

## **COTTON (PREPLANT SURFACE OR PREEMERGENCE) - COARSE-TEXTURED SOILS**

### General Information

#### PRODUCT INFORMATION

Flexstar GT 3.5 may be applied as a preplant or preemergence burndown application in cotton or as a postemergence directed application in glyphosate-tolerant (GT) cotton\* and as a preplant or preemergence burndown in soybeans or as a postemergence over-the-top application in glyphosate-tolerant (GT) soybeans\*\* to control labeled broadleaf, grass and sedge weeds.

Glyphosate-tolerant (GT) Cotton: Flexstar GT 3.5 may be used on the following glyphosate-tolerant cotton only: Roundup Ready Flex Cotton.

Glyphosate-tolerant (GT) Soybeans: Flexstar GT 3.5 may be used on the following glyphosate-tolerant soybeans only: all Roundup Ready soybeans including Roundup Ready Soybeans, Roundup Ready 2 Yield Soybeans, and all Genuity brand soybeans which includes Roundup Ready 2.

#### Environmental and Agronomic Conditions

Always apply Flexstar GT 3.5 under favorable environmental conditions that promote active weed growth. Avoid applying Flexstar GT 3.5 to weeds 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.

#### Preplant Surface, Preemergence or Postemergence Applications

Flexstar GT 3.5 will control or partially control certain germinating broadleaf weeds and sedges by soil residual activity from either preplant surface, preemergence or postemergence applications that come in contact with the soil. Moisture is necessary to activate Flexstar GT 3.5 in soil for residual weed control. Dry weather following applications of Flexstar GT 3.5 may reduce effectiveness. When adequate moisture is not received within 7 days after a Flexstar GT 3.5 application, weed control may be improved by overhead irrigation with at least a 1/4 inch of water.

### Cultivation

Cultivation prior to postemergence application is not recommended. Weeds may be put under stress by cultivation thus reducing weed control. Timely cultivation 2-3 weeks after applying Flexstar GT 3.5 may assist weed control.

### Adjuvants

When an adjuvant is to be used with this product, the use of an adjuvant that meets the standards of the Chemical Producers and Distributors Association (CPDA) adjuvant certification program is recommended.

### RESISTANT WEED MANAGEMENT

Flexstar GT 3.5 contains the active ingredients glyphosate which inhibits 5-enolpyruvylshikimate-3-phosphate synthase (EPSPS, Site of Action Group 9) and fomesafen which inhibits the enzyme protoporphyrinogen oxidase (PPO or PROTOX, Site of Action Group 14). Some naturally occurring weed populations have been identified as resistant to Group 9 and Group 14 herbicides. Selection of resistant biotypes, through repeated use of these herbicides or lower than recommended use rates in the same field, may result in weed control failures. A resistant biotype may be present where poor performance cannot be attributed to adverse environmental conditions or improper application methods. If resistance is suspected, contact your local Syngenta representative and/or agricultural advisor for assistance.

Principles of herbicide resistant weed management:

- Employ integrated weed management practices. Use multiple herbicide sites-of-action with overlapping weed spectrums in rotation, sequences, or mixtures.
- Use the full labeled herbicide rate and proper application timing for the hardest to

control weed species present in the field.

- Scout fields after herbicide application to ensure control has been achieved.
- Avoid allowing weeds to reproduce by seed or to proliferate vegetatively.
- Monitor site and clean equipment between sites.
- Start with a clean field and control weeds early by using a burndown treatment or tillage in combination with a preemergence residual herbicide as appropriate.
- Use cultural practices such as cultivation and crop rotation, where appropriate.

Use good agronomic principles that enhance crop competitiveness.

## APPLICATION DIRECTIONS

### Ground Application

Use sufficient spray volume and pressure to ensure complete coverage of the target. A spray volume of 15-20 gallons per acre and 30-60 psi at the nozzle tip is recommended. When foliage is dense, use a minimum of 20 gallons per acre to ensure adequate coverage.

The use of flat fan nozzles will result in the most effective postemergence application of Flexstar GT 3.5. Use nozzles that are set up to deliver medium quality spray (ASAE Standard S-572).

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

### 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.**

## USE RESTRICTIONS

- A maximum of 5.3 pt of Flexstar GT 3.5 (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 5.3 pt of Flexstar GT 3.5 (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 4.5 pt of Flexstar GT 3.5 (or a maximum of 0.315 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 3.5 pt of Flexstar GT 3.5 (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 2.68 pt of Flexstar GT 3.5 (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).

#### USE PRECAUTIONS

- Thoroughly clean the spray system with water and a commercial tank cleaner before and after each use.
- Tank mixes of Flexstar GT 3.5 with other pesticides, fertilizers or any other additives except as specified on the label or other Syngenta labeling or recommendations made by Syngenta Crop Protection may result in tank-mix incompatibility, unsatisfactory performance or unacceptable crop injury.
- Avoid overlapping spray swaths, as injury may occur in crop or to rotational crops.
- Heavy rainfall or irrigation shortly after application may reduce performance.
- Optimum coverage will occur when the ground speed does not exceed 10 mph during application.
- Do not apply when wind velocity exceeds 15 mph.
- Do not spray if conditions of thermal inversion exist, or if wind direction and speed

may cause spray to drift onto adjacent nontarget areas. Drift minimization is the responsibility of the applicator. Consult with local and State agricultural authorities for information on avoiding or minimizing spray drift.

- Flexstar GT 3.5 is not volatile and cannot move as vapor after application onto nontarget vegetation.
- Severe damage or destruction may be caused by contact of Flexstar GT 3.5 to any desirable crop or plant to which treatment is not intended.
- Spray solutions of Flexstar GT 3.5 must be mixed, stored and applied using only plastic, plastic-lined steel, stainless steel, or fiberglass containers. Concentrate must not be stored in galvanized, carbon steel, aluminum or unlined steel containers.

### Replanting

If replanting is necessary in fields previously treated with Flexstar GT 3.5, the field may be replanted to cotton, dry beans, potatoes, snap beans or soybeans. Do not apply a second application of Flexstar GT 3.5 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.

Refer in the label for tank mix information.

### Limitations, Restrictions, and Exceptions

#### COTTON

#### Burndown and Residual Weed Control Applications

Flexstar GT 3.5 Herbicide can provide burndown of emerged weeds and residual control of certain germinating broadleaf weeds and sedges in cotton.

#### Application to Coarse-Textured Soils

Apply Flexstar GT 3.5 Herbicide from 3.5 to 5.3 pts./A as preplant surface or preemergence application to coarse-textured soils (sandy loam, loamy sand, sandy clay loam) only.

Do not exceed 3.5 pts./A of Flexstar GT 3.5 on medium or fine-textured soils. Also, to avoid severe crop injury, the following use directions must be followed when applications are made to medium or fine-textured soils:

- After Flexstar GT 3.5 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.

#### Use Directions for Burndown and Residual Weed Control Applications

Emerged weeds must have thorough spray coverage for effective control. Refer to the Spray Adjuvants section for directions on spray adjuvants for postemergence weed control.

Moisture is necessary to activate Flexstar GT 3.5 Herbicide in soil for residual weed control. Dry weather following application of Flexstar GT 3.5 Herbicide may reduce residual activity. When adequate moisture is not received within 7 days after a Flexstar GT 3.5 Herbicide application, residual weed control may be improved with at least a 1/4 inch of overhead irrigation.

Cotton plants are tolerant to Flexstar GT 3.5 Herbicide when applied at specified 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.

#### Use Restrictions - Cotton

- DO NOT apply Flexstar GT 3.5 Herbicide over the top of cotton as plant death will occur.

- Do not exceed 5.3 pints of Flexstar GT 3.5 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 Flexstar GT 3.5 Herbicide Regional Use Map).
- Do not exceed 3.5 pints of Flexstar GT 3.5 Herbicide per acre as a preplant surface application to medium or fine-textured soil.
- Do not exceed 3.5 pints of Flexstar GT 3.5 Herbicide per acre as a post-directed application.
- Do not apply Flexstar GT 3.5 Herbicide later than 70 days before harvest.

#### Method

[Broadcast/Foliar Air](#)

[Broadcast/Foliar Ground](#)

[Surface](#)

[Broadcast/Foliar Air](#)

[Broadcast/Foliar Ground](#)

[Surface](#)

[Broadcast/Foliar Air](#)

[Broadcast/Foliar Ground](#)

[Surface](#)

Pre-Harvest Interval

70 days

Rates

[field\\_rates 0](#)

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Restricted Entry Interval

24 hours

Soils

[Coarse](#)

[Loamy Sand](#)

[Sandy Loam](#)

[Sandy Clay Loam](#)

Timings

Preemergence (Crop)

Preplant

Preemergence (Weed)