

OCT 7 1993

Morris Gaskins
Micro-Flo Co.
P.O. Box 5948
Lakeland, FL 33807

Dear Mr. Gaskins:

Subject: Revised Labeling
Mepiquat Chloride 4.2% Liquid
EPA Registration No. 51036-188
Your Submission Dated September 3, 1993

The amendment referred to above, submitted in connection with registration under section 3(c)(7)(A) of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), is acceptable provided that you:

1. Submit/cite all data required for registration/-reregistration of your product under FIFRA section 3(c)(5) or 4(a) when the Agency requires all registrants of similar products to submit such data.

2. Make the labeling changes listed below before you release the product for shipment bearing the amended labeling:

a. Above statements "Avoid contact with eyes..." add the following headings required by Title 40 Code of Federal Regulations § 156.10(h)(2):

Precautionary Statements

Hazards to Humans and Domestic Animals

b. Above statements "Do not apply directly to water,..." add the following heading required by Title 40 Code of Federal Regulations § 156.10(h)(2):

Environmental Hazards

c. We note for the section "OK, TX ...with a history of excessive vegetative growth" the rate per acre is 8 fl.oz. but on the last accepted label it was 16 fl. oz. Correct it if it is in error.

-2-

3. Submit one (1) copy of your 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 shipment of the product bearing the amended labeling constitutes acceptance of these conditions.

A stamped copy of the label is enclosed for your records.

This acceptance of your label does not relieve you of your obligation to comply with the Worker Protection Standard (WPS). Under the WPS labeling regulations at 40 CFR Part 156, Subpart K, § 156.200(c)(3), you are prohibited from distributing or selling any product within the scope of the WPS requirements after April 21, 1994, without amended labeling accepted by the Agency.

Sincerely yours,

/S/

Cynthia Giles-Parker
Product Manager (22)
Fungicide-Herbicide Branch
Registration Division (H7505C)

Enclosure

3049
Jacket

MEPICHLOR 4.2%

LIQUID

ACTIVE INGREDIENT:

Mepiquat Chloride: N,N-dimethylpiperidinium Chloride 4.2%
INERT INGREDIENTS: 95.8%
TOTAL 100.0%

Contains 0.35 pounds active ingredient per gallon.

KEEP OUT OF REACH OF CHILDREN

156.10(h)(2)

CAUTION

*Precautionary Statements
Hazardous to Humans and Domestic Animals*

Avoid contact with eyes. In case of contact, immediately flush eyes or skin with plenty of water. Get medical attention if irritation persists.

Environmental Hazards

Do not apply directly to water, to areas where surface water is present or to intertidal area below the high water mark. Do not contaminate water when disposing of rinsewater or equipment washwater. Do not contaminate water by cleaning of equipment or disposal of wastes.

See Additional Precautionary Statements Inside Booklet

EPA Reg. No. 51036-188

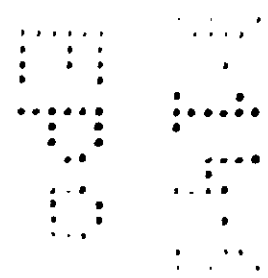
EPA Est. No. 51036-GA-1

ACCEPTED
with COMMENTS
in EPA Letter Dated:

OCT 7 1983

Manufactured by:
MICRO FLO COMPANY
P.O. Box 5948
Lakeland, Florida 33807-5948

Under the Federal Insecticide
Fungicide and Rodenticide Act
as amended, for the purpose
regulated under EPA Reg. No.
51036-188



4249

DIRECTIONS FOR USE

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

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal
STORAGE: Store in locked area in original container only, with lid tightly closed. Store separately from other pesticides and fertilizers, food and feed to prevent contamination. Use care to avoid puncturing container during storage or transit. In case of a spill or leaking container, call CHEMTREC at 1-800-424-9360.

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 guidance.

CONTAINER DISPOSAL: Triple rinse container (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

IN CASE OF EMERGENCY

In case of large-scale spillage regarding this product, call CHEMTREC at 1-800-424-9300.

In case of medical emergency regarding this product, call your local doctor for immediate treatment, or your local poison control center (hospital).

GENERAL INFORMATION

Mepichlor 4.2 is a Micro Flo product which is equivalent to PIX Plant Regulator produced by BASF Corporation. Mepichlor 4.2 is a foiler applied plant regulator. Benefits derived from the use of Mepichlor 4.2 include increased boll retention, reduced plant height which provides a more open canopy, less boll rot, improved defoliation, less trash, and a darker leaf color. These benefits can provide for earlier maturity and often result in improved yields.

Growers may use single or multiple applications. Application rates acre dependent on the number of applications to be made and growing conditions. Multiple applications of low rates provide maximum flexibility under a wide range of growing conditions. Mepichlor 4.2 should not be applied to plants under stress. If stress is alleviated, plants should be evaluated for vegetative growth before additional applications are made. Mepichlor 4.2 may be tank mixed with insecticides/miticides when application timing coincide. (See RESTRICTIONS AND LIMITATIONS)

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Fields should be carefully scouted. Mepichlor 4.2 should not be applied if plants are under any form of stress. In the absence of stress, a maximum of four low rate applications can be made each season, generally using 2-4 fl.oz./acre per application. The first application can be applied at the matchhead square stage. The rate and timing of subsequent applications depend on growing conditions and desired benefits. Under good growing conditions, additional treatments of 2-4 fl.oz./acre can be made at 7-14 day intervals. Higher rates of Mepichlor 4.2 (1q/4 - 1/2 pt./acre) should be used if vegetative growth becomes excessive or a greater degree of height control is desired. Do not use more than a total of 24 fl. oz. of Mepichlor 4.2 per acre in a growing season.

SPRAY VOLUMES
Thorough coverage is required

) **IN WATER:**

Areas other than California:

Ground Application - Use a minimum of 10 gallons of water per acre.

Aerial Application - Use a minimum of 2 gallons/acre.

California Only:

Ground Application - Use a minimum of 20 gallons/acre.

Aerial Application - Use a minimum of 5 gallons/acre.

IN OIL:

Use a minimum total oil volume of 2 pints/acre for Ultra low volume (ULV) aerial application. Application in oil is permitted only in AL, AR, FL, GA, LA, MO, MS, NC, OK, SC, TN and TX. Use a nonphytotoxic oil concentrate which contains either a petroleum or vegetable oil base, contains only EPA-exempt ingredients and has been used successfully in your locality. The oil diluent should contain emulsifiers which provide good mixing quality. If using a vegetable oil based product, only highly refined concentrates should be used. ✓

) Mix under constant agitation. Pour one-half of the required volume of oil into the spray tank, and then pour in the Mepichlor 4.2 while the remainder of the oil is added. Constant agitation is required during and after mixing and during application.

RAIN WASH-OFF PRECAUTION

The use of a high quality, EPA exempt surfactant will enhance the uptake of Mepichlor 4.2 into the plant. Therefore, the use of a surfactant allows applications made as little as 4 hours prior to rainfall to be effective. Without a surfactant, the product should be used at least 8 hours prior to expected rainfall.

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COMPATIBILITY

Mepichlor 4.2 is water based, and is compatible with most insecticides and miticides. If compatibility is in doubt, perform a jar test to check for compatibility. Mepichlor 4.2 can be used with foliar fertilizers if your prior experience shows the combination is compatible and will not injure cotton under your conditions. Caution should be used when applying with foliar fertilizers under conditions of extreme heat.

RESTRICTIONS AND LIMITATIONS

- * Insect or mite damage to Mepichlor 4.2 treated crops can lead to yield decreases or other undesirable effects.
- * Do not apply Mepichlor 4.2 to cotton that is under stress. If using low rate multiple applications, discontinue use until your crop has overcome any stress.
- * Do not use Mepichlor 4.2 on the short-staple variety Delta & Pineland 70.
- * Do not apply more than 24 fl. oz. of Mepichlor 4.2 per acre per season.
- * Do not apply Mepichlor 4.2 within 30 days of harvest.
- * Do not graze or feed cotton forage to livestock within 30 days of application.
- * Do not graze or feed cotton forage to livestock at all if applied in oil as a ULV application by air.
- * Mepichlor 4.2 contains a dye and effectiveness is not related to the color of the spray solution.
- * Do not tank mix with other products other than those mentioned under "COMPATIBILITY".
- * Do not apply this product through any type of irrigation system.

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TIME AND RATE OF APPLICATION
SHORT-STAPLE AND LONG-STAPLE (PIMA) COTTON

Directions for use should be observed as specified below:

I. SINGLE OR DUAL APPLICATIONS:

Use these instructions when you are not able to start growth regulation treatments early, or when you want to make the fewest number of applications.

<u>AREA</u>	<u>TIME OF APPLICATION</u>	<u>RATE PER ACRE</u>
AL, AR, AZ, CA, FL, GA, LA, MO, MS, NM, NC, SC, TN, VA	First Application:	8 to 16 fl.oz.
	Apply when cotton is actively growing and is between 20" and 30" tall, but not more than 7 days beyond early bloom (5-6 blooms per 25 row feet). Also apply if cotton is 24" tall and has no blooms.	
	Use the 8 oz. rate on the cotton where excessive vegetative growth is not expected. Use 16 oz. where excessive growth has historically occurred. See RESTRICTIONS AND LIMITATIONS	
	Second Application:	8 fl.oz.
	Make another application in 3 to 4 weeks if additional growth control is desired.	
OK, TX, (except Rio grande Valley)	Areas without a history of excessive vegetative growth:	
	First Application:	8 fl.oz.
	Apply when cotton is in the early bloom stage (5-8 blooms per 25 row feet) and actively growing. Also apply if no blooms are present and the cotton is 24" tall and actively growing. See RESTRICTIONS AND LIMITATIONS.	
	Second Application:	8 fl.oz.
	Make a second application in 3-4 weeks if additional growth control is desired.	
OK, TX	Areas with a history of excessive vegetative growth:	
	First Application:	8 fl.oz.
	For best results, apply when plants are in early bloom	

stage (5-6 blooms per 25 row feet) and an average of 24" tall. Treatments can also be made when cotton height averages a minimum of 20" and a maximum of 28", provided cotton is not more than 7 days beyond early bloom.

See RESTRICTIONS AND LIMITATIONS

Second application: 8 fl.oz.

For fields with a history of excessive growth, or if conditions after the first application favor excessive growth, make a second application in 3 - 4 weeks.

II. LOW-RATE MULTIPLE APPLICATIONS:

Use these instructions when you want to maintain maximum flexibility in plant regulation treatments.

AREA	TIME OF APPLICATION	EXCESSIVE GROWTH NOT EXPECTED OR LOWER RATES HAVE WORKED IN THE PAST.	EXCESSIVE GROWTH EXPECTED OR HIGHER RATES HAVE BEEN NECESSARY IN THE PAST.
AL, AR, AZ, CA, FL, GA, LA, MO, MS, NC, NM, OK, SC, TN, TX, VA,	First Application: Apply at the matchhead square stage of growth.	2 fl.oz.	4 fl.oz.
	Second Application: 7-14 days later, or when regrowth occurs.	2-4 fl.oz.*	4-8 fl.oz.*
	Third Application: 7-14 days later, or when regrowth occurs.	2-4 fl.oz.*	4-8 fl.oz.
	Fourth Application: 7-14 days later, or when regrowth occurs.	2-4 fl.oz.*	4-8 fl.oz.*

*Use the higher rate if previous application was not made or if growing conditions favor excessive growth.

+Matchhead square is when the first square of a typical cotton plant is about the size of a match head (about 1/8" in diameter). Make the first application when 50% of the plants have one or more matchhead squares.

9049

CONDITIONS OF SALE AND WARRANTY

The DIRECTIONS FOR USE of this product 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 ("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 set forth in the DIRECTIONS FOR USE when it is used in accordance with such directions, subject to the inherent risks mentioned above. MICRO FLO NEITHER MAKES NOR INTENDS, NOR DOES IT AUTHORIZE ANY AGENT OR REPRESENTATIVE TO MAKE ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, AND IT EXPRESSLY EXCLUDES AND DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. ✓

THIS WARRANTY DOES NOT EXTEND TO, AND THE BUYER SHALL BE SOLELY RESPONSIBLE FOR ANY AND ALL LOSS OR DAMAGE WHICH RESULTS FROM THE USE OF THIS PRODUCT IN ANY MANNER WHICH IS INCONSISTENT WITH THE LABEL DIRECTIONS, WARNINGS, OR CAUTIONS. BUYER'S EXCLUSIVE REMEDY AND MANUFACTURER'S OR SELLER'S EXCLUSIVE LIABILITY FOR ANY AND ALL CLAIMS, LOSSES, DAMAGES OR INJURIES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER OR NOT BASED IN CONTRACT, NEGLIGENCE, STRICT LIABILITY IN TORT OR OTHERWISE SHALL BE LIMITED, AT THE MANUFACTURER'S OPTION TO REPLACEMENT OF, OR THE REPAYMENT OF THE PURCHASE PRICE FOR, THE QUANTITY OF PRODUCT WITH RESPECT TO WHICH DAMAGES ARE CLAIMED. IN NO EVENT SHALL MANUFACTURER OR SELLER BE LIABLE FOR SPECIAL, INDIRECT OR CONSEQUENTIAL 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.

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