

PM 23

10/82-83

01-21

OCT 30 1995

Saundra M. O'Bryan
Zeneca Ag Products
1800 Concord Pike
Wilmington, DE 19850-5458

Dear Ms. O'Bryan:

SUBJECT: Label Amendment - Revision of Signal Word and
Precautionary Labeling
Reflex Herbicide
EPA File Symbol: 10182-83
Your Submission, dated October 16, 1995

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, is acceptable provided that you:

1. Delete the phrase "if irritation persists" from the ocular and dermal Statements of Practical Treatment.
2. Revise the oral Statement of Practical Treatment to read as follows:

"IF SWALLOWED: Call a doctor or get medical attention. Do not induce vomiting. Drink promptly a large quantity of milk, egg whites, gelatin solution, or if these are not available, drink large quantities of water. Avoid alcohol."

EPA believes it is medically unadvisable to induce vomiting in cases where a pesticide product has been ingested, if the product is in Toxicity category I for eye irritation. Due to the corrosiveness of such products, there is a concern that additional tissue damage might occur during vomiting. Except in cases where the product also has a high acute oral toxicity, EPA believes the risk of additional damage outweighs the risk of toxicity from the ingested substance.

RD:STANTON:PM Team 23:Rm. 235:CM-2:305-5218:Disk #1:S495982.LET

CONCURRENCES

SYMBOL ▶	7505C							
SURNAME ▶	S. Stanton							
DATE ▶	Oct 27, 1995							

3. Revise the second paragraph under "Hazards to Humans and Domestic Animals" to read as follows:

"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."

4. Add the following statement to the label, near the Statements of Practical Treatment:

"NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage."

5. Revise the first statement of the Pesticide Disposal instructions to read: "Pesticide wastes are acutely hazardous."
6. Delete the words "puncture and" from the disposal instructions for "Glass Containers".
7. Replace "ICI Americas" with "Zeneca" in the fourth "bulleted" item from the top on page 9.
8. Submit one copy of your final printed labeling before you release the product for shipment.

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

Sincerely yours,

Joanne I. Miller
Product Manager (23)
Fungicide-Herbicide Branch
Registration Division (7505C)

Enclosure

REFLEX® 2LC HERBICIDE
For Postemergence Control of Broadleaf Weeds in Soybeans

COMPLETE DIRECTIONS FOR USE

**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 ZENECA or Seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold ZENECA and Seller harmless for any claims relating to such factors.

ZENECA 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 ZENECA, and Buyer and User assume the risk of any such use. ZENECA 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 ZENECA 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 ZENECA 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 ZENECA OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

ACCEPTED
with COMMENTS
In EPA Letter Dated

OCT 30 1995

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

1018d-83

ZENECA and Seller offer this product, and Buyer and User accept it, subject to the foregoing conditions of sale and limitations of warranty and of liability, which may not be modified except by written agreement signed by a duly authorized representative of ZENECA.

Made in U.S.A.
ZENECA Ag Products
ZENECA Inc.
Wilmington, DE 19897

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.)

ACTIVE INGREDIENT:

Sodium salt of fomesafen

5-[2-chloro-4-(trifluoromethyl)phenoxy]-N-

(methylsulfonyl)-2-nitrobenzamide 22.8%*

INERT INGREDIENTS 77.2%

TOTAL 100.0%

*Equivalent to 21.7% fomesafen or 2 pounds fomesafen active ingredient per gallon.

EPA Reg. No. 10182-083

U.S. Patent No. 4,285,723

STATEMENT OF PRACTICAL TREATMENT

IF IN EYES: Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation persists.

IF SWALLOWED: Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger. Do not induce vomiting or give anything by mouth to an unconscious person. Call a physician or Poison Control Center.

IF ON SKIN: Immediately remove contaminated clothing and wash thoroughly with plenty of soap and water. Get medical attention if irritation persists.

FOR 24-HOUR EMERGENCY MEDICAL ASSISTANCE, CALL (800)-F-A-S-T-M-E-D (327 8633)

FOR CHEMICAL EMERGENCY: Spill, leak, fire, exposure, or accident call CHEMTREC 1-800-424-9300.

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 EYE DAMAGE. HARMFUL IF SWALLOWED, INHALED OR ABSORBED THROUGH SKIN. Do not get in eyes, on skin or on clothing. Avoid breathing vapors or spray mist.

PERSONAL PROTECTIVE EQUIPMENT

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.
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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.

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

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 toxic. 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.

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

FOR BULK AND MINI-BULK CONTAINERS:

Container Disposal: Reseal container and offer for reconditioning, or triple rinse (or equivalent) and offer for recycling or reconditioning, or clean in accordance with manufacturer's instructions.

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 2LC. The contents of this container cannot be completely removed by cleaning. Refilling with materials other than REFLEX 2LC 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[®] 2LC is a selective postemergence herbicide for control of broadleaf weeds in soybeans. Soybean plants are tolerant to REFLEX 2LC when applied at recommended rates. Some bronzing, crinkling or spotting of soybean leaves may occur, but soybeans soon outgrow these effects and develop normally with no yield reduction.

Thorough coverage of all weed plant foliage is important for good activity. Optimum weed control is achieved when young actively growing weeds are treated that are not under stress from moisture, temperature, low soil fertility, mechanical or chemical injury.

REFLEX 2LC is effective through contact action, therefore weeds must be thoroughly covered with spray.

Secondary flushes of certain weeds may be controlled by soil residual activity if rainfall occurs within one week after application. The extent of soil activity is dependent upon soil type, ground cover at time of application, amount of rainfall and the rate of REFLEX 2LC used.

REFLEX 2LC is rainfast in 4 hours.

APPLICATION DIRECTIONS

Timing - Best control of susceptible broadleaf weeds is obtained when REFLEX 2LC is applied early to actively growing weeds. This usually occurs 14 to 21 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.

ALWAYS ADD ONE OF THE FOLLOWING:

Nonionic Surfactant - Add nonionic surfactant containing at least 75% surface active agent at 0.25 to 0.5% ($\frac{1}{2}$ to 1 pint per 25 gallons) of the finished spray volume to improve contact activity.

Crop Oil Concentrate - Add a nonphytotoxic crop oil concentrate, or a once-refined vegetable oil concentrate containing 15%-20% approved emulsifier, at 0.5-1% (1-2 pints per 25 gallons) of the finished spray volume. Crop oil concentrate 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.

Always refer to the product label and follow recommendations concerning rates, target crops, environmental effect such as drought or weed stress, and use in tankmix with other labeled pesticides.

In addition to crop oil concentrate or nonionic surfactant, liquid nitrogen fertilizer (28% or similar) can be added to the spray mixture. This 28% liquid nitrogen fertilizer is water soluble and should be used at a rate of one gallon per acre. Liquid nitrogen fertilizers should not be used as a substitute for crop oil concentrate or nonionic surfactant in the spray mixture.

In addition to crop oil concentrate or nonionic surfactant, diammonium phosphate (aqueous ammonium polyphosphate) commonly sold as a solution (10-34-0) can be added to the spray mixture. This completely water soluble material should be used at a rate of 2 pts. per acre. Diammonium phosphate should not be used as a substitute for crop oil concentrate or nonionic surfactant in the spray mixture.

MIXING - Fill the clean spray tank with $\frac{1}{2}$ the required amount of water. Begin agitation and add the recommended amount of REFLEX 2LC herbicide and appropriate amount of approved adjuvant. Add the remaining quantity of water and allow sprayer to agitate and recycle 5-10 minutes before application.

GROUND APPLICATION - Use sufficient spray volume and pressure to ensure complete coverage of the target weeds. A minimum of 10 gallons per acre of spray mixture should be used with spray pressures of 40 to 60 psi at the nozzle tip. When weed foliage is dense, 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 all weeds.

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 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. Cultivation of untreated areas may be needed following band applications. When making 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 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 weeds. 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. Add 1 pint/A of crop oil concentrate or 1/2 pint/A nonionic surfactant in the spray mixture.

When making aerial applications, care should be taken to avoid drift to crops other than soybeans or to other non-target areas. Do not spray when conditions are favorable for drift or when wind velocity exceeds 10 mph.

CULTIVATION - Cultivation within 7 days prior to application is not recommended. Cultivation may put weeds under stress, reducing weed control. Timely cultivation 2-3 weeks after applying REFLEX 2LC may assist weed control.

GENERAL USE PRECAUTIONS

- REFLEX 2LC can only be applied in the states or parts of states included in Regions 1 & 2. DO NOT APPLY REFLEX 2LC TO ANY FIELD IN REGION 2 MORE THAN ONCE EVERY TWO YEARS.

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- Apply REFLEX 2LC before soybeans bloom.
- A maximum of 1½ pints of REFLEX 2LC herbicide may be applied per acre per season to soybeans in Region 1. A maximum of 1½ pints of REFLEX 2LC herbicide may be applied per acre in alternate years in Region 2.
- Thoroughly clean spray tank with water and a commercial tank cleaner before and after each use.
- REFLEX 2LC herbicide should not be mixed with fertilizers or any other additive except as specified on this label or other approved ICI Americas supplemental labeling.
- REFLEX may be mixed with other postemergence pesticides as labeled. Refer to the other pesticide labels for restrictions.
- REFLEX 2LC herbicide requires a 4-hour rain-free period for best results. Do not apply if rain is threatening.
- Apply to actively growing weeds. Do not apply to weeds which are under drought stress including cold temperature, such as when maximum day temperature is below 70°F, or when soil temperature is below 60°F, as reduced weed control may result.
- Avoid applying REFLEX 2LC to soybeans which have been under stress from drought, hail damage, flooding or herbicide injury as increased crop injury may result.
- Avoid overlapping spray swaths, as injury may occur to rotational crops.
- Avoid drift to all other crops and nontarget areas. Crops other than soybeans may be severely injured by drift.
- Do not graze treated areas or harvest for forage or hay.
- Do not apply this product through any type of irrigation system.

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ROTATIONAL CROP RESTRICTIONS

The following rotational crops may be planted after applying REFLEX 2LC at recommended rates in soybeans:

<u>Crop To Be Planted</u>	<u>Minimum Rotation Interval (Months After Last REFLEX 2LC Application)</u>
Small grains such as wheat, barley, rye	4
Alfalfa, beans & peas, corn, cotton, peanuts, rice, sorghum	10
To avoid crop injury do not plant sunflowers, sugar beets, 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 soybeans can be replanted.

REFLEX 2LC REGIONAL USE MAP

REFLEX-2LC IN SOYBEANS - USE RATES AND WEEDS CONTROLLED

REGION 1

REFER TO MAP FOR DEFINITION OF SPECIFIED GEOGRAPHIC REGIONS

Region 1 - Includes the following states or portion of states where REFLEX 2LC herbicide may be applied: Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, North Carolina, Oklahoma (east of U.S. Highway 75 and east of Indian Nation Parkway), South Carolina, Tennessee, and Texas (counties east of U.S. Highway 75 and Interstate 45, additional counties of Austin, Brazoria, Calhoun, Colorado, Fort Bend, Harris, Jackson, Matagorda, Victoria, Waller and Wharton).

Application Rates for Weed Growth Stages

REGION 1	REFLEX 2LC RATE (PTS/ACRE) ^a	
	Maximum Growth Stage Controlled At	
Weeds Controlled ^b	1 Pt/Acre # of Leaves	1½ Pt/Acre # of Leaves
Amaranth, Palmer	4	6
Amaranth, Spiny	2	4
Anoda, Spurred	--	2
Carpetweed	6" Diameter Size	Unlimited Size
Citron (Wild Watermelon)	2	4
Cocklebur, Common ^c	2	4
Copperleaf, Hophornbeam	2	4
Copperleaf, Virginia	2	4
Crotalaria, Showy	4	6
Croton, Tropic	2	4
Cucumber, Volunteer	4	6
Eclipta	2	4
Jimsonweed	4	8
Ladysthumb	2	4
Lambsquarters, Common	2 Suppression Only	2 Suppression Only
Mexicanweed	2 Suppression Only	2
Morningglory		

REGION 1	REFLEX 2LC RATE (PTS/ACRE) ^a	
	Maximum Growth Stage Controlled At	
Weeds Controlled ^b	1 Pt/Acre # of Leaves	1½ Pt/Acre # of Leaves
Cypressvine	4	6
Entireleaf var. <i>integriscula</i>	2	4
Ivyleaf var. <i>hederacea</i>	2	4
Purple Moonflower	2	4
Scarlet	2	4
Smallflower	2	4
Smallwhite (pitted)	4	4
Tall (Common)	2	3
Willowleaf (Palmleaf)	2	4
Mustard, Wild	4	8
Nightshade, Black	4	4
Nutsedge, Yellow	--	Suppression Only
Figweed, Redroot	4	6
Pigweed, Smooth	4	6
Poinsettia, Wild	--	3
Purslane, Common	Multi-Leaf 6" Diameter	Multi-Leaf 8" Diameter
Pusley, Florida	--	2
Ragweed, Common	4	6
Ragweed, Giant	--	4
Redweed	--	3 Suppression Only
Sesbania, Hemp	6	12
Sicklepod	--	Suppression Only Cotyledon
Sida, Prickly	--	Suppression Only Cotyledon
Smartweed, Pennsylvania	4	6
Smellmelon		2

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REGION 1	REFLEX 2LC RATE (PTS/ACRE) ^a	
	Maximum Growth Stage Controlled At	
Weeds Controlled ^b	1 Pt/Acre # of Leaves	1½ Pt/Acre # of Leaves
Spurge, Prostrate	--	Suppression Only 1" Diameter
Spurge, Spotted	--	2 Suppression Only
Starbur, Bristly	2	4
Velvetleaf	--	2 Suppression Only
Venice Mallow	4	6
Waterhemp, Tall	2	4
Witchweed	Multi-leaf Up to 7"	Multi-leaf Up to 10"
Yellow Rocket	4	6

^a It is necessary to use 0.25 - 0.5% nonionic surfactant or 0.5-1% crop oil concentrate.

^b Scientific names for weeds are listed in the Appendix (page 23).

^c Do not apply REFLEX 2LC to cotyledon stage.

REFLEX 2LC IN SOYBEANS - USE RATES AND WEEDS CONTROLLED

REGION 2

REFER TO MAP FOR DEFINITION OF SPECIFIED GEOGRAPHIC REGIONS

Region 2 - Includes the following states or portion of states where REFLEX 2LC herbicide may be applied: Connecticut, Delaware, Indiana, Illinois, Iowa, Kansas (all counties east of U.S. Highway 75), Kentucky, Maine, Maryland, Massachusetts, Michigan (excluding the upper peninsula), Minnesota (all counties south of Highway 212), Missouri, Nebraska (all counties east of U.S. Highway 81), New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Vermont, Virginia, West Virginia and Wisconsin.

Application Rates for Weed Growth Stages

REGION 2 ^a	REFLEX 2LC RATE (PTS/ACRE) ^b
Weeds Controlled ^c	Maximum Growth Stage At 1½ Pt/Acre (No. of Leaves)
Amaranth, Palmer	4
Amaranth, Spiny	2
Carpetweed	Multi-leaf 6" Diameter
Cocklebur, Common ^d	2
Crotalaria, Showy	4
Croton, Tropic	2
Cucumber, Volunteer	4
Jimsonweed	4
Ladysthumb	2
Lambsquarters, Common	2 Suppression Only
Morningglory	
Cypressvine	4
Entireleaf var. <i>integriuscula</i>	2
Ivyleaf var. <i>hederacea</i>	2
Purple Moonflower	2

REGION 2 ^a	REFLEX 2LC RATE (PTS/ACRE) ^b
Weeds Controlled ^c	Maximum Growth Stage At 1½ Pt/Acre (No. of Leaves)
Scarlet	2
Smallflower	2
Smallwhite (pitted)	2
Tall (Common)	2
Mustard, Wild	4
Nightshade, Black	4
Pigweed, Redroot	4
Pigweed, Smooth	4
Purslane, Common	Multi-leaf 6" Diameter
Ragweed, Common	4
Sesbania, Hemp	6
Smartweed, Pennsylvania	4
Starbur, Bristly	2
Venice Mallow	4
Waterhemp, Tall	2
Yellow Rocket	4

^a Do not apply REFLEX 2LC to any field in Region 2 more than once every two years.

^b It is necessary to use 0.25 - 0.5% nonionic surfactant or 0.5-1% crop oil concentrate.

^c Scientific names for weeds are listed in the Appendix (Page 23).

^d Do not apply to cotyledon stage.

**SPECIAL USE DIRECTIONS
FOR ADDITIONAL WEED PROBLEMS IN SOYBEANS**

Suppression of Annual Grasses:

The grasses listed below may be suppressed by applications of REFLEX 2LC at 1-1½ pints/acre. Consult Use Rate Table for maximum rate in each region. For full-season broad-spectrum annual grass control, FUSILADE® 2000 herbicide should be used alone or in tankmix with REFLEX 2LC. Consult tankmix section.

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

Suppression of Perennial Weeds:

Use of REFLEX 2LC at rates of 1 to 1½ pints/acre 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 2LC 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

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TANKMIX AND SEQUENTIAL APPLICATIONS FOR SOYBEANS

SEE TABLES FOR TANKMIX APPLICATION RATES.

Fill the spray tank with half the amount of required water and add the recommended amounts of REFLEX 2LC, the selected tankmix herbicide, and proper rate of approved adjuvant while the agitator is running and then add the remaining quantity of water. Allow the spray mixture to agitate and recycle 5-10 minutes before application.

NOTE: Tankmix applications can result in increases in crop injury as compared to either product used alone.

It is recommended that tank mixes should be applied in a minimum of 20 gallons per acre with spray pressures of 40 to 60 PSI at the nozzle tip. When foliage is dense, use 60 to 80 PSI and 20 to 50 gallons per acre to ensure coverage of weed foliage.

USE OF REFLEX 2LC WITH FUSILADE 2000 - SOYBEANS ONLY

REFLEX 2LC herbicide and FUSILADE 2000 herbicide may be used together in a postemergence program for broad-spectrum weed control in soybeans.

REFLEX 2LC and FUSILADE 2000 may be applied sequentially or in a tankmix. The growth stage of weeds at the time of application will determine which application will provide the most satisfactory results.

Both REFLEX 2LC and FUSILADE 2000 should be applied to actively growing weeds. Do not apply either herbicide if weeds appear stressed due to unfavorable temperatures, drought and/or low soil fertility. Do not apply REFLEX 2LC or FUSILADE 2000 if soybeans show injury from prior herbicide applications.

METHOD 1:

Sequential Application

FUSILADE 2000 Followed by REFLEX 2LC

(Annual and/or perennial grass weeds at proper growth stage for treatment, prior to broadleaf weed treatment.)

Apply FUSILADE 2000 with an approved adjuvant to annual and/or perennial grass weeds at the recommended rate and growth stage listed in the Application Directions Section.

FUSILADE 2000 is a systemic herbicide; therefore, when treating annual grasses, allow at least 3 days, and when treating perennial grasses, allow at least 5 days, to elapse prior to a REFLEX 2LC herbicide application. This will enable FUSILADE 2000 to be adequately translocated to the meristematic regions of the plant.

After the appropriate time interval has elapsed, apply REFLEX 2LC with an approved adjuvant at the recommended rate and growth stage listed in the Applications Direction Section.

METHOD 2:

Sequential Application
REFLEX 2LC Followed by FUSILADE 2000

(Broadleaf weeds at proper growth stage for treatment, prior to annual and/or perennial grass weed treatment.)

Apply REFLEX 2LC with an approved adjuvant to susceptible broadleaf weeds at the recommended rate and growth stage.

A sequential application of FUSILADE 2000 may be applied following a REFLEX 2LC application when grasses resume active growth with the development of a new leaf. Follow the recommended rates and growth stages listed in the Application Directions Section.

METHOD 3:

Tankmix Applications
REFLEX 2LC And FUSILADE 2000

(Annual grasses and broadleaf weeds are at the proper stage of growth for treatment, as per the respective labels.)

A tankmix of REFLEX 2LC and FUSILADE 2000 may be applied at the recommended rates and growth stages to susceptible annual grass and broadleaf weed species in a manner consistent with respective labels.

Use a nonionic surfactant or crop oil concentrate in the tankmix. Follow water volume and spray pressure recommendations as per the REFLEX 2LC herbicide label.

Tankmix applications have sometimes resulted in reduced grass control compared to FUSILADE 2000 used alone. If grass regrowth occurs following an application of the tankmix or an additional flush of grasses emerges, make a second application of FUSILADE 2000 to actively growing weeds. Refer to the Application Direction Section of the FUSILADE 2000 herbicide label. When perennial grasses are the predominant grass to be controlled, a tankmix is not recommended. Follow the directions for sequential applications of REFLEX 2LC and FUSILADE 2000 listed above.

SEE SOYBEAN TANKMIX USE PRECAUTIONS SECTION FOR ADDITIONAL INFORMATION.

USE OF REFLEX 2LC WITH BASAGRAN[®] 4E HERBICIDE - SOYBEANS ONLY

REFLEX 2LC and Basagran 4E are selective postemergence herbicides which may be applied in a tankmix for improved postemergence control of troublesome annual broadleaf weeds in soybeans such as prickly sida and velvetleaf. These weeds will be controlled in addition to weeds listed in the REFLEX 2LC herbicide Rate Tables.

The tankmix should be applied to actively growing weeds. Refer to the REFLEX 2LC and Basagran labels for defined environmental conditions that promote active growth.

SEE SOYBEAN TANKMIX USE PRECAUTIONS SECTION FOR ADDITIONAL INFORMATION.

USE OF REFLEX 2LC WITH FUSILADE 2000 + BASAGRAN 4E - SOYBEANS ONLY

REFLEX 2LC herbicide, FUSILADE 2000 herbicide and Basagran 4E herbicide may be used together in a tankmix as a postemergence program for broad spectrum weed control in soybeans. The tankmix should be applied at the recommended rates and growth stages to susceptible annual grass and broadleaf weed species in a manner consistent with respective labels.

The REFLEX 2LC/FUSILADE 2000/Basagran 4E tankmix should be applied to actively growing weeds. Do not apply this tankmix if weeds are stressed due to unfavorable temperatures, drought and/or low soil fertility. Do not apply the REFLEX 2LC/FUSILADE 2000/Basagran 4E tankmix if soybeans show injury from prior herbicide applications.

Use a nonionic surfactant or crop oil concentrate. Apply in a minimum of 15 gallons per acre of spray mixture with spray pressures of 40-60 PSI at the nozzle tip.

SEE SOYBEAN TANKMIX USE PRECAUTIONS SECTION FOR ADDITIONAL INFORMATION.

USE OF REFLEX 2LC WITH BUTYRAC[®] 200 HERBICIDE - SOYBEANS ONLY

REFLEX 2LC herbicide and Butyrac 200 herbicide may be applied in a tankmix for improved postemergence control of annual morningglory species (Entireleaf, Ivyleaf and Tall), giant ragweed and cocklebur in soybeans.

The tankmix should be applied to actively growing weeds before they exceed the growth stages described on the REFLEX 2LC herbicide label. The most consistent control is obtained when applications are made to actively growing seedlings under conditions of high soil moisture and high humidity. The most restrictive labeling of either product used applies in tank mixtures.

SEE SOYBEAN TANKMIX USE PRECAUTIONS SECTION FOR ADDITIONAL INFORMATION.

USE OF REFLEX 2LC WITH CLASSIC[®] HERBICIDE - SOYBEANS ONLY

REFLEX 2LC herbicide and Classic herbicide may be applied in a tankmix (for improved postemergence control of cocklebur in Region 2, and yellow nutsedge in soybeans).

REFLEX 2LC and Classic are selective postemergence herbicides which control annual broadleaf weeds. The tankmix should be applied to actively growing weeds. Refer to the REFLEX 2LC and Classic labels for defined environmental conditions that promote active growth. Do not apply either herbicide if weeds appear stressed due to unfavorable temperatures, drought, water saturated soil, and/or low soil fertility. Do not apply the REFLEX 2LC and Classic tankmix if soybeans show injury from disease, insect damage, nutrient deficiency, or prior herbicide applications.

The REFLEX 2LC and Classic tankmix may be applied by ground application only to susceptible annual broadleaf weeds at the recommended rates and growth stages in a manner consistent with respective labels. The most restrictive labeling of either product used applies in tank mixtures.

Use only a nonionic surfactant in the tankmix at the rate of 0.25% (1/2 pint per 25 gallons) of the finished spray volume to improve wetting and/or contact activity.

SEE SOYBEAN TANKMIX USE PRECAUTIONS SECTION FOR ADDITIONAL INFORMATION.

USE OF REFLEX 2LC WITH PINNACLE® HERBICIDE - SOYBEANS ONLY

REFLEX 2LC herbicide and Pinnacle herbicide may be applied in a tankmix for improved control of black nightshade and lambsquarters. The tankmix should be applied to actively growing weeds. Refer to the REFLEX 2LC and Pinnacle labels for defined environmental conditions that promote active growth. Do not apply the tankmix if weeds appear stressed due to unfavorable temperatures, drought, water saturated soil, and/or low soil fertility. Do not apply the REFLEX 2LC and Pinnacle tankmix if soybeans show injury from disease, insect damage, nutrient deficiency or prior herbicide applications. The REFLEX 2LC and Pinnacle tankmix may be applied by ground application only to susceptible annual broadleaf weeds at the recommended rates and growth stages in a manner consistent with respective labels. The most restrictive label of either product applies in tank mixtures.

Use only a nonionic surfactant in the tankmix at the rate of 0.25% (1/2 pt. per 25 gal.).

SEE SOYBEAN TANKMIX USE PRECAUTIONS SECTION FOR ADDITIONAL INFORMATION.

USE OF REFLEX 2LC WITH SCEPTER® HERBICIDE - SOYBEANS ONLY

REFLEX 2LC herbicide and Scepter herbicide may be applied in a tankmix (for improved postemergence control of cocklebur in Region 2).

REFLEX 2LC and Scepter are selective postemergence herbicides which control annual broadleaf weeds. The tankmix should be applied to actively growing weeds. Refer to the REFLEX 2LC and Scepter labels for defined environmental conditions that promote active growth. Do not apply either herbicide if weeds appear stressed due to unfavorable temperatures, drought, or low soil fertility. Do not apply the REFLEX 2LC and Scepter tankmix if soybeans show injury from disease, insect damage, nutrient deficiency, or prior herbicide applications.

The REFLEX 2LC and Scepter tankmix may be applied by ground application only to susceptible annual broadleaf weeds at the recommended rates and growth stages in a manner consistent with respective labels. The most restrictive labeling of either product used applies in tank mixtures.

SEE SOYBEAN TANKMIX USE PRECAUTIONS SECTION FOR ADDITIONAL INFORMATION.

TABLE 1
SOYBEAN HERBICIDE TANK MIX APPLICATION RATE TABLE¹

TANK MIX COMBINATION	REFLEX 2LC PTS/A	FUSILADE 2000 FL. OZ./A	BASAGRAN PTS/A	BUTYRAC 200 OZ./A	CLASSIC OZ./A	PINNACLE OZ./A	SCEPTER PTS/A	NONIONIC SURFACTANT CROP OIL CONCENTRATE
REFLEX 2LC + FUSILADE 2000	3/4-1½	24						0.5-1% COC 0.25-0.5% NIS
REFLEX 2LC + BASAGRAN	3/4-1½		1-2					COC 1 QVA
REFLEX 2LC + FUSILADE 2000 + BASAGRAN	1-1½	24	1-2					0.5-1% COC 0.25-0.5% NIS
REFLEX 2LC + BUTYRAC 200	1-1½			2-3				0.5-1% COC 0.25% NIS
REFLEX 2LC + CLASSIC	3/4-1½				1/2-3/4			0.25% NIS
REFLEX 2LC + PINNACLE	3/4-1½					1/4		0.25% NIS
REFLEX 2LC + SCEPTER	3/4-1½						1/3-2/3	0.5-1% COC 0.25-1% NIS

¹ Follow the recommended rate and growth stages for the grass and broadleaf weeds on the respective labels.

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SOYBEAN TANKMIX USE PRECAUTIONS

- Always read and follow the restrictions and limitations for all products whether used alone or in a tankmix. The most restrictive labeling of any product used applies in tank mixtures.
- Do not apply tank mixes if rain is threatening. FUSILADE 2000 requires a 1-hour rain-free period, Basagran requires an 8-hour rain-free period; and Classic requires a 4-hour rain-free period.
- Do not apply a total of more than 64 oz. of FUSILADE 2000 herbicide to soybeans.
- Make the last FUSILADE 2000 herbicide application to soybeans before bloom.
- Do not apply a total of more than 2 quarts of Basagran herbicide per acre in one season to soybeans.
- Do not apply a total of more than 1½ oz. of Classic herbicide per acre in one season to soybeans.
- Do not apply Classic herbicide before crop emergence or later than 60 days before soybean maturity.
- Do not apply a total of more than 1-1/3 pints of Scepter herbicide per acre in one season to soybeans.
- There must be an interval of at least 90 days between the last Scepter application and soybean harvest.
- Do not apply Butyrac 200 herbicide within 60 days of soybean harvest.
- In the case of crop failure, only soybeans may be immediately replanted following use of Basagran 4E, REFLEX 2LC, Scepter and Classic.
- Do not make more than one application of the REFLEX 2LC/Basagran 4E, REFLEX 2LC/FUSILADE 2000, REFLEX 2LC/FUSILADE 2000/Basagran 4E, REFLEX 2LC/Butyrac 200, REFLEX 2LC/Scepter, and REFLEX 2LC/Classic tankmix in a single season.
- Butyrac 200 herbicide may form a precipitate when diluted in very hard water. Refer to Butyrac 200 directions for testing compatibility at proposed dilution rates.
- Do not make tankmix applications of any of these herbicides if the weeds appear stressed due to unfavorable temperatures, drought, and/or low soil fertility.

APPENDIX

Scientific names are listed for those weeds referred to in the REFLEX 2LC label.

COMMON NAME	SCIENTIFIC NAME
Amaranth, Palmer	<i>Amaranthus palmeri</i>
Amaranth, Spiny	<i>Amaranthus spinosus</i>
Anoda, Spurred	<i>Anoda cristata</i>
Barnyardgrass	<i>Echinochloa crus-galli</i>
Broadleaf Signalgrass	<i>Brachiaria platyphylla</i>
Carpetweed	<i>Mollugo verticillata</i>
Citron (Wild Watermelon)	<i>Citrullus vulgaris</i>
Cocklebur, Common	<i>Xanthium pennsylvanicum</i>
Copperleaf, Hophornbeam	<i>Acalypha ostryaefolia</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 lutescens</i>
Goosegrass	<i>Eleusine indica</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 castanaefolia</i>
Morningglory, Cypressvine	<i>Ipomoea quamoclit</i>
Entireleaf var. <i>integriscula</i>	<i>Ipomoea hederacea</i>
Ivyleaf var. <i>hederacea</i>	<i>Ipomoea hederacea</i>
Purple Moonflower	<i>Ipomoea turbinata</i>
Scarlet	<i>Ipomoea coccinea</i>

COMMON NAME	SCIENTIFIC NAME
Smallflower	<i>Jacquemontia tamnifolia</i>
Smallwhite (pitted)	<i>Ipomoea lacunosa</i>
Tall (Common)	<i>Ipomoea purpurea</i>
Willowleaf (Palmleaf)	<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 supina</i>
Spurge, Spotted	<i>Euphorbia maculata</i>
Starbur, Bristly	<i>Acanthospermum hispidum</i>
Velvetleaf	<i>Abutilon theophrasti</i>
Venice Mallow	<i>Hibiscus trionum</i>
Waterhemp, Tall	<i>Amaranthus tuberculatos</i>
Witchweed	<i>Striga asiatica</i>
Yellow Rocket	<i>Barbarea vulgaris</i>

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