

JUL 25 1995

Janet M. Overholt
 American Cyanamid Company
 Agricultural Research Division
 P.O. Box 400
 Princeton, N.J. 08543-0400

Dear Ms. Overholt:

SUBJECT: Label Amendments
 Tri-4(R) HF Herbicide
 EPA Registration No. 241-343
 Your Applications Dated January 24, 1995 and
 February 24, 1995 Requesting Supplemental
 Labels to Allowing Post-incorporated Applications
 in Field Corn and Allowing Application by
 Chemigation on Alfalfa, Cotton, Field Corn,,
 and Grain Sorghum

The labelings referred to above, submitted in accordance with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended is acceptable with the following provisions:

1. On the "chemigation" labeling, under the Chemigation Mixing Directions", in the "Undiluted Tri-4 HF" statement, add the following statement per the "substantially similar" cited product (EPA Reg. No. 62719-93): "Continuous agitation must be engaged throughout the injection of undiluted TRI-4 HF into the injection tank.

A stamped copy is enclosed for your records. Please submit (one) final printed copy for the above mentioned labels before releasing the product for shipment.

Sincerely yours,

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

Enclosure

CONCURRENCES

SYMBOL ▶	7505c							
SURNAME ▶	DMorgan							
DATE ▶	Jul 21, 1995							

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FOR USE IN FIELD CORN AS A POSTEMERGENCE INCORPORATED TREATMENT

OBSERVE ALL PRECAUTIONARY STATEMENTS AND WORKER PROTECTION INFORMATION, LIMITATIONS, APPLICATION INSTRUCTIONS AND ROTATIONAL CROP RESTRICTIONS IN THE TRI-4 HF LEAFLET LABEL BEFORE USING. FOLLOW THE MOST RESTRICTIVE USE PRECAUTIONS OR DIRECTIONS FOR APPLICATION THAT APPEAR ON ANY PRODUCT LABEL.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

TRI-4 HF may be surface applied following a cultivation or use of a herbicide that has controlled weeds. **TRI-4 HF WILL NOT CONTROL WEEDS THAT HAVE EMERGED.** TRI-4 HF can be applied after the corn has reached a size of 2 true leaves or greater. TRI-4 HF should be applied over the corn, or post-directed using drop nozzles if the foliage is so dense that the spray solution cannot contact the soil.

Mechanical incorporation of TRI-4 HF must be completed within 24 hours of application to prevent volatilization of product which causes reduced weed control. The product must also be incorporated in the weed seed germination zone for optimum effectiveness. Mechanical incorporation can be completed with a single pass sweep-type or rolling cultivator. The sweep-type cultivator must have 3-5 sweeps between the rows for maximum mixing of soil. **DO NOT** expose untreated soil. Avoid crop injury from improper cultivator settings.

Broadcast Rate Per Acre of TRI - 4 HF¹

<u>Soil Texture</u>	<u>TRI-4 HF (pints)</u>
Coarse	0.75-1.0*
Medium	1.0-1.5
Fine	1.5-2.0

*In Alabama, Florida, Georgia, North Carolina, South Carolina, and Virginia in coarse soils apply 1.0-1.5 pints/acre for fall panicum and Texas panicum control.

¹Corn must be planted at least 1.5 inches deep to safely utilize this treatment.

®Registered Trademark of American Cyanamid Company

(see other side)

ACCEPTED
 WITH COMMENTS
 In EPA Letter Dated
 JUL 25 1995
 Under the Federal Insecticide,
 Fungicide, and Rodenticide Act
 as amended, for the pesticide
 registered under EPA Reg. No.
 241-343

TRI-4 HF MUST NOT BE SOIL APPLIED AS A PRE-PLANT OR PREEMERGENCE TREATMENT IN FIELD CORN, OR CROP INJURY WILL OCCUR.

Planting corn into a furrow requires TRI-4 HF to be applied after a cultivation has moved soil into the row.

Refer to the TRI-4 HF label for specific use directions regarding soil preparation, weeds controlled, soil texture, and special precautions.

This label must be in the possession of the user at the time of herbicide application. **Review and follow the TRI-4 HF label prior to application and rotational crop planting.**

) Not for use in California.

PE- 1/05/95 SD

 **CYANAMID**
American Cyanamid Company
Agricultural Products Division
Crop Protection Chemicals Department
Wayne, NJ 07470 ©1996

EPA Reg. No. 241-343

CHEMIGATION FOR USE IN ALFALFA, FIELD CORN, COTTON, AND GRAIN SORGHUM

OBSERVE ALL PRECAUTIONARY STATEMENTS, WORKER PROTECTION STANDARDS STATEMENTS, LIMITATIONS, APPLICATION INSTRUCTIONS AND ROTATIONAL CROP RESTRICTIONS IN THE TRI-4 HF LEAFLET LABEL BEFORE USING. FOLLOW THE MOST RESTRICTIVE USE PRECAUTIONS OR DIRECTIONS FOR APPLICATION THAT APPEAR ON ANY PRODUCT LABEL.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

This label must be in the possession of the user at the time of herbicide application.

TRI-4 HF may be applied by overhead sprinkler irrigation on specific crops.

DO NOT apply TRI-4 HF in California.

APPLICATION THROUGH OVERHEAD SPRINKLER IRRIGATION SYSTEMS (CHEMIGATION)

TRI-4 HF can be applied through moving, properly equipped sprinkler irrigation systems for weed control in several crops. Soil incorporation is not required with TRI-4 HF when applied through sprinkler irrigation when 0.5-1 inch of irrigation is applied depending on the crop. Read and follow all label instructions before application.

Apply this product only through continuously moving center pivot, lateral move, or end row sprinkler irrigation systems. **DO NOT APPLY THIS PRODUCT THROUGH ANY OTHER TYPE OF IRRIGATION SYSTEM.**

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.

The irrigation system must be correctly calibrated (with water only) to ensure that the recommended rate of TRI-4 HF is applied.

DO NOT CONNECT AN IRRIGATION SYSTEM (including greenhouse systems) USED FOR PESTICIDE APPLICATION TO A PUBLIC WATER SYSTEM UNLESS THE PESTICIDE LABEL PRESCRIBED SAFETY DEVICES FOR PUBLIC WATER SYSTEMS ARE IN PLACE.

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ACCEPTED
with COMMENTS
by EPA Letter Dated
11/10/83

Under the Federal Insecticide,
Fungicide, and Rodenticide Act
as amended, for the pesticide
registered under EPA Reg. No.
241-343

pattern. The chemigation system should also be free of leaks.

Overhead Sprinkler Irrigation System Requirements

1. The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from back flow.
2. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
3. 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.
4. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
5. 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 that pesticide distribution is adversely affected.
6. Systems must use a metering pump, such as a positive displacement injection 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.
7. Do not apply when wind speed favors drift beyond the area intended for treatment.

The following routine checks will help to ensure that the sprinkler irrigation system is working properly:

1. Use a calibrated injection metering pump as specified by the manufacturer.
2. Metering pumps, the supply tank, and any associated equipment must be clean and dry before adding undiluted TRI-4 HF to the system for injection.
3. Check the metering pump periodically to confirm that TRI-4 HF is being injected continuously and at the proper calibration throughout the irrigation period.
4. Continuous agitation must be maintained in the supply tank during the entire overhead sprinkler irrigation period.

Use of this product could stain irrigation equipment and equipment associated with the use of TRI-4 HF.

CHEMIGATION MIXING DIRECTIONS:

Undiluted TRI-4 HF: Chemigation equipment must be completely cleaned and dry before TRI-4 HF is added to the system for injection.

Diluted TRI-4 HF: Diluted TRI-4 HF can be used for the calibration of irrigation equipment. The volume of TRI-4 HF added to the injection tank is equal to what is required. Agitation must be started prior to the addition of TRI-4 HF to the water. Next fill the supply tank with the remainder of water that is needed for equipment calibration. Continuous agitation must be engaged throughout the injection of TRI-4 HF into the injection tank.

DO NOT APPLY TRI-4 HF THROUGH ANY IRRIGATION SYSTEM IF THESE DIRECTIONS ARE NOT FOLLOWED CAREFULLY.

APPLICATIONS TO ESTABLISHED ALFALFA

Annual grass control can be achieved through sprinkler irrigation or broadcast surface applications.

Broadcast applications may be made to the soil surface in established alfalfa. However the TRI-4 HF must be activated by moisture through rainfall, or irrigation. At least 0.5 inches of moisture is required by rainfall or overhead sprinkler irrigation to activate TRI-4 HF for weed control. When furrow irrigation is used, field inspection should be done to ensure that the beds are thoroughly wet between the furrows. In situations where rainfall has not occurred for 3 days mechanical incorporation can be done, however, in such a way that ensures thorough soil mixing while eliminating or minimizing potential damage to established alfalfa.

Applications during dormancy, semi-dormancy or immediately after cutting can be made during the growing season. Applications of TRI-4 HF will not control established weeds, therefore timing of application should occur prior to weed seed germination. To control cheat and Bromegrass, apply TRI-4 HF immediately after cutting between August 1 and October 1, before weeds emerge. If applied in the fall TRI-4 HF will control labeled weeds that germinate after application.

Weeds controlled when TRI-4 HF is applied through overhead sprinkler irrigation.

barnyardgrass	cupgrass
cheat	foxtail
downy brome	junglerice
canarygrass	sandbur
crabgrass	wild barley

APPLICATION RATE/ACRE FOR TRI-4 HF PER ACRE IS UP TO 4.0 PINTS ON ALL SOILS.

DO NOT harvest or graze alfalfa within 21 days of application. Apply up to 4 pints per acre per season. Plant crops only that are labeled for preplant applications as rotational crop injury could occur the following season. See the TRI-4 HF leaflet label for crops labeled for pre-plant applications.

Tank-mixes: TRI-4 HF may be tank mixed with any product registered for use on alfalfa or applied as part of a sequential application. Refer to the tank-mix product for rates, weeds controlled, precautions, and restrictions.

CHEMIGATION APPLICATION TO COTTON

TRI-4 HF must be applied through properly calibrated and maintained CHEMIGATION systems to ensure proper application rates for optimum weed control in cotton. Follow the TRI-4 HF directions carefully and adhere to all label precautions and restrictions.

Apply TRI-4 HF through sprinkler irrigation in 0.5 to 1 inch of water. Plant immediately after the last field operation. Application must be completed within 2 days after planting. TRI-4 HF does not control established weeds. Mechanical incorporation is not needed when TRI-4 HF is applied through a chemigation system. Shallow cultivation operations can be done however untreated soil must not be exposed as this will result in reduced weed control.

BROADCAST APPLICATION RATES/ACRE TRI-4 HF

SOIL TEXTURE	SPRING APPLICATION¹ (pints)	EASTERN U.S.² (pints)	WEST. U.S.³ (pints)
COARSE	1.0	2.0	1.5
MEDIUM	1.25-1.5	2.0	2.0
FINE	1.5-2.0	2.5	2.5

¹ Coarse to medium soils with 2-5% O.M. apply 1.5 pints/acre

Fine soils with 2-5% O.M. apply 2.0 pints/acre

Soils with 5.1-10% O.M. apply 2.0-2.5 pints/acre

The lowest rate in any rate range should be used if cumulative rainfall plus irrigation totals are less than 20 inches.

² Fall application rates for Alabama, Arkansas, northern Florida, Georgia, Louisiana, Mississippi, southeastern Missouri (Bootheel), North Carolina, New Mexico, Oklahoma, South Carolina, Tennessee, and Texas

³ Fall application rates for western states including Arizona and Nevada.

In states not listed above, apply in the fall at broadcast rates for regions with greater than 20 inches of average annual rainfall.

CHEMIGATION APPLICATION TO FIELD CORN

Application timing

When field corn is at 2 true leaves or taller, TRI-4 HF can be applied with 0.5 to 1.0 acre inch of overhead sprinkler irrigation. TRI-4 HF will not control emerged weeds.

Broadcast Application Rate/Acre

Soil Texture	TRI-4 HF (pints)
Coarse	1.5-2.0
Medium	1.5-2.0
Fine	DO NOT apply

1. TRI-4 HF should not be applied to sweet corn or corn grown for seed.
2. DO NOT apply where corn is planted in a furrow. Apply only after a cultivation to move soil into a row to prevent crop injury.
3. DO NOT apply TRI-4 HF as a preplant or preemergence treatment because crop injury will occur.

APPLICATION TO GRAIN SORGHUM (MILO)

Apply TRI-4 HF through chemigation equipment when grain sorghum has reached a height of 8 inches or taller. **Cultivate** sorghum to destroy existing weeds and add 1 inch of soil around the base of sorghum plants.

Apply TRI-4 HF in 0.5 to 1 acre inch of sprinkler irrigation and immediately after cultivation when the grain sorghum is at least 8 inches tall. TRI-4 HF has no postemergent activity on emerged weeds.


BROADCAST RATES/ACRE

<u>SOIL TEXTURE</u>	<u>TRI-4 HF</u>
COARSE	0.75-1.0
MEDIUM	1.0-1.5
FINE	DO NOT apply

Applications to grain sorghum with TRI-4 HF should not be made preplant or preemergence because of potential crop injury. Misapplication will result in crop injury.

This label must be in possession of the user at the time of use for all applications allowed in this supplemental label.

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