

PM

23

10182-418

1/11/99

Page 1 of 19

Page 1 of 19  
FLEXSTAR Booklet  
FLHL418B.RSJ 12/01/98

**FLEXSTAR®**

For Control of Weeds in Soybeans

**COMPLETE DIRECTIONS FOR USE****KEEP OUT OF REACH OF CHILDREN****WARNING - AVISO**

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 ..... 22.1%\*

**INERT INGREDIENTS** ..... 77.9%**TOTAL** ..... 100.0%

\*Equivalent to 21.0% fomesafen or 1.88 pound fomesafen active ingredient per gallon.

EPA Reg. No. 10182-418

Made in U.S.A.  
ZENECA Ag Products  
ZENECA Inc.  
Wilmington, DE 19850-5458

**ACCEPTED**

JAN 11 1999

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act,  
as amended, for the pesticide  
registered under  
EPA Reg. No. 10182-418

**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.**

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.

## TABLE OF CONTENTS

	Page
STATEMENT OF PRACTICAL TREATMENT	
PRECAUTIONARY STATEMENTS	
HAZARDS TO HUMANS AND DOMESTIC ANIMALS	
PERSONAL PROTECTIVE EQUIPMENT	
ENVIRONMENTAL HAZARDS	
DIRECTIONS FOR USE	
AGRICULTURAL USE REQUIREMENTS	
STORAGE AND DISPOSAL	
GENERAL INFORMATION	
APPLICATION DIRECTIONS	
Timing	
Spray Additives	
Ground Application	
Band Applications	
Aerial Application	
Cultivation	
GENERAL USE PRECAUTIONS	
FLEXSTAR IN SOYBEANS - USE RATES AND WEEDS CONTROLLED	
REGIONAL USE MAP	
Application Rates for Weed Growth Stages	
SPECIAL USE DIRECTIONS FOR ADDITIONAL WEED PROBLEMS	
TANKMIX AND SEQUENTIAL APPLICATIONS FOR SOYBEANS	
APPENDIX	

### STATEMENT OF PRACTICAL TREATMENT

**IF SWALLOWED:** Call a physician or Poison Control Center. 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.

**IF ON SKIN:** Wash with plenty of soap and water. Get medical attention.

**IF INHALED:** Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth to mouth. Get medical attention.

**IF IN EYES:** Flush with plenty of water. Call a physician if irritation persists.

**NOTE TO PHYSICIANS:** Probable mucosal damage may contraindicate the use of gastric lavage.

---

**FOR 24-HOUR EMERGENCY MEDICAL ASSISTANCE, CALL 1-800-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

#### WARNING

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.

**CAUSES EYE AND SKIN IRRITATION. HARMFUL IF SWALLOWED, INHALED OR ABSORBED THROUGH SKIN.** Do not get on skin or on clothing. Avoid breathing vapor or spray mist. Avoid contact with eyes. Prolonged or repeated skin contact may cause allergic reactions in some individuals. **WASH THOROUGHLY WITH SOAP AND WATER AFTER HANDLING.**

#### PERSONAL PROTECTIVE EQUIPMENT

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category E on an EPA chemical resistance category selection chart.

Applicators and other handlers must wear:

- Coveralls over short-sleeved shirt and short pants.
- Chemical-resistant gloves such as Barrier Laminate, Nitrile Rubber, Neoprene Rubber, or Viton.
- Chemical resistant footwear plus socks.
- Chemical resistant apron when cleaning equipment, mixing or loading.

---

#### User Safety Recommendations

Users should:

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

#### ENVIRONMENTAL HAZARDS

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

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

## 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 over short-sleeved shirt and short pants.
  - Chemical-resistant gloves such as Barrier Laminate, Nitrile Rubber, Neoprene Rubber, or Viton.
  - Chemical resistant footwear plus socks.
- 

---

## 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 50°F in original containers only. If product solidifies, 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, or 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 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 FLEXSTAR®.** The contents of this container cannot be completely removed by cleaning. Refilling with materials other than FLEXSTAR 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.

FLEXSTAR is a selective herbicide which may be applied preplant, preemergence and/or postemergence for control and suppression of broadleaf weeds, grasses and sedges in soybeans. Soybean plants are tolerant to FLEXSTAR when applied according to labeled rates and uses.

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

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

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

## APPLICATION DIRECTIONS

**TIMING:** Best broadspectrum postemergence control of susceptible broadleaf weeds is obtained when FLEXSTAR is applied early to actively growing weeds. This usually occurs 14 to 28 days after planting. Refer to the weed tables for specific recommendations on weed growth stages, rates, and regions.

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

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

**For Postemergence Applications Always Add One of the Following: except in tankmix with products prohibiting spray additives - (See Tankmix Directions for Use).**

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

**Crop Oil Concentrate (COC)** - Use a nonphytotoxic COC or a once refined vegetable oil concentrate (VOC, MSO) containing 15-20% approved emulsifier at 0.5-1% (1-2 pints per 25 gallons) of 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 FLEXSTAR on the target crop through proven field trials and through university and extension recommendations.

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

### Recommended Mixing Order:

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

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

**GROUND APPLICATION:** Use sufficient spray volume and pressure to ensure complete coverage of the target. A minimum spray volume of 15 gallons per acre and 30-60 psi at the nozzle tip is recommended. On large weeds and/or dense foliage, use 60 psi and a minimum of 20 gallons per acre to ensure coverage of weed foliage.

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

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

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

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

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

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

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

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

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

#### GENERAL USE PRECAUTIONS

- A maximum of 1.6 pints of FLEXSTAR (or a maximum of 0.375 lb ai/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 1.6 pints of FLEXSTAR (or a maximum of 0.375 lb ai/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 1.3 pints of FLEXSTAR (or a maximum of 0.313 lb ai/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 pint of FLEXSTAR (or a maximum of 0.25 lb ai/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 pint of FLEXSTAR (or a maximum of 0.1875 lb ai/A of fomesafen from any product containing fomesafen) may be applied per acre in alternate years in Region 5 (see Regional Use Map).
- Apply FLEXSTAR before soybeans bloom.
- Thoroughly clean the spray system with water and a commercial tank cleaner before and after each use.
- Tankmixes of FLEXSTAR with other pesticides, fertilizers or any other additives except as specified on this label or other approved ZENECA supplemental labels may result in tankmix incompatibility, unsatisfactory performance and/or unsatisfactory crop injury.
- FLEXSTAR requires a 1-hour rain-free period for best results when applied postemergence.
- Apply postemergence to actively growing weeds. Avoid applying FLEXSTAR to weeds or soybeans which are under stress from moisture, temperature, low soil fertility, mechanical or chemical injury, as reduced weed control and/or increased crop injury may result.
- Avoid overlapping spray swaths, as injury may occur to rotational crops.
- Avoid drift to all other crops and nontarget areas. Crops other than soybeans may be severely injured by drift. 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. Avoiding spray drift at the application site is the responsibility of the applicator.
- Applications should not occur during 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.
- To provide adequate coverage, it is recommended that ground speed not exceed 10 MPH during application.
- Do not graze treated areas or harvest for forage or hay.

ROTATIONAL CROP RESTRICTIONS

The following rotational crops may be planted after applying FLEXSTAR at recommended rates in soybeans:

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

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

\* 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.

## **FLEXSTAR IN SOYBEANS - USE RATES AND WEEDS CONTROLLED**

### **REFER TO MAP FOR DEFINITION OF SPECIFIED GEOGRAPHIC REGIONS**

#### **REGION 1**

**(Maximum Rate 1.6 pints per acre per year)**

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

**(Insert Region 1 Use Map Here)**

#### **REGION 2**

**(Maximum Rate 1.6 pints per acre, alternate years)**

**REGION 2** - Includes the following states or portion of states where FLEXSTAR may be applied: Delaware, Kentucky, Maryland, Virginia and West Virginia. South of Interstate 70 in the following states: Illinois, Indiana and Ohio and in Pennsylvania (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).

**(Insert Region 2 Use Map Here)**

#### **REGION 3**

**(Maximum Rate 1.3 pints per acre, alternate years)**

**REGION 3** - Includes the following states or portion of states where FLEXSTAR 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, Wisconsin (South of U.S. Highway 18 between Prairie Du Chien and Madison, and South of Interstate 94 between Madison and Milwaukee) and North of Interstate 70 in the following states: Illinois, Indiana and Ohio.

**(Insert Region 3 Use Map Here)**

#### **REGION 4**

**(Maximum Rate 1 pint per acre, alternate years)**

**REGION 4** - Includes the following states or portion of states where FLEXSTAR may be applied: Kansas (all areas counties east of or intersected by U.S. Highway 75 281), Michigan (all areas south of State Road 55), Minnesota (all areas South of Interstate 94), Minnesota (all areas south of U.S. Highway 212), Nebraska (all areas counties east of or intersected by U.S. Highway 81 281), and Wisconsin (North of U.S. Highway 18 between Prairie Du Chien and Madison, and South of Interstate 94 from Hudson to Madison All areas except those in Region 3, South of Interstate 94 from Minnesota state line to Eau Clair and South of US Highway 29 from Eau Clair to Green Bay plus Door and Kewaunee counties. The following counties are excluded: Clark, Jackson, Marathon, Wood, Portage, Adams, Juneau, Shawano, Waupaca, Waushara and Marquette). North Dakota (all areas East of Interstate 29 from Fargo South to the South Dakota

state line), South Dakota (all areas East of Interstate 29 from the North Dakota state line to Watertown, all areas east of Highway 81 from Watertown to Madison and all areas East and South of State Road 34 and US Highway 281 to the Nebraska state line).

(Insert Region 4 Use Map Here)

### REGION 5

(Maximum Rate 0.75 pint per acre, alternate years)

REGION 5 - Includes the following states or portion of states where FLEXSTAR may be applied: North Dakota (all areas East of Interstate 29 from Fargo South to the South Dakota State line U.S. Highway 281 except those areas in Region 4), South Dakota (all areas East of Interstate 29 from North Dakota State line to Watertown, all areas East of U.S. 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 U.S. Highway 281 except those areas in Region 4) and Minnesota (all areas North of U.S. Highway 212 and South of Interstate 94 South of U.S. Highway 2 except those areas in Region 4).

(Insert Region 5 Use Map Here)

### APPLICATION RATES FOR WEED GROWTH STAGES

Weed	FLEXSTAR Rate (Pts/A)			
	Maximum Growth Stage Controlled At			
	3/4 P/A # of True Leaves	1 Pts/A # of True Leaves	1.25 Pts/A # of True Leaves	1.5 Pts/A # of True Leaves
Anoda, Spurred	--	2*	2	4
Balloonvine	--	--	2	4
Carpeweed	--	8" Diameter Size	Unlimited Size	Unlimited Size
Citron (Wild Watermelon)	--	2	4	4
Cocklebur, Common	2	4	6	8
Copperleaf, Hophornbeam	--	4	4	6
Copperleaf, Virginia	--	4	4	6
Crotalaria, Showy	--	6	6	8
Croton, Tropic	--	4	4	6
Cucumber, Volunteer	--	4	6	8
Eclipta	--	2	4	4
Groundcherry, Cutleaf	--	4	6	8
Hemp	--	4	6	6
Horsenettle	--	2*	4*	4*
Jimsonweed	4	6	8	8
Ladysthumb	2*	2	4	6

Weed	FLEXSTAR Rate (Pts/A)			
	Maximum Growth Stage Controlled At			
	3/4 Pt/A # of True Leaves	1 Pts/A # of True Leaves	1.25 Pts/A # of True Leaves	1.5 Pts/A # of True Leaves
Lambsquarters, Common	2*	2*	2*	2*
Mexicanweed	--	2*	2	4
Morningglory				
Cypressvine	2	4	6	6
Entireleaf var.	3*	3	4	5
Ivyleaf	3*	3	4	5
Purple Moonflower	3*	3	5	6
Red (Scarlet)	3*	3	6	6
Smallflower	3*	3	4	6
Pitted (Smallwhite)	4*	4	6	6
Tall (Common)	2*	2	3	5
Palmleaf (Willowleaf)	3*	3	6	6
Mustard, Wild	4	6	8	8
Nightshade, Black	2	4	6	6
Nutsedge, Yellow	--	--	*	*
Pigweed, spp.				
Amaranth, Palmer	2	4	6	6
Amaranth, Spiny	2	2	4	6
Redroot	2	4	6	8
Smooth	2	4	6	6
Waterhemp, Common	2*	2	4	6
Waterhemp, Tall	2*	2	4	6
Poinsettia, Wild	--	2	4	6
Purslane, Common	--	Multi-Leaf 6" Diameter	Multi-Leaf 8" Diameter	Multi-Leaf 8" Diameter
Pusley, Florida	--	2	2	4
Ragweed, Common	4*	4	6	8
Ragweed, Giant	4*	4	6	8
Redweed	--	--	2*	3*
Sesbania, Hemp	--	8	12	12

Weed	FLEXSTAR Rate (Pts/A)			
	Maximum Growth Stage Controlled At			
	3/4 Pt/A # of True Leaves	1 Pts/A # of True Leaves	1.25 Pts/A # of True Leaves	1.5 Pts/A # of True Leaves
Sicklepod	--	--	Cotyledon*	Cotyledon*
Sida, Prickly	--	2*	2	4
Smartweed, Pennsylvania	4*	4	6	6
Smellmelon	--	2	2	4
Spurge, Prostrate	--	--	1" Diameter*	2" Diameter*
Spurge, Spotted	--	--	2*	2*
Starbur, Bristly	--	4	4	6
Sunflower, Common	--	--	2	4
Velvetleaf	--	--	4	4
Venice Mallow	4	6	6	8
Witchweed	--	Multi-leaf Up to 7"	Multi-leaf Up to 10"	Multi-leaf Up to 10"
Yellow Rocket	4	4	6	8

\*Suppression Only

## **SPECIAL USE DIRECTIONS FOR ADDITIONAL WEED PROBLEMS**

### **Suppression of Annual Grasses:**

The grasses listed below may be suppressed by postemergence applications and controlled or suppressed by preemergence applications of FLEXSTAR at 1-1.5 pints/acre. Consult Use Rate Table for maximum rate in each region. For full-season broad-spectrum annual grass control, FUSILADE® DX or FUSION® herbicide should be used alone or in tankmix with FLEXSTAR. Consult tankmix section.

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

### **Suppression of Perennial Weeds:**

Use of FLEXSTAR at postemergence rates of 1-1.5 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 FLEXSTAR and crop competition can suppress perennial weeds for a growing season, the rootstocks will continue to live and reestablishment will occur in subsequent years.

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

## **TANKMIX AND SEQUENTIAL APPLICATIONS FOR SOYBEANS**

FLEXSTAR can be used sequentially or in tankmix with one or more of the following products: FUSILADE® DX, FUSION®, GRAMOXONE® EXTRA, TOUCHDOWN®, Assure II®, Basagran®, Butyrac®, Classic®, Concert®, FirstRate®, Poast®, Poast Plus®, Pursuit®, Option® II, Pinnacle®, Raptor®, Reliance™ STS® SP, Resource®, Roundup®, Roundup® Ultra, Scepter®, Select®, and Synchrony® STS®.

Under certain conditions, the mixture of FLEXSTAR with one or more of the above mentioned broadleaf herbicides may cause a reduction in activity of any postemergence grass herbicide in the mixture.

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

- Tankmix applications can result in increased crop injury as compared to either product used alone.
- Do not exceed 1 fluid ounce of Butyrac per acre in mixture with FLEXSTAR.
- Always read and follow the recommendations, restrictions and limitations for all products whether used alone, sequentially or in a tankmix. The most restrictive labelling of any product used applies.

# **SPECIAL USE DIRECTIONS FOR TANKMIX WITH ROUNDUP ULTRA FOR USE ON ROUNDUP READY SOYBEANS**

FLEXSTAR at ~~4-8~~ 6-12 ounces per acre, can be tankmixed with Roundup Ultra, at 1.5-2 pints per acre, for improved postemergence control in Roundup Ready Soybeans of many weeds such as morning-glory spp., hemp sesbania and black nightshade which are known to have tolerance to Roundup Ultra, but are susceptible to FLEXSTAR.

FOLLOW THE RECOMMENDATIONS ON THE ROUNDUP ULTRA LABEL FOR THE USE OF SPRAY ADDITIVES IN THIS TANKMIX. Roundup Ultra does not allow the addition of surfactants, additives containing surfactants, buffering agents or pH adjusting agents. Ammonium sulfate may be used.

Apply FLEXSTAR tankmix before bloom. Do not allow this tankmix to be applied or 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 tankmix 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.

## **APPENDIX**

Scientific names are listed for those weeds referred to in the FLEXSTAR 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>Bracharia 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>

COMMON NAME	SCIENTIFIC NAME
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>
Morningglory, Cypressvine	<i>Ipomoea quamoclit</i>
Entireleaf	<i>Ipomoea hederacea</i> var. <i>integruscula</i>
Ivyleaf	<i>Ipomoea hederacea</i> var. <i>hederacea</i>
Purple Moonflower	<i>Ipomoea turbinata</i>
Red (Scarlet)	<i>Ipomoea coccinea</i>
Smallflower	<i>Jacquemontia tamnifolia</i>
Pitted (Smallwhite)	<i>Ipomoea lacunosa</i>
Tall (Common)	<i>Ipomoea purpurea</i>
Palmleaf (Willowleaf)	<i>Ipomoea wrightii</i>
Mustard, Wild	<i>Brassica kaber</i>
Nightshade, Black	<i>Solanum nigrum</i>
Nutsedge, Yellow	<i>Cyperus esculentus</i>
Panicum, Fall	<i>Panicum dichotomiflorum</i>
Panicum, Texas	<i>Panicum texanum</i>
Pigweed, Redroot	<i>Amaranthus retroflexus</i>
Pigweed, Smooth	<i>Amaranthus hybridus</i>

COMMON NAME	SCIENTIFIC NAME
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 pensylvanicum</i>
Smellmelon	<i>Cucumis melo</i>
Spurge, Prostrate	<i>Euphorbia humistrata</i>
Spurge, Spotted	<i>Euphorbia maculata</i>
Starbur, Bristly	<i>Acanthospermum hispidum</i>
Sunflower, Common	<i>Helianthus annuus</i>
Trumpet creeper	<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 tuberculatus</i>
Witchweed	<i>Striga asiatica</i>
Yellow Rocket	<i>Barbarea vulgaris</i>

FUSILADE®, FUSION®, FLEXSTAR®, GRAMOXONE® and TOUCHDOWN® are trademarks of a ZENECA Group Company.

Basagran®, Poast® and Poast Plus are trademarks of BASF Corporation.

Assure II®, Classic®, Concert®, Pinnacle®, Reliance™ STS® SP and Synchrony® STS® are trademarks of E.I. DuPont de Nemours & Co., Inc.

Pursuit®, Raptor® and Scepter® are trademarks of American Cyanamid Company.

Select® and Resource® are trademarks of Valent Chemical Co.

Option® II is a trademark of AgrEvo USA Company.

Butyrac® is a trademark of Albaugh Inc.

Roundup® and Roundup Ultra are trademarks of Monsanto Company.

FirstRate® is a registered trademark of Dow Agro Sciences.