Active Ingredient/Guarantee

Sodium salt of fomesafen

5 [2-chloro-4 (trifluoromethyl)phenoxy]-N-(methylsulfonyl) 2 nitrobenzamide 22 8%

Other Ingredients 77 2%

Total 100 0%

Contains 1 2-benzisothiazolin-3-one at 0 02% as a preservative

Equivalent to 21 7% or 2 pounds per U S gallon or 240 grams per liter of fomesafen active ingredient

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

Product of

Formulated in

SCP 993A

2 64 gallons/10 liters

30 gallons

120 gallons

Net Contents

8/46

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

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

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 thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

Environmental Hazards

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 washwater or rinsate. Do not apply when weather conditions favor drift from target area.

Groundwater Advisory

This chemical has properties and characteristics associated with chemicals detected in groundwater. This chemical may leach into groundwater if used in areas where permeable, particularly where the water table is shallow.

Surface Water Advisory

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

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

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

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

Syngenta warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. To the extent permitted by applicable law, (1) this warranty does not extend to the use of this product contrary to label instructions or under conditions not reasonably foreseeable to or beyond the control of Seller or Syngenta, and (2) Buyer and User assume the risk of any such use. To the extent permitted by applicable law, SYNGENTA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS WARRANTED BY THIS LABEL.

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

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

12/46

DIRECTIONS FOR USE

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

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

AGRICULTURAL USE REQUIREMENTS

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

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated such as plants soil or water is

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

PRODUCT INFORMATION

Read all label directions before using

Reflex Herbicide is a selective herbicide which may be applied preplant surface preemergence and/or postemergence for control or partial control of broadleaf weeds grasses and sedges in cotton dry beans potatoes snap beans and soybeans

13/
46

Preplant Surface and Preemergence Applications

Certain germinating broadleaf weeds grasses and sedges can be controlled or partially controlled by soil residual activity from either preplant surface or preemergence applications of Reflex Herbicide. Moisture is necessary to activate Reflex Herbicide in soil for residual weed control. Dry weather following applications of Reflex Herbicide may reduce effectiveness. When adequate moisture is not received after a Reflex Herbicide application, weed control may be improved by overhead irrigation with at least a ¼ inch of water.

Postemergence Applications

Reflex Herbicide is generally most effective when used postemergence, working through contact action. Therefore, emerged weeds must have thorough spray coverage for effective control. Best broad-spectrum postemergence control of susceptible broadleaf weeds is obtained when Reflex Herbicide is applied early to actively growing weeds. This usually occurs within 14 to 28 days after planting. Refer to the weed control tables for specific recommendations on weed growth stages and rates.

Some bronzing, crinkling or spotting of labeled crop leaves may occur following postemergence applications, but labeled crops soon outgrow these effects and develop normally.

Soil Characteristics

Application of Reflex Herbicide to soils with high organic matter and/or high clay content may require higher rates than soils with low organic matter and/or low clay content. Refer to the Reflex Herbicide Regional Use Map, weed control tables, and specific crop use sections for recommendations on use rates based on soil texture.

Environmental and Agronomic Conditions

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

Rainfastness

Reflex Herbicide requires a 1 hour rain free period for best results when applied postemergence.

14/46

Cultivation

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

Information on Weed Resistance

Naturally occurring biotypes of certain broadleaf species with resistance to this herbicide and related products (same mode of action) are known to exist. Selection of resistant biotypes through repeated use of these herbicides may result in control failures.

If poor performance cannot be attributed to adverse weather conditions or improper application methods, a resistant biotype may be present. In such a case, additional treatments with this herbicide or similar mode of action products are not recommended. Consult your local company representative or agricultural advisor for assistance.

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

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

For Postemergence Applications Always Add One Of The Following Except in Tank Mix With Products Prohibiting Spray Additives

Nonionic Surfactant (NIS) - Use NIS containing at least 75% surface active agent at 0.25 to 0.5% v/v (1.2 qts /100 gals) of the finished spray volume.

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

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

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

Note No adjuvants are needed for preplant surface or preemergence applications unless Reflex Herbicide is being used in a burndown on emerged weeds

Recommended Mixing Order

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

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

Tank-Mix Compatibility Test

A jar test is recommended prior to tank mixing to ensure compatibility of Reflex Herbicide with mixture partners. Add proportion amounts of tank mixture components in a clear quart jar one at a time in the recommended mixing order. Gently shake or invert capped jar and let stand for 15-30 minutes. If the mixture clumps, forms flakes, oily films or layers or other precipitates, it is not compatible and the tank mixture should not be used.

GROUND APPLICATION

Preplant Surface and Preemergence Application - Use a minimum of 10 gallons per acre. Nozzle selection should meet manufacturer's gallonage and pressure recommendations for preplant surface or preemergence applications.

Postemergence Application Use sufficient spray volume and pressure to ensure complete coverage of the target weed. A spray volume of 10-20 gallons per acre and

16/46

30 60 psi at the nozzle tip is recommended On large weeds and/or dense foliage use 60 psi and a minimum of 20 gallons per acre to ensure coverage of weed foliage

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

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

BAND APPLICATIONS

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

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

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

Note Thorough weed coverage is important for postemergence band applications Best coverage is obtained with a minimum of two nozzles one directed to each side of the planted row Application with a single nozzle directed over the top of the row is not recommended for 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

AERIAL APPLICATION

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

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

CENTER PIVOT IRRIGATION APPLICATION

Reflex Herbicide alone or in tank mixture with other herbicides on this label which are registered for center pivot application may be applied in irrigation water preemergence

17/
46

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

Operating Instructions

- The system must contain a functional check-valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water-source contamination from backflow.
- The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- The pesticide injection pipeline must also contain a functional, normally closed, solenoid operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distributions are adversely affected.
- Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump or piston pump), effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- Do not apply when wind speed favors drift beyond the area intended for treatment.
- Prepare a mixture with a minimum of 1 part water to 1 part herbicide(s) and inject this mixture into the center pivot system. Injecting a larger volume of a more dilute

mixture per hour will usually provide more accurate calibration of equipment
Maintain sufficient agitation to keep the herbicide in suspension

- Meter into irrigation water during entire period of water application
- Apply in $\frac{1}{2}$ 1 inch of water Use the lower water volume ($\frac{1}{2}$ inch) on *coarser soils* and the higher volume (1 inch) on *fine-textured soils* More than 1 inch of water at application may reduce weed control by moving the herbicide below the effective zone in the soil

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

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

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

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

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

19/46

Specific Instructions for Public Water Systems

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

RESTRICTIONS AND 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
- 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
- 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

Replanting

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

ROTATIONAL CROP RESTRICTIONS

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

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

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

*Use a 12 month minimum rotation interval for popcorn in the states of Ohio Kentucky Illinois Indiana Iowa and Region 4 when applied at rates of 1 0 pint per acre or more

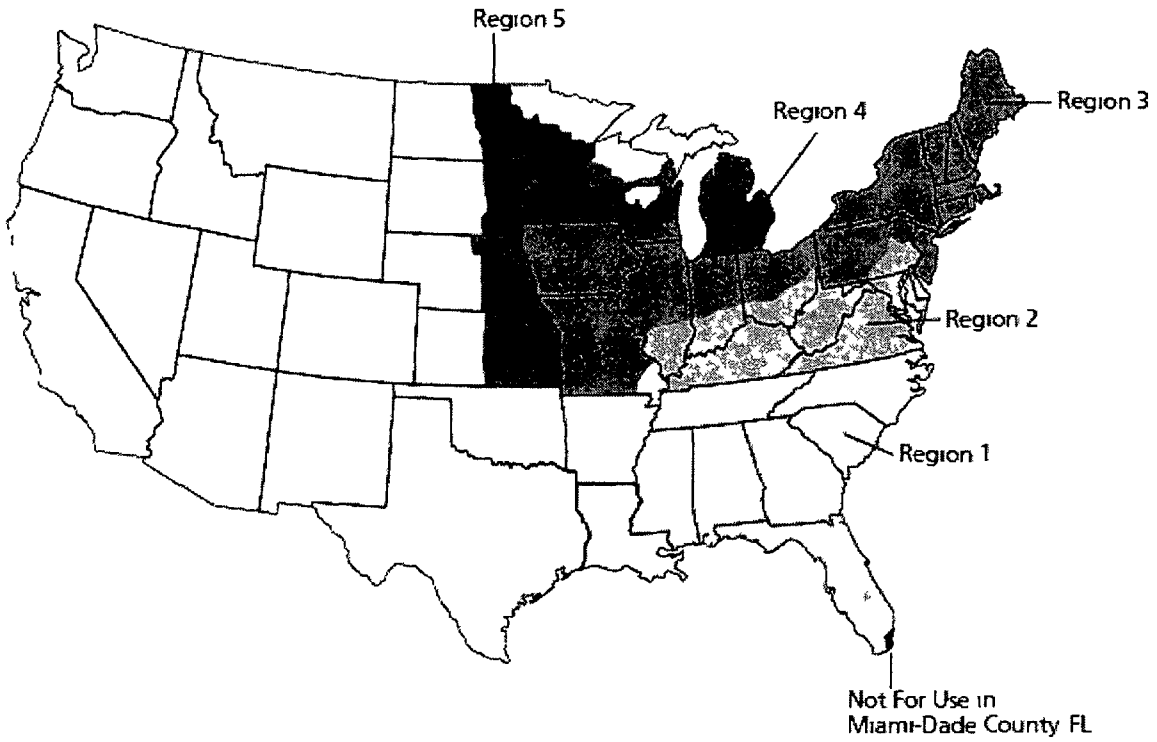
*Use 18 month minimum rotation interval for sweet corn in the states of Connecticut Maine Massachusetts New Hampshire New York Rhode Island Vermont and Region 5

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

22/46

USE RATES AND WEEDS CONTROLLED

REFLEX HERBICIDE REGIONAL USE MAP



REGION 1
(Maximum Rate 1 5 pts /A per year)



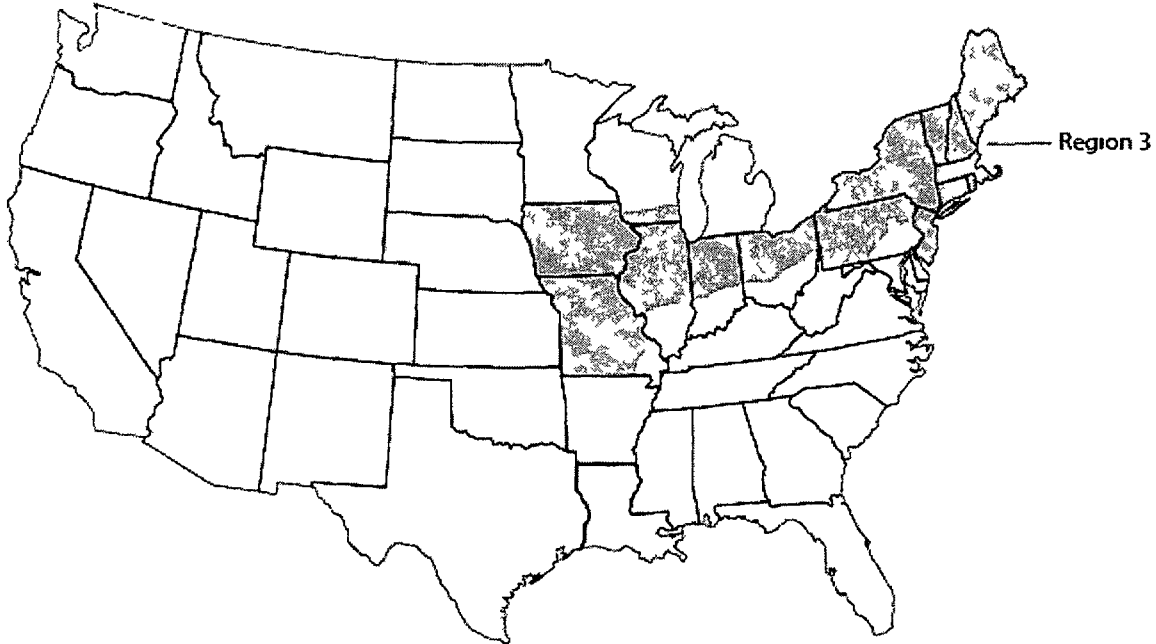
REGION 1 - Includes the following states or portion of states where Reflex Herbicide may be applied Alabama Arkansas Florida (except Miami-Dade County) Georgia Louisiana Mississippi Missouri (counties of Bollinger Butler Cape Girardeau Dunklin Madison Mississippi New Madrid Pemiscot Perry Ripley Scott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

REGION 2
(Maximum Rate 1 5 pts /A, alternate years)



REGION 2 Includes the following states or portion of states where Reflex Herbicide 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 Herbicide 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 Herbicide may be applied Kansas (all counties East of or intersected by U S Highway 281) Michigan (Southern Peninsula) Minnesota (all areas South of Interstate 94) Nebraska (all counties East of or intersected by U S Highway 281) and Wisconsin (all areas except those in Region 3 South of Interstate 94 from Minnesota state line to Eau Claire and South of U S Highway 29 from Eau Claire to Green Bay plus Barron Chippewa Clark Door Dunn Eau Claire Kewaunee Marathon Menominee Oconto Polk Shawano and St Croix counties The following counties are excluded Adams Marquette Portage Waupaca Waushara and Wood) North Dakota (all areas East of Interstate 29 from Fargo South to the South Dakota state line) South Dakota (all areas East of Interstate 29 from the North Dakota state line to Watertown all areas East of Highway 81 from Watertown to Madison and all areas East and South of State Road 34 and U S Highway 281 to the Nebraska state line)

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



REGION 5 - Includes the following states or portion of states where Reflex Herbicide 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)

28/46

WEEDS CONTROLLED

Table 1 Weeds controlled or partially controlled* by preplant surface or preemergence application of Reflex Herbicide at 1 to 1.5 pts /A¹

Broadleaf Weeds Controlled	Soil Texture	Organic Matter
Amaranth Palmer	All soil types	Up to 5%
Croton tropic ²		
Eclipta		
Galinsoga spp		
Lambsquarters common		
Morningglory smallflower		
Nightshade black		
Nightshade Eastern black		
Pigweed redroot		
Pigweed smooth		
Poinsettia wild		
Pursh common		
Ragweed common ²		
Sida prickly ²		
Starbur bristly		
Broadleaf Weeds Partially Controlled*		
Anoda spurred		
Cocklebur common		
Morningglory entireleaf		
Morningglory ivyleaf		
Morningglory pitted		
Morningglory red/scarlet		
Morningglory tall		
Nightshade hairy		
Ragweed giant		
Waterhemp common		
Sedges Partially Controlled*		
Nutsedge yellow		

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

¹Use the higher end of the rate range when heavy weed populations are anticipated

²Rates less than 1.5 pts /A will provide only partial control of this weed

Table 2 Weeds controlled or partially controlled* by postemergence application of Reflex Herbicide

Weed	Reflex Herbicide Rate (pt /A)			
	Maximum Growth Stage Controlled At			
	0.75 pt /A No of True Leaves	1 pt /A No of True Leaves	1.25 pts /A No of True Leaves	1.5 pts /A No of True Leaves
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}	-		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 ^b			4	6
Horsenettle ^b	-	2 ^c	3 ^c	4 ^c
Jimsonweed	2	4	6	8
Ladysthumb		2	2	4
Lambsquarters Common ^c	-	2	2	2
Mexicanweed	-	2 ^c	2 ^c	2
Morningglory				
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
Mustard Wild	2	4	6	8
Nightshade Black	2	4	4	4

Weed	Reflex Herbicide Rate (pt /A)			
	Maximum Growth Stage Controlled At			
	0.75 pt /A No of True Leaves	1 pt /A No of True Leaves	1.25 pts /A No of True Leaves	1.5 pts /A No of True Leaves
Nutsedge Yellow	-	-	-	Suppression Only
Pigweed				
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
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 ^b	-		4	4
Redweed		-	-	3 ^c
Sesbania Hemp	-	6	6	12
Sicklepod	--	-	--	Cotyledon ^c
Sida Prickly	-	-		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
Waterhemp Common	2 ^c	2	2	4
Waterhemp Tall	2 ^c	2	2	4
Yellow Rocket	2	4	6	6

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

^aDo not apply in cotyledon stage

^bFor effective control of this weed it is necessary to use 1% MSO and 2.5% UAN v/v as an adjuvant in Regions 2 and 3 (soybeans only)

^cPartial control

SPECIAL USE DIRECTIONS FOR ADDITIONAL WEED PROBLEMS

Partial Control* of Annual Grasses

The grasses listed below may be partially controlled by preemergence applications of Reflex Herbicide at 1 1 5 pts /A

Crabgrass
Goosegrass
Panicum Texas
Signalgrass broadleaf

The grasses listed below may be partially controlled by postemergence applications of Reflex Herbicide at 1 1 5 pts /A

Barnyardgrass
Signalgrass broadleaf
Crabgrass
Foxtail
 Giant
 Green
 Yellow
Goosegrass
Johnsongrass Seedling
Panicum Fall
Panicum Texas

Partial Control* of Perennial Weeds

Use of Reflex Herbicide 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 Herbicide 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
Trumpetcreeper

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

CROP USE DIRECTIONS

COTTON

Preemergence Application to Coarse Textured Soils

Apply Reflex Herbicide at 1.15 pts /A as a preemergence application to coarse textured soils (sandy loam loamy sand sandy clay loam) only. Refer to Table 1 for a list of weeds controlled or partially controlled. Do not apply as a preemergence application to medium or fine textured soils as crop injury will likely occur.

Preplant Surface Application to Medium or Fine Textured Soils

Apply Reflex Herbicide at 1 pt /A as a preplant surface application to medium or fine textured soils (i.e. soil types heavier than coarse-textured soils) up to 21 days prior to planting cotton. Apply after the last tillage operation is completed. Refer to Table 1 for a list of weeds controlled or partially controlled. Do not exceed 1 pt /A of Reflex Herbicide on medium or fine textured soils. Also to avoid severe crop injury the following directions must be followed when application is made to medium or fine textured soils:

- After Reflex Herbicide application a minimum of 0.5 inch of rainfall or overhead irrigation must occur before planting cotton.
- Cotton must be planted at least 0.75 inch in depth.
- Avoid overlapping spray swaths.
- Do not disturb or re-work the seedbed following application.

The use of an in furrow or seed applied fungicide will generally assist with seedling establishment and development.

Cotton plants are tolerant to preplant surface or preemergence applications of Reflex Herbicide when applied at recommended rates 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 Reflex Herbicide. Do not apply Reflex Herbicide over the top of emerged cotton as unacceptable cotton injury will occur.

Reflex Tank Mixes for Preplant Surface or Preemergence Application

To broaden the weed control spectrum Reflex Herbicide may be tank mixed with other preemergence herbicides such as Caparol® Cotoran® Direx® Karmex® Solicam® or Staple®. For control of emerged weeds Reflex Herbicide may be tank mixed with a burndown herbicide such as dicamba Gramoxone® brands or glyphosate brands (such

as Touchdown® Roundup®) labeled in cotton Refer to the tank mix partner label for use directions restrictions and limitations The most restrictive product labeling applies

Post-Directed Application (All Soil Types)

Apply Reflex Herbicide in emerged cotton as a post directed treatment using precision post directed hooded or shielded application equipment to provide complete coverage of emerged weeds Apply Reflex Herbicide at 1.15 pts /A in a minimum of 10 gallons spray solution per acre Applications may be made broadcast or banded Post directed applications of Reflex Herbicide will provide contact control of labeled emerged weeds and residual preemergence control of labeled weeds (once activated by rainfall or irrigation) Refer to the **Weeds Controlled** section for a list of weeds controlled recommended application rates weed growth stages and application directions

Reflex Herbicide should be applied with a non-ionic surfactant at 0.25 to 0.5% v/v or crop oil concentrate at 1% v/v to emerged weeds Do not add liquid nitrogen (28% or similar) to Reflex Herbicide or Reflex Herbicide tank mixes in cotton

To broaden the weed control spectrum post-directed applications of Reflex Herbicide 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 Herbicide and Reflex Herbicide tank mixes may be applied with burndown products such as Gramoxone brands Sequence or glyphosate brands (such as Touchdown Roundup) labeled for in crop application in cotton Refer to the tank-mix partner label for use directions restrictions and limitations The most restrictive product labeling applies

Cotton foliage is not tolerant to Reflex Herbicide 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 cotton stems and foliage

Post Directed Application Timing in Cotton

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

Shield and Hooded Applications

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

34/46

Layby Applications

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

Product Use Restrictions - Cotton

Do not apply Reflex Herbicide later than 70 days before harvest

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

Do not apply more than 1 pint per acre of Reflex Herbicide as a preplant surface application to medium or fine-textured soils

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

Apply Reflex Herbicide 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

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

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

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

DRY BEANS AND SNAP BEANS

Preplant Surface and Preemergence Application

Apply Reflex Herbicide as a preplant surface or preemergence application in Regions 1, 2, 3 and 4 only for control or partial control of the weeds listed in Table 1 Reflex

Herbicide can be applied alone or tank mixed or followed sequentially with other labeled dry bean or snap bean herbicides to broaden the weed control spectrum or control newly emerged weeds. Refer to the **Tank Mix and Sequential Application** section for additional information.

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

Postemergence Application

Apply Reflex Herbicide as a postemergent broadcast application in Regions 1, 2, 3, 4, and 5 for control or partial control of the weeds listed in Table 2 and in the **Special Use Directions For Additional Weed Problems** section. Application rate depends on weed species and growth stage. Two applications may be made if necessary but not to exceed the maximum rate specified per geographic region. (Refer to map for definition of specified geographic regions). Refer to the Spray Additive section for recommended spray additives. Use of crop oil concentrate can improve weed control but may slightly reduce crop tolerance. Do not use UAN (28% or similar) or ammonium sulfate on dry beans or snap beans as severe crop injury may occur. Apply when dry beans or snap beans have at least one fully expanded trifoliate leaf.

Reflex Herbicide can be applied alone or in tank mix with other labeled dry bean or snap bean postemergence herbicides to broaden the weed control spectrum. Refer to the **Tank Mix and Sequential Application** section.

Some bronzing, crinkling or spotting of dry bean or snap bean leaves may occur following postemergent applications, but dry beans and snap beans soon outgrow these effects and develop normally.

Tank Mix and Sequential Applications for Dry Beans and Snap Beans

Reflex Herbicide can be used sequentially or in tank mix with the following products:

Dry Beans and Snap Beans

Assure II®
Basagran®
Dual Magnum
Eptam®
Poast®
Prowl®
Pursuit®
Raptor®
Treflan®

Dry Beans Only

Frontier®
Select®
Sonalan®

36/46

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

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

Always read and follow the 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

Product Use Restrictions – Dry Beans and Snap Beans

- Refer to Reflex Herbicide Regional Use Map for the maximum rate of Reflex Herbicide (or other fomesafen containing products) that may be applied in each geographic region
- Do not apply to any field in Regions 2 3 4 or 5 more than once every two years
- **For snap beans** Do not exceed 1.5 pints of Reflex Herbicide per acre in any one year and also adhere to the maximum rate that may be applied in each geographic region (refer to the Reflex Herbicide Regional Use Map) Do not graze treated areas or harvest for forage or hay Do not utilize hay or straw for animal feed or bedding Do not apply within 30 days of harvest
- **For dry beans** Do not exceed 1.5 pints of Reflex Herbicide per acre in any one year and also adhere to the maximum rate that may be applied in each geographic region (refer to the Reflex Herbicide Regional Use Map) Do not graze animals on green forage or stubble Do not utilize hay or straw for animal feed or bedding Do not apply within 45 days of harvest

POTATOES

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

Note Potato varieties may vary in their response to Reflex Herbicide. When using Reflex Herbicide for the first time on a particular variety, always determine crop tolerance before using.

Tank Mixtures With Other Products Registered for Use in Potatoes

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

Product Use Restrictions – Potatoes

- Do not exceed 1 pt /A of Reflex Herbicide per season. Refer to Reflex Herbicide Regional Use Map for the maximum rate of Reflex Herbicide (or other fomesafen containing products) that may be applied per year or alternate year in each geographic region.
- Do not harvest potatoes treated with Reflex Herbicide within 70 days of application.
- Do not apply Reflex Herbicide to sweet potatoes or yams.
- Do not apply Reflex Herbicide as a preplant incorporated application in potatoes or crop injury may occur.
- Do not apply to emerged potato plants or severe crop injury will occur.

SOYBEANS

Preplant Surface and Preemergence Application

Apply Reflex Herbicide as a preplant surface or preemergence application in Regions 1, 2, 3, and 4 only for control or partial control of the weeds listed in Table 1. Reflex Herbicide can be applied alone or tank mixed or followed sequentially with other labeled soybean herbicides to broaden the weed control spectrum or control newly emerged weeds. Refer to the **Tank Mix and Sequential Application** section for additional information.

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

Postemergence Application

Apply Reflex Herbicide as a postemergence broadcast application in Regions 1 2 3 4 and 5 for control or partial control of weeds listed in Table 2 and in the **Special Use Directions For Additional Weed Problems** section. Application rate depends on weed species and growth stage. Refer to the Spray Additive section for recommended spray additives. To enhance postemergence control of susceptible broadleaf weeds (**soybeans only**) in Regions 2 3 4 and 5 (see Reflex Herbicide Regional Use Map) Reflex Herbicide 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.

Reflex Herbicide can be applied alone or in combination with other labeled soybean postemergence herbicides to broaden the weed control spectrum. Refer to the **Tank Mix and Sequential Application** section.

Some bronzing, crinkling or spotting of soybean leaves may occur following postemergent applications, but soybeans soon outgrow these effects and develop normally.

Tank Mix and Sequential Applications For Soybeans

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

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

NOTE

- Tank-mix applications can result in increased crop injury as compared to either product used alone.
- Do not exceed 1 fl. oz. of Butyrac per acre in mixture with Reflex Herbicide.

- Do not exceed 0.25 oz /A of Synchrony STS herbicide in the tank with labeled rates of Reflex Herbicide 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® (Glyphosate Tolerant) Soybean Tank Mixes

Reflex Herbicide at 6-12 oz /A can be tank mixed with glyphosate products (such as Touchdown or Roundup) that are labeled for Roundup Ready (glyphosate tolerant) soybeans for improved 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 Herbicide.

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.

Product Use Restrictions – Soybeans

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

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.

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 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 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 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 Herbicide 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>
Milkweed Honeyvine	<i>Ampelamus albidus</i>

44/46

COMMON NAME	SCIENTIFIC NAME
Morningglory	
Cypressvine	<i>Ipomoea quamoclit</i>
Entireleaf var	<i>Ipomoea hederacea</i> var <i>integruscula</i>
Ivyleaf	<i>Ipomoea 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>Sinapis arvensis</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 artemisiifolia</i>
Ragweed Giant	<i>Ambrosia trifida</i>
Redweed	<i>Melochia corchorifolia</i>
Sesbania Hemp	<i>Sesbania exaltata</i>
Sicklepod	<i>Senna obtusifolia</i>
Sida Prickly	<i>Sida spinosa</i>
Signalgrass Broadleaf	<i>Brachiana platyphylla</i>
Smartweed Pennsylvania	<i>Polygonum pennsylvanicum</i>
Smellmelon	<i>Cucumis melo</i>
Spurge Prostrate	<i>Chamaesyce humistrata</i>
Spurge Spotted	<i>Chamaesyce 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 [less than 5 gallons]

Non refillable container Do not reuse or refill this container Offer for recycling if available Triple rinse container (or equivalent) promptly after emptying Triple rinse as follows Empty the remaining contents into application or a mix tank and drain for 10 seconds after the flow begins to drip Fill the container ¼ full with water and recap Shake for 10 seconds Pour rinsate into application equipment or a mix tank or store rinsate for later use and disposal Drain for 10 seconds after the flow begins to drip Repeat this procedure two more times Then offer for recycling if available or puncture and dispose of in a sanitary landfill by incineration or if allowed by state and local authorities by burning If burned stay out of smoke

Container Handling [Bulk/Mini Bulk]

Refillable container Refill this container with Reflex Herbicide only Do not reuse this container for any other purpose Cleaning the container before final disposal is the responsibility of the person disposing of the container Cleaning before refilling is the responsibility of the refiller To clean container before final disposal empty the remaining contents from this container into application equipment or mix tank Fill the container about 10 percent full with water Agitate vigorously or recirculate water with the pump for 2 minutes Pour or pump rinsate into application equipment or rinsate collection system Repeat this rinsing procedure two more times Then offer for

recycling if available or puncture and dispose of in a sanitary landfill or by incineration or if allowed by state and local authorities by burning If burned stay out of smoke

CONTAINER IS NOT SAFE FOR FOOD, FEED OR DRINKING WATER

Boundary® Caparol® Dual Magnum® Dual II Magnum® Envoke® Fusilade® Fusion® Gramoxone® Gramoxone Inteon® Reflex® Sequence® Solicam® Suprend® Touchdown® and the Syngenta logo are trademarks of a Syngenta Group Company

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

Basagran® Frontier® Poast® Poast Plus® Prowl® Pursuit® Raptor® and Scepter® trademarks of BASF Ag Products

Butyrac® trademark of Albaugh Inc

Resource® and Select® trademarks of Valent U S A Corporation Agricultural Products

Roundup Ready® and Roundup® trademarks of Monsanto Company

FirstRate® Glyphomax™ and Sonalan® trademarks of Dow AgroSciences

Cotoran® Direx® and Karmex® trademarks of Griffin LLC

Eptam® trademark of Gowan Company

Treflan® trademark of UAP Loveland Products Inc

©201X Syngenta

For non-emergency (e g current product information) call
Syngenta Crop Protection at 1-800 334 9481

Manufactured for
Syngenta Crop Protection LLC
P O Box 18300
Greensboro North Carolina 27419-8300

SCP 993A

REFLEX HERBICIDE 993 MAS AMEND 0612 – bb – 6-4 12
000100 00993 20110604 REFLEX AMEND 0612 pdf