



1812-400

5-10-2002

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

OFFICE OF  
PREVENTION, PESTICIDES  
AND TOXIC SUBSTANCES

MAY 10 2002

Jimmy LeFiles  
Griffin Corp.  
P.O. Box 1847  
Valdosta, GA 31604-18476

Dear Mr. LeFiles:

Subject: Mepex Plant Regulator  
EPA Registration No. 1812-400  
Your submission dated April 25, 2002

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

Revise the statements on pages 2 and 3 in "Personal Protective Equipment" and "Agricultural Use Requirements" sections: "Chemical resistant gloves (such as Nitrile, Neoperene, and/or Barrier laminate)" to "Chemical resistant gloves made of a waterproof material (such as Nitrile, Neoperene, and/or Barrier laminate)"

Submit one (1) copy of your final labeling before you release the product for shipment. A stamped copy of the labeling is enclosed for your records. If you have questions about this label review, please contact Dennis McNeilly at (703) 308-6742 or electronically at [mcneilly.dennis@epa.gov](mailto:mcneilly.dennis@epa.gov).

Sincerely yours,

/s/

Cynthia Giles-Parker  
Product Manager (22)  
Fungicide Branch  
Registration Division (7505C)

Enclosure

04/19/02

MEPEX®

g400s02b

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PLANT REGULATOR

ACTIVE INGREDIENT:\*

Mepiquat chloride:

N,N-dimethylpiperidinium chloride ..... 4.2%

INERT INGREDIENTS: ..... 95.8%

TOTAL ..... 100.0%

\*Equivalent to 0.35 pounds active ingredient per gallon.

ACCEPTED  
with COMMENTS  
In EPA Letter Dated:  
MAY 10 2002

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

1812-400

KEEP OUT OF REACH OF CHILDREN  
CAUTION

FIRST AID	
<b>IF IN EYES:</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.</li> <li>• Remove contact lenses, if present, after the first five minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>IF SWALLOWED:</b>	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<b>IF ON SKIN OR CLOTHING:</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15 to 20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. <b>For medical emergencies involving this product, call toll free 1-888-324-7598.</b>	
See Label for Additional Precautions and Directions for use.	

GRIFFIN L.L.C.  
VALDOSTA, GA. 31601

EPA REC. NO. 1812-400  
EPA Est. No. \_\_\_\_\_

NET CONTENTS: \_\_\_\_\_

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

Harmful if swallowed or absorbed through skin. Causes moderate eye irritation. Avoid contact with eyes, skin or clothing. ~~In case of contact, immediately flush eyes or skin with plenty of water. Get medical attention if irritation persists.~~

**PERSONAL PROTECTIVE EQUIPMENT (PPE)**

Applicators and other handlers must wear:

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category A on an EPA chemical-resistant category selection chart.

- Long-sleeved shirt and long pants
- ~~Waterproof gloves and~~
- Chemical-resistant gloves (such as nitrile, butyl, neoprene and/or barrier laminate)
- 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.

**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, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment washwaters.

### 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 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:

- Coveralls
- ~~Waterproof gloves~~ Chemical-resistant gloves made of any waterproof material
- Shoes plus socks

#### STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Do not store below 32° F or above 100° F. Store in a dry place away from heat or open flame.

**PESTICIDE DISPOSAL:** Pesticide wastes are toxic. Wastes resulting from this product may be disposed of on site or at an approved waste disposal facility. Improper disposal of excess pesticide, spray mix, or rinsate is a violation of federal law. If these wastes cannot be disposed of by use according to label instructions, contact the state agency responsible for pesticide regulation or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

**CONTAINER DISPOSAL: Plastic containers:** 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.

### GENERAL INFORMATION

Mepex plant regulator is a foliar-applied plant regulator that modifies the cotton plant in several beneficial ways. It is the only such compound that allows the grower to manage the cotton plant for **short-season production** leading to reduced risk of yield and quality loss due to delayed and prolonged harvest. The use of Mepex will also result in several or all of the following:

- Height reduction and more open canopy
- Better early boll retention and/or larger bolls
- Less boll rot
- Improved defoliation
- Reduced trash and lower ginning costs
- Better harvest efficiency
- Darker green leaf color

Most of these effects often favorably influence the yield potential of the cotton plant. The pink color of Mepex may fade under some conditions; however, effectiveness is not related to color of spray solution or the color of Mepex.

#### Spray Coverage

Under most circumstances, water is the recommended diluent, however, oil is permitted in the following states for ultra low volume (ULV) aerial applications: Alabama, Arkansas, Florida, Georgia, Louisiana, Missouri, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee and Texas. Refer to **Air and Ground Application** sections for spray volumes. Regardless of the method or gallonage of application, thorough coverage of the cotton foliage is required.

#### Cleaning Application Equipment

Clean application equipment thoroughly using a strong detergent or commercial sprayer cleaner according to the manufacturer's directions before and after applying this product, particularly if a product with the potential to injure crops was used.

### APPLICATION INSTRUCTIONS

#### Early Application

On both short-staple and Pima cotton, the grower has the option of low-rate multiple applications (see **Table 1**) or higher, less frequent dosages (see **Table 2**), which greatly facilitates his management flexibility. The multiple application option gives the grower the ability to discontinue usage of Mepex if any significant stresses occur after an earlier application. In such

a case, the total quantity of Mepex used over the season may be reduced. If stress is relieved, the grower has the option of continuing treatments with Mepex. In addition, the rate and timing ranges indicated in the **Application Rates and Timings Tables** allow the grower to tailor his usage of Mepex to the degree of vegetative vigor in a given field. In areas where insecticides, miticides or foliar fertilizers are frequently applied, the timings are such that tank mixing is often possible (See section **General Restrictions and Limitations**).

Fields should be carefully scouted and Mepex should not be applied if plants are under severe stress from weather factors, mite, insect or nematode damage, disease stress, herbicide injury or fertility stress. In the absence of these stresses, up to 5 low-rate multiple applications can be made each season.

After the first application (at matchhead square in the absence of stress), the rate and timing of subsequent applications will depend on vegetative vigor. Under good growing conditions, additional treatments should be made at 7 to 14 day intervals. However, if new growth at any time is excessive, higher rates of Mepex can be used.

If significant loss of squares or young bolls has occurred earlier due to insect pressure or other stresses, but now these stresses have been alleviated, the need for Mepex is increased - excess vegetative growth is likely because of poor fruit load.

**Late Season Application**

Late application of Mepex (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 Mepex. Late season application can lead to one or more of the following:

- Reduction in late season vegetative growth or regrowth after cutout or defoliation
- More complete and manageable cutout
- Better defoliation
- Earlier maturity
- Reduction in trash
- Lower ginning costs

Some of these effects may favorably influence the yield potential and fiber quality. A late season application of Mepex 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**

- **On fields where cotton cuts out and then starts regrowth:** Apply when regrowth begins, as evidenced by new leaves in the terminal and stem elongation. This application time is often, but not always, 5 to 6 weeks after the first bloom.

- **On fields where cotton never completely cuts out:** Apply Mepex when there are 4 to 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 boom 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 to 6 nodes during the fourth to sixth week of bloom. During this time, the NAWF should be decreasing about one node ever 5 to 6 days - if its rate of decrease is less, 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 to 6, apply Mepex.

**Use Rate for Late Season Application**

Apply 8 to 24 fluid ounces of Mepex per acre. Use the lower rate on cotton with only moderate additional growth potential, and the higher rate on fields likely to continue vigorous growth.

**Air Application**

**Spray Volume**

- **Water as Diluent:** Use a minimum of 2 gallons of water per acre in all states except California. In California, use a minimum of 5 gallons per acre.
- **Oil as Diluent:** Use a minimum of 1 quart of oil per acre. When using oil as a diluent, the oil concentrate must contain either a petroleum or vegetable oil base and must meet all of the following criteria:

- Be nonphytotoxic
- Contain only EPA-exempt ingredients
- Provide good mixing quality in the jar test
- Be successful in local experience

The exact composition of suitable products will vary, however, vegetable and petroleum oil concentrates should contain emulsifiers to provide good mixing quality. If the oil does not contain an emulsifier, one must be added during mixing at a volume equal to 3% of the final volume of the mixing tank. Do not apply Mepex ULV without using emulsifiers. Highly refined vegetable oils have proven more satisfactory than unrefined vegetable oils. For additional information, see **Compatibility Test for Mix Components**.

**Aerial Application Methods and Equipment**

**Spray Drift Management**

Avoiding spray drift at the application site is the responsibility of the applicator. ~~The applicator should be familiar with and take into account the information covered in the Aerial Drift Reduction Advisory Information.~~ The interaction of many equipment and weather-related factors determines the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions. The following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops. These requirements do not apply to forestry applications, public health uses or to applications using dry formulations.

- 1) The distance of the outermost nozzles on the boom must not exceed  $\frac{3}{4}$  the length of the wingspan or rotor.
- 2) Nozzles must always point backward parallel with the air stream and never be pointed downward more than 45 degrees. Where states have more stringent regulations, they should be observed.

The applicator should be familiar with and take into account the information covered in the publication titled A Summary of Aerial Application Studies by the Spray Drift Task Force.

### Importance of Droplet Size

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (see **Wind, Temperature and Humidity, and Temperature Inversions** sections of this label).

### Controlling Droplet Size

**Volume:** Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets. Use a minimum of 5 gallons of water per acre. Increase water volume to at least 10 gallons of water per acre if grass foliage or crop canopy is dense.

**Pressure:** Use the lower spray pressures recommended for the nozzle. Higher pressure reduces droplet size and does not improve canopy penetration. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure. Use up to 40 psi.

**Number of Nozzles:** Use the minimum number of nozzles that provide uniform coverage.

**Nozzle Orientation:** Orienting nozzles so that the spray is released backward, parallel to the airstream, will produce larger droplets than other orientations. Significant deflection from the horizontal will reduce droplet size and increase drift potential.

**Nozzle Type:** Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce larger droplets than other nozzle types. Use only diaphragm-type nozzles that produce fan spray patterns.

**Boom Length:** ~~The distance of the outer most nozzles on the boom must not exceed  $\frac{3}{4}$  the length of the wingspan or rotor. Reducing this~~ For some use patterns, reducing the effective boom length to less than  $\frac{3}{4}$  of the wingspan or rotor length may further reduce drift without reducing swath width.

**Application Height:** Applications should not be made more than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest safe height reduces exposure of droplets to evaporation and wind.

**Swath Adjustment:** When applications are made with a cross-wind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase with increasing drift potential (higher wind, smaller drops, etc.).

**Wind:** Drift potential is lowest between wind speeds of 2 to 10 mph. However, many factors.



including droplet size and equipment type, determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential. Do not apply Mepex by aircraft when wind is blowing more than 10 mph. **Note:** Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

**Temperature and Humidity:** When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

### **Controlling Droplet Size**

~~The most effective way to reduce drift potential is to apply large droplets. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions.~~

~~**Pressure:** Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increased pressure.~~

~~**Number of Nozzles:** Use the minimum number of nozzles that provide uniform coverage.~~

~~**Nozzle Orientation:** Orienting nozzles so that the spray is released parallel to the airstream produces larger droplets than other orientations and is the recommended practice. Significant deflection from horizontal will reduce droplet size and increase drift potential. Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees. Where states have more stringent regulations, they should be observed.~~

~~**Nozzle Type:** Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets. Use a nozzle type that is designed for the intended application. With most nozzles, narrower spray angles produce larger droplets.~~

~~Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.~~

### **Temperature Inversions**

Applications should not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

### **Sensitive Areas**

The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g., residential areas, bodies of water, known habitat for threatened or endangered species, nontarget crops) is minimal (e.g. when wind is blowing away from the sensitive areas). Do not apply Mepex by air if sensitive species are within 200 feet downwind.

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**Ground Application**

**Spray Volume**

- **Water as Diluent:** Use 2 gallons of spray solution per acre in all states except California. In California use a minimum of 5 gallons per acre.

**Table 1. Application Rates and Timing: Low-Rate Multiple Applications**

The times and rates of application have been carefully researched and the **Directions For Use** should be observed as specified below. See section **General Restrictions and Limitations**.

Geographic Area	Time of Application	Fields with Moderate Vegetative Vigor: Rate per Acre	Fields with High Vegetative Vigor: Rate per Acre
AL, AR, AZ, CA, FL, GA, LA, MO, MS, NC, NM, OK, SC, TN, TX, VA	<b>First application:</b> Optimal results will be achieved when plants are in the matchhead square** stage of growth.	2 fluid ounces	4 fluid ounces
	<b>Second application:</b> 7 to 14 days later, or when regrowth occurs.	2 fluid ounces	4 fluid ounces
	<b>Third application:</b> 7 to 14 days later, or when regrowth occurs.	2-4 fluid ounces*	4-8 fluid ounces*
	<b>Fourth application:</b> 7 to 14 days later, or when regrowth occurs.	2-8 fluid ounces*	4-12 fluid ounces*
	<b>Fifth application (if needed):</b> 7 to 14 days later, or when regrowth occurs.	4-8 fluid ounces*	4-12 fluid ounces*
	<b>Late season:</b> Refer to <b>Late Season Application</b> of Mepex	6-16 fluid ounces*	12-24 fluid ounces*

\* Use higher rates if previous application was not made or if growing conditions are conducive to vigorous growth.

\*\*Matchhead square is when the first square of a typical cotton plant is 1/8 to 1/4 inch in diameter. The first application should go on be made when 50% of the plants have one or more matchhead squares.

**Table 2. Application Rates and Timing**

The times and rates of application have been carefully researched and the section **Application Instruction** should be observed as specified below. See the section **General Restrictions and Limitations**.

Geographic Area	Time of Application	Rate per Acre
<p>AL, AR, AZ, CA, FL, GA, LA, MO, MS, NM, NC, SC, TN, VA</p>	<p><b>First application:</b> Apply Mepex <del>when cotton is</del> to actively growing cotton that is <del>and is between 20 and</del> to 30 inches tall, provided cotton is not more than 7 days beyond early bloom stage (5 to 6 blooms per 25 row feet). If cotton is 24 inches tall and has no blooms, apply Mepex. Use 8 to 16 fluid ounces per acre on cotton where excessive vegetative growth is not likely to be a problem, and 16 fluid ounces per acre in areas tending to have excessive vegetative growth.</p> <p><b>Second application for control of excessive vegetative growth:</b> If the cotton field has a history of vigorous growth or if conditions after the first application of Mepex favor vigorous growth, <del>apply</del> make a second application 2 to 3 weeks after the first application.</p> <p><b>Third application for control of excessive vegetative growth:</b> If the cotton field has a history of vigorous growth or if conditions continue to favor vigorous growth, <del>apply</del> make a third application of 1 to 2 weeks after the second application.</p> <p><b>Late season application:</b> Refer to <b>Late Season Application</b> in section <b>Application Instructions</b>.</p>	<p>8-16 fluid ounces</p> <p>8-16 fluid ounces</p> <p>8-16 fluid ounces</p> <p>8-24 fluid ounces</p>
<p>OK, TX (except Rio Grande Valley)</p>	<p><b>Areas where excessive vegetative growth is not a problem</b></p> <p><b>First application:</b> Apply Mepex <del>when</del> to actively growing cotton <del>is</del> in the early bloom stage (5 to 6 blooms per 25 row feet). <del>and actively growing</del>. If no blooms are present and the cotton is 20 inches tall and actively growing, apply Mepex.</p> <p><b>Second application:</b> If conditions after the first application of Mepex favor vigorous growth, <del>apply</del> make a second application 2 to 3 weeks after the first application.</p>	<p>8 fluid ounces</p> <p>8 fluid ounces</p>

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	<p><b>Third application:</b> If conditions after the second application of Mepex continue to favor vigorous growth, <b>apply</b> make a third application 1 to 2 weeks after the second application.</p> <p><b>Late season application:</b> Refer to <b>Late Season Application</b> in section <b>Application Instructions</b>.</p>	<p>8 fluid ounces</p> <p>8-24 fluid ounces</p>
<p>OK, TX (including Rio Grande Valley)</p>	<p><b>Areas where excessive vegetative growth is a problem</b></p> <p><b>First application:</b> Apply Mepex <del>when cotton is</del> to actively growing cotton that is <del>and between</del> 20 and to 30 inches tall, provided cotton is not more than 7 days beyond early bloom stage (5 to 6 blooms per 25 row feet). If cotton is 24 inches tall and has no blooms, apply Mepex.</p> <p><b>Second application for control of excessive vegetative growth:</b> If cotton field has a history of vigorous growth, or conditions after the first application of Mepex favor vigorous growth, <b>apply</b> make a second application 2 to 3 weeks after the first application</p> <p><b>Third application:</b> If conditions after the second application of Mepex continue to favor vigorous growth, <b>apply</b> make a third application 1 to 2 weeks after the second application.</p> <p><b>Late season application:</b> Refer to <b>Late Season Application</b> in section <b>Application Instructions</b>.</p>	<p>16 fluid ounces</p> <p>8-16 fluid ounces</p> <p>8-16 fluid ounces</p> <p>8-24 fluid ounces</p>

**ADDITIVES**

If rain is expected within 8 hours, use a high-quality EPA-exempt surfactant to make Mepex rain-safe after 4 hours.

**Compatibility Test for Mix Components**

Add components in the following sequence using 2 teaspoons for each pound or 1 teaspoon for each pint of recommended label rate per acre.

- 1) **Water:** For 20 gallons per acre spray volume, use 3.3 cups (800 ml) of water. For other spray volumes, adjust rates accordingly. Use only water from the intended source at the source temperature.
- 2) **Products in PVA Bags:** Cap the jar and invert 10 cycles.

- 3) **Water-Dispersible Products** (dry flowables, wettable powders, suspension concentrates, or suspo-emulsions): Cap the jar and invert 10 cycles.
- 4) **Water-Soluble Products** (such as Mepex): Cap the jar and invert 10 cycles.
- 5) **Emulsifiable Concentrates** (Oil concentrates): Cap the jar and invert 10 cycles.
- 6) **Water-Soluble Additives**: Cap the jar and invert 10 cycles.
- 7) Let the solution stand for 15 minutes.
- 8) **Evaluate** the solution for uniformity and stability. The spray solution should not have free oil on the surface, nor fine particles that precipitate to the bottom, nor thick (clabbered) texture. Do not use any spray solution that could clog spray nozzles.

### MIXING ORDER

- 1) **Water**: Begin by agitating a thoroughly clean sprayer tank half full of clean water.
  - 2) **Products in PVA Bags**: Rinse the tank thoroughly before adding any material in PVA bags as boron residue will prevent adequate mixing. Place the water-soluble PVA bag into the mixing tank. The water-soluble PVA bag will dissolve in water to allow the contents to disperse. Wait until all water-soluble PVA bags have fully dissolved and the plant regulator is evenly mixed in the spray tank before continuing. To prepare spray solution for aerial application, use a mixing tank or mixing vat first to get the product into suspension before transferring suspension to air application equipment.
  - 3) **Water-Dispersible Products**: (dry flowables, wettable powders, suspension concentrates, or suspo-emulsions).
  - 4) **Water-Soluble Products**
  - 5) **Emulsifiable Concentrates**
  - 6) **Remaining Quantity of Water**
- Only moderate agitation should be used while mixing and transporting.

### GENERAL TANK MIXING INFORMATION

Mepex has an aqueous base, and as such, is compatible with most insecticides and miticides. You may combine Mepex with foliar fertilizers if prior experience has shown the original liquid formulation of Mepex to be compatible and noninjurious under your conditions. Always perform the **Compatibility Test for Mix Components** before preparing a tank mix application.

Read and follow the applicable **Restrictions and Limitations and Directions for Use** on all products involved in tank mixing. The most restrictive labeling applies to tank mixes.

### GENERAL RESTRICTIONS AND LIMITATIONS

- **Maximum Seasonal Use Rate**: Do not apply more than a total of 48 fluid ounces (3 pints) of Mepex (0.132 pounds a.i.) per acre per season.
- The sum of all products and formulations containing mepiquat chloride must not exceed 0.132 pounds of mepiquat chloride per acre per season. This maximum equals 48 fluid ounces (3

- pints) of Mepex (0.35 pounds a.i. per gallon).
- **Preharvest Interval (PHI):** Do not apply within 30 days of harvest.
- **Restricted Entry Interval (REI):** 12 hours.
- Do not plant another crop within 75 days of last treatment.
- **Stress:** Do not apply to cotton plants under severe stress due to adverse weather conditions, mite, insect, or nematode damage, disease, herbicide injury, or fertility stress. If using the low-rate multiple option, discontinue use until the stress is alleviated. Do not apply a single application of 8 to 16 fluid ounces of Mepex to cotton that is stressed due to lack of soil moisture.
- Do not graze or feed cotton forage to livestock.
- Do not apply through any type of irrigation equipment.

**Table 3. Restrictions and Limitations**

Crop	Minimum Time from Application to Harvest (PHI)	Maximum Rate Per Acre Per Application	Maximum Rate per Acre Per Season	Livestock Grazing or Feeding	Aircraft Application
Cotton	30 days	24 fluid ounces (1.5 pints)	48 fluid ounces (3 pints)	No	Yes

**WARRANTY STATEMENT**

GRIFFIN warrants that this product conforms to the chemical description on the label thereof and is reasonably fit for purposes stated on such label only when used in accordance with directions under normal use conditions. 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 GRIFFIN. In no case shall GRIFFIN be liable for consequential, special or indirect damages resulting from the use or handling of this product. All such risks shall be assumed by the Buyer. The exclusive remedy of any buyer of this product for any and all losses, injuries, or damages resulting from or in any way arising from the use, handling, or application of this product, whether in contract, warranty, tort, negligence, strict liability, or otherwise, shall not exceed the purchase price paid for this product or, at Griffin Corporation's election, the replacement of this product. GRIFFIN MAKES NO WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESSED OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

Griffin and Design are a registered trademark of Griffin Corporation.  
 Mepex is a registered trademark of Griffin Corporation.

[Based on the EPA stamped accepted label dated April 8, 1999 and notification dated April 5, 2002]