



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

AUG 17 2005

OFFICE OF
PREVENTION, PESTICIDES
AND TOXIC SUBSTANCES

Bill Washburn
Micro-Flo Company LLC
P.O. Box 772099
Memphis, TN 38117-2099

Dear Washburn:

Subject: Revised Labeling
Thidiazuron-Diuron EC
EPA Registration No. 51036-429
Your Submission Dated July 21, 2005

The amendment referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended is acceptable provided that you:

1. Make the labeling changes listed below before you release the product for shipment bearing the amended labeling:
 - a. On page 4 delete "should". The use of this term implies that the restrictions on the labeling do not have to be complied with.
 - b. On page 6 delete WARNING. Only one Signal Word, DANGER, is allowed on pesticide labeling. You can use the terms "Attention" or "Precaution".
2. Submit one (1) copy of your final printed labeling before you release the product for shipment.

A stamped copy of the labeling is enclosed for your records

Sincerely yours,

A handwritten signature in black ink that reads "Joanne I. Miller". The signature is written in a cursive, flowing style.

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

Enclosure

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MICRO FLO COMPANY LLC

THIDIAZURON-DIURON EC

COTTON DEFOLIANT

For Agricultural Use Only

ACTIVE INGREDIENTS: Thidiazuron: N-phenyl-N'-1,2,3-thidiazol-5-ylurea*.....	12%
Diuron: 3-(3,4-dichlorophenyl)-1,1-dimethylurea*.....	6%
Other Ingredients:.....	82%
TOTAL	100%

ACCEPTED
with COMMENTS
In EPA Letter Dated:

AUG 17 2005

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

Contains 1 lb. Thidiazuron per gallon and 0.5 lb. Diuron per gallon

KEEP OUT OF REACH OF CHILDREN
ANGER - PELIGRO

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

51036-429

FIRST AID	
IF ON SKIN OR CLOTHING:	<ul style="list-style-type: none"> Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
IF IN EYES:	<ul style="list-style-type: none"> Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. Call a poison control center or doctor for treatment advice.
IF INHALED:	<ul style="list-style-type: none"> Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth is possible. Call a poison control center or doctor for treatment advice.
IF SWALLOWED:	<ul style="list-style-type: none"> Immediately call a poison control center or doctor for treatment advice. Do not induce vomiting unless told to do so by a poison control center or doctor. Have person sip a glass of water if able to swallow. Do not give anything by mouth to an unconscious person.
NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.	
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor or going for treatment.	
EMERGENCY NUMBERS:	
<ul style="list-style-type: none"> Transportation or spill, call CHEMTREC 800-424-9300. Human health, 800-832-HELP (4357). Animal health, call ASPCA at 800-345-4735. 	

SEE INSIDE (SIDE PANEL) FOR ADDITIONAL PRECAUTIONS AND USE DIRECTIONS

EPA Reg. No. 51036-429
ADxxxxxx

EPA Est. No. 51036-GA-001
NET CONTENTS: _____

Manufactured by
Micro Flo Company LLC
P. O. Box 772099
Memphis, TN 38117

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**PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
DANGER**

Corrosive. Causes irreversible eye damage. Causes burns. Harmful if inhaled. Do not get in eyes, on skin, or on clothing. Avoid breathing dust or spray mist. Prolonged or frequently repeated skin-contact may cause allergic reactions in some individuals.

PERSONAL PROTECTIVE EQUIPMENT

Applicators and other handlers (other than mixers and loaders) must wear:

- Coveralls worn over long-sleeved shirt and long pants
- Chemical-resistant gloves, such as barrier laminate or butyl rubber gloves
- Chemical-resistant footwear plus socks
- Protective eyewear

Mixers and loaders must wear:

- Coveralls worn over long-sleeved shirt and long pants
- Chemical-resistant gloves, such as barrier laminate or butyl rubber gloves
- Chemical-resistant footwear plus socks
- Protective eyewear

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 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.

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

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

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

PESTICIDE STORAGE: Store this product in a cool, dry place in its original container only. Container should be closed when not in use. Do not expose the product to open flame excessive heat. Store in original container and keep closed.

PESTICIDE DISPOSAL: Pesticide wastes are acutely hazardous. 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 guidance.

CONTAINER DISPOSAL: Triple rinse (or equivalent); then offer for recycling or reconditioning, or puncture and dispose of in sanitary landfill, or by other procedures approved by State and local authorities.

DO NOT REUSE EMPTY CONTAINER

Do not use or store near heat or open flame.

To Contain a Spill: Absorb liquid by covering it with cat litter, commercial clay, lime, sand, sawdust, or soda ash. Once absorbed, bury the cleaning materials and cleanse the spill area with a detergent and water solution.

GENERAL INFORMATION

THIDIAZURON-DIURON EC is a harvest aid for cotton, used for leaf removal prior to harvest.

THIDIAZURON-DIURON EC can be applied in most weather conditions, both warm and cool.

USE PRECAUTIONS

This product is not to be applied through any type of irrigation system.

Effectiveness of THIDIAZURON-DIURON EC will be reduced if rainfall occurs within 12 hours post application.

Foliage from treated plants or gin trash is not to be fed to livestock.

Rotation to the following crops requires the minimum specified periods below after the last application of THIDIAZURON-DIURON EC:

small grains, sorghum, corn, or root crops (except carrots, onions).....	two (2) months	
legumes (including alfalfa) or leafy vegetable (except lettuce).....	two (2) months	
cole crops, garlic, safflower, tomatoes, and watermelon.....	two (2) months	
carrots.....	three (3) months	
onions.....	four (4) months	
cantaloupe, honeydew melon/casaba melon, muskmelon, or peppers	five (5) months	
lettuce..... when soil has been deep-plowed (12-15 inches)	two (2) months	
OR lettuce	when soil is only disced (4-6 inches)	nine (9) months
All other crops.....	twelve (12) months	

Special Note for inter-cropped grains and legumes planted either as cover crops or planted into treated fields before the minimum two (2) month plant back time after the final THIDIAZURON-DIURON EC application: Any such crops are prohibited for use as feed or food and may be used only as cover crops.

Immature crops should not be used for food or feed.

Prevent spray drift from contacting crops other than mature cotton, since this product may defoliate or injure other plant species.

Mixtures with organophosphates can increase nontarget crop phytotoxicity. Additional care should be exercised when lettuce, citrus, cantaloupes or any other edible crops are adjacent to THIDIAZURON-DIURON EC treated cotton fields.

PROCEDURES TO LOWER SPRAY DRIFT POTENTIAL ONTO NONTARGET CROPS

Under windy weather conditions, applications of THIDIAZURON-DIURON EC may drift to non-target crops.

The following procedures can help reduce the potential for drift:

- If wind speeds top ten (10) miles per hour at the application site, do not make aerial or ground applications of THIDIAZURON-DIURON EC.
- Nozzle pressure of 20-30 psi is recommended.
- Applications of this product should not occur during a temperature inversion because drift potential is high. In addition, do not apply this product if the development of a temperature inversion appears likely during the application period.
- This product should not be applied by ground within 100 feet or by air within 0.5 mile of lettuce.

RIO GRANDE VALLEY OF TEXAS PROCEDURES TO LOWER SPRAY DRIFT POTENTIAL

The following procedures can help reduce the potential for drift:

- If wind speeds top ten (10) miles per hour at the application site, do not make aerial or ground applications of THIDIAZURON-DIURON EC. If wind speeds are less than ten (10) miles per hour, observe local recommendations from your State Extension Cotton Specialist.

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- Nozzle pressure of 20-30 psi is recommended.
- Applications of this product should not occur during a temperature inversion because drift potential is high. In addition, do not apply this product if the development of a temperature inversion appears likely during the application period.
- The maximum nozzle orifice size that provides proper coverage and deposition of this product should be used.
- **CITRUS AREAS:** This product should not be applied by ground within 0.5 mile or by air within 5 miles upwind of citrus in flush.

DIRECTIONS FOR USE

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

Do not make applications of this product that may contact workers or other person either by drift or directly. Protected handlers only are allowed in the area during application. Consult your State or Tribe agency responsible for pesticide regulations for any specific recommendation.

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 statement 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 24 hours.

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 worn over long-sleeved shirt and long pants
- Chemical-resistant gloves such as barrier laminate or butyl rubber gloves
- Chemical-resistant footwear plus socks
- Protective eyewear

TIME OF APPLICATION

THIDIAZURON-DIURON EC defoliant applications are to be made only on mature cotton plants when the uppermost harvestable boll is mature. Boll maturity is defined as 1) when a boll is squeezed between thumb and finger, it does not dent; 2) when cutting a cross section with a sharp knife is difficult; 3) when seeds in cross section lack liquid within the seed coat or outer edges of seed coat are light brown; and 4) when fully developed cotyledons are present.

Make applications of THIDIAZURON-DIURON EC at least 5 days prior to expected harvest date.

NOTE: Adequate defoliation with THIDIAZURON-DIURON EC depends on three factors:

- Cotton is actively growing.
- High relative humidity.
- Cotton plant leaves are turgid and not desiccated.

WARNING: Desiccation and/or leaf freezing may occur during periods of high temperature when adjuvants are added to THIDIAZURON-DIURON EC application solution. Products and adjuvants known to cause desiccation of cotton leaf tissue should not be used.

Under low nighttime temperatures (below 60°F) or otherwise adverse conditions, this product, when used alone, may provide less than expected defoliation and / or regrowth suppression.

APPLICATION INFORMATION

Use an adequate volume of water with the recommended amount of THIDIAZURON-DIURON EC defoliant to uniformly and completely cover leaves. For ground equipment, apply 10 – 25 gallon per acre and by air, use 2 –10 gallons per acre. Maintain agitation during application.

DOSAGE INFORMATION

Application Rate: Before harvest, use 0.4-1.0 pints active ingredient/acre (6.4-16 fl. oz./A).

One gallon of THIDIAZURON-DIURON EC will treat 8 - 20 acres. Refer to the dose rate table below.

In some situations, a follow-up application may be needed. THIDIAZURON-DIURON EC may be used for this application. Other defoliants may be needed. If additional boll opening is required, Ethephon 6 may be used at recommended rates; see product label for rates and timings. Consult your local State Extension Cotton Specialist recommendations for rates and timings.

The maximum annual use rate of THIDIAZURON-DIURON EC is 16 oz. per acre per season.

MIXING INSTRUCTIONS

1. Fill spray applicator tank with at least one half of the water to be used
2. Start agitation
3. Add the appropriate volume of THIDIAZURON -DIURON EC
4. Continue agitation and fill tank with the remainder of the water to be used
5. Agitation should continue throughout the application

CALIFORNIA ONLY: PRECONDITIONING

When used as a pre-conditioner seven to ten days before application of this or other defoliant compounds, this product will improve the efficacy of such a defoliant application. Before use, observe all product label directions, recommendations and prohibitions on both product's labels.

Application Rate: Use 4-6 fl.oz. of this product/acre in an aerial application of 2-10 gallons of spray solution or ground application of 10-25 gallons of spray solution

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APPLICATION RATE TABLE for THIDIAZURON-DIURON EC

THIDIAZURON-DIURON EC Formulated Product	One Gallon of THIDIAZURON- DIURON EC Will Treat	Active Ingredients per Acre
6.4 oz./Acre (0.4 pt./Acre)	20 Acres	0.075 lbs. ai/Acre
8.8 oz./Acre (0.55 pt./Acre)	15 Acres	0.10 lbs. Ai/Acre
12.8 oz./Acre (0.8 pt./Acre)	10 Acres	0.15 lbs. Ai/Acre
16.0 oz./Acre (1.0 pt./Acre)	8 Acres	0.1875 lbs. ai/Acre

DO NOT APPLY MORE THAN 1.0 PINT OF THIDIAZURON-DIURON EC PER ACRE PER SEASON.

IMPORTANT CLEANOUT INSTRUCTIONS

When applying THIDIAZURON-DIURON EC, a residue may form in application equipment. This residue can best be flushed out of the spraying system by using a commercial tank cleaner when done while residue is still fresh and moist. **DO NOT ALLOW EQUIPMENT TO DRY BEFORE CLEANOUT.** Consult your State Extension Cotton Specialist for recommended tank cleaners and cleaning procedures.

Tank cleaner and water should be used immediately after application. The entire system including nozzles, booms, application tanks, sumps, pumps, and transfer lines should be flushed. Allowing the spray solution to dry in the application equipment can result in residues that are more difficult to remove. **Dried residues are extremely difficult to remove. To remove such dried residues, fill the affected equipment to capacity with commercial tank cleaner solution and let it remain for 7 days. Afterwards, the equipment will need to be thoroughly flushed and rinsed.**

Spray application equipment that has been inadequately cleaned will contain residue of THIDIAZURON - DIURON EC. Such improper cleaning could lead to crop damage in later applications.

Micro Flo Company, LLC assumes no liability due to equipment that has not been properly cleaned.

CONDITIONS OF SALE AND WARRANTY

The **Directions For Use** of this product reflects 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 use of the product in a manner inconsistent with its labeling, all of which are beyond the control of MICRO FLO COMPANY LLC ("MICRO FLO") or the Seller. All such risks shall be assumed by the Buyer.

MICRO FLO 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.

MICRO FLO MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY. TO THE EXTENT PERMITTED BY LAW, MICRO FLO AND THE SELLER DISCLAIM ANY LIABILITY FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT. MICRO FLO 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 MICRO FLO.

THIDIAZURON-DIURON EC
COTTON DEFOLIANT
For Agricultural Use Only

ACTIVE INGREDIENTS: Thidiazuron: N-phenyl-N'-1,2,3-thidiazol-5-ylurea*12%
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KEEP OUT OF REACH OF CHILDREN
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IF INHALED:	<ul style="list-style-type: none">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 treatment advice.
IF SWALLOWED:	<ul style="list-style-type: none">Immediately call a poison control center or doctor for treatment advice.Do not induce vomiting unless told to do so by a poison control center or doctor.Have person sip a glass of water if able to swallow.Do not give anything by mouth to an unconscious person.
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- Protective eyewear

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CONTAINER DISPOSAL: Triple rinse (or equivalent); then offer for recycling or reconditioning, or puncture and dispose of in sanitary landfill, or by other procedures approved by State and local authorities.

DO NOT REUSE EMPTY CONTAINER

PHYSICAL OR CHEMICAL HAZARDS

Do not use or store near heat or open flame.

To Contain a Spill: Absorb liquid by covering it with cat litter, commercial clay, lime, sand, sawdust, or soda ash. Once absorbed, bury the cleaning materials and cleanse the spill area with a detergent and water solution.

DIRECTIONS FOR USE

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

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AGRICULTURAL USE REQUIREMENTS

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- Chemical-resistant gloves such as barrier laminate or butyl rubber gloves
- Chemical-resistant footwear plus socks
- Protective eyewear

SEE ATTACHED BOOKLET FOR ADDITIONAL PRECAUTIONS AND USE DIRECTIONS

EPA Reg. No. 51036-429
ADxxxxxx

EPA Est. No. 51036-GA-001
NET CONTENTS: _____

Manufactured by
Micro Flo Company LLC
P. O. Box 772099
Memphis, TN 38117

BASE LABEL _____

b/b