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51036-283

7/30/97

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U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Biopesticides and Pollution Prevention Division

401 M St., S.W.
Washington, D.C. 20460

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)

EPA Reg. Number:

Date of Issuance:

51036-283

JUL 30 1997

Term of Issuance:

Unconditional

Name of Pesticide Product:

Mepichlor/BP01 4-2

NOTICE OF PESTICIDE:

- Registration
- Reregistration

(under FIFRA, as amended)

Name and Address of Registrant (include ZIP Code):

Micro Flo Company
P.O. Box 5948
Lakeland, Florida 33807-5948

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Biopesticides and Pollution Prevention Division prior to use of the label in commerce. In any correspondence on this product always refer to the above 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.

Registration is in no way to be construed as an endorsement or recommendation of this product by the 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 by others.

This product is unconditionally registered in accordance with FIFRA Sec. 3(c)(5) provided you:

1. Submit and /or cite all data required for registration/reregistration of your 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 your product under FIFRA Sec.4.
2. Revise the EPA Registration Number to read, "EPA Reg. No. 51036-283"
3. Submit five (5) copies of the revised final printed label for the record.
4. Under "FIRST AID", pg..1, "IF IN EYES:" Insert "if irritation persists." after "Call a physician".
5. Pg. 2 under "CAUTION", delete "Get medical attention ...persists" from this statement.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with the FIFRA Sec.6(e). Your release for shipment of the product constitutes acceptance of these conditions.

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

ACCEPTED
with COMMENTS
in EPA Letter Dated

JUL 30 1997
Under the Federal Insecticide,
Fungicide, and Rodenticide Act
as amended, for the pesticide
registered under EPA Reg. No.
51036-283

Signature of Approving Official:

Date:

7/30/97

Revised

MASTER 7/10

Revised
7/22/97

MEPICHLOR/BP01 4-2

Plant growth regulator for use on cotton ✓

ACTIVE INGREDIENTS ✓

Bacillus cereus, Strain BP01.....	0.05%
Mepiquat Chloride	4.20%
INERT INGREDIENTS:	95.75%
TOTAL	100.0%

Contains a minimum of 3.1×10^8 colony forming units per fluid ounce.

Contains 5.6 ounces of mepiquat chloride per gallon.

KEEP OUT OF REACH OF CHILDREN

CAUTION

FIRST AID

*irritation
no persists
pg 8-23*

IF IN EYES: Flush eyes with plenty of water. Call a physician.
IF ON SKIN: Wash with plenty of soap and water. Get medical attention if irritation persists.

See Additional Precautionary Statements on rear panel. ✓

EPA Reg. No. 51036-EIC/282

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~~no!~~

EPA Est. No. 51036-GA-1

NET CONTENTS: _____

1 2 3 4 5 6 7 8 9 0
REGULATION
2 3
*

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

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PRECAUTIONARY STATEMENTS
Hazards to Humans and Domestic Animals

CAUTION

Avoid contact with eyes, skin or clothing. Wash thoroughly with soap and water after handling. ~~Get medical attention if irritation persists.~~ delete

PERSONAL PROTECTIVE EQUIPMENT

Applicators and other handlers must wear:

- 1. Long-sleeved shirt and long pants
- 2. Waterproof gloves
- 3. Shoes plus socks

Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

<p>USER SAFETY RECOMMENDATIONS</p> <p>Users should:</p> <ul style="list-style-type: none"> 1. Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. 2. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

ENVIRONMENTAL HAZARDS

~~Do not apply to water~~
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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 cleaning of equipment or disposing of equipment washwater. ~~or disposal of water~~



CHEMIGATION PROHIBITION

Do not apply this product through any type of irrigation system.

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.

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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 and restricted-entry intervals. 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.

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:

1. Coveralls
2. Waterproof gloves
3. Shoes plus socks

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 1-800-424-9300.

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.

double check?
OK

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

Fields should be carefully scouted. MEPICHLOR/BP01 4-2 should not be applied if plants are under any form of stress. If stress is alleviated, plants should be evaluated for vegetative growth before additional applications are made. MEPICHLOR/BP01 4-2 may be tank mixed with insecticides, fungicides, miticides or fertilizers when application timing coincide.

MEPICHLOR/BP01 4-2 contains a dye and effectiveness is not related to the color of the spray solution. Refer to COMPATIBILITY section for tank mixing with other products.

The following table gives the minimum and maximum amounts of diluent to be used to apply the amount of MEPICHLOR/BP01 4-2 per acre specified in the use rate tables. Applicators should use a dilution rate that achieves thorough coverage of available plant foliage up to the point of runoff.

SPRAY MIX VOLUMES

DILUENT	MINIMUM PER ACRE	MAXIMUM PER ACRE	COMMENTS
WATER	2 gallons (aerial) 10 gallons (ground)	10 gallons (aerial) 60 gallons (ground)	Use minimum of 5 gallons in California for aerial.
OIL, petroleum or vegetable Aerial only	2 pints	4 pints	Application in oil is permitted only in AL, AR, FL, GA, LA, MO, MS, NC, OK, SC, TN and TX. If using a vegetable oil, only highly refined concentrates should be used containing sufficient amount of emulsifier to insure adequate mixing. Mix under constant agitation. Pour 1/2 of the required volume of oil into the spray tank, and then pour in the MEPICHLOR/BP01 4-2 before the remainder of the oil is added. Constant agitation is required during mixing and application.

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RAIN WASH-OFF PRECAUTION

Thorough coverage of foliage is required for MEPICHLOR/BP01 4-2 to be effective. The use of a high quality surfactant will enhance coverage and the uptake of MEPICHLOR/BP01 4-2 into the plant. It will allow applications to be 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.

COMPATIBILITY

MEPICHLOR/BP01 4-2 is water based, and is compatible with most insecticides and miticides. If compatibility is in doubt, perform a standard jar test (mix all ingredients in a clear glass jar in approximate ratios intended for field application) to check for compatibility. MEPICHLOR/BP01 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. Care should be used when applying with foliar fertilizers under conditions of extreme heat.

RESTRICTIONS AND LIMITATIONS

- * For use on short-staple and long-staple (Pima) cotton only.
- * Do not apply more than 48 fl. oz. of MEPICHLOR/BP01 4-2 per acre per season. Do not exceed 6 applications per season. The sum of all products and formulations containing mepiquat chloride must not exceed 2.1 ounces (60 grams) of mepiquat chloride per acre per season.
- * Do not apply MEPICHLOR/BP01 4-2 within 30 days of harvest.
- * Do not graze or feed cotton forage to livestock.

LOW RATE MULTIPLE APPLICATIONS

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

NOTE: Do not exceed a total of 48 fl. oz. of MEPICHLOR/BP01 4-2 per acre per season.

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APPLICATION	RATE PER ACRE	COMMENTS
FIRST	2 - 4 fl. oz.	Apply at the matchhead square stage of growth.
SECOND	2 - 4 fl. oz.	7-14 days later, or when regrowth occurs.
THIRD	2 - 8* fl. oz.	7-14 days later, or when regrowth occurs.

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APPLICATION	RATE PER ACRE	COMMENTS
FOURTH	2 - 12* fl. oz.	7-14 days later, or when regrowth occurs.
FIFTH (If needed)	4 - 12* fl. oz.	7-14 days later, or when regrowth occurs.
SIXTH (If needed)	8 - 24* fl. oz.	Use the lower rate range on cotton with only moderate additional growth potential, and the higher rate range on fields likely to continue vigorous growth. Refer to Late Season Application section.

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

HIGH RATE SINGLE OR MULTIPLE APPLICATIONS

(Except Texas outside Rio Grande Valley and Oklahoma)

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.

NOTE: Do not exceed a total of 48 fl. oz. of MEPICHLOR/BP01 4-2 per acre per season.

APPLICATION	RATE PER ACRE	COMMENTS
FIRST	8 - 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.
SECOND	8 - 16 fl. oz.	Make another application in 2 to 3 weeks if additional growth control is desired.
THIRD	8 - 16 fl. oz.	If the cotton field has a history of vigorous growth or if conditions continue to favor vigorous growth, apply a third application 1 to 2 weeks after the second application.
FOURTH	8 - 24 fl. oz.	Use the lower rate range on cotton with only moderate additional growth potential, and the higher rate range on fields likely to continue vigorous growth. Refer to Late Season Application section.

HIGH RATE SINGLE OR MULTIPLE APPLICATIONS
(Texas outside Rio Grande Valley and Oklahoma)

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.

NOTE: Do not exceed a total of 48 fl. oz. of MEPICHLOR/BP01 4-2 per acre per season.

APPLICATION	RATE PER ACRE	COMMENTS
FIRST	8 - 16 fl.oz.	<p>Apply when cotton is in the early bloom stage (5-6 blooms per 25 row feet) and actively growing.</p> <p>Also apply if no blooms are present and the cotton is 20" tall and actively growing.</p> <p>Use the 8 oz. rate on cotton without a history of excessive vegetative growth. Use up to 16 oz. where excessive growth has historically occurred.</p>
SECOND	8 - 16 fl. oz.	<p>Make second application in 2 to 3 weeks if additional growth control is indicated.</p> <p>Use the 8 oz. rate on cotton without a history of excessive vegetative growth. Use up to 16 oz. where excessive growth has historically occurred.</p>
THIRD	8 - 16 fl. oz.	<p>If the cotton field has a history of vigorous growth or if conditions continue to favor vigorous growth, apply a third application 1 to 2 weeks after the second application.</p> <p>Use the 8 oz. rate on cotton without a history of excessive vegetative growth. Use up to 16 oz. where excessive growth has historically occurred.</p>
FOURTH	8 - 24 fl. oz.	<p>Use the lower rate range on cotton with only moderate additional growth potential, and the higher rate range on fields likely to continue vigorous growth.</p> <p>Refer to Late Season Application section.</p>

LATE SEASON APPLICATION.

Late season application of MEPICHLOR/BP01 4-2 (approximately during the fourth to sixth week of blooming) can provide certain benefits to cotton. However, it should not and does not substitute for early season use, the time of the greatest benefit from the use of MEPICHLOR/BP01 4-2. Late season application will reduce late season vegetative growth or regrowth after cutout or defoliation. A late season application of MEPICHLOR/BP01 4-2 should be applied

only if fields are not drought or nutrient stressed; that is, those fields likely to experience additional vegetative growth or regrowth. However, fields that are very rank and extremely vigorous due to a combination of poor boll load and excellent growing conditions may not respond as much as desired to late season applications at the suggested rates.

Timing for Late Season Applications

A. On fields where cotton cuts out (has ceased vegetative growth) and then starts regrowth: apply when regrowth begins, as evidenced by new leaves in the terminal and stem elongation. This would often, but not always, be in the period of 5-6 weeks after the first bloom.

B. On fields where cotton never completely cuts out: apply MEPICHLOR/BP01 4-2 when there are 4-6 nodes above the white flower (NAWF). Measure NAWF by counting the number of mainstem nodes from the first position white bloom (the one closest to the mainstem) to the terminal. Count the node with the first position white bloom as zero and the last node in the terminal, which is counted, should have a leaf at least the size of a quarter. Generally, the NAWF first reaches 4-6 during the fourth to sixth week of bloom. During this time period, the NAWF should be decreasing about one node every 5-6 days - if its rate of decrease is less, this means that the plant is not cutting out soon enough (the crop is too vigorous). If the fifth week of bloom arrives and NAWF is still above 5-6, apply MEPICHLOR/BP01 4-2.

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

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