EPA REGISTRATION NO. DATE OF ISSUANCE US ENVIRONMENTAL PROTECTION AGENCY MAR 1 0 1999 100-949 OFFICE OF PESTICIDES PROGRAMS REGISTRATION DIVISION (TS-767) TERM OF ISSUANCE WASHINGTON, DC 20460 Conditional NAME OF PESTICIDE PRODUCT NOTICE OF PESTICIDE: REREGISTRATION (Under the Federal Insecticide, Fungicide, Trinexação Liduid and Rodenticide Act, as amended) NAME AND ADDRESS OF REGISTRANT (Include ZIP code) Novarris Cros Protection Inc. F.C. DOX 10300 Greensporo, NC 27419 NOTE: Changes in labeling formula differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above U.S. EPA registration number. On the basis of information furnished by the registrant, the above named pesticide is hereby Registered/Reregistered under the Federal Insecticide, Fungicide, and Rodenticide Act. A copy of the labeling accepted in connection with this Registration/Reregistration is returned herewith. Registration is in no way to be construed as an indorsement or approval of this product by this Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered This product is registered in accordance with FIFRA Section 3(c)(5) provided that you: 1. Submit and/or cite all data required for registration of this product under FIFRA sec. 3(c)(5) when the Agency requires all registrants of similar products to submit such data; and submit acceptable responses required for reregistration of this product under FIFRA sec. 4. 3. Add the phrase "EPA Registration No. 100-949" to the front panel of the label before you release the product for shipment. 4. Submit one (1) copy of the final printed labeling before you release the product for shipment. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). Your release for snipment of the product constitutes acceptance of these conditions. A stamped copy of the lapel is enclosed for your records. Joanne I. Miller Product Manager (23) Fundicide-Herbicide Branch Erclosure Registration Division (7505C) ATTACHMENT IS APPLICABLE SIGNATURE OF APPROVING OFFICIAL MAR 1 0 1999 EPA Form 8570-6 (Rev. 5-76)

Trinexapac Liquid™

For Growth Management of Perennial Ryegrass Grown for Seed

- · Shortens grass height to reduce lodging
- Easier and more efficient seed harvest

Active Ingredient: Trinexapac-ethyl:

 (CAS No. 95266-40-3)
 12.0%

 Other Ingredients:
 88.0%

Total: 100.0%

Trinexapac Liquid is an emulsifiable concentrate.

EPA Reg. No. 100- 000

EPA Est. 1386-OH-1

KEEP OUT OF REACH OF CHILDREN.

WARNING/AVISO

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

See additional precautionary statements and directions for use inside booklet.

2.5 GALLONS U.S. Standard Measure

ACCEPTED
with COMMENTS
In EPA Letter Dated

MAR 1 0 1999

Under the Federal Insecticide, Fundicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No.

DIRECTIONS FOR USE AND CONDITIONS OF SALE AND WARRANTY

IMPORTANT: Read the entire Directions for Use and the Conditions of Sale and Warranty before using this product. If terms are not acceptable, return the unopened product container at once.

CONDITIONS OF SALE AND WARRANTY

The **Directions for Use** of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and should be followed carefully. However, it is impossible to eliminate all risks inherently associated with 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 Novartis Crop Protection, Inc. or the Seller. All such risks shall be assumed by the buyer.

Novartis warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the **Directions for Use** subject to the inherent risks referred to above. **Novartis makes no other** express or implied warranty of Fitness or Merchantability or any other express or implied warranty. In no case shall Novartis or the Seller be liable for consequential, special, or indirect damages resulting from the use or handling of this product. Novartis and the Seller offer this product, and the Buyer and user accept it, subject to the foregoing **Conditions of Sale and Warranty**, which may be varied only by agreement in writing signed by a duly authorized representative of Novartis.



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 treated areas without footwear until sprays have dried. There is no restricted entry interval (REI) requirement.

Observe all precautions and limitations on this label and on the labels of each product used in tank mixture with this product.

FAILURE TO FOLLOW THE DIRECTIONS FOR USE AND PRECAUTIONS ON THIS LABEL MAY RESULT POOR PERFORMANCE, CROP INJURY, OR ILLEGAL RESIDUES.

GENERAL INFORMATION

Trinexapac Liquid is a growth regulator which restricts the growth of perennial ryegrass grown for seed when the product is applied as directed. This results in:

- 1. less potential for lodging
- 2. easier and more efficient seed harvest

Other benefits often seen are:

- improved pollination and seed set
- less straw in the combine
- · less trash in harvested seed
- faster combining

Trinexapac Liquid is rapidly absorbed by the ryegrass foliage. The product is rain fast an hour after application. The growth regulator effects of Trinexapac Liquid do not occur through soil uptake.

NOTICE TO USER: Crop response to Trinexapac Liquid is acceptable for perennial ryegrass, but other grass species grown for seed have not been adequately evaluated yet. Neither the manufacturer nor the seller has determined the level of performance or crop tolerance of grass species other than perennial ryegrass grown for seed

APPLICATION INFORMATION

The activity and performance of Trinexapac Liquid is primarily affected by:
(1) Environmental conditions (2) crop management and cultural practices that affect perennial ryegrass growth and vigor (3) fertility level (4) moisture availability (5) plant vigor (6) and perennial ryegrass growth stage.

<u>Chemigation</u>: Do not apply this product through any type of irrigation system.

TABLE 1. TRINEXEPAC LIQUID APPLICATION RATES AND TIMING

Application Rate	Application Timing	Comments
	Before or during stem	1) Apply as a broadcast,
	elongation stage of	foliar spray to actively-
	development (Zadoks	growing perennial
	growth stages 30-37 or	ryegrass.
2 - 4 pt./A	Feekes stages 5-8)	
1		2) Use the high rate on
3	NOTE: Although this	heavy, lush stands.
	product is effective at any	••. •
j	time in this growth stage	3) Multiple applications
	the BEST timing is early	during the growing
	(Zadoks growth stage 32	season are allowed but .
 - -	or Feekes 7 -when the	do not apply more than
	second node on the main	4 pints per acre per
	stem is detectable).	year.

Equipment:

Clean spray equipment thoroughly before use and use a sprayer that will deliver an accurate and uniform spray. Rinse sprayer with clean water after use and dispose of rinsate according to label directions.

Mixing Instructions

- (1) Mix Trinexapac Liquid in enough water (10-20 gals./A) to thoroughly and uniformly cover the crop.
- (2) Mix only the amount needed for the immediate operation.
- (3) Agitate thoroughly before and during application.

Note: Tank mixtures are permitted only in those states where the tank mix partner is also registered.

Trinexapac Liquid Alone:

- (1) Add 1/2-2/3 of the required amount of water to the spray tank.
- (2) While agitating, add Trinexapac Liquid.
- (3) Continue agitation while adding the remainder of the water.
- (4) Maintain agitation until all of the mixture has been applied.

Trinexapac Liquid + Tilt® Fungicide:

- (1) Add 1/2-2/3 of the required amount of water to the spray tank.,
- (2) While agitating, add Trinexapac Liquid followed by Tilt Fungicide.
- (3) Continue agitation while adding the remainder of the water.
- (4) Maintain agitation until all of the mixture has been applied.

Note: Observe all directions for use, precautions, and limitations which appear on the Tilt Fungicide label.

STORAGE AND DISPOSAL

Pesticide Storage and Disposal

Do not store below 0°F. If crystals do form, store above 70°F, shaking periodically until crystals are dissolved.

Do not contaminate water, food, or feed by storage, disposal, or cleaning of equipment. Pesticide wastes are toxic. Improper disposal of unused pesticide, ''s spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, they must be disposed of according to Federal, state, or local procedures. Contact your State Pesticide or

Environmental Control Agency or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

Container Disposal

Triple rinse (or equivalent) and offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incinerate, or if allowed by state and local authorities, dispose of by open burning. Stay out of smoke from burning container.

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

WARNING/AVISO

Causes eye irritation. Do not get in eyes. Harmful if swallowed, inhaled or absorbed through skin. Avoid contact with skin, or clothing. Avoid breathing vapor or spray mist.

First Aid

If in eyes: Hold eyelids open and flush with a steady, gentle stream of water. Get medical attention.

If swallowed: Call a physician or Poison Control Center. Do not induce vomiting. Drink promptly a large quantity of milk, egg whites, or gelatin solution, or, if these are not available, drink large quantities of water. Never give anything by mouth to an unconscious person.

If inhaled: Remove victim to fresh air.

If on skin: Wash with plenty of soap and water. Call a physician if irritation persists.

Note to Physician: If ingested, lavage stomach with care to prevent aspiration of stomach contents. An aqueous suspension of activated charcoal can be ::.; given to absorb remaining toxicant.

Personal Protective Equipment

Some materials that are chemical-resistant to this product are listed below. If, you want more options, follow the instructions for Category 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.
- Shoes plus socks
- Protective eye wear

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. 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 Control Statements

When handlers use closed systems or enclosed cabs 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.

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.

Environmental Hazards

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

Trinexapac Liquid™ and Tilt® trademarks of Novartis U.S. Patent No. 4,693,745

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Other Ingredients:	88.0%
Total:	100.0%

EPA Reg. No. 100-

EPA Est. 1386-OH-1

See directions for use in attached booklet.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to supplemental labeling under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.

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disposed of by use according to label instructions, they must be disposed of according to Federal, state, or local procedures. Contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

Container Disposal:

Triple rinse (or equivalent) and offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill, or incinerate, or if allowed by state and local authorities dispose of by burning. Stay out of smoke from burning container.

For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during clean up and disposal of wastes. In the event of a major spill, fire, or other emergency, call 1-800-888-8372, day or night.

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