

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

April 25, 2018

April Kitchen State Regulatory Specialist Makhteshim Agan of North America, Inc. (d/b/a ADAMA) 3120 Highwoods Blvd #100 Raleigh, NC 27604

Subject: Notification per PRN 98-10 – Minor Label Revisions

Product Name: TRIFLUREX HFP EPA Registration Number: 66222-46

Application Date: 9/19/2018 Decision Number: 535532

Dear Ms. Kitchen:

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 for the above referenced product. The Registration Division (RD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the action requested falls within the scope of PRN 98-10.

The label submitted with the application has been stamped "Notification" and will be placed in our records.

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

If you have any questions, you may contact Sarah Meadows at 703-347-0505 or via email at meadows.sarah@epa.gov.

Sincerely,

Kathryn Montague, Product Manager 23

Herbicide Branch

Registration Division (7505P) Office of Pesticide Programs

# NOTIFICATION

66222-46

The applicant has certified that no changes, other than those reported to the Agency have been made to the labeling. The Agency acknowledges this notification by letter dated:

4/25/2018

GROUP **HERBICIDE** 

# TRIFLUREX® HFP (TRIFLURALIN) HERBICIDE

% BY WT.

INERT INGREDIENTS: 57.22%

100.00%

Contains 4 pounds of trifluralin per gallon. Contains petroleum distillates.

# KEEP OUT OF REACH OF CHILDREN CAUTION-PRECAUCION

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

> EPA Reg. No. 66222-46 EPA Est. No.

# Manufactured for:

Makhteshim Agan of North America, Inc. d/b/a ADAMA 3120 Highwoods Blvd. Ste 100, Raleigh, NC 27604

# **FIRST AID**

IF ON SKIN OR	•	Take off contaminated clothing.
CLOTHING:	•	Rinse skin immediately with plenty of water for 15 to 20 minutes.
	•	Call a poison control center or doctor for treatment advice.
IF SWALLOWED:	•	Call a poison control center or doctor immediately for treatment advice.
	•	Do not induce vomiting unless told to do so by a poison control center or doctor.
	•	Do not give any liquid to the person.
	•	Do not give anything by mouth to an unconscious or convulsing person.
IF IN EYES:   • Hold eye open and rinse slowly and		Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.
	•	Remove contact lenses, if present, after the first 5 minutes then continue rinsing eye.
	•	Call a poison control center or doctor for treatment advice.
<b>IF INHALED:</b> • Move person to fresh air.		Move person to fresh air.
	•	If person is not breathing, call 911 or an ambulance, then give artificial respiration preferably mouth-to-mouth if possible.
	•	Call a poison control center or doctor for further treatment advice.

Have the product container or label with you when calling a poison control center or doctor or going for treatment. For emergency medical treatment information, call ProPharma 24 hours a day at 1-877-250-9291. Note to Physician: This product may pose an aspiration pneumonia hazard. Contains petroleum distillate.

# In case of spills, fire, leaks or accident call 1-800-535-5053

(Note to Reviewer: OPTIONAL TEXT – Refer to Booklet for additional First Aid, Precautionary and Storage and Disposal Statements, or similar text if this statement is on current label)

> **PRECAUTIONARY STATEMENTS** HAZARDS TO HUMANS AND DOMESTIC ANIMALS **CAUTION**

Harmful if swallowed. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling.

# PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical resistant are listed below. If you want more options, follow the instructions for category  $\boldsymbol{G}$  on an EPA chemical resistance category selection chart.

# Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves, such as barrier laminate or Viton ≥14 mils
- Shoes plus socks

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.

**ENGINEERING CONTROLS STATEMENT:** 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.

NET CONTENTS: \_\_\_\_ GALLON

## **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**

This pesticide is extremely toxic to freshwater marine and estuarine fish and aquatic invertebrates including shrimp and oyster. Do not apply in a manner which will directly expose canals, lakes, streams, ponds, marshes, or estuaries to aerial drift. Do not contaminate water when disposing of equipment wash waters. For terrestrial uses, do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark.

#### **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 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.

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

- Coveralls
- Chemical-resistant gloves, such as barrier laminate or Viton >14 mils
- · Shoes plus socks

# NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants in farms, forests, nurseries, or greenhouses.

Do not enter treated areas until sprays have dried.

# **GENERAL INFORMATION**

Triflurex® HFP is a selective herbicide for the pre-emergence 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 post-emergence 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, ADAMA 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.

# **ROTATION CROP RESTRICTIONS**

# Sugar beets, red beets, spinach:

In Arizona, Colorado, California, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming; sugar beets, red beets, or spinach should not be planted for 12 months after a spring application or 14 months after a fall application of Triflurex HFP. Moldboard plowing to a depth of 12 inches prior to planting these crops will reduce the possibility

of crop injury. If land has not been irrigated, these crops should not be planted for 18 months after a spring application or 20 months after a fall application of Triflurex HFP.

In all other areas; sugar beets, red beets, and spinach should not be planted for 12 months after a spring application or 14 months after a fall application. Before planting sugar beets, moldboard plow to a depth of 12 inches to reduce the possibility of crop injury.

Proso Millet, Corn, Sorghum (milo), Oats, or Annual or Perennial Grass Crops or Grass Mixtures:

In Arizona, Colorado, California, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming; unless crop injury is acceptable, sorghum (milo), proso millet, corn, oats, and annual or perennial grass crops or grass mixtures should not be planted for 12 months after a spring application or 14 months after a fall application to avoid the possibility of crop injury. If land has not been irrigated, these crops should not be planted for 18 months after a spring application or 20 months after a fall application. Moldboard plowing to a depth of 12 inches before planting these crops will reduce the possibility of crop injury.

In Minnesota, North Dakota, and South Dakota; unless crop injury is acceptable, proso millet, sorghum (milo), oats, and annual or perennial grass crops or grass mixtures should not be planted for 18 months after a spring application or 21 months after a fall application of Triflurex HFP.

In those portions of Kansas, Nebraska, Oklahoma, and Texas that receive less than 20 inches of rainfall and irrigation to produce a crop, unless crop injury is acceptable, do not plant proso millet, sorghum (milo), oats, and annual or perennial grass crops or grass mixtures for 18 months after an application of Triflurex HFP. In sorghum, cool wet weather conditions during early growth stages may increase the possibility of crop injury.

In all other areas receiving more than 20 inches of rainfall and/or irrigation; unless crop injury is acceptable, do not plant proso millet, sorghum (milo), oats, and annual or perennial grass crops or grass mixtures for 12 months after a spring application or 14 months after a fall application of Triflurex HFP.

## Other crops:

Vegetable crops other than those to which Triflurex HFP may be applied as a pre-plant soil incorporated treatment should not be planted within 5 months following the application of Triflurex HFP.

#### SOIL TEXTURE GUIDE FOR APPLICATION RATES

Rate recommendations for incorporated treatments of product are based on SOIL TEXTURE CLASS (coarse, medium, or fine) and organic matter content. A fine-textured soil (e.g. a clay loam) will require a higher application rate than a coarse-textured soil (e.g. loamy sand). In the table below, find the SOIL TEXTURE CLASS (coarse, medium, or fine) corresponding to the SOIL TEXTURE TO BE TREATED. Choose the proper rate for each application based on the SOIL TEXTURE CLASS and specific crop recommendations. Do not exceed recommended rates.

SOIL TEXTURE CLASS	SOIL TEXTURE TO BE TREATED
Coarse (light) soils	Sand, loamy sand, sandy loam
Medium soils	Loam, silty clay loam*, silt loam, silt, sandy clay loam*
Fine (heavy) soils	Clay, clay loam, silty clay loam*, silty clay, sandy clay, sandy clay loam*

<sup>\*</sup>Silty clay loam and sandy clay loam soils are transitional soils and may be classified as either medium- or fine-textured soils. If silty clay loam or sandy clay loam soils are mostly sand or silt, they are usually classified as medium-textured soils. If they are mostly clay, they are usually classified as fine-textured soils.

## **MIXING DIRECTIONS**

**Triflurex HFP Alone:** Triflurex HFP may be mixed with water or most liquid fertilizer materials. Prior to mixing product in liquid fertilizer, refer to label section entitled TESTING FOR COMPATIBILITY IN LIQUID FERTILIZERS for testing procedures to determine compatibility with the liquid fertilizer product to be used. The combination of Triflurex HFP with solution and suspension-type fertilizers provides weed and grass control equal to water sprays.

Fill spray tank ½ to ½ full with clean water or liquid fertilizer. Start agitation. Add correct amount of Triflurex HFP and continue agitation while filling tank to required spray volume.

**Precaution:** Do not allow water or spray mixture to back-siphon into a water source.

**Triflurex HFP in Tank Mix:** For broader spectrum weed control, Triflurex HFP may be applied in tank mix combination with other products registered for use on crops listed in this label unless tank mixing with Triflurex HFP and (trifluralin) is prohibited by the manufacturer's label. When tank mixing, use the recommended rate of Triflurex HFP. Follow the label DIRECTIONS FOR USE of each tank mix partner for applicable use instructions including application rate, application timing, weeds controlled, and specific precautions and restrictions of product use.

Triflurex HFP may be tank mixed with other products and applied with water or most liquid fertilizer materials. Prior to mixing tank mixes containing Triflurex HFP with liquid fertilizer, refer to label section entitled TESTING FOR COMPATIBILITY IN LIQUID FERTILIZERS for testing procedures to determine tank mix compatibility with the liquid fertilizer product to be used.

Vigorous, continuous agitation during mixing, filling, and throughout application is required for all tank mixes. Sparger pipe agitators generally provide the best agitation in spray tanks. To prevent foaming in the spray tank, avoid stirring or splashing air into the spray mixture. To prevent foaming during filling, keep end of fill pipe below the surface of the liquid in the spray tank.

**Mixing Order:** Fill the spray tank to  $\frac{1}{2}$  to  $\frac{1}{2}$  of the total spray volume required. Start agitation. Add different formulation types in the order indicated below allowing time for complete mixing and dispersion after addition of each product. Allow extra mixing and dispersion time for dry flowable products.

Add different formulation types in the following order: dry flowables (DF); wettable powders (WP); aqueous suspensions (AS); flowables (F); and liquids (L).

Maintain agitation and fill spray tank to ¾ of total spray volume. Add Triflurex HFP and other emulsifiable concentrates (EC) and any solutions (S).

Finish filling the spray tank. Maintain continuous agitation during mixing, final filling, and throughout application. If spraying/agitation must be stopped before the spray tank is empty, the materials may settle to the bottom. Settled materials must be resuspended before spraying is resumed. A sparger agitator is particularly useful for this purpose. Settled material may be more difficult to resuspend than when originally mixed.

**Precautions:** Read and carefully follow all label instructions for each material added to the spray tank. Do not allow water or spray mixture to back-siphon into a water source.

**Premixing:** Dry and flowable formulations may be premixed with water (slurried) and added to the spray tank through a 20 to 35 mesh wet screen. This procedure assures good initial dispersion of these products in liquid fertilizer or water. Line screens in the spray tank should be no finer than 50 mesh (100 mesh is finer than 50 mesh).

# COMPATIBILITY TESTING FOR TANK MIX PARTNERS INCLUDING LIQUID FERTILIZERS

A jar test is recommended prior to tank mixing this product with other pesticides or liquid fertilizer to ensure compatibility. Use a clear glass quart jar with lid and mix the tank mix ingredients in their relative proportions and in the order indicated in the tank mixing section above. Invert the jar containing the mixture several times and observe the mixture for approximately ½ hour. If components of the mixture separate readily, a compatibility agent may be helpful in maintaining the stability of the spray mixture. If the mixture balls-up, forms flakes, sludges, jets, oily films or layers, or other precipitates, the components of the mixture are not compatible and full-scale tank mixing should not be attempted.

**Note:** Compliance with state regulations for liquid fertilizer mixing, registration, labeling, and application are the responsibility of the individual and/or company offering the fertilizer or chemical mixture for sale.

## **APPLICATION METHOD**

**General:** As spray volume decreases, the importance of accurate calibration and uniform application increases. Check calibration and uniformity of spray application daily. To avoid spray drift, do not apply when winds are gusting or when wind speed is greater than 15 mph.

**Ground Broadcast Application:** Apply Triflurex HFP in 5 to 40 gallons of liquid carrier per acre (broadcast basis), using any properly calibrated, low pressure herbicide sprayer that will apply the spray uniformly. The carrier may be water or liquid fertilizer as specified for the crop to be treated in the APPROVED CROPS section of this label. For band application, adjust herbicide rate and spray volume in proportion to the band width and row width treated.

**Aerial Broadcast Application:** Apply Triflurex HFP in 5 to 10 gallons of water per acre. Adjust pump pressure, nozzle arrangements, speed, and application height to provide a uniform application to the soil surface. Use swath markers or flagmen to assure proper swath width interval.

# **APPLICATION WITH DRY BULK FERTILIZER**

Dry bulk fertilizers impregnated or coated with Triflurex HFP may be applied as a preplant incorporated treatment on approved crops. All label recommendations for Triflurex HFP regarding application rates, incorporation directions, special instructions, and precautions should be followed. Read and follow all label instructions below concerning use of Triflurex HFP with dry bulk fertilizer. Properly applied dry bulk fertilizers impregnated with Triflurex HFP provide weed and grass control equal to water sprays.

Use the following formula to calculate the amount of Triflurex HFP required to impregnate a ton of dry bulk fertilizer:

Pints Triflurex HFP X 1000 = Quarts Triflurex HFP
Per Acre Pounds Fertilizer Per Acre Per Ton of Fertilizer

**Limitations:** Apply minimum of 200 lbs. per acre of dry fertilizer impregnated with Triflurex HFP at the recommended broadcast rate per acre. Any commonly used dry fertilizer can be used for impregnation with Triflurex HFP except coated ammonium nitrate and pure limestone. These materials will not absorb the herbicide. Blends containing mixtures of these materials can be impregnated.

**Impregnation:** Use any closed drum, belt, ribbon, or other commonly used dry bulk fertilizer blender. Nozzles used to apply Triflurex HFP to dry bulk fertilizer should be placed to provide uniform spray coverage.

**Application and Incorporation:** Spread the fertilizer/chemical mixture with properly calibrated application equipment. Be certain the material is applied uniformly to the soil surface. Dry bulk fertilizer impregnated with Triflurex HFP must be incorporated two times. The first incorporation should occur within 24 hours after application. The second incorporation should be delayed a minimum of 5 days after the first and be completed prior to planting.

Compliance with State Regulations: Compliance with state regulations relating to dry bulk fertilizer blending, registration, labeling, and application are the responsibility of the individual and/or company offering the fertilizer or chemical mixture for sale.

# GENERAL CHEMIGATION USE INSTRUCTIONS APPLICATION BY CHEMIGATION

Triflurex HFP may be applied through properly equipped chemigation systems for weed control in certain crops as specified in the APPROVED CROPS section of the label. If application by chemigation is not specifically listed for a crop, Triflurex HFP may not be applied to that crop through irrigation systems.

**General Chemigation Use Instructions:** Triflurex HFP may be applied through sprinkler (including micro, center pivot, end tow, side (wheel) roll, traveler, solid set, lateral move, and hand move), flood (basin), furrow, and border chemigation (soil drench uses), or drip (including surface and subsurface) irrigation systems. Do not apply this product through any other type of irrigation system. Do not apply this product in an irrigation system connected to a public water supply. Public water supply

means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water. If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers, or other experts. A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

Irrigation System Requirements: The system must contain a functional check valve, vacuum relief valve, and a low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected. Systems must use a metering pump, such as a positive displacement pump (e.g. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

**Precautions and Use Requirements for All Irrigation Systems:** Do not allow contact with crop foliage or fruit (unless allowed in use directions for other application methods).

Do not apply when wind speed favors drift beyond the area intended for treatment, when system connections leak, or when emitters do not provide uniform distribution.

Before use, remove scale, pesticide residues, and other debris from the mix tank and the pump system. Flush system with clean water.

Calibration and distribution will be more accurately achieved by injecting a larger volume of a more dilute solution over time. If desired, dilute Triflurex HFP with water prior to injection and mix solution sufficiently to ensure uniform delivery into the injection system; maintain adequate agitation.

Sprinkler systems should be calibrated to deliver a volume of 4 to 50 gallons per hour (gph) per emitter. Apply Triflurex HFP in overhead irrigation equal to ½ to 1 inch of water.

Drip systems should be set at 0.1 to 3 gph per emitter. The application interval should be such that at one period of time during the injection, the first and last emitters in the system contain Triflurex HFP treated water.

After application is completed, flush equipment with clean water, then continue to irrigate for one to two hours. Mechanical soil incorporation is not required when Triflurex HFP is applied through chemigation systems.

For General Application of Triflurex HFP Through Irrigation Systems for Overall Weed Control (Broadcast): Use sprinkler systems (micro, center pivot, end tow, side (wheel) roll, traveler, solid set, lateral move, and hand move), flood (basin), furrow, and border chemigation (soil drench uses) to apply to crops which permit application by chemigation on this label. Triflurex HFP should be injected continuously throughout the chemigation period. The chemigation metering pump should be checked periodically during the application to ensure proper operation. The injection metering pump must be calibrated as specified by the manufacturer. During chemigation, maintain agitation at all times. Apply label-prescribed rates to treated area only. If the irrigation system does not apply treated water to the entire area of the field, adjust the amount of Triflurex HFP used to match the actual treated acreage. (43,560 Sq. Ft. = 1 acre)

For Control of Break Through Weeds (including foliage, root, rhizome, or stolon) at Irrigation (Emitter) Points: Use drip systems (surface and subsurface) and sprinkler systems (micro, solid set, and hand move) to apply to crops which permit application by chemigation on this label. In this application, Triflurex HFP rates which are listed as broadcast rates should be prorated to treat only the desired soil area. Do not apply Triflurex HFP in this manner more than 3 times per calendar year.

Surface drip and sprinkler applications-(Timing)-Inject Triflurex HFP at the end of the irrigation cycle allowing 1 to  $1\frac{1}{2}$  hours of irrigation following the application to flush lines with clear water. (Rate Calculation)-For example, apply 2 to 4 pints of Triflurex HFP per acre to the treated area. A treated acre is defined as the surface area wetted by the irrigation system. To calculate the treated acreage, multiply the number of emitters in an irrigation set by the measured square footage of the wetted area of the average emitter, divided by 43,560.

Subsurface drip applications-(Timing)-Charge the irrigation system. Begin application of Triflurex HFP immediately after all emitter points are functional. Shut off the irrigation system immediately following completion of the Triflurex HFP application, allowing the Triflurex HFP to bond to the treated soil. Resume irrigation 4 to 8 hours after the Triflurex HFP application. (Rate Calculation)-For example, apply 2 to 4 pints of Triflurex HFP per treated acre. The treated acreage is defined as the square footage area wetted by the irrigation system during the application period. Multiply the number of emitters (for "leaky hose" type of system, use the linear feet of buried line) per irrigation set by the desired square footage to be treated around each emitter and divide by 43,560. In this type of application, it is usually desirable to treat only 2 to 4 square inches around each irrigation emitter in order to prevent break-through weeds.

**NOTE:** Application of Triflurex HFP through irrigation systems as a supplemental weed control practice to suppress breakthrough weeds including pest foliage, roots, and rhizomes at irrigation emitters will inhibit the formation of root tissue. Improper use of Triflurex HFP may result in yield loss due to weak or deformed root structure in annual and some perennial crops. Make Triflurex HFP injections after the majority of the root development has occurred but prior to pest presence in the emitter zone. Visual inspection of the root zone is necessary for proper application timing. Triflurex HFP injection should be done separately from normal irrigation practices. For annual crops with "tap" or "bulb" type root structure, bury the drip line off center of the planted row or below the depth of the fully developed tap root or bulb. Triflurex HFP injections made early in the

crop development or in shallow buried drip lines will result in restricted root development and possible yield loss. Consult your local Farm Advisor, P.C.A., or Makhteshim Agan Company Representative for proper use of Triflurex HFP.

# **SPRAY DRIFT LABELING**

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment- and weather-related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.

The following drift management requirements must be followed to avoid off-target movement from aerial applications to agricultural field crops. These requirements do not apply to forestry applications, public health uses, or to applications using dry formulations.

- 1. The distance of the outer-most nozzles on the boom must not exceed ¾ the length of the wingspan or rotor.
- 2. Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees. Where states have more stringent regulations, they should be observed.

The applicator should be familiar with and take into account the information covered in the <u>Aerial Drift Reduction Advisory</u> Information.

**Information on Droplet Size:** The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential but will not prevent drift if applications are made improperly or under unfavorable environmental conditions (see Wind, Temperature and Humidity, and Temperature Inversions sections).

# **Controlling Droplet Size**

- Volume-Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher-rated flows produce larger droplets.
- Pressure-Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types, lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- Number of nozzles-Use the minimum number of nozzles that provide uniform coverage.
- Nozzle Orientation-Orienting nozzles so that the spray is released parallel to the airstream produces larger droplets than other orientations and is the recommended practice. Significant deflection from horizontal will reduce droplet size and increase drift potential.
- Nozzle Type-Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

**Boom Length:** For some use patterns, reducing the effective boom length to less than ¾ of the wingspan or rotor length may further reduce drift without reducing swath width.

**Application Height:** Applications should not be made at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

**Swath Adjustment:** When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase with increasing drift potential (higher wind, smaller drops, etc.).

**Wind:** Drift potential is lowest between wind speeds of 2 to 10 mph. However, many factors including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential. NOTE: Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

**Temperature and Humidity:** When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

**Temperature Inversions:** Applications should not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

**Sensitive Areas:** The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g. when wind is blowing away from the sensitive areas).

## **APPLICATION TIMING**

**Spring Application:** Apply and incorporate Triflurex HFP any time 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 Minnesota, Montana, North and South Dakota, and California, 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.

**Pre-emergence 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 this label for crop specific instructions.

**Post-emergence 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. Non-uniform 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 any time 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 breakup of large clods and uniform mixing during the incorporation process. Soil compaction and/or non-uniform 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.

## INCORPORATION EQUIPMENT

Use incorporation equipment capable of mixing Triflurex HFP uniformly into the top 2 to 3 inches of the final seedbed. Use of inappropriate equipment or improper use of recommended equipment may result in erratic weed control and/or crop injury. Incorporation equipment such as a tandem disc will mix Triflurex HFP approximately half as deep as the equipment is set to operate. For example, a disc set to cut 4 inches deep will mix most of the Triflurex HFP within the top 2 inches of soil. Any recommended incorporation implement may be used alone or in combination with any other recommended implement.

Two incorporation passes are required when using the following incorporation implements (for single pass incorporation, refer to soil conditions and equipment listed under single pass incorporation option below):

Tandem Disc: Set disc to cut 4 to 6 inches deep and operate at 4 to 6 mph.

Rolling Cultivator: Set equipment to cut 2 to 4 inches deep and operate at 6 to 8 mph.

**Bed Conditioner (Do-All):** Set equipment to cut 2 to 4 inches deep and operate at 4 to 6 mph. One incorporation pass is adequate in bedded culture, while two incorporation passes are required in flat-planted culture. The do-all should be used only on coarse- and medium-textured soils.

**Mulch Treader (other similar disc-type implements):** Set equipment to cut 3 to 4 inches deep and operate at 5 to 8 mph. **Other equipment:** Other implements including the flexible tine-tooth harrow (Flextine or Melroe) are recommended but only for certain uses defined in the APPROVED CROPS section of the label.

Conservation Tillage Practices: In reduced or minimum tillage situations, fall or spring application and incorporation of Triflurex HFP may be combined with tillage operations. The first incorporation may utilize equipment such as a tandem disc, combination implement, or bedding equipment that provides good soil mixing but leaves a maximum amount of crop residue on the soil surface. The second incorporation may be accomplished with tillage equipment that provides uniform soil mixing used in conjunction with no-till planters (see specific recommendations for reduced or conservation tillage situations for cotton and soybeans in the APPROVED CROPS section of this label).

# **Single Pass Incorporation Option:**

Triflurex HFP may be incorporated in a single pass if incorporation conditions allow for thorough and uniform mixing into the top 2 to 3 inches of the final seedbed. Thorough and uniform incorporation may be achieved if the soil at the time of incorporation is of good tilth with moderate moisture and is relatively free of clods and crop residue.

The following types of equipment can be used to obtain thorough and uniform soil mixing from a single incorporation pass:

**Finishing Disc** with disc blades no greater than 22 inches in diameter, spaced no more than 7½ inches apart. Operate at 4 to 6 mph. Best results are obtained when the disc is equipped with harrow, reel, or basket attachments.

**Field Cultivator:** Set equipment to cut 3 to 4 inches deep and operate at a minimum of 5 mph. A field cultivator is defined as an implement with 3 to 4 rows of sweeps, spaced at intervals of 7 inches or less with sweeps on successive rows staggered so that no soil is left unturned. Chisel points should not be used. Best results are obtained when the field cultivator is equipped with harrow, reel, or basket attachments.

**Combination Implements:** These implements are defined as 2 or more tillage devices combined to operate as a single tillage unit. For example, 2 to 3 rows of field cultivator C- or S-shaped shanks with successive rows of sweeps staggered so that no soil is left unturned followed by a spike-tooth or flextine harrow, followed by ground driven reel, basket, or incorporator wheels. Combination implements should be set to cut 3 to 4 inches deep and operated at a minimum of 6 mph. Two incorporations are recommended under conditions which prevent optimum soil mixing such as excessive surface residue, roughness, high clay content, or soil is too wet or too dry. Combination tools can also be composed of 2 rows of wide crown sweeps that overlap so that the roots of all weeds and plants are severed. This should be followed by 2 gangs of rotating spoked wheels that thoroughly mix Triflurex HFP into the top 2 to 3 inches of the final seedbed.

**P.T.O. Driven Equipment (tillers, cultivators, hoes):** Adjust equipment to incorporate Triflurex HFP into the top 2 to 3 inches of the final seedbed with rotors spaced to provide a clean sweep of the soil. P.T.O. equipment should not be operated more than 4 mph.

# GRASSES AND BROADLEAF WEEDS CONTROLLED BY TRIFLUREX HFP

	GRASSES AND BROADLEAF WEEDS CONTROLLED BY TRIFLUREX HIFF  GRASSES			
COMMON NAME	SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	
Annual bluegrass	(Poa annua)	Johnsongrass (from seed) (Rhizome—see special instructions for control in cotton, soybeans, stone fruit and nut crops, vineyards, and trees grown for pulp)	(Sorghum halepense)	
Barnyardgrass (Watergrass)	(Echinochloa crus-galli)	Junglerice	(Echinochloa colonum)	
Brachiaria (Signalgrass)  Bromegrass (Cheatgrass) (Downy brome)	(Brachiaria spp.) (Bromus tectorum)	Panicum Fall panicum (Spreading panicgrass) (see special instructions for control in cotton and soybeans in the APPROVED CROPS section)	(Panicum dichotomiflorum)	
Cheat (Chess)	(Bromus secalinus)	Ryegrass, Italian	(Lolium multiflorum)	
Crabgrass (Large crabgrass) (Smooth crabgrass)	(Digitaria spp.)	Sandbur (Burgrass)	(Cenchrus incertus	
Foxtail (Bottlegrass) (Bristlegrass) (Giant foxtail) (Green foxtail) (Foxtail millet) (Pigeongrass) (Robust foxtail) (Yellow foxtail)	(Setaria spp.)	Sprangletop	(Leptochloa filiformis)	
Guineagrass (see special instructions for control in sugarcane in the approved crops section)	(Panicum maximum)	Stinkgrass (Lovegrass)	(Eragrostis cilianensis)	
Itchgrass (Raoulgrass) (see special instructions for control in sugarcane in the approved crops section)	(Rottboellia exaltata)	Shattercane (Wild cane) (see special instructions for control in soybeans in APPROVED CROPS section)	(Sorghum bicolor)	
Texas panicum (Buffalograss) (Coloradograss)	(Panicum texanum)	Woolly cupgrass	(Eriochloa villosa)	
Red rice (see special instructions for suppression or partial control in soybeans in APPROVED CROPS section)	(Oryza sativa)			
,	BRO	ADLEAF WEEDS		
Carpetweed	(Mollugo verticillata)	Lambsquarters	(Chenopodium album)	
Chickweed	(Stellaria media)	Pigweed (Carelessweed) (Palmer amaranth**) (Prostrate pigweed) (Redroot) (Rough pigweed) (Spiny pigweed) (see special instructions for control in soybeans in APPROVED CROPS section)	(Amaranthus spp.)	
Field bindweed (see special instructions for control in stone fruit and nut crops and vineyards in the APPROVED CROPS section)	(Convolvulus arvensis	Puncturevine (Western U.S. only) (Caltrop) (Goatweed)	(Tribulus terrestris)	
Goosefoot	(Chenopodium hybridum)	Purslane, common	(Portulaca oleracea)	
Henbit	(Lamium amplexicaule)	Pusley, Florida (Florida purslane) (Mexican clover) (Pusley)	(Richardia scabra)	
Knotweed	(Polygonum aviculare)	Russian thistle (Tumbleweed)	(Salsola iberica)	
Kochia (Fireweed) (Mexican fireweed)	(Kochia scoparia)	Stinging nettle (Nettle)	(Urtica dioica)	

\*\*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.

#### SPECIAL USE PROGRAM

Triflurex HFP is approved for the following special use programs. Refer to APPROVED CROPS section of this label for details on soil preparation, use rates, application, soil incorporation, and precautions for each type of program.

## Cotton

- Chemigation
- Weed Control in Conservation Tillage
- Fall Panicum Control
- Pigweed and Seedling Johnsongrass Control
- Additional Weed and Grass Control (Gulf Coast Counties of Texas)
- Rhizome Johnsongrass Control

## Soybeans

- Chemigation
- Weed Control Under Reduced or Conservation Tillage
- Fall Panicum Control
- Pigweed and Seedling Johnsongrass Control
- Additional Weed and Grass Control (Gulf Coast Counties of Texas)
- Itchgrass (Raoulgrass) Suppression
- Charcoal Soils in Arkansas, Louisiana, and Mississippi
- Red Rice Control in Arkansas, Louisiana, Mississippi, and Texas
- Rhizome Johnsongrass Control in Western United States and the State of Texas
- Wild Cane (Shattercane) Control

## Stone Fruit and Nut Crops and Vineyards

- Rhizome Johnsongrass Control
- Field Bindweed Control

# APPROVED CROPS ALFALFA-ESTABLISHED

# **Mechanically Incorporated**

Apply Triflurex HFP with ground or aerial equipment and mechanically incorporate prior to weed emergence to control weeds listed in the GENERAL INFORMATION section of this label. Use mechanical incorporation equipment that will insure thorough soil mixing with minimal damage to crop stand.

# **Broadcast Application Rates/Acre:**

Soil Texture	Triflurex HFP
Coarse	1.5 pts.
Medium	2.0 pts.
Fine	2.0 pts.

# **Surface Applications (Chemigation or Water Incorporated)**

Triflurex HFP may be surfaced applied for annual grass control in established alfalfa by chemigation or ground or aerial broadcast application equipment.

# **Broadcast Application Rates/Acre:**

Soil Texture	Triflurex HFP
All Soil Textures	4.0 pts.

# Surface Applications Activated by Rainfall or Irrigation

Broadcast surface applications of Triflurex HFP to established alfalfa may be activated by rainfall, sprinkler, flood, or furrow irrigation. Rainfall or a single overhead sprinkler irrigation of 0.5 acre inch or more is required to activate Triflurex HFP. If activated by furrow irrigation, care should be taken to thoroughly wet beds between furrows. If rainfall or irrigation has not occurred within 3 days after application, Triflurex HFP may be mechanically incorporated. If mechanically incorporated, use equipment that will insure thorough soil mixing with minimum damage to the established alfalfa.

# **Application Timing and Weeds Controlled**

Application to established alfalfa for annual grass control can be made during dormancy or semi-dormancy or during the growing season immediately after a cutting. Because Triflurex HFP does not control established weeds, application must be made prior to the expected time of weed germination. Bromegrass and cheat begin to germinate in the fall with the onset of cooler weather. To control these weeds, apply Triflurex HFP immediately after a cutting between August 1 and October 1 but prior to weed germination. When fall applied, Triflurex HFP controls bromegrass and cheat in addition to other labeled weeds that germinate after application.

The following weeds are controlled when Triflurex HFP is applied by chemigation or surface applied and incorporated by

rainfall or irrigation:

Barnyardgrass Crabgrass Junglerice
Bromegrass (cheatgrass, Cupgrass Sandbar
downy brome, cheat, chess) Dodder Wild barley
Canarygrass Foxtail

# **Use Precautions/Restrictions**

- Apply at a rate of 4 pints (2 lbs. a.i.) per acre.
- Do not apply more than 4 pints (2 lbs. a.i.) per acre per application.
- Do not apply within 21 days before harvest of forage or 20 days before harvest of hay.
- Do not apply more than 8 pints (4 lbs. a.i.) per acre per year.

## **Tank Mixing**

Other products registered for use on established alfalfa may be applied in tank mix combination with Triflurex HFP or applied as sequential treatments following application of Triflurex HFP. Tank mixes containing Triflurex HFP must be applied by ground broadcast when alfalfa is dormant or semi-dormant or immediately after a cutting.

## **Precautions**

Follow the label DIRECTIONS FOR USE of each tank mix partner for applicable use instructions including application rate, application timing, weeds controlled, and specific precautions and restrictions of product use. See detailed information for tank mixing in the GENERAL INFORMATION section of the label.

## **ASPARAGUS-ESTABLISHED**

Apply Triflurex HFP to established asparagus as a single or split application. Triflurex HFP will suppress volunteer seedling asparagus and field bindweed when applied as directed. Follow recommended soil preparation, application, and incorporation procedures for Triflurex HFP.

## **Application Timing**

Make applications to dormant asparagus in winter or early spring after mature ferns have been removed. Do not apply after new spears begin to emerge. Apply post-harvest applications immediately after harvest in late spring or early summer just before ferns are allowed to develop.

# **Broadcast Application Rates per Acre:**

Soil Texture TRIFLUREX HFP		REX HFP
	SPLIT APPLICATION	INGLE APPLICATION
	Before and After Harvest	Before or After Harvest
Coarse	1.0+1.0 pts.	2.0 pts.
Medium	1.5+1.5 pts.	3.0 pts.
Fine	2.0+2.0 pts.	4.0 pts.

#### **Use Precautions/Restrictions**

• Do not apply more than 2.0 pts./acre on coarse soils, 3.0 pts./acre on medium soils, or 4.0 pts./acre on fine soils during any calendar year.

ASPARAGUS-CHEMIGATION: For application by irrigation system, apply specified dosage of Triflurex HFP per acre as described in previous section for use on ASPARAGUS. Follow all directions given under GENERAL CHEMIGATION USE INSTRUCTIONS section of this label. [Note to label editor: You may choose to delete chemigation on this crop when printing the marketing label.]

# BEANS-ALL DRY AND FRESH BEANS/PEAS (EXCEPT BEANS/PEAS LISTED ELSEWHERE ON THIS LABEL)

# **Triflurex HFP-Alone**

Apply and incorporate Triflurex HFP in the spring before planting or in the fall in advance of spring planting. See instructions for fall application of Triflurex HFP under the heading APPLICATION TIMING in the GENERAL INFORMATION section of the label.

# **Broadcast Application Rates/Acre:**

Soil Texture	Triflurex HFP
Coarse	1.0 pt.
Medium	1.0-1.5 pts.
Fine	1.5-2.0 pts.

- Coarse and medium soils with 2% to 5% organic matter-1.5 pts.
- Fine soils with 2% to 5% organic matter-2.0 pts.
- Soils with 5% to 10% organic matter-2.0 pts.
- Use lower rate in rate range in areas receiving less than 20 inches total annual rainfall and irrigation.

# **Tank Mixing or Sequential Treatments**

For broader spectrum weed control, other products registered for use in dry and fresh beans/peas may be applied in tank mix combination with Triflurex HFP or as a sequential treatment following application of Triflurex HFP. When tank mixing, use the recommended rate of Triflurex HFP. Follow the label DIRECTIONS FOR USE of each tank mix partner for applicable use instructions including application rate, application timing, weeds controlled, and specific precautions and restrictions of product use. See detailed information for tank mixing in the GENERAL INFORMATION section of this label.

Apply Triflurex HFP as a preplant soil incorporated treatment.

#### **Broadcast Application Rates/Acre:**

Soil Texture	Triflurex HFP
Coarse	1.0 pt.
Medium	1.5 pts.
Fine	1.5 pts.

All soils with 2% to 5% organic matter-1.5 pts.

#### **BEANS** (Lima Bean and Snap Bean)

Apply Triflurex HFP as a preplant soil incorporated treatment.

**Broadcast Application Rates/Acre:** 

Soil Texture	Triflurex HFP
Coarse	1.0 pt.
Medium	1.0 pt.
Fine	1.5 pts.

All soils with 2% to 5% organic matter-1.5 pts.

## **CARROT**

Apply Triflurex HFP as a preplant soil incorporated treatment.

**Broadcast Application Rates/Acre:** 

Soil Texture	Triflurex HFP
Coarse	1.0 pt.
Medium	1.25-1.5 pts.
Fine	1.5-2.0 pts.

- Coarse and medium soils with 2% to 5% organic matter-1.5 pts.
- Fine soils with 2% to 5% organic matter-2.0 pts.
- Soils with 5% to 10% organic matter-2.0 pts.
- Use lower rate in rate range in areas receiving less than 20 inches total annual rainfall and irrigation.

CHEMIGATION-Carrot: For application by irrigation system, apply specified dosage of Triflurex HFP per acre as described in previous section for use on specified crop. Follow all directions given under GENERAL CHEMIGATION USE INSTRUCTIONS section of this label. [Note to label editor: You may choose to delete chemigation on this crop when printing the marketing label.]

# **CASTOR BEAN**

Apply Triflurex HFP as a soil incorporated treatment before or immediately after planting. If applied and incorporated after planting, set equipment so as not to disturb the seed.

**Broadcast Application Rates/Acre:** 

 The state of the s		
Soil Texture	Triflurex HFP	
Coarse	1.0 pt.	
Medium	1.25-1.5 pts.	
Fine	1.5-2.0 pts.	

- Coarse and medium soils with 2% to 5% organic matter-1.5 pts.
- Fine soils with 2% to 5% organic matter-2.0 pts.
- Soils with 5% to 10% organic matter-2.0 pts.
- Use lower rate in rate range in areas receiving less than 20 inches total annual rainfall and irrigation.

CHEMIGATION-Castor Bean: For application by irrigation system, apply specified dosage of Triflurex HFP per acre as described in previous section for use on specified crop. Follow all directions given under GENERAL CHEMIGATION USE INSTRUCTIONS section of this label. [Note to label editor: You may choose to delete chemigation on this crop when printing the marketing label.]

## **CELERY**

Apply Triflurex HFP as a soil incorporated treatment. Triflurex HFP may be applied to direct seeded or transplant celery before planting, at planting, or immediately after planting.

**Broadcast Application Rates/Acre:** 

Soil Texture	Triflurex HFP
Coarse	1.0 pt.
Medium	1.25-1.5 pts.
Fine	1.5-2.0 pts.

Coarse and medium soils with 2% to 5% organic matter-1.5 pts.

- Fine soils with 2% to 5% organic matter-2.0 pts.
  Soils with 5% to 10% organic matter-2.0 pts.
  Use lower rate in rate range in areas receiving less than 20 inches total annual rainfall and irrigation.

**CHEMIGATION-Celery:** For application by irrigation system, apply specified dosage of Triflurex HFP per acre as described in previous section for use on specified crop. Follow all directions given under GENERAL CHEMIGATION USE INSTRUCTIONS section of this label. [Note to label editor: You may choose to delete chemigation on this crop when printing the marketing label.]

## **CHICORY**

(Cichorium intybus or Cichorium endiva)

Triflurex HFP may be applied as a preplant incorporated treatment to chicory grown either as a root crop or leafy vegetable as indicated below:

**Cichorium intybus,** considered to be a root crop, may yield the following:

- Chicory-the dried and processed root used as a coffee substitute.
- Radicchio-green leaves harvested from field grown plantings.
- Belgian Endive-white leaves grown in the dark; growth from field grown rootstalks.

Cichorium endiva, considered to be a leafy vegetable, may yield the following:

- Escarole-curly green leaves from field grown plantings.
- Endive-very curly green leaves from field grown planting.

Apply Triflurex HFP as a soil incorporated treatment in spring or early summer prior to planting.

**Broadcast Application Rates/Acre:** 

Soil Texture	Triflurex HFP
Coarse	1.0 pt.
Medium	1.5 pts.
Fine	2.0 pts.

- Coarse and medium soils with 2% to 5% organic matter-1.5 pts.
- Fine soils with 2% to 5% organic matter-2.0 pts.
- Soils with 5% to 10% organic matter-2.0 pts.

#### **COLE CROPS**

## Broccoli, Brussels Sprouts, Cabbage, and Cauliflower

## **Direct Seeded Cole Crops**

Apply Triflurex HFP as a preplant soil incorporated treatment.

**Broadcast Application Rates/Acre:** 

Soil Texture	Triflurex HFP
Coarse	1.0 pt.
Medium	1.0 pt.
Fine	1.5 pts.

Soils with 2% to 5% organic matter-1.5 pts.

**Precaution:** Direct seeded cole crops exhibit marginal tolerance to higher than recommended rates of Triflurex HFP. Stunting or reduced stands may occur.

# **Transplanted Cole Crops**

Apply and incorporate Triflurex HFP prior to transplanting.

**Broadcast Application Rates/Acre:** 

Soil Texture	Triflurex HFP
Coarse	1.0 pt.
Medium	1.25-1.5 pts.
Fine	1.5-2.0 pts.

- Coarse and medium soils with 2% to 5% organic matter-1.5 pts.
- Fine soils with 2% to 5% organic matter-2.0 pts.
- Soils with 5% to 10% organic matter-2.0 pts.
- Use lower rate in rate range in areas receiving less than 20 inches total annual rainfall and irrigation.

**COLE CROPS-CHEMIGATION:** For application by irrigation system, apply specified dosage of Triflurex HFP per acre as described in previous section for use on COLE CROPS-Direct seeded. Follow all directions given under GENERAL CHEMIGATION USE INSTRUCTIONS section of this label. [Note to label editor: You may choose to delete chemigation on this crop when printing the marketing label.]

# **CORN-FIELD CORN ONLY**

# **Post-emergence Incorporated Treatment**

Apply Triflurex HFP as a post-emergence treatment following cultivation and/or use of a pre-emergence herbicide. Triflurex HFP does not control established weeds. Apply when crop is well established (2 true leaf stage or taller). Apply as an over-the-top spray or as a directed spray using drop nozzles if foliage prevents uniform coverage of the soil surface.

# **Incorporation Directions**

Applications of Triflurex HFP must be mechanically incorporated within 24 hours. Mechanical incorporation may be accomplished with 1 pass of a sweep-type cultivator or properly adjusted rolling cultivator. The sweep-type cultivator should

have 3 to 5 sweeps per row middle and be operated at a speed that will provide vigorous soil mixing. Set middle sweeps so as to avoid exposing untreated soil. Adjust incorporation equipment so as to avoid mechanical injury to the crop.

# Water in Option for Coarse- and Medium-Textured Soils

On coarse- and medium-textured soils, Triflurex HFP may be incorporated by continuous rainfall or sprinkler irrigation amounting to at least ½ to 1 inch of water. Best results are obtained if application is made immediately after a cultivation when the soil surface is open and porous. Rainfall or sprinkler irrigation prior to application will tend to consolidate and seal the soil surface and prevent the downward movement of Triflurex HFP that is expected under porous, open, recently tilled conditions. Supplemental irrigation can be applied through a center pivot, solid set, or hand moved sprinkler system. Do not use furrow irrigation. Mechanically incorporate as described above if the required amount of rainfall or sprinkler irrigation does not occur within 24 hours after application.

## **Broadcast Application Rates/Acre:**

Soil Texture	Triflurex HFP
Coarse	0.75-1.0 pt. <sup>†</sup>
Medium	1.25-1.5 pts.
Fine	1.5-2.0 pts.

<sup>&</sup>lt;sup>†</sup>Apply 1.0 to 1.5 pts./acre on coarse soils in Alabama, Florida, Georgia, North Carolina, South Carolina, and Virginia to control fall panicum and Texas panicum.

Apply lower rate in rate range in areas receiving less than 20 inches total annual rainfall and irrigation.

#### **Precautions**

- Do not apply to sweet corn, popcorn, or corn grown for seed.
- Do not apply Triflurex HFP to corn as a preplant or pre-emergence treatment or crop injury may occur.
- Where corn is planted in a furrow, Triflurex HFP should be applied only after a cultivation to move soil into the row.

#### Restriction

Do not apply Triflurex HFP within 6 weeks prior to harvesting forage, fodder, or silage, or after corn is 30 inches tall.

#### Chemigation

Triflurex HFP may be applied through properly equipped chemigation systems for weed control in field corn. Refer to APPLICATION BY CHEMIGATION section in the GENERAL INFORMATION section of this label for chemigation use directions. Do not apply Triflurex HFP through any type of irrigation system unless these directions are carefully followed.

# **Application Timing**

Apply Triflurex HFP in  $\frac{1}{2}$  to 1 acre inch of sprinkler irrigation when field corn is at the 2 true leaf stage of growth or taller. Apply Triflurex HFP prior to weed emergence or after existing weeds have been controlled with herbicides or cultivation. Triflurex HFP does not control established weeds.

# **Broadcast Application Rates/Acre:**

Soil Texture	Triflurex HFP
Coarse	1.5-2.0 pts.
Medium	1.5-2.0 pts.
Fine	Do not apply Triflurex HFP by chemigation to fine-
	textured soils.

# Precautions

- Do not apply to sweet corn, popcorn, or corn grown for seed.
- Where corn is planted in a furrow, Triflurex HFP should be applied only after a cultivation to move soil into the row.
- Do not apply Triflurex HFP to corn as a preplant or pre-emergence treatment or crop injury may occur.

#### Restriction

Do not apply Triflurex HFP within 6 weeks prior to harvesting forage, fodder, or silage, or after corn is 30 inches tall.

## COTTON

# **Triflurex HFP-Alone**

Apply Triflurex HFP to cotton as a soil incorporated treatment. Triflurex HFP may be applied before planting, immediately after planting, to the established crop up to layby, or in the fall in advance of spring planting. Refer to instructions for fall application under APPLICATION TIMING in the GENERAL INFORMATION section of this label. Follow recommended soil preparation, application, and incorporation procedures in the GENERAL INFORMATION section of the label. When incorporating Triflurex HFP after planting but prior to crop emergence set equipment so as not to disturb planted seed.

#### **Broadcast Application Rates/Acre:**

Soil Texture	TRIFLUREX HFP		
	Spring Application <sup>†</sup> Fall Application	oplication	
		Eastern U.S. <sup>††</sup>	Western U.S. ***
Coarse	1.0 pt.	2.0 pts.	1.5 pts.
Medium	1.25-1.5 pts.	2.0 pts.	2.0 pts.
Fine	1.5-2.0 pts.	2.5 pts.	2.5 pts.

<sup>&</sup>lt;sup>†</sup> Spring Application

- Coarse and medium soils with 2% to 5% organic matter-1.5 pts. per acre.
- Fine soils with 2% to 5% organic matter-2.0 pts. per acre.
- Soils with 5% to 10% organic matter-2.0 to 2.5 pts. per acre.
- Use lower rate in rate range for areas receiving less than 20 inches of total annual rainfall and irrigation.

For cotton grown in states other than those listed above, fall apply at the highest broadcast rates for each soil texture under spring application.

## **Precautions**

Cotton should be planted after early season adverse weather conditions have passed, especially when using higher rate programs. Cool, wet weather early in the growth cycle causes additional stress to the cotton plant. This may result in reduced stand, delayed maturity, and reduced yields.

# **Tank Mixing or Sequential Treatments**

For broader spectrum weed control, other products registered for use in cotton may be applied in tank mix combination with Triflurex HFP or as a sequential treatment following application of Triflurex HFP. When tank mixing, use the recommended rate of Triflurex HFP. Follow the label DIRECTIONS FOR USE of each tank mix partner for applicable use instructions including application rate, application timing, weeds controlled, and specific precautions and restrictions of product use. See detailed information for tank mixing in the MIXING DIRECTIONS section of this label.

# **Special Use Programs**

# 1. Cotton-Chemigation

Triflurex HFP may be applied through properly equipped chemigation systems for weed control in cotton. Refer to APPLICATION BY CHEMIGATION in the GENERAL INFORMATION section of this label for use directions for chemigation. Do not apply Triflurex HFP through any type of irrigation system unless these directions are carefully followed. Apply Triflurex HFP in overhead sprinkler irrigation equal to ½ to 1 inch of water. Planting and application should occur as soon as possible after the last tillage operation. Triflurex HFP must be applied within 2 days after planting prior to crop emergence. Triflurex HFP does not control established weeds. Soil incorporation is not required when Triflurex HFP is applied through chemigation systems.

Broadcast Application Rates per Acre for Chemigation Application Where Conventional Tillage Practices are Used See rates for cotton TRIFLUREX HFP-ALONE above. Apply at the maximum recommended rate for spring application for each soil texture class to be treated.

#### Cultivation

Soil treated by chemigation with Triflurex HFP may be shallow cultivated without reducing weed control activity.

## Broadcast Application Rates per Acre for Chemigation Application Where Minimum Tillage Practices are Used:

Soil Texture	Triflurex HFP
Coarse	1.0-3.0 pts.
Medium	1.5-4.0 pts.
Fine	2.0-4.0 pts.

• 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 when high crop residue levels are present, where dense weed populations are anticipated, or where no additional sequential applications of Triflurex HFP are to be made.

# **Rotational Crop Restrictions After Chemigation**

**Conventional Tillage:** Refer to the rotational crop restrictions in the ROTATION CROP RESTRICTIONS section of this label. **Minimum Tillage:** In addition to the rotational crop restrictions listed in the ROTATION CROP RESTRICTIONS section of this label, do not plant grain sorghum in the year following the application of Triflurex HFP.

# 2. 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.

# **Broadcast Application Rates Conservation Tillage:**

Soil Texture	Triflurex HFP
Coarse	1.0-2.0 pts.
Medium	1.5-2.0 pts.
Fine	2.0-4.0 pts.

<sup>&</sup>lt;sup>††</sup> Fall application rates for eastern cotton producing areas including Alabama, Arkansas, northern Florida, Georgia, Louisiana, Mississippi, southeastern Missouri (Bootheel), North Carolina, New Mexico, Oklahoma, South Carolina, Tennessee, and Texas.

<sup>\*\*\*</sup> Fall application rates for western cotton producing areas including Arizona and California.

#### **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 not to 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 1/3 of the recommended broadcast rate per acre (12 inches divided by 36 inches = 1/3).

# **Layby Applications**

Layby applications may be made in established cotton from the 4 true leaf stage of growth up to layby but not less than 90 days before harvest. Apply Triflurex HFP uniformly to the soil surface using drop nozzles if necessary. Soil incorporate using 1 pass of a sweep-type cultivator or properly adjusted rolling cultivator. Operate cultivation equipment at speeds sufficient to provide vigorous soil mixing and exercise care to avoid mechanical injury to the crop. Cumulative layby application rate may not exceed the layby application rate shown for each soil texture.

# **Broadcast Application Rates:**

Soil Texture	Triflurex HFP
Coarse	1.0 pt.
Medium	1.5 pts.
Fine	2.0 pts.

#### Repeat, Sequential Applications

Triflurex HFP may be applied 1 or more times sequentially during the growing season using the rates and methods of application described above for full season weed control. The maximum dosage that can be used for a single application cannot exceed the rates shown for each application method. The maximum cumulative application rate that may be applied within the same growing season (including fall applications) cannot exceed 4.0 pints per acre for Triflurex HFP (2 pounds active ingredient per acre).

# Contact, Overlay, or Post-emergence Herbicides

Contact herbicides approved for use in cotton may be used to control existing weeds prior to planting cotton. To control additional weeds, overlay, pre-emergence, or post-emergence applications of other products registered for use on cotton may be applied. Follow the label DIRECTIONS FOR USE of such products for applicable use instructions including application rates, application timing, weeds controlled, and specific precautions and restrictions of product use.

# **Rotation Crop Restrictions**

Refer to the ROTATION CROP RESTRICTIONS section of this label for specific rotational crop restrictions. When the cumulative application rate exceeds the application rates in the table below, plant only those crops for which Triflurex HFP can be applied as a preplant incorporated treatment in the season following the application of Triflurex HFP or crop injury may result.

Cumulative Application Rate	

Soil Texture	Triflurex HFP
Coarse	1.5 pts./acre
Medium	1.5 pts./acre
Fine	2.0 pts./acre

Small grain cover crops that will not be grazed or harvested and are intended for prevention of wind erosion in conservation tillage cotton may be planted in the fall following spring applications of up to 4.0 pints per acre of Triflurex HFP. Injury in the form of reduced stands or delayed emergence and development may result when small grains are planted under these conditions.

## 3. Cotton-Fall Panicum Control

Apply and incorporate a broadcast rate of 2.0 pts./acre on both coarse and medium soils.

#### 4. Cotton-Pigweed and Seedling Johnsongrass Control

Apply Triflurex HFP as a preplant incorporated treatment.

**Broadcast Application Rates/Acre:** In Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, southeastern Missouri (Bootheel), North Carolina, South Carolina, Tennessee, and southern Virginia, apply Triflurex HFP at the following broadcast rates:

Soil Texture	Triflurex HFP
Coarse	1.0-1.5 pts.
Medium	1.5-2.0 pts.
Fine	2.0 pts.

(Exception: Louisiana where 3.0 pts./acre can be applied to fine soils).

• Use higher rates in the rate range where high weed populations are anticipated.

# 5. Cotton-Additional Weed and Grass Control in Gulf Coast Counties of Texas

Apply Triflurex HFP as a preplant incorporated treatment up to 2 weeks before planting.

**Broadcast Application Rates/Acre:** For cotton grown in Brazoria, Calhoun, Chambers, Fort Bend, Galveston, Harris, Jackson, Jefferson, Liberty, Matagorda, Orange, Victoria, Waller, and Wharton counties of the Texas Gulf Coast, apply Triflurex HFP at the following broadcast rates:

Soil Texture	Triflurex HFP
Coarse	1.5 pts.
Medium	2.0 pts.
Fine	3.0 pts.

6. Cotton-Rhizome Johnsongrass Control (For use in all cotton producing states except Arizona and California)

Rhizome johnsongrass control with Triflurex HFP requires maximum application rates for 2 consecutive years. See Broadcast Application Rates/Acre in the table below. Commercially acceptable control cannot be obtained with only 1 year applying the maximum use rate of Triflurex HFP. Carefully follow all special use directions.

# **Soil Preparation**

Satisfactory results are dependent upon proper preparation of soil prior to application. Chisel plow to bring rhizomes to the soil surface. Disc twice before application to chop rhizomes into small (2-3 inch) pieces and destroy any recently emerged johnsongrass plants.

## **Broadcast Application Rate/Acre:**

Soil Texture	Triflurex HFP
Coarse	2.0 pts.
Medium	3.0 pts.
Fine	4.0 pts.

Spring Application: Apply Triflurex HFP any time before planting in the spring for 2 years in succession.

Fall Application: Apply Triflurex HFP between October 15 and December 31 for 2 years in succession.

**Incorporation:** Deep incorporation with a tandem disc is essential for good results. Set disc to operate 4 to 6 inches deep and operate at 4 to 6 mph. Two incorporation passes are necessary and the second should be in a different direction than the first.

**Cultivation:** Some johnsongrass plants will not be controlled. Timely cultivation during the crop season is necessary to remove escaped plants and maintain commercially acceptable control.

# **Restrictions and Use Precautions**

- In the season following a maximum rate treatment, plant only rice or crops for which Triflurex HFP is labeled as preplant incorporated treatment or crop injury may occur.
- To avoid crop injury, cotton should be planted after early season adverse weather conditions have passed especially when using high rates. Cool wet weather early in the growth cycle causes stress to the cotton plant. The added stress may result in reduced stand, delayed maturity, and reduced yields.

#### **Maximum Crop Year Use Rates**

• For full season weed control, Triflurex HFP may be applied one or more times sequentially during the crop year observing the rates, methods of application, and a 90-day preharvest interval. The maximum dosage must not exceed the rates given and the maximum cumulative amount of Triflurex HFP that may be applied within the same crop year (includes fall application or spring application plus layby application) must not exceed 4.0 pts. per acre (2 lbs. a.i. per acre).

#### **CUCURBITS**

Apply Triflurex HFP after emergence when plants have reached the 3 to 4 true leaf stage of growth. Apply as a directed spray to soil between the rows. Avoid foliage contact as slight crop injury may occur. Set incorporation equipment to move treated soil around the base of plants.

**Broadcast Application Rates/Acre:** 

Soil Texture	Triflurex HFP
Coarse	1.0 pt.
Medium	1.25-1.5 pts.
Fine	1.5-2.0 pts.

- Coarse and medium soils with 2% to 5% organic matter-1.5 pts.
- Fine soils with 5% to 10% organic matter-2.0 pts.
- Soils with 5% to 10% organic matter-2.0 pts.
- Use lower rate in rate range for areas receiving less than 20 inches of total annual rainfall and irrigation.

**Restriction:** Do not apply within 30 days of harvest except for watermelon which has a 60 day preharvest interval. **CUCURBITS-CHEMIGATION:** For application by irrigation system, apply specified dosage of Triflurex HFP per acre as described in previous section for use on CUCURBITS. Follow all directions given under GENERAL CHEMIGATION USE INSTRUCTIONS section of this label. **[Note to label editor: You may choose to delete chemigation on this crop when printing the marketing label.]** 

## **EGGPLANT**

Apply and incorporate Triflurex HFP before transplanting. Incorporate to a depth of 3 inches. Do not make more than one application per season.

**Broadcast Application Rates/Acre:** 

Soil Texture	Triflurex HFP
Coarse	1.0 pt.
Medium	1.25-1.5 pts.
Fine	1.5-2 pts.

- Coarse and medium soils with 2% to 5% organic matter-1.5 pts.
- Fine soils with 5% to 10% organic matter-2.0 pts.
- Soils with 5% to 10% organic matter-2.0 pts.
- Use lower rate in rate range for areas receiving less than 20 inches of total annual rainfall and irrigation.

Precaution: Avoid transplanting until soil temperatures have warmed in late spring.

**Eggplant-CHEMIGATION:** For application by irrigation system, apply specified dosage of Triflurex HFP per acre as described in previous section for use on EGGPLANT. Follow all directions given under GENERAL CHEMIGATION USE INSTRUCTIONS section of this label. [Note to label editor: You may choose to delete chemigation on this crop when printing the marketing label.]

# FLAX (Fall Application Only)

Apply and incorporate Triflurex HFP in the fall for weed control in spring seeded flax. Incorporate once within 24 hours after application. The second incorporation may be performed in the spring prior to planting.

# **Special Instructions for Flax**

- 1. Incorporation operations or other tillage practices performed in the spring prior to seeding should be relatively shallow so as to maintain a firm seedbed and the seedbed should be packed prior to seeding.
- 2. Seeding should be done with a press drill or hoe drill. Seed into moist seedbed and plant no more than 1½ inches deep.
- 3. Delay seeding until soil has warmed sufficiently to allow rapid germination and establishment.
- 4. Refer to GENERAL USE PRECAUTIONS in the GENERAL INFORMATION section of this label for information on growing conditions that can lead to crop injury or yield reduction.

**Broadcast Application Rates/Acre:** 

Soil Texture	Triflurex HFP
Coarse	1.0 pt.
Medium	1.5 pts.
Fine	2.0 pts.

**FLAX-CHEMIGATION:** For application by irrigation system, apply specified dosage of Triflurex HFP per acre as described in previous section for use on FLAX. Follow all directions given under GENERAL CHEMIGATION USE INSTRUCTIONS section of this label.

[Note to label editor: You may choose to delete chemigation on this crop when printing the marketing label.]

## **GRAIN SORGHUM (MILO)**

# Post-emergence Incorporated **Treatment**

Apply Triflurex HFP as a directed or over-the-top spray when grain sorghum is 8 to 24 inches tall. Drop nozzles should be used if foliage prevents uniform soil coverage.

#### **Soil Preparation**

Cultivate before application of Triflurex HFP to remove established weeds and to cover the base of grain sorghum plants with soil. Cultivation equipment should be set to add approximately 1 inch of soil to the base of sorghum plants.

## **Incorporation Directions**

Applications of Triflurex HFP must be mechanically incorporated within 24 hours after application. Mechanical incorporation may be accomplished with one pass of a sweep-type cultivator or properly adjusted rolling cultivator. Sweep-type cultivators should have 3 to 5 sweeps per row middle and be operated at a speed that will provide vigorous soil mixing. Set middle sweeps so as to avoid exposing untreated soil. Adjust incorporation equipment so as to avoid mechanical injury to the crop.

**Broadcast Application Rates/Acre:** 

Soil Texture	Triflurex HFP
Coarse	0.75-1.0 pt.
Medium	1.0-1.5 pts.
Fine	1.5-2.0 pts.

Apply Triflurex HFP at lower rate in rate range in areas receiving less than 20 inches total rainfall and irrigation.

#### **Precautions**

- Do not apply Triflurex HFP to grain sorghum as a preplant or pre-emergence treatment or crop injury will occur.
- Over-application may result in injury to grain sorghum.

**Restriction:** Do not apply after grain sorghum is 24 inches tall.

## Chemigation

Triflurex HFP may be applied through properly equipped chemigation systems for weed control in grain sorghum 8 to 24 inches tall. Refer to APPLICATION BY CHEMIGATION section in the GENERAL INFORMATION section of this label for chemigation use directions. Do not apply Triflurex HFP through any irrigation system unless these directions are carefully followed.

#### **Soil Preparation**

Cultivate before application of Triflurex HFP to destroy existing weeds and cover the base of the grain sorghum plants with soil. Cultivation equipment should be set to add approximately 1 inch of soil to the base of sorghum plants.

#### **Application Timing**

Apply Triflurex HFP to grain sorghum in 1/2- to 1-acre inch of overhead sprinkler irrigation as soon as possible after a cultivation when grain sorghum is 8 to 24 inches tall. Triflurex HFP must be applied prior to weed emergence or after existing weeds are controlled. Triflurex HFP does not control established weeds.

**Broadcast Application Rates/Acre:** 

Soil Texture	Triflurex HFP
Coarse	0.75-1.0 pt.
Medium	1.0-1.5 pts.
Fine	Do not apply Triflurex HFP by chemigation to fine-
	textured soils.

**Restriction:** Do not apply after grain sorghum is 24 inches tall.

# GREENS-TURNIP GREENS GROWN FOR PROCESSING, COLLARDS, KALE, AND MUSTARD GREENS

Apply Triflurex HFP to greens as a preplant soil incorporated treatment.

**Broadcast Application Rates/Acre:** 

Soil Texture	Triflurex HFP
Coarse	1.0 pt.
Medium	1.5 pts.
Fine	1.5 pts.

Soils with 2% to 10% organic matter-1.5 pts.

GREENS (Turnip greens grown for processing, Collards, Kale, and Mustard greens)-CHEMIGATION: For application by irrigation system, apply specified dosage of Triflurex HFP per acre as described in previous section for use on GREENS (Turnip greens grown for processing, Collards, Kale, and Mustard greens). Follow all directions given under GENERAL CHEMIGATION USE INSTRUCTIONS section of this label. [Note to label editor: You may choose to delete chemigation on this crop when printing the marketing label.]

# **HOPS**

Apply and incorporate Triflurex HFP to established crop during dormancy. Use incorporation equipment that will insure thorough soil mixing with minimal damage to crop stand.

**Broadcast Application Rates/Acre:** 

Soil Texture	Triflurex HFP
Coarse	1.0 pt.
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Medium	1.25-1.5 pts.
Fine	1.5 pts.

• Soils with 2% to 10% organic matter-1.5 pts.

HOPS-CHEMIGATION: For application by irrigation system, apply specified dosage of Triflurex HFP per acre as described in previous section for use on HOPS. Follow all directions given under GENERAL CHEMIGATION USE INSTRUCTIONS section of this label. [Note to label editor: You may choose to delete chemigation on this crop when printing the marketing label.]

# IRRIGATION WATER RINGS NON-BEARING CITRUS TREES

Apply to non-bearing citrus trees through irrigation water rings to provide pre-emergence weed control. Mix at a rate of 12 fluid ounces of Triflurex HFP per 500 gallons of water. Agitate until uniformly dispersed in tank. Apply 10 gallons of the mixture per 4-foot diameter water ring per tree. Triflurex HFP should be applied at the second or third watering and should not be applied in combination with any other pesticide.

#### **KENAF**

Apply Triflurex HFP as a preplant soil incorporated treatment.

# **Broadcast Application Rates/Acre:**

<b>Soil Texture</b> Coarse <sup>†</sup>	Triflurex HFP 1.0 pt.
Medium	1.0-1.5 pts.
Fine	1.5 pts.

<sup>&</sup>lt;sup>†</sup>Coarse soils with 2% to 5% organic matter-1.5 pts.

Precaution: Do not graze or harvest treated crop for livestock forage.

## **LUPINE**

Apply and incorporate before planting.

# Broadcast Application Rates/Acre:

Soil Texture	Triflurex HFP
Coarse	1.0 pt.
Medium	1.25-1.5 pts.
Fine	1.5-2.0 pts.

- Coarse and medium soils with 2% to 5% organic matter-1.5 pts.
- Fine soils with 2% to 5% organic matter-2.0 pts.
- Soils with 5% to 10% organic matter-2.0 pts.
- Use lower rate in rate range for areas receiving less than 20 inches of total annual rainfall and irrigation.

## **MINT**

# **Established Peppermint and Spearmint**

## **Broadcast Application Rates/Acre:**

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Soil Texture	Triflurex HFP	
Coarse	1.0 pt.	
Medium	1.25 pts.	
Fine	1.5 pts.	

Use incorporation equipment that will ensure thorough soil mixing with minimum damage to the crop.

MINT-CHEMIGATION: For application by irrigation system, apply specified dosage of Triflurex HFP per acre as described in previous section for use on MINT. Follow all directions given under GENERAL CHEMIGATION USE INSTRUCTIONS section of this label. [Note to label editor: You may choose to delete chemigation on this crop when printing the marketing label.]

# MUSTARD-GROWN FOR SEED OR PROCESSED FOR FOOD

Apply Triflurex HFP to mustard as a preplant soil incorporated treatment.

**Broadcast Application Rates/Acre:** 

Soil Texture	Triflurex HFP
Coarse	1.0 pt.
Medium	1.5 pts.
Fine	1.5 pts.

Soils with 2% to 10% organic matter-1.5 pts.

#### **OKRA**

Apply Triflurex HFP as a soil incorporated treatment before or immediately after planting. If applied and incorporated after planting, set equipment so as not to disturb the seed.

**Broadcast Application Rates/Acre:** 

Triflurex HFP
1.0 pt.
_

Use higher rate in rate range where high weed populations are anticipated.

Medium	1.25-1.5 pts.
Fine	1.5-2.0 pts.

- Coarse and medium soils with 2% to 5% organic matter-1.5 pts. Fine soils with 2% to 5% organic matter-2.0 pts.

- Soils with 5% to 10% organic matter-2.0 pts.
- Use lower rate in rate range for areas receiving less than 20 inches of total annual rainfall and irrigation.

# **ONIONS (DRY BULBS ONLY)**

**Post-emergence Layby Application:** Apply at layby to the soil between onion rows. Avoid applying directly to the tops or exposed bulbs of onion plants. Emerged weeds should be removed prior to application of Triflurex HFP. Triflurex HFP will not control established weeds.

**Broadcast Application Rates/Acre:** 

Soil Texture	Triflurex HFP
Coarse	0.75-1.0 pt.
Medium	1.0-1.25 pts.

- Apply only to soils containing 3.5% or less organic matter.
- Note: Use the lower rate in rate range where light weed pressure is anticipated.

## Incorporation

Triflurex HFP should be uniformly incorporated into the soil between the onion rows. Incorporation may be accomplished by operating a sweep-type or rolling cultivator 2 to 4 inches deep at 6 to 8 mph. Two incorporation passes are required with the first occurring within 24 hours after application or erratic weed control may result. Avoid covering onions with treated soil during incorporation as injury to the crop may occur. Care should be taken to avoid mechanical injury to onion roots during incorporation.

# **Precautions**

- Preharvest interval: Do not apply within 60 days of harvest.
- Do not apply as a preplant or pre-emergence treatment.
- Do not apply to muck soils.
- Note: Reduced yields may result from use of Triflurex HFP on onion crops weakened by diseases, improper incorporation
  depth, excessive moisture, high salt concentration, or drought may weaken the crop and increase the possibility of
  damage from Triflurex HFP. Under these conditions, reduced yields may result.

**ONION-CHEMIGATION:** For application by irrigation system, apply specified dosage of Triflurex HFP per acre as described in previous section for use on ONION. Follow all directions given under GENERAL CHEMIGATION USE INSTRUCTIONS section of this label. [Note to label editor: You may choose to delete chemigation on this crop when printing the marketing label.]

#### **ORNAMENTALS**

Apply and mechanically incorporate Triflurex HFP prior to planting new nursery stock liners, ornamentals, trees and woody shrubs, and gladioli. Gladioli corms less than 1-inch diameter may be injured by preplant applications. Triflurex HFP may also be applied to these and other listed ornamentals (see below) after they are established. When mechanically incorporated after planting, the implement should be adjusted so that treated soil is thrown toward and around the plants in the row.

**Broadcast Application Rates/Acre:** 

Soil Texture	Triflurex HFP
Coarse	1.0 pt.
Medium	1.5 pts.
Fine	2.0 pts.

For the indicated ornamental groundcovers, apply 1 gallon per acre (3 ounces per 1000 square feet) of Triflurex HFP in 5 to 40 gallons of water per acre and incorporate within 24 hours with at least a ½-inch rain or its equivalent in sprinkler irrigation.

Woody Shrubs	Trees	Ground Cover
Andromeda, Japanese	Almond	Aaronsbeard
Arborvitae, American	Apple, Crabapple	Bellflower, Adriatic
Azalea	Apricot	Bellflower, Poscharsky
Barberry, Japanese	Ash, White	Ceanothus
Barberry, Mento	Bald Cypress	Coreopsis
Boxwood, Common	Birch, European White	Cotoneaster
Boxwood, Harlands	Black gum	Coyote Brush
Boxwood, Littleleaf	Cherry	Crown Vetch
Camellia, Japanese	Chestnut, Chinese	Daisy, Trailing African
Camellia, Sasanqua	Cottonwood	Fern, Asparagus
Cherry Laurel, American	Dogwood, Flowering	Gazania
Cinquefoil	Dogwood, Kousa	Germander
Cleyera, Japanese	Douglas Fir	Ice Plant, Largeleaf
Cotoneaster, Cranberry	Fir, Balsam	Ivy, Algerian
Cotoneaster, Zabel	Hemlock, Canada	Ivy, English
Deutzia	Honey Locust	Lily-of-the-Nile
Elaegnus, Silverberry	Larch, Japanese	Lillyturf, Bigblue
Euonymus, Spreading	Locust, Black	Marigold
Euonymus, Winged	Maple, Norway	Myoporum
Euonymus, Wintercreeper	Maple, Red	Plumbago, Dwarf

Firethorn	Maple, Silver	Rockrose
Forsythia	Maple, Sugar	Rosemary
Guava, Pineapple	Oak, Pin	Rupturewort
Holly	Oak, Red	Snow-in-Summer
Honeysuckle	Oak, Scarlet	Speedwell
India Hawthorn	Peach	St. Johnswort
Juniper	Pine, Austrian	Stonecrop (Sedum)
Laurel, Mountain	Pine, Easter White	Strawberry, Beach
Lilac, Common	Pine, Japanese Black	Thrift
Mock Orange	Pine, Loblolly	Verbena
Pittosporum, Japanese	Pine, Red	Wirevine, Creeping
Privet	Pine, Scotch	Yarrow, Wolly
Red Cedar, Eastern	Planetree, London	Zoysiagrass
Rhododendron	Plum	
Spiraea, Vanhoutte	Redbud, Eastern	
Viburnum	Spruce, Colorado	
Weigela	Spruce, Norway	
Willow	Spruce, White	
Yew, Anglojap	Sweet Gum	
Yew, Japanese	Sycamore	
Yew, Pine	Tulip Tree	
	Walnut, Black	

# ROSES AND OTHER ESTABLISHED FLOWERS

African Daisy	Gaillardia	Rose
Aster (perennial)	Gladiolus	Salvia
Balsam	Golden Glow	Shasta Daisy
Black-eyed Susan	Impatiens	Snapdragon
Calendula	Ixora	Snow-on-the-mountain
Carnation	Lobelia	Stock
Centaurea, Velvet	Lupine	Sunflower
Chrysanthemum	Marigold	Sweet Alyssum
Coreopsis	Marigold, Cape	Sweet Pea
Cornflower	Morningglory	Sweet Sultan
Cosmos Dahlia	Nasturtium	Sweet William
Dianthus	Petunia	Vinca
Dusty Miller	Phlox	Yarrow
Floss Flower	Pincushion Flower	Zinnia
Forget-me-not	Poppy, California	
Four O'Clock	Portulaca	

# **UNDER PAVED SURFACES**

# **General Use Instructions and Site Preparation**

Triflurex HFP should be used only where the area to be treated has been prepared according to good construction practices. If rhizomes, stolens, tubers, or other vegetative plant parts are present in the site, they should be removed by scalping with a grader blade to a depth sufficient to insure their complete removal. Application should be made only when final grade is established or after additions of base rock. Do not move soils following Triflurex HFP application and do not apply Triflurex HFP to areas where asphalt is to be laid directly on top of soil. Paving should follow Triflurex HFP applications as soon as possible.

Large Areas: Apply Triflurex HFP in sufficient water to insure thorough wetting of the soil surface or penetration of the spray solution through the base rock layer. A minimum of 150 gallons per acre is recommended. Apply with any sprayer that will apply the spray uniformly. Add the recommended amount of Triflurex HFP to clean water in the spray tank during the filling operation. Agitate before spraying.

**Small Areas:** For treating small areas, a tank-type hand sprayer or sprinkling can may be used. Before application, determine the amount of water and Triflurex HFP necessary to uniformly cover the area to be treated. Shake or stir the spray solution prior to application.

OUNCES PER 1000 SQUARE FEET	TRIFLUREX HFP GALLONS PER ACRE
9-12	3-4

# **PEAS-DRY PEAS AND ENGLISH PEAS**

# **Triflurex HFP-Alone**

Apply and incorporate Triflurex HFP in the spring before planting or in the fall in advance of spring planting. Refer to instructions for fall application under APPLICATION TIMING in the GENERAL INFORMATION section of this label.

Broadcast Application Rates/Acre:
Soil Texture TRIFLUREX HFP

	Spring Application	Fall Application <sup>†</sup>
Coarse	1.0 pt.	1.0 pt.
Medium	1.25-1.5 pts. <sup>††</sup>	1.25-1.5 pts.
Fine	1.5 pts.	1.5 pts.

<sup>•</sup> Use lower rate in rate range for areas receiving less than 20 inches of total annual rainfall and irrigation.

# **Tank Mixing or Sequential Treatments**

For broader spectrum weed control, other products registered for use in dry and English peas may be applied in tank mix combination with Triflurex HFP or as a sequential treatment following application of Triflurex HFP. When tank mixing, use the recommended rate of Triflurex HFP. Follow the label DIRECTIONS FOR USE of each tank mix partner for applicable use instructions including application rate, application timing, weeds controlled, and specific precautions and restrictions of product use. See detailed information for tank mixing in the GENERAL INFORMATION section of this label.

**PEAS, Dry Peas and English Peas-CHEMIGATION:** For application by irrigation system, apply specified dosage of Triflurex HFP per acre as described in previous sections for use on PEAS, Dry Peas and English Peas. Follow all directions given under GENERAL CHEMIGATION USE INSTRUCTIONS section of this label. For tank mixes containing Triflurex HFP, follow label directions, restrictions, and precautions for both products concerning CHEMIGATION. Do not use tank mixes for chemigation when not permitted on either label. [Note to label editor: You may choose to delete chemigation on this crop when printing the marketing label.]

## **PEAS-SOUTHERN PEAS**

Apply Triflurex HFP as a preplant soil incorporated treatment.

**Broadcast Application Rates/Acre:** 

Soil Texture	Triflurex HFP
Coarse	1.0 pt.
Medium	1.25-1.5 pts.
Fine	1.5-2.0 pts.

- Coarse and medium soils with 2% to 5% organic matter-1.5 pts.
- Fine soils with 5% to 10% organic matter-2.0 pts.
- All soils with 5% to 10% organic matter-2.0 pts.
- Use lower rate in rate range for areas receiving less than 20 inches of total annual rainfall and irrigation.

**CHEMIGATION-Southern pea:** For application by irrigation system, apply specified dosage of Triflurex HFP per acre as described in previous section for use on SOUTHERN PEA. Follow all directions given under GENERAL CHEMIGATION USE INSTRUCTIONS section of this label. [Note to label editor: You may choose to delete chemigation on this crop when printing the marketing label.]

# **PEANUTS**

## Triflurex HFP-Alone (for Use in Texas, Oklahoma, and New Mexico Only)

Apply and incorporate Triflurex HFP before planting, at planting, or immediately after planting. When incorporating after planting, adjust equipment so as not to disturb planted seed.

**Broadcast Application Rates/Acre:** 

Soil Texture	Triflurex HFP
Coarse	1.0 pt.
Medium	1.5 pts.

# **Tank Mixing or Sequential Treatments**

For broader spectrum weed control, other products registered for use in peanuts may be applied in tank mix combination with Triflurex HFP or as a sequential treatment following application of Triflurex HFP. When tank mixing, use the recommended rate of Triflurex HFP. Follow the label DIRECTIONS FOR USE of each tank mix partner for applicable use instructions including application rate, application timing, weeds controlled, and specific precautions and restrictions of product use. See detailed information for tank mixing in the GENERAL INFORMATION section of this label.

**PEANUTS-CHEMIGATION:** For application by irrigation system, apply specified dosage of Triflurex HFP per acre as described in previous section for use on PEANUTS. Follow all directions given under GENERAL CHEMIGATION USE INSTRUCTIONS section of this label. For tank mixes containing Triflurex HFP, follow label directions, restrictions and precautions for both products concerning CHEMIGATION. Do not use tank mixes for chemigation when not permitted on either label. [Note to label editor: You may choose to delete chemigation on this crop when printing the marketing label.]

# **PEPPER (Transplant Only)**

Apply and incorporate Triflurex HFP prior to transplanting.

**Broadcast Application Rates/Acre:** 

Soil Texture Triflurex HFP		
	Soli Texture	Triflurex HFP

<sup>&</sup>lt;sup>†</sup>Triflurex HFP may be fall applied to dry and English peas in the states of Idaho, Oregon, and Washington.

<sup>&</sup>lt;sup>††</sup>Medium soils with 3% or greater organic matter-1.5 pts.

Coarse	1.0 pt.
Medium	1.25-1.5 pts.
Fine	1.5-2.0 pts.

Coarse and medium soils with 2% to 5% organic matter-1.5 pts.

- Fine soils with 2% to 5% organic matter-2.0 pts.
- Soils with 5% to 10% organic matter-2.0 pts.
- Use lower rate in rate range for areas receiving less than 20 inches of total annual rainfall and irrigation.

# **POTATOES (Not for Use in the State of Maine)**

# **Application After Planting**

Apply and incorporate Triflurex HFP after planting but before emergence, immediately following dragoff, or after potato plants have fully emerged.

**Broadcast Application Rates/Acre:** 

Soil Texture	Triflurex HFP
Coarse	1.0 pt.
Medium	1.25-1.5 pts.
Fine	1.5-2.0 pts.

- Coarse and medium soils with 2% to 5% organic matter-1.5 pts.
- Fine soils with 2% to 5% organic matter-2.0 pts.
- Soils with 5% to 10% organic matter-2.0 pts.
- Use lower rate in rate range for areas receiving less than 20 inches of total annual rainfall and irrigation.

## **Incorporation Directions**

Set incorporation equipment so that the bed and furrow will be uniformly covered with a layer of treated soil. If the layer of treated soil is not uniform and the herbicide is concentrated over the bed, potato emergence may be retarded and stem brittleness can occur. When applying and incorporating Triflurex HFP after potato plants have fully emerged, do not completely cover the foliage with treated soil. Likewise, do not completely cover foliage at subsequent cultivations. Be careful that incorporation machinery does not damage potato seed pieces or elongating sprouts.

# Split Applications Before and After Planting (For use in Idaho, Oregon, and Washington)

On all soils, apply and incorporate Triflurex HFP at the rates shown below as split applications before planting and after planting when potato plants have fully emerged. Do not apply to soils containing 2% or more organic matter. Follow incorporation directions provided above for application to potatoes after planting.

**Broadcast Application Rates/Acre:** 

SPLIT APPLICATION	Triflurex HFP
Before Planting	0.75 pts.
After Planting	0.75 pts.

# Triflurex HFP Plus Eptam herbicide Tank-Mix-Postplant Pre-emergence Treatment (For Use in Kansas, Minnesota, Nebraska, North Dakota, Oklahoma, South Dakota, and Texas)

Triflurex HFP may be tank-mixed with Eptam herbicide and applied as a soil incorporated treatment to control additional weeds. Apply after planting but before crop emergence. In areas where potatoes are normally dragged off, apply and incorporate up to or immediately following drag off. Use application rates for Triflurex HFP recommended for Application After Planting section above. Incorporate immediately.

# Precautions

Refer to the label for Eptam for application rates, additional use directions, precautions, and limitations before use. Do not graze for feed or forage to livestock from fields treated with the Triflurex HFP plus Eptam tank mix.

# Triflurex HFP Plus Eptam Tank-Mix-Preplant Treatment (For Use in Idaho, Oregon, and Washington)

Triflurex HFP may be tank-mixed with Eptam and applied as a soil incorporated treatment to control additional weeds. Apply before planting and incorporate immediately.

**Broadcast Application Rate/Acre:** 

Soil Texture	Triflurex HFP
All Soil Textures	0.75 pts.

**Precautions:** Do not use this tank mix both before and after planting in the same season. Do not graze for feed or forage to livestock from fields treated with the Triflurex HFP plus Eptam tank mix. Refer to the label for Eptam for application rates, additional use directions, precautions, and limitations before use.

# **Chemigation (Triflurex HFP Only)**

Triflurex HFP may be applied through properly equipped chemigation systems for weed control in potatoes. Refer to CHEMIGATION section in the GENERAL INFORMATION section of the label for Triflurex HFP. Do not apply Triflurex HFP through any type of irrigation system unless these directions are carefully followed. Apply Triflurex HFP to potatoes in 0.5- to 1-acre inch of overhead sprinkler irrigation after planting, before emergence, or immediately following dragoff, or after the potato plants have fully emerged. Existing weeds must be destroyed by tillage or cultivation prior to application of Triflurex HFP. Triflurex HFP does not control established weeds. Incorporation is not necessary when Triflurex HFP is applied by chemigation.

**Broadcast Application Rates/Acre:** 

Soil Texture	Triflurex HFP
Coarse	1.0 pt.
Medium	1.5 pts.

Do not apply by chemigation to fine-textured soils.

# **Precautions**

If cultivation is required after treatment with Triflurex HFP, avoid completely covering potato plants with treated soil. Erratic weed control may result if cultivation exposes untreated soil between row.

#### **RADISH**

Apply Triflurex HFP as a preplant soil incorporated treatment.

**Broadcast Application Rates/Acre:** 

Soil Texture	Triflurex HFP
Coarse	1.0 pt.
Medium	1.5 pts.
Fine	1.5 pts.

#### RAPESEED (CANOLA) AND CRAMBE

Apply as a soil incorporated treatment in the spring before planting or in late summer or early fall before a fall planting. Follow soil preparation, application, and incorporation directions for Triflurex HFP.

**Broadcast Application Rates/Acre:** 

Soil Texture	Triflurex HFP
Coarse	1.0 pt.
Medium	1.5 pts.
Fine	2.0 pts.

#### Precautions

- Do not apply to rapeseed (canola) grown in the state of Alaska.
- Where applications are made in late summer or fall, plant as rotation crops in the season following application only those
  crops to which Triflurex HFP may be applied as a preplant incorporated treatment or crop injury may occur.
- Do not graze or harvest crambe for livestock forage.

**RAPESEED-CHEMIGATION:** For application by irrigation system, apply specified dosage of Triflurex HFP per acre as described in previous section for use on RAPESEED. Follow all directions given under GENERAL CHEMIGATION USE INSTRUCTIONS section of this label. [Note to label editor: You may choose to delete chemigation on this crop when printing the marketing label.]

#### **SAFFLOWER**

Apply and incorporate Triflurex HFP in the spring before planting or in fall in advance of spring planting. See instructions for fall application under APPLICATION TIMING in the GENERAL INFORMATION section of this label.

**Broadcast Application Rates/Acre:** 

Soil Texture	TRIFLUREX HFP	
	Spring Application	Fall Application
Coarse	1.0 pt.	1.5 pts.
Medium	1.25-1.5 pts.	2.0 pts.
Fine	1.5-2.0 pts.	2.5 pts.

- Coarse and medium soils with 2%-5% organic matter-1.5 pts.
- Fine soils with 2%-5% organic matter-2.0 pts.
- Soils with 5%-10% organic matter-2.5 pts.
- Use lower rate in rate range for areas receiving less than 20 inches of total annual rainfall and irrigation.

**SAFFLOWER-CHEMIGATION:** For application by irrigation system, apply specified dosage of Triflurex HFP per acre as described in previous section for use on SAFFLOWER. Follow all directions given under GENERAL CHEMIGATION USE INSTRUCTIONS section of this label. [Note to label editor: You may choose to delete chemigation on this crop when printing the marketing label.]

# SMALL GRAINS-BARLEY, DURUM, AND WHEAT

# Special Precautions for Use of Triflurex HFP on Small Grains

Carefully follow directions for use of Triflurex HFP on small grains to minimize potential crop stress. Under certain conditions, delayed crop emergence and or stand reduction may occur when Triflurex HFP is applied to barley, durum, or wheat. The combined effect of certain cultural practices and unfavorable soil or environmental conditions may cause excessive crop seedling stress resulting in retarded crop growth, stand reduction, and possibly reduced yield.

For best results, observe the following cultural practices or precautions: Use tillage methods that provide a uniformly firm seedbed and time tillage operations to conserve moisture.

Irrigate prior to planting or after germination and emergence. Moisture received between planting and emergence may cause crusting especially on loose seedbeds.

Do not exceed recommended application rates for Triflurex HFP. This is particularly important on coarse-textured or low organic matter soils.

Carefully follow incorporation directions. When applying preplant incorporated treatments, operate equipment at recommended depth and speed to place Triflurex HFP into the upper 1 to 1½ inches of soil. If applied after planting, set equipment so as not to disturb planted seed.

Set drills to place seed at the depth specified in use directions. A planting depth greater than 2½ inches for **spring wheat or durum** will result in increased seedling stress and decreased emergence.

Use only high quality seed where Triflurex HFP is to be applied (avoid use of small seed with low starch reserves).

If seed treatments are used, apply at the correct rate and uniformly across all seeds. Misapplication may result in reduced germination and/or seedling vigor. Avoid use of seed varieties known to have poor seedling (emergence) vigor.

Soil characteristics and environmental conditions which may contribute to crop seedling stress that may be accentuated by use of Triflurex HFP include:

Soil related: High salinity, eroded knolls/hilltops, loose dry soils, and compaction.

Weather related: Cold and/or wet soils, excessively hot soils, excessive moisture, drought, and soil crusting from heavy rainfall.

Note: Do not apply Triflurex HFP on small grains where a dinitroaniline herbicide such as Triflurex HFP or Sonalan<sup>®</sup> herbicide was applied at a rate greater than 0.5 lb. a.i. per acre the previous growing season.

**Application Directions for Small Grains** 

Barley, Spring Seeded-Spring Application Preplant Incorporated for Foxtail (Pigeongrass) Control (For Use in Minnesota, North Dakota, and South Dakota)

Apply Triflurex HFP as a preplant incorporated treatment prior to planting spring seeded barley. Triflurex HFP may be applied to ground that has a manageable level of crop residue or has been fallowed or pre-tilled. The first incorporation is required within 24 hours after application. The second incorporation is required prior to planting to destroy emerged weeds and to insure even distribution of Triflurex HFP in the soil surface.

Broadcast Application Rates/Acre: Apply at a rate of 1.0 pint per acre for all soil textures regardless of organic matter content.

### Incorporation

Recommended incorporation tools include the chisel plow (first incorporation pass only), tandem disc, and field cultivator. Refer to INCORPORATION EQUIPMENT in GENERAL INFORMATION section of this label for details on operation of incorporation equipment.

## **Planting Directions**

Barley should be seeded approximately 1½ inches deep.

#### **Precautions**

- Carefully read and follow SPECIAL PRECAUTIONS FOR USE OF TRIFLUREX HFP IN SMALL GRAINS before
  application of Triflurex HFP.
- While use of this weed control practice may result in a stand reduction, slight stand reductions do not normally affect yield.

# Barley, Spring Seeded-Spring Application Preplant Incorporated for Foxtail (Pigeongrass) Control in Barley Used as a Cover Crop or in the Conservation Reserve Program

Apply Triflurex HFP as a preplant incorporated treatment prior to planting spring seeded barley on land enrolled in acreage conservation reserve programs. Follow recommended soil preparation, application, and incorporation procedures for Triflurex HFP.

**Broadcast Application Rates/Acre:** 

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Soil Texture	Triflurex HFP	
Coarse	1.0 pt.	
Medium	1.5 pts.	
Fine	1.5 pts.	

## **Planting Directions**

Barley should be seeded approximately 1½ inches deep.

## Precautions

Use of this weed control practice may result in slight stand reduction. Follow the most severe grazing restrictions imposed either by the label for Triflurex HFP or by the USDA Acreage Conservation Reserve Program, whichever is longest. Consult the local ASCS office or other state agency to determine the period of USDA grazing restriction.

# Winter Wheat-Preplant Incorporated for Control of Cheatgrass and Other Annual Grasses and Broadleafs (For Use in Idaho, Oregon, and Washington)

Apply Triflurex HFP as a preplant incorporated treatment for control of downy brome (cheatgrass), annual ryegrass, annual bluegrass, pacific meadow foxtail (blackgrass), henbit, and fiddleneck (tarweed). The growth, development, and yield of winter wheat will not be adversely affected provided the seed is placed below the zone of soil treated with Triflurex HFP. Triflurex HFP may be applied for up to 3 weeks before planting.

**Broadcast Application Rates/Acre:** 

Soil Texture	Triflurex HFP	
Coarse	1.5 pts.	
Medium	1.5 pts.	
Fine	2.0 pts.	

## **Incorporation Directions**

Incorporate Triflurex HFP with a flexible tine-tooth harrow (Flextine or Melroe) set to cut 1 to 2 inches deep and operate at 3 to 6 mph. Incorporate once within 24 hours after application and a second time in a different direction from the first prior to planting. Do not till the soil with a disc after Triflurex HFP has been incorporated with a flexible tine harrow.

### **Planting Directions**

Use only a deep furrow or semi-deep furrow drill that will place the seed below the zone of soil treated with Triflurex HFP. **Precautions** 

Carefully read and follow SPECIAL PRECAUTIONS FOR USE OF TRIFLUREX HFP IN SMALL GRAINS before
application of Triflurex HFP.

 Wheat planted in direct contact with treated soil may suffer crop injury in the form of delayed emergence and development.

## **Winter Wheat-Post Plant Incorporated Treatment**

Apply and incorporate Triflurex HFP after planting but before emergence to control the following weeds susceptible to Triflurex HFP in winter wheat: annual ryegrass, annual bluegrass, downy brome (cheatgrass), pacific meadow foxtail (blackgrass), fiddleneck (tarweed), and henbit.

**Broadcast Application Rates/Acre:** 

Soil Texture	Triflurex HFP
Coarse	1.0-1.5 pts.
Medium	1.5 pts.

### **Planting Directions**

Plant wheat 2 to 3 inches deep in a well-tilled seedbed. Do not use a deep or semi-deep furrow drill.

#### **Incorporation Directions**

Incorporate Triflurex HFP using 2 passes with a flextine or spike-tooth harrow operated at least 5 mph. The second incorporation pass should be in a different direction from the first. Set equipment to cut 1 to 1½ inches deep and avoid disturbing seed. Application and first incorporation should be done in the same operation if possible. Both incorporations must be done within 24 hours.

### **Precautions**

- Carefully read and follow SPECIAL PRECAUTIONS FOR USE OF TRIFLUREX HFP IN SMALL GRAINS before application of Triflurex HFP.
- · Wheat seed in direct contact with treated soil may suffer crop injury in the form of delayed emergence and development.
- If less than 20 inches of rainfall plus irrigation was received between planting and harvest, refer to rotation crop restrictions before planting sorghum or oats.

# Winter Wheat-Fallow Soil Application Prior to Planting (For Use in Idaho, Oregon, and Washington)

Triflurex HFP may be applied and shallowly incorporated into fallow soil up to 4 months before planting wheat to control cheatgrass and certain annual grasses and broadleaf weeds. Apply Triflurex HFP anytime from May to September prior to fall planting of winter wheat. Wheat growth, development, and yield will not be adversely affected so long as the seed is placed below the zone of soil treated with Triflurex HFP.

**Broadcast Application Rates/Acre:** 

Soil Texture	Triflurex HFP
Coarse	1.5 pts.
Medium	1.5 pts.
Fine	2.0 pts.

## **Incorporation Directions**

Incorporate Triflurex HFP with a flexible tine-tooth harrow (Flextine or Melroe) set to cut 1 to 2 inches deep and operate at 3 to 6 mph. Incorporate once within 24 hours after application and a second time in a different direction from the first prior to planting. Do not till the soil with a disc after Triflurex HFP has been incorporated with a flexible tine harrow.

## **Planting Directions**

Use only a deep furrow or semi-deep furrow drill that will place the seed below the zone of soil treated with Triflurex HFP.

## **Precautions**

- Carefully read and follow SPECIAL PRECAUTIONS FOR USE OF TRIFLUREX HFP IN SMALL GRAINS before
  application of Triflurex HFP.
- Wheat planted in direct contact with treated soil may suffer crop injury in the form of delayed emergence and development.

# Wheat, Durum, and Barley, Spring Seeded-Fall Applied Preplant Soil Incorporated for Foxtail (Pigeongrass) Control (For Use in Minnesota, North Dakota, and South Dakota)

Apply Triflurex HFP in the fall for foxtail (pigeongrass) control during the following growing season. Incorporate one time within 24 hours. Incorporate a second time before planting to destroy existing weeds and insure a uniform distribution of Triflurex HFP in treated soil. Triflurex HFP may be applied to ground that has a manageable level of crop residue or has been fallowed or pre-tilled.

**Broadcast Application Rates/Acre:** 

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Soil Texture	Triflurex HFP		
Coarse and Medium	1.0 pt.		
Fine	1.5 pts.		

## Incorporation

Recommended incorporation tools include the chisel plow (first incorporation pass only), tandem disc, and field cultivator. Refer to INCORPORATION EQUIPMENT in GENERAL INFORMATION section of this label for details on operation of incorporation equipment.

### **Planting Directions**

Set equipment to place seed approximately 1½ inches deep.

#### **Precautions**

- Carefully read and follow SPECIAL PRECAUTIONS FOR USE OF TRIFLUREX HFP IN SMALL GRAINS before application of Triflurex HFP.
- While use of this control practice may result in a stand reduction, slight stand reductions do not normally affect yield.

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### Spring Wheat, Durum, and Barley-Postplant Incorporated for Foxtail (Pigeongrass) Control

Apply and incorporate Triflurex HFP after planting but before emergence to control foxtail (pigeongrass) in spring wheat, durum, and barley.

#### **Broadcast Application Rates/Acre:**

Soil Texture	Triflurex HFP
Coarse	1.0 pt.
Medium	1.0 pt.
Fine	1.5 pts.

## **Planting Directions**

Plant wheat 2 to 3 inches deep in a well-tilled seedbed.

## **Incorporation Directions**

Incorporate Triflurex HFP using 2 passes with a flextine or diamond harrow operated at least 5 mph. The second incorporation pass should be in a different direction than the first. Set equipment to cut 1 to  $1\frac{1}{2}$  inches deep and avoid disturbing seed. Application and first incorporation should be done in the same operation if possible. Both incorporations must be done within 24 hours.

#### **Precautions**

- Carefully read and follow SPECIAL PRECAUTIONS FOR USE OF TRIFLUREX HFP IN SMALL GRAINS before application of Triflurex HFP.
- Wheat seed in direct contact with treated soil may suffer crop injury in the form of delayed emergence and development.

#### **SOYBEANS**

### **Triflurex HFP Alone**

Apply and incorporate Triflurex HFP in the spring before planting or in the fall in advance of spring planting. See instructions for fall application under APPLICATION TIMING in the GENERAL INFORMATION section of this label.

# **Broadcast Application Rates/Acre:**

Soil Texture	TRIFLUREX HFP	
	Spring Application	Fall Application <sup>†</sup>
Coarse	1.0 pt.	2.0 pts.
Medium	1.5 pts.	2.0 pts.
Fine	2.0 pts.	2.5 pts.

- Coarse and medium soils with 2%-5% organic matter-1.5 pts.
- Fine soils with 2%-5% organic matter-2.0 pts.
- Soils with 5%-10% organic matter-2.0 to 2.5 pts.
- <sup>†</sup> Fall application rates for states including Alabama, Arkansas, northern Florida, Georgia, Louisiana, Mississippi, southeastern Missouri (Bootheel), North Carolina, Oklahoma, South Carolina, Tennessee, and Texas.

For soybeans grown in states other than those listed above, fall apply Triflurex HFP at broadcast rates recommended for spring preplant incorporated treatment.

### **Precautions**

Soybeans should be planted after early season adverse weather conditions have passed especially when using higher rate programs. Cool, wet weather early in the growth cycle causes additional stress on soybean plants which may result in reduced stand, delayed maturity, and reduced yield.

## Tank mix overlay and post-emergence recommendations

For broader spectrum weed control, other products registered for use in soybeans may be applied in tank mix combination with Triflurex HFP or as a sequential treatment following application of Triflurex HFP. When tank mixing, use the recommended rate of Triflurex HFP. Follow the label DIRECTIONS FOR USE of each tank mix partner for applicable use instructions including application rate, application timing, weeds controlled, and specific precautions and restrictions of product use. See detailed information for tank mixing in the GENERAL INFORMATION section of this label.

## **Special Use Programs**

# 1. Soybeans/Chemigation

Triflurex HFP may be applied through properly equipped chemigation systems for weed control in soybeans. Refer to APPLICATION BY CHEMIGATION in the GENERAL INFORMATION section of this label for use directions for chemigation. Do not apply Triflurex HFP through any irrigation system unless these directions are carefully followed.

Apply Triflurex HFP in sprinkler irrigation equal to ½ to 1 inch of water. Planting and application should occur as soon as possible after the last tillage operation. Triflurex HFP must be applied within 2 days after planting and prior to crop emergence. Triflurex HFP does not control established weeds. Soil incorporation is not required when Triflurex HFP is applied through chemigation systems.

## **Broadcast Application Rates/Acre:**

Soil Texture	Triflurex HFP
Coarse	1.5-2.0 pts.
Medium	1.5-2.0 pts.
Fine	2.0-2.5 pts.

- Soils with 2%-5% organic matter-2.0 pts.
- Soils with 5%-10% organic matter-2.0-2.5 pts.

### Cultivation

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Soil treated by chemigation with Triflurex HFP may be shallow cultivated without reducing weed control activity.

#### 2. Soybeans-Weed Control Under Reduced or Conservation Tillage

Triflurex HFP can be applied either in the fall or in the spring as a preplant incorporated treatment for weed control in soybeans grown under reduced or conservation tillage conditions. Make only 1 application per crop cycle.

Apply to tilled land or standing or chopped stubble from the previous season's crop. The first incorporation of Triflurex HFP must occur within 24 hours. For the first incorporation, a tandem disc or combination tool that can thoroughly mix Triflurex HFP into the top 2 to 3 inches of the final seedbed while leaving the desired amount of plant residue on the soil surface is recommended. For fall or spring application, the second incorporation can occur any time prior to planting or at planting with tillage equipment that provides uniform soil mixing used in conjunction with no-till planters.

#### **Application With Dry Bulk Fertilizers**

Dry bulk fertilizers impregnated or coated with Triflurex HFP may be applied as a preplant incorporated treatment. See instructions for APPLICATION WITH DRY BULK FERTILIZER in the GENERAL INFORMATION section of this label. Under reduced or conservation tillage conditions, uniformly applied dry bulk fertilizers impregnated with Triflurex HFP provide weed and grass control equal to or better than Triflurex HFP applied in liquid sprays. Two incorporation passes are required when Triflurex HFP is applied with dry bulk fertilizer. For best results with spring applications, incorporate once within 24 hours after application and a second time at least 5 days later.

**Broadcast Application Rates/Acre:** 

Soil Texture	TRIFLUREX HFP	
	Spring Application	Fall Application
Coarse	1.0-1.5 pts.	1.5-2.0 pts.
Medium	1.5-2.0 pts.	2.0-2.5 pts.
Fine	2.0-2.5 pts.	2.5-3.0 pts.

• Use the higher rate in the rate range where higher crop residues are present or where dense weed populations are anticipated.

#### **Precautions**

To be effective, Triflurex HFP must be mixed thoroughly in the top 2 to 3 inches of soil in the final seedbed. Weed control may be poor or erratic where soil conditions or heavy crop residues do not permit thorough soil mixing.

## 3. Soybeans-Fall Panicum Control

Apply Triflurex HFP as a preplant incorporated treatment at a broadcast rate of 2.0 pts./acre on coarse and medium soils.

## 4. Soybeans-Pigweed and Seedling Johnsongrass Control

Apply Triflurex HFP as a preplant incorporated treatment.

**Broadcast Application Rates/Acre:** In Alabama, Arkansas, Florida, Georgia, Kansas, Louisiana, Mississippi, Missouri, Nebraska, North Carolina, Oklahoma, South Carolina, Tennessee, and southern Virginia, apply Triflurex HFP at the following broadcast rates:

Soil Texture	Triflurex HFP
Coarse	1.0-1.5 pts.
Medium	1.5-2.0 pts.
Fine	2.0-2.5 pts.

(Exception: Louisiana, 3.0 pts./acre on fine soils.)

## 5. Soybeans-Additional Weed and Grass Control in Gulf Coast Counties of Texas

Apply Triflurex HFP as a preplant incorporated treatment up to 2 weeks before planting.

**Broadcast Application Rates/Acre:** For soybeans grown in Brazoria, Calhoun, Chambers, Fort Bend, Galveston, Harris, Jackson, Jefferson, Liberty, Matagorda, Orange, Victoria, Waller, and Wharton counties of the Texas Gulf Coast, apply Triflurex HFP at the following broadcast rates:

Soil Texture	Triflurex HFP
Coarse	1.5 pts.
Medium	2.0 pts.
Fine	3.0 pts.

# 6. Soybeans-Itchgrass (Raoulgrass) Suppression

Apply Triflurex HFP as a preplant incorporated treatment or at layby.

#### **Layby Treatment**

Cultivate to remove existing weeds and treat when soybeans are well established (10 inches tall). Apply as a directed spray to the soil surface and incorporate using a rolling cultivator set to cut 2 to 4 inches deep or sweep-type cultivator with 3 to 5 sweeps per row middle operated 2 to 3 inches deep. Set incorporation equipment to throw treated soil to the row.

**Broadcast Application Rates/Acre:** 

Soil Texture	TRIFLUREX HFP	
	Preplant Incorporated	Layby Application
Medium	3.0 pts.	1.0 pt.
Fine	3.0 pts.	2.0 pts.

# 7. Soybeans-Charcoal Soils in Arkansas, Louisiana, and Mississippi

Newly cleared land often contains high organic matter (5-10%) and charcoal from burning debris. Charcoal and organic matter tends to bind Triflurex HFP and reduce weed control activity. Under these conditions, higher rates of Triflurex HFP are necessary for weed control. Increased rates, however, can cause crop injury if charcoal or organic matter is not present to bind some of the Triflurex HFP. In the burn row, a high level of charcoal is usually present. Consequently, poor weed control

may result, even if an increased rate of Triflurex HFP is used. Follow recommended application and incorporation procedures for Triflurex HFP.

## **Broadcast Application Rates/Acre:**

Soil Texture	Triflurex HFP
Coarse	1.5-2.5 pts.
Medium	2.5 pts.
Fine	3.0 pts.

# 8. Soybeans-Red Rice Control in Arkansas, Louisiana, Mississippi, and Texas Only

Suppression or partial control of red rice can be obtained from a 2-year treatment program which consists of a maximum rate application the first year followed by application in the second year at normal rates indicated for soil texture, organic matter, or charcoal content. Apply and incorporate Triflurex HFP in the spring before planting. Follow recommended soil preparation and incorporation procedures for Triflurex HFP.

#### **Broadcast Application Rates/Acre:**

Soil Texture	TRIFLUREX HFP					
	Application Year 1	Application Year 2				
Coarse	2.0 pts.	1.0 pt.				
Medium	3.0 pts.	1.5 pts.				
Fine	4.0 pts.	2.0 pts.				
Coarse soils with 2- 5% organic matter	3.0 pts.	1.5 pts.				
Soils with 5-10% organic matter	4.0 pts.	2.0-2.5 pts.				

In Arkansas, Louisiana, and Mississippi, if a combination of high soil organic matter (5-10%) and charcoal are present, apply Triflurex HFP at the following broadcast rates:

Soil Texture	Triflurex HFP
Coarse	1.5-2.5 pts.
Medium	2.5 pts.
Fine	3.0 pts.

For more information on charcoal soils, see discussion in preceding section.

**Precaution:** Crop Rotation: The recommendation for red rice control in soybeans is a 2-year program. In the first year following a double rate application, plant only soybeans. During the second year after applying Triflurex HFP at the normal rate indicated for soil texture and charcoal level, plant only those crops for which Triflurex HFP is registered as a preplant treatment or crop injury may result. Rice may be planted during the third year following application of normal use rates in year two.

# 9. Soybeans-Rhizome Johnsongrass Control in Eastern United States and the State of Texas

Rhizome johnsongrass control with Triflurex HFP requires maximum rate application for 2 consecutive years. Commercially acceptable control cannot be obtained with only 1 year of maximum rate use of Triflurex HFP. Carefully follow the special use directions which follow.

#### **Soil Preparation**

Satisfactory results are dependent upon proper soil preparation prior to application. Use implements such as a chisel plow to bring rhizomes to the soil surface. Disc twice before application to chop rhizomes into small (2 to 3 inch) pieces and destroy any recently emerged johnsongrass plants.

# **Broadcast Application Rates/Acre:**

Soil Texture	Triflurex HFP
Coarse	2.0 pts.
Medium	3.0 pts.
Fine	4.0 pts.

- Coarse soils with 2%-5% organic matter-3.0 pts.
- Soils with 5%-10% organic matter-4.0 pts.

Spring Application: Apply Triflurex HFP any time before planting in the spring for 2 consecutive years.

Fall Application: Apply Triflurex HFP after October 15 for 2 consecutive years.

**Split Application:** Apply Triflurex HFP at the broadcast rates indicated in the following table both spring and fall for 2 consecutive years.

Soil Texture	Triflurex HFP
	Spring + Fall
Coarse	1.0+1.0 pt.
Medium	1.5+1.5 pts.
Fine	2.0+2.0 pts.
Coarse soils with 2-5% organic matter	1.5+1.5 pts.
Soils with 5-10% organic matter	2.0+2.0 pts.

**Incorporation:** Deep incorporation with a tandem disc is essential for good results. Set disc to operate 4 to 6 inches deep and operate at 4 to 6 mph. Two incorporation passes are necessary and the second should be in a different direction than the first.

Cultivation: Some johnsongrass plants will not be controlled. Timely cultivation during the crop season is necessary to remove escaped plants and maintain commercially acceptable control.

Precaution: In the season following a double rate treatment (according to the special use program outlined above), plant only rice and those crops to which Triflurex HFP can be applied as a preplant treatment or crop injury may result.

## 10. Soybeans-Wild Cane (Shattercane) Control

Follow recommended soil preparation and application procedures for Triflurex HFP. Wild cane (shattercane) can germinate throughout the growing season and from greater soil depth than most other weed seeds. Commercially acceptable control of wild cane can be obtained by using increased rates of Triflurex HFP.

**Broadcast Application Rates/Acre:** 

Soil Texture	Triflurex HFP
Coarse	1.0 pt.
Medium	2.0 pts.
Fine	2.5 pts.

Incorporation: Deep incorporation with a tandem disc is essential for good results. Set disc to operate 4 to 6 inches deep and operate at 4 to 6 mph. Two incorporation passes are necessary and the second should be in a different direction than the first.

Cultivation: Cultivation during the growing season will improve shattercane control.

#### **SUGAR BEETS**

#### **Triflurex HFP Alone**

Apply Triflurex HFP as an over-the-top spray and incorporate. Apply from the time the first true leaves have formed until plants are 6 inches tall.

## **Broadcast Application Rates/Acre:**

Soil Texture	Triflurex HFP
Coarse	1.0 pt.
Medium	1.25-1.5 pts.
Fine	1.25-1.5 pts.

## Incorporation

Set incorporation equipment to move treated soil around the plants in the row. Avoid damage to the sugar beet tap root from incorporation equipment.

Precaution: Exposed beet roots should be covered with soil before application of Triflurex HFP to reduce the possibility of girdling.

## Incorporation with a Tine-Tooth Harrow (For Use in California, Colorado, Idaho, Nebraska, Oregon, Texas, Utah, Washington, and Wyoming)

A tine-tooth harrow (Flextine or Melroe) can be used to incorporate Triflurex HFP in sugar beets. Incorporation with tine-tooth harrow requires 2 passes in opposite directions over the same set of rows. Set the harrow to cut 1 to 2 inches deep and operate at 3 to 6 mph. Set incorporation equipment carefully to avoid damage to sugar beet tap root. Use application procedures and broadcast application rates recommended in preceding section.

## Tank Mixing

For broader spectrum weed control, other products registered for use in sugar beets may be applied in tank mix combination with Triflurex HFP or as a sequential treatment following application of Triflurex HFP. When tank mixing, use the recommended rate of Triflurex HFP. Follow the label DIRECTIONS FOR USE of each tank mix partner for applicable use instructions including application rate, application timing, weeds controlled, and specific precautions and restrictions of product use. See detailed information for tank mixing in the GENERAL INFORMATION section of this label.

Precaution: Exposed beet roots should be covered with soil before an application to reduce the possibility of girdling. SUGAR BEET-CHEMIGATION: For application by irrigation system, apply specified dosage of Triflurex HFP per acre as described in previous section for use on SUGAR BEET. Follow all directions given under GENERAL CHEMIGATION USE INSTRUCTIONS section of this label. [Note to label editor: You may choose to delete chemigation on this crop when printing the marketing label.]

#### **SUGARCANE**

## **Triflurex HFP Alone**

Apply and incorporate Triflurex HFP twice a year. Make the first application of Triflurex HFP in the fall on firmly packed beds immediately after the seed pieces are planted. Make the second application of Triflurex HFP in the spring before or shortly after the cane emerges. Loosen rain-packed beds 2 to 3 inches deep before the spring application. Take care that incorporation equipment does not damage the seed pieces or emerging shoots.

**Broadcast Application Rates/Acre:** 

Soil Texture	Triflurex HFP
All Textures	2.0-4.0 pts. <sup>†</sup>

<sup>&</sup>lt;sup>†</sup>Application rate within rate range may be adjusted according to weed pressure.

# Postplant Application for Control of Most Annual Grasses Including Guineagrass (For Use in Hawaii)

Surface apply Triflurex HFP after planting (for plant cane) or after harvesting (for ration cane). For best results in plant cane, the soil surface should be smooth and finely tilled. Apply Triflurex HFP as soon as possible after tillage and planting before germination and emergence of grass weeds. For optimum efficacy in ratoon cane, minimize surface residue from previous

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crop	before ap	plying.	Apply	Triflurex	HFP	just	before	anticipated	rainfall	in	non-irrigated	and	furrow-irrigated	sugarcane

Apply 0.5 inch or more irrigation in drip-irrigated or sprinkler-irrigated sugarcane as soon as possible after applying Triflurex HFP.

**Broadcast Application Rates/Acre:** 

Soil Texture	Triflurex HFP
All Textures	6.0-8.0 pts.

## **Repeat Applications**

Subsequent germination of grass weeds may occur prior to the development of a full dense canopy of sugarcane. If this occurs, additional grass weed establishment is strongly suppressed. One or two additional applications of Triflurex HFP can be applied to maintain weed control during the early crop development period. For repeat applications, direct the spray to the soil surface to minimize interception of the herbicide by the crop.

#### Restrictions

Do not apply Triflurex HFP as a post plant surface applied treatment within 180 days of harvest.

## Applications Up to Layby for Plant Cane or Ratoon Cane (For Use in Louisiana and Texas)

Apply and incorporate Triflurex HFP in spring from shortly before or after cane emergence until layby. Apply after beds have been shaved or false shaved. Loosen rain-packed beds 2 to 3 inches deep before application. Avoid incorporation equipment damage to seed pieces or emerging shoots. Incorporate with a rolling cultivator or bed chopper for all soil textures. Set rolling cultivator to cut 2 to 4 inches deep and operate at 6 to 8 mph. Set bed chopper to cut 3 to 4 inches deep and operate 4 to 6 mph. Two incorporation passes are necessary.

**Broadcast Application Rates/Acre:** 

Soil Texture	Triflurex HFP
All Textures	2.0-4.0 pts. <sup>†</sup>

<sup>&</sup>lt;sup>†</sup>Application rate within rate range may be adjusted according to weed pressure.

## Itchgrass (Raoulgrass) Control (For use in Louisiana)

Apply and incorporate Triflurex HFP on plant or ration cane. Follow use directions in preceding section for layby application.

**Broadcast Application Rates/Acre:** 

Soil Texture	Triflurex HFP
All Textures	2.0-4.0 pts.

**SUGARCANE-CHEMIGATION:** For application by irrigation system, apply specified dosage of Triflurex HFP per acre as described in previous sections for use on SUGARCANE. Follow all directions given under GENERAL CHEMIGATION USE INSTRUCTIONS section of this label.

[Note to label editor: You may choose to delete chemigation on this printing the marketing label.]

## **SUNFLOWER**

## **Triflurex HFP-Alone**

Apply and incorporate Triflurex HFP in the spring before planting or in the fall in advance of spring planting. See instructions for fall application under APPLICATION TIMING in the GENERAL INFORMATION section of this label.

**Broadcast Application Rates/Acre:** 

**Broadcast Application Rates/Acre:** 

Soil Texture	Triflurex HFP
Coarse	1.0 pt.
Medium	1.25-1.5 pts.
Fine	1.5-2.0 pts.

- Coarse and medium soils with 2%-5% organic matter-1.5 to 2.0 pts.
- Fine soils with 2%-5% organic matter-2.0 pts.
- Soils with 5%-10% organic matter-2.0 pts.
- Use lower rate in rate range for areas receiving less than 20 inches of total annual rainfall and irrigation.

## **Tank Mixing**

For broader spectrum weed control, other products registered for use in sunflowers may be applied in tank mix combination with Triflurex HFP or as a sequential treatment following application of Triflurex HFP. When tank mixing, use the recommended rate of Triflurex HFP. Follow the label DIRECTIONS FOR USE of each tank mix partner for applicable use instructions including application rate, application timing, weeds controlled, and specific precautions and restrictions of product use. See detailed information for tank mixing in the GENERAL INFORMATION section of this label.

**SUNFLOWER-CHEMIGATION:** For application by irrigation system, apply specified dosage of Triflurex HFP per acre as described in previous sections for use on SUNFLOWER. Follow all directions given under GENERAL CHEMIGATION USE INSTRUCTIONS section of this label. For tank mixes containing Triflurex HFP follow label directions, restrictions and precautions for both products concerning CHEMIGATION. Do not use tank mixes for chemigation when not permitted on either label. [Note to label editor: You may choose to delete chemigation on this crop when printing the marketing label.]

#### **TOMATOES**

Apply Triflurex HFP to direct-seeded tomatoes as a directed spray between rows and beneath plants and incorporate at the time of blocking or thinning. For transplant tomatoes, apply and incorporate before transplanting or apply post-plant as a directed spray to the soil between the rows and beneath plants and incorporate.

Soil Texture	Triflurex HFP
Coarse	1.0 pt.
Medium	1.25-1.5 pts.

Fine	1.5-2.0 pts.
1 1110	1.0 2.0 pto.

- Coarse and medium soils with 2%-5% organic matter-1.5 pts.
- Fine soils with 2%-5% organic matter-2.0 pts.
- Soils with 5%-10% organic matter-2.0 pts.
- Use lower rate in rate range for areas receiving less than 20 inches of total annual rainfall and irrigation.

**TOMATO-CHEMIGATION:** For application by irrigation system, apply specified dosage of Triflurex HFP per acre as described in previous section for use on TOMATO. Follow all directions given under GENERAL CHEMIGATION USE INSTRUCTIONS section of this label. [Note to label editor: You may choose to delete chemigation on this crop when printing the marketing label.]

## TREES GROWN FOR PULP WOOD

## Aspen, Cottonwood, Poplar

Apply as a soil incorporated treatment to control weeds susceptible to Triflurex HFP in new and established plantings of trees grown for pulp.

#### **Application Before Planting**

Apply and incorporate Triflurex HFP before planting.

### **Broadcast Application Rates/Acre:**

Soil Texture	Triflurex HFP
Coarse	1.0 pt.
Medium	1.25-1.5 pts.
Fine	1.5-2.0 pts.

- All soils with 2%-5% organic matter-1.5 to 2.0 pts.
- All soils with 5%-10% organic matter-2.0 pts.
- Use lower rate in rate range for areas receiving less than 20 inches of total annual rainfall and irrigation.

## **Application to Established Plantings**

In established plantings, apply Triflurex HFP as a directed spray to the soil and use incorporation methods not injurious to the crop

### **Broadcast Application Rates/Acre:**

Soil Texture	Triflurex HFP
All Soil Textures	2.0-4.0 pts.

• Application rate within the rate range may be adjusted according to weed pressure.

**Johnsongrass suppression in established plantings:** Proper soil preparation before application is necessary for satisfactory results. Use a chisel plow or similar implement to bring rhizomes to the soil surface, then work the soil twice using a tandem disc to cut rhizomes into small (2 to 3 inches) pieces and to destroy emerged johnsongrass.

## **Broadcast Application Rates/Acre:**

Soil Texture	Triflurex HFP
All Soil Textures	4.0 pts.

## Incorporation

Incorporate twice with tandem disc set to cut 4 to 6 inches deep and operated at 4 to 6 mph.

## Cultivation

Some johnsongrass plants will escape. Timely cultivation with tillage implements or spot spraying with effective post-emergence herbicides will improve the level of johnsongrass control.

# TREE AND VINE CROPS

# CITRUS, STONE FRUIT, AND NUT TREES AND VINEYARDS

### New Plantings of Citrus, Stone Fruit, and Nut Trees

For new plantings of almond, apricot, grapefruit, lemon, nectarine, orange, peach, pecan, plum, prune, tangelo, tangerine, and walnut trees, apply and incorporate Triflurex HFP before transplanting.

## **Broadcast Application Rates/Acre:**

Soil Texture	Triflurex HFP
Coarse	1.0 pt.
Medium	1.25-1.5 pts.
Fine	1.5-2.0 pts.

- All soils with 2%-5% organic matter-1.5-2.0 pts.
- All soils with 5%-10% organic matter-2.0 pts.
- Use lower rate in rate range for areas receiving less than 20 inches of total annual rainfall and irrigation.

# **New Plantings of Vineyards**

Apply and incorporate Triflurex HFP before transplanting.

### **Broadcast Application Rates/Acre:**

Soil Texture	Triflurex HFP
Coarse	1.0-1.5 pts.
Medium	1.5-3.0 pts.
Fine	3.0-4.0 pts.

•	Soils with 2%-5% organic matter-4.0 pts.

• Use lower rate in rate range for areas receiving less than 20 inches of total annual rainfall and irrigation.

Note: Do not use more than 2.0 pts./acre on mist propagated grape rootings.

## Established Non-bearing and Bearing Citrus, Stone Fruit, and Nut Trees and Vineyards

Triflurex HFP may be applied in established non-bearing and bearing vineyards and plantings of almond, apricot, grapefruit, lemon, nectarine, orange, peach, pecan, plum, prune, tangelo, tangerine, and walnut trees. In established plantings, apply Triflurex HFP as a directed spray to the soil and incorporate using methods not injurious to the crop. Do not apply to vineyards within 60 days of harvest.

**Broadcast Application Rates/Acre:** 

	Soil Texture	Triflurex HFP
	All Soil Textures	2.0-4.0 pts.

• Application rate within the rate range may be adjusted according to weed pressure.

## Rhizome Johnsongrass Control-Special Two-year Use Program

Triflurex HFP may be applied for 2 consecutive years in a special use program to control rhizome johnsongrass in established vineyards and in plantings of almond, apricot, grapefruit, lemon, nectarine, orange, peach, pecan, plum, prune, tangelo, tangerine, and walnut trees. Do not apply to vineyards within 60 days of harvest.

#### **Soil Preparation**

Work the soil thoroughly to move rhizomes near the soil surface and cut them into smaller pieces.

## **Broadcast Application Rates/Acre:**

The following application rate must be applied for 2 consecutive years:

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Soil Texture	Triflurex HFP
All Soil Textures	4.0 pts.

### Incorporation

Incorporate Triflurex HFP thoroughly with a disc set to cut 4 to 6 inches deep and operate 4 to 6 mph. Two incorporation passes are necessary with a second pass in a different direction from the first.

#### Cultivation

Some johnsongrass plants will escape. Timely cultivations are necessary to obtain commercially acceptable control. Commercially acceptable control cannot be obtained with only a single year use of Triflurex HFP.

#### **Precautions**

Do not use the 4.0 pint rate on new plantings or crop injury may result. Do not interplant orchards or vineyards with other crops. If treated vineyards and orchards are diverted to other crop uses, then in the next cropping season, plant only those crops for which Triflurex HFP has been registered as a preplant incorporated treatment.

## **Bindweed Control in California**

Triflurex HFP can be applied using a specially equipped spray blade for the control of field bindweed in vineyards and in plantings of almond, apricot, grapefruit, lemon, nectarine, orange, peach, pecan, plum, prune, tangelo, tangerine, and walnut trees.

### **Soil Preparation**

Destroy existing weeds with soil tillage before applying Triflurex HFP to prevent interference with operation of the spray blade.

#### Equipment

Application requires a spray blade capable of operation at 4 to 6 inches below the soil surface. The blade should be equipped with nozzles located under the blade and directed so as to allow spray to be trapped in a thin layer as the blade is pulled through the soil. Use a nozzle spacing sufficient to insure application of a uniform horizontal layer.

# Application

Apply Triflurex HFP in 40 to 80 gallons of water per acre. Operate blade at a depth of 4 to 6 inches.

**Broadcast Application Rates/Acre:** 

Soil Texture	Triflurex HFP	
All Soil Textures	4.0 pts.	

## **Precautions**

Some soils may develop cracks as they dry after rainfall or irrigation. Field bindweed may emerge if the cracks extend through the layer of Triflurex HFP. Prevent or eliminate cracks by shallow discing or other tillage. Avoid deep tillage which disturbs the subsurface layer. Cultivation or tillage also aids the control of germinating seeds.

STONE FRUIT AND NUT CROPS AND VINEYARDS-CHEMIGATION: For application by irrigation system, apply specified dosage of Triflurex HFP per acre as described in previous sections for use on STONE FRUIT AND NUT CROPS AND VINEYARDS. Follow all directions given under GENERAL CHEMIGATION USE INSTRUCTIONS section of this label. [Note to label editor: You may choose to delete chemigation on this crop when printing the marketing label.]

# STORAGE AND DISPOSAL

DO NOT contaminate water, food, or feed by storage or disposal.

**PESTICIDE STORAGE:** Store this product in its original container and keep in a locked storage area out of reach of children and domestic animals.

**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 quidance.

CONTAINER DISPOSAL:

Nonrefillable Container (five gallons or less): Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Nonrefillable Container (greater than five gallons): Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ½ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

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

#### LIMITATION OF WARRANTY AND LIABILITY

Read the entire directions for use, conditions of warranties and limitations of liability before using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following CONDITIONS, DISCLAIMER OF WARRANTIES and LIMITATIONS OF LIABILITY.

**CONDITIONS:** The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of ADAMA All such risks shall be assumed by the user or buyer.

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Triflurex HFP – 66222-46-Master-091517.ver1