

## **COTTON - FINE - CONSERVATION**

### General Information

#### GENERAL INFORMATION

Triflurex HFP is a selective herbicide for the preemergence control of annual grasses and broadleaf weeds. Triflurex HFP may be applied in liquid sprays of water or liquid fertilizer, or impregnated on dry bulk fertilizer. To reduce loss of herbicidal activity, Triflurex HFP should be soil incorporated within 24 hours after application unless otherwise specified in specific use directions or supplemental labeling. Triflurex HFP may be tank mixed or followed by overlay or postemergence treatments with other herbicides to improve the spectrum of weeds controlled. Triflurex HFP controls weeds by disrupting growth processes during germination. Triflurex HFP does not control established weeds.

When an adjuvant is to be used with this product, Makhteshim Agan of North America, Inc. suggests the use of a Chemical Producers and Distributors Association certified adjuvant.

#### GENERAL USE PRECAUTIONS

Applied according to directions and under normal growing conditions, Triflurex HFP will not harm the treated crop. Overapplication may result in crop injury or rotational crop damage from herbicide carryover. Uneven application or improper incorporation of Triflurex HFP can result in erratic weed control or crop injury. Seedling disease, cold weather, deep planting, excessive moisture, high salt concentration, or drought may weaken crop seedlings and increase the possibility of damage from Triflurex HFP. Under these conditions, delayed crop development or reduced yields may result.

Do not apply Triflurex HFP to soils that are wet or are subject to prolonged periods of flooding as poor weed control may result.

Do not use Triflurex HFP on any crop grown in Pecos County or Reeves County, Texas.

## APPLICATION TIMING

Spring Application: Apply and incorporate Triflurex HFP anytime after January 1 when soil can be worked and is in a condition which allows thorough mixing to ensure uniform incorporation. See APPROVED CROPS section for application timing recommendations for specific crops.

Fall Application: Fall application can be used for all crops for which Triflurex HFP is recommended as a preplant incorporated treatment. Refer to APPROVED CROPS section for any crop specific fall application instructions.

In California, Minnesota, Montana, North and South Dakota, apply and incorporate Triflurex HFP anytime between September 1 and December 31. In all other states, fall apply Triflurex HFP between October 15 and December 31.

Ground may be bedded-up over winter. On bedded ground, knock beds down to desired height before planting, moving some treated soil from beds into furrows. Where soil is left flat over winter, be careful not to turn up untreated soil during spring bedding operations. Destroy established weeds during seedbed preparation. If weeds become established in furrows due to uncovering of untreated soil during bedding, destroy these weeds before planting. Fall application of Triflurex HFP is not recommended on fields which remain wet or are subject to prolonged periods of flooding.

Preemergence Application Immediately After Planting:

Apply and incorporate Triflurex HFP immediately after planting and prior to crop germination. Adjust incorporation equipment so as to not disturb planted seed. Refer to the APPROVED CROPS section of the label for crop specific instructions.

Postemergence and Layby Application:

Apply and incorporate Triflurex HFP at the recommended rate to the established crop at or before the last cultivation. Required preharvest intervals for treatments with Triflurex HFP for certain crops are specified in the APPROVED CROPS section of the label. Crop cover may prevent uniform soil coverage from over-the-top sprays. To avoid this problem, use drop nozzles or directed sprays to achieve uniform soil coverage.

## INCORPORATION DIRECTIONS

Soil Preparation and Incorporation: Ground cover or existing weeds can interfere with uniform soil incorporation of Triflurex HFP. A manageable level of ground cover will allow uniform incorporation into the top 2 to 3 inches of the final seedbed. Ground cover and crop residues, if excessive, should be reduced by appropriate soil tillage prior to application.

Triflurex HFP must be incorporated within 24 hours after application unless otherwise specified on supplemental labeling. Nonuniform application may result in erratic weed control and/or crop injury. With most equipment and methods of application, a second incorporation is required and may occur anytime before planting. The second incorporation should be in a different direction, and to avoid bringing untreated soil to the surface, should not be deeper than the first.

Note: Two-pass incorporation is required for all special use programs unless otherwise specified.

General Soil Conditions: The soil surface should be smooth enough to allow for uniform application and efficient incorporation of Triflurex HFP. Break up clods using tillage equipment prior to application of Triflurex HFP. Apply when soil moisture is sufficient to allow the break up of large clods and uniform mixing during the incorporation process. Soil compaction and/or nonuniform incorporation may occur if soil is excessively moist.

Incorporation in Bedded Culture: In bedded culture, Triflurex HFP should be incorporated to a depth of 2 to 3 inches of the final seedbed.

Application prior to bedding: Apply Triflurex HFP and incorporate one time with recommended equipment. The bedding operation serves as the second incorporation. Do not expose untreated soil during post bedding operations such as planting since removal of treated soil during planting can allow weed germination and establishment in the drill row.

Application after bedding: Knock off beds to planting height before applying Triflurex HFP and incorporate with recommended equipment that will conform to the bed shape. Do not leave untreated soil exposed.

Cultivation after planting: Treated crops may be shallowly cultivated without

reducing the weed control activity of Triflurex HFP. Limit depth of cultivation to the zone of treated soil to avoid moving untreated soil to the surface. Exposure of untreated soil may cause loss of weed control.

Refer the specified label of Soil Texture for application.

Limitations, Restrictions, and Exceptions

Special Use Programs

Cotton - Weed Control in Conservation Tillage

This section describes application methods and techniques for weed control with Triflurex HFP in conservation tillage cotton. Triflurex HFP may be applied and incorporated in the fall in advance of spring planting, in the spring before planting, after planting prior to crop emergence, or at layby. Single or multiple applications may be made so long as maximum application rates are not exceeded and rotational crop restrictions are followed.

Strip Planting into Small Grain Cover Crops

Fall planted cover crops may be utilized to control wind erosion and protect developing crop seedlings from wind damage. Prior to planting cotton, the cover crop may be treated with a contact herbicide to prevent continued growth and development and prevent competition with crop seedling for water and soil nutrients. The standing cover crop (now dead) continues to control wind erosion and provide protection to the developing crop until it is well established.

Strip Planting: In strip planting, cotton is seeded into competition-free bands established in the cover crop. Competition-free bands may be established by leaving unseeded drill rows when seeding the cover crop, by tillage, or by use of a contact herbicide to prepare competition-free bands prior to planting.

Fall Application Before Establishing a Cover Crop

Small grain cover crops (wheat, barley, or rye) may be established following a preplant incorporated application of Triflurex HFP. Apply Triflurex HFP to flat ground at a broadcast rate of 2.0 to 3.0 pints per acre and incorporate once within 24 hours using incorporation implements that can be set to cut no more than 2 to 3 inches deep, such as a springtooth harrow. Do not incorporate with a tandem disc. Form

beds with disc bedders or other bedding implements that will mix and move most of the treated soil from the furrows to the beds. Phosphate and other fertilizer may be applied as appropriate during incorporation operations. Plant 2 to 4 rows of the small grain cover crop 2 inches deep in the furrows between the beds. To avoid injury to small grain seedlings, place seed below the treated layer of soil. Barley is usually less susceptible to injury than wheat or rye. Soil moisture must be adequate to establish and maintain the cover crop. In late winter (February), apply 2,4-D if necessary for broadleaf weed control.

#### Spring Application Before or After Planting (Within Competition-Free Bands)

Apply Triflurex HFP using low pressure ground equipment as a band (within the weed free zone) or as a broadcast treatment. Application and incorporation may occur before planting or after planting prior to crop emergence. If applied after planting, set incorporation equipment so as to not disturb the planted seed (see incorporation instructions).

Incorporation: Equipment should be adapted to the width of the competition-free band. Use equipment that will uniformly mix Triflurex HFP into the weed germination zone.

Weed control resulting from single pass incorporation or with incorporation equipment that does not result in thorough mixing of soil treated with Triflurex HFP may be reduced compared to conventional double pass incorporation. Implements used to incorporate Triflurex HFP after planting should be operated so that they do not disturb the planted seed or growing crop.

Use the lower rate in the rate range when additional sequential applications of Triflurex HFP are anticipated. Use the higher rate in the rate range where high crop residues are present, and where dense weed populations are anticipated.

For band treatments, reduce the application rate in proportion to the row spacing and band width treated. For example, treating a 12-inch band where the row spacing is 36 inches would require  $\frac{1}{3}$  of the recommended broadcast rate per acre (12 inches divided by 36 inches =  $\frac{1}{3}$ ).

#### Weeds Controlled:

Palmer amaranth: Suppression only in areas of the southwest US where tolerance to

trifluralin has been observed. Consult your local extension service or MANA sales representative for information regarding alternate weed control.

Long term and continued use of Triflurex HFP has resulted in the selection of tolerant populations in certain species of weeds. This situation is limited to a few weeds and is generally geographically specific. Weed species known to have some trifluralin tolerant population are goosegrass, green foxtail (pigeongrass), and Palmer amaranthus (Palmer pigweed).

Trifluralin is not recommended for the control of goosegrass, tolerant green foxtail, or Palmer amaranthus. Consult state agricultural extension service or experiment station weed specialist for specific recommendations for local weed populations.

#### Method

[Broadcast/Foliar Air](#)

[Broadcast/Foliar Ground](#)

[Broadcast/Foliar Air](#)

[Broadcast/Foliar Ground](#)

[Broadcast/Foliar Air](#)

[Broadcast/Foliar Ground](#)

[Broadcast/Foliar Air](#)

[Broadcast/Foliar Ground](#)

#### Rates

[field rates 0](#)

- 

#### Restricted Entry Interval

12 hours

Exception: If the product is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

#### Soils

[Fine](#)

[Silty Clay Loam](#)

[Sandy Clay Loam](#)

[Silty Clay](#)

[Sandy Clay](#)

[Clay Loam](#)

[Clay](#)

Tillages

[Conservation](#)

Timings

[Preemergence \(Crop\)](#)

[Preplant](#)

[Preplant Incorporated](#)

[Postplant](#)