

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

March 15, 2021

Rebecca Clemmer Sr. Regional Regulatory Manager UPL NA Inc. 630 Freedom Business Center, Suite 402 King of Prussia, PA 19406

Subject: Registration Review Label Mitigation for Mepiquat

Product Name: MEPICHLOR 4.2% LIQUID

EPA Registration Number: 66330-241

Application Date: June 6, 2018 Decision Number: 571736

Dear Ms. Clemmer:

The Agency, in accordance with the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, has completed reviewing all the information submitted with your application to support the Registration Review of the above referenced product in connection with the Mepiquat Interim Decision, and has concluded that your submission is acceptable. The label referred to above, submitted in connection with registration under FIFRA, as amended, is acceptable.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

A copy of your label stamped "Accepted" is enclosed. Products shipped after 12 months from the date of this amendment must bear the new revised label. Your release for shipment of the product bearing the amended label constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6.

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If you have any questions about this letter, please contact Marisa Wright by phone at (703) 347-0463, or via email at wright.marisa@epa.gov.

Sincerely,

Linda Arrington, Branch Chief

Risk Management and Implementation Branch 4

Pesticide Re-Evaluation Division

Office of Pesticide Programs

Enclosure

[Text in brackets is optional]

# **MEPICHLOR® 4.2% LIQUID**

ACTIVE INGREDIENT:	% BY WT.
Mepiquat Chloride: N,N-dimethylpiperidinium Chloride	4.2%
OTHER INGREDIENTS:	
TOTAL:	100.0%
Contains 0.35 pounds active ingredient per gallon.	

## KEEP OUT OF REACH OF CHILDREN **CAUTION / PRECAUCIÓN**

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

See [front][back][side][inside] panel for First Aid Instructions and [Leaflet][Booklet] for complete **Precautionary Statements and Directions for Use.** 

FIRST AID		
IF IN EYES:	Hold eye open and rinse slowly and gently with water for 15-20 minutes.	
	Remove contact lenses, if present, after first 5 minutes, then continue rinsing eye.	
	Call a poison control center or doctor for treatment advice.	
IF SWALLOWED:	Call poison control center or doctor immediately for treatment advice.	
	Have person sip a glass of water if able to swallow.	
	Do not induce vomiting unless told to do so by a poison control center or doctor.	
	Do not give anything by mouth to an unconscious person.	
IF ON SKIN OR	Take off contaminated clothing.	
CLOTHING:	Rinse skin immediately with plenty of water for 15-20 minutes.	
	Call a poison control center or doctor for treatment advice.	
NOTE TO PHYSICIAN: No known antidate, treat symptomatically		

**NOTE TO PHYSICIAN:** No known antidote, treat symptomatically.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. FOR 24-HOUR MEDICAL EMERGENCY ASSISTANCE CALL ROCKY MOUNTAIN POISON AND DRUG **SAFETY:** 1-800-673-6671.

FOR 24-HOUR CHEMICAL EMERGENCY (Spill, leaks, fire, exposure or accident)

CALL CHEMTREC: 1-800-424-9300 or +1-703-527-3887.

For Product Use Information Call 1-866-761-9397

EPA Reg. No. 66330-241

**EPA Est. No.:** 

xxxxxxV001

**NET CONTENTS:** 

[Batch Code will be placed on the container.]

**Produced For:** 

ARYSTA LIFESCIENCE NORTH AMERICA, LLC C/O UPL NA Inc., 630 Freedom Business Center, Suite 402 King of Prussia, PA 19406

ACCEPTED

Mar 15, 2021

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

66330-241

## PRECAUTIONARY STATEMENTS

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**CAUTION:** Harmful if swallowed or absorbed through the skin. Causes moderate eye irritation. Avoid contact with eyes, skin and clothing.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are listed below.

#### Applicators and other handlers must wear:

- Long-sleeved shirt and long pants;
- Chemical-resistant gloves made of any waterproof material (nitrile rubber ≥ 14 mils, butyl rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, natural rubber ≥ 14 mils, polyethylene, polyvinyl chloride (PVC) ≥ 14 mils, viton ≥ 14 mils, and/or barrier laminate); and
- 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.

#### **USER SAFETY RECOMMENDATIONS**

#### Users should:

- Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and change into 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 area below the high-water mark. Do not contaminate water when disposing of rinsate or equipment washwater. Do not contaminate water by cleaning of equipment of disposal of wastes.

#### **Non-Target Organism Advisory Statement**

This product may adversely impact the forage and habitat of non-target organisms, including pollinators, in areas adjacent to the treated site. Protect the forage and habitat of non-target organisms by minimizing spray drift.

## **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.

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

## 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:

- Coveralls;
- Chemical-resistant gloves made of any waterproof material (nitrile rubber ≥ 14 mils, butyl rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, natural rubber ≥ 14 mils, polyethylene, polyvinyl chloride (PVC) ≥ 14 mils, viton ≥ 14 mils, and/or barrier laminate); and
- Shoes plus socks.

#### **RUNOFF PREVENTION**

To protect the environment, do not allow pesticide to enter or run off into storm drains, drainage ditches, gutters or surface waters. Applying this product in calm weather when rain is not predicted for the next 24 hours will help ensure that wind or rain does not blow or wash pesticide off the treatment area. Rinsing application equipment over the treated area will help avoid run off to water bodies.

#### **GENERAL INFORMATION**

**MEPICHLOR® 4.2% LIQUID** is a foliar applied plant regulator. It 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. Benefits derived from the use of **MEPICHLOR 4.2% LIQUID** include increased early boll retention and/or larger bolls, reduced plant height which provides a more open canopy, less boll rot, improved defoliation, less trash and lower ginning costs, better harvest efficiency and a darker leaf color. These benefits can provide for earlier maturity and often result in improved yields.

#### SPRAY DRIFT

#### **Aerial Applications:**

- Applicators are required to use a medium to coarser droplet size, as defined by ASABE Standard S572.1.
- Do not apply when wind speeds exceed 10 miles per hour at the application site.
- Do not apply during temperature inversions.
- Do not release spray at a height greater than 10 ft above the crop canopy, unless a greater application height is necessary for pilot safety.
- The spray boom must be mounted on the aircraft so as to minimize drift caused by wing tip vortices. The boom length must not exceed 75% of the wingspan or 90% of the rotor blade diameter.
- When applying to crops via aerial application equipment, use 1/2 swath displacement upwind at the edge of the field.
- Orient nozzles so the spray is directed toward the back of the aircraft.

#### **Ground Applications:**

- Applicators are required to use a medium to coarser droplet size, as defined by ASABE Standard S572.1.
- Do not apply when wind speeds exceed 10 miles per hour at the application site.
- Do not apply during temperature inversions.
- When using ground application equipment, apply with nozzle height no more than 3 feet above the ground or crop canopy.
- When applying via airblast, turn off outward spraying nozzles on the outside row of the vineyard. In addition, applications must be directed into the canopy foliage. Applications must not be made over the top of the canopy.

#### SPRAY DRIFT ADVISORIES

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT.

BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.

#### IMPORTANCE OF DROPLET SIZE

An effective way to reduce spray drift is to apply large droplets. Use the largest droplets that provide target pest control. While applying larger droplets will reduce spray drift, the potential for drift will be greater if applications are made improperly or under unfavorable environmental conditions.

#### **Controlling Droplet Size – Ground Boom**

- Volume Increasing the spray volume so that larger droplets are produced will reduce spray drift. Use the
  highest practical spray volume for the application. If a greater spray volume is needed, consider using a nozzle
  with a higher flow rate.
- Pressure Use the lowest spray pressure recommended for the nozzle to produce the target spray volume and droplet size.
- Spray Nozzle Use a spray nozzle that is designed for the intended application. Consider using nozzles designed to reduce drift.

## **Controlling Droplet Size – Aircraft**

 Adjust Nozzles - Follow nozzle manufacturers recommendations for setting up nozzles. Generally, to reduce fine droplets, nozzles should be oriented parallel with the airflow in flight.

#### **BOOM HEIGHT - Ground Boom**

For ground equipment, the boom should remain level with the crop and have minimal bounce.

#### **RELEASE HEIGHT - Aircraft**

Higher release heights increase the potential for spray drift.

#### SHIELDED SPRAYERS

Shielding the boom or individual nozzles can reduce spray drift. Consider using shielded sprayers. Verify that the shields are not interfering with the uniform deposition of the spray on the target area.

#### **TEMPERATURE AND HUMIDITY**

When making applications in hot and dry conditions, use larger droplets to reduce effects of evaporation.

#### **TEMPERATURE INVERSIONS**

Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. The presence of an inversion can be indicated by ground fog or 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. Avoid applications during temperature inversions.

#### **WIND**

Drift potential generally increases with wind speed. AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS.

Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

#### **APPLICATION INFORMATION**

### Early Application of MEPICHLOR 4.2% LIQUID

Growers may use low-rate multiple applications, or higher, less frequent dosages which provide maximum flexibility under a wide range of growing conditions. **MEPICHLOR 4.2% LIQUID** 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% LIQUID** may be tank-mixed with insecticides/miticides when application timings coincide. (See **RESTRICTIONS AND LIMITATIONS**)

Fields should be carefully scouted. **MEPICHLOR 4.2% LIQUID** should not be applied if plants are under any form of stress. In the absence of stress, a maximum of five low rate applications can be made each season. 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 per acre can be made at 7- to 14-day intervals. Higher rates of **MEPICHLOR 4.2% LIQUID** (1/4 - 3/4 pt/A) 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 48 fl oz of **MEPICHLOR 4.2% LIQUID** per acre in a growing season.

If significant loss of squares and/or young bolls has occurred earlier due to insect pressure or other stresses, but now these stresses have been alleviated, the need for **MEPICHLOR 4.2% LIQUID** is increased - excess vegetative growth is likely because of poor fruit load.

#### Late Season Application of MEPICHLOR 4.2% LIQUID

Late application of **MEPICHLOR 4.2% LIQUID** (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 4.2% LIQUID**. 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 and reduction in trash and lower ginning costs. Some of these effects may favorably influence the yield potential and fiber quality. A late season application of **MEPICHLOR 4.2% LIQUID** 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 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 to 6 weeks after the first bloom.
- B. On fields where cotton never completely cuts out, apply **MEPICHLOR 4.2% LIQUID** 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 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 to 6 during the fourth to sixth week of bloom. During this time period, the NAWF should be decreasing about one node every 5 to 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 to 6, apply **MEPICHLOR 4.2% LIQUID**.

## **Use Rate for Late Season Application**

**MEPICHLOR 4.2% LIQUID** should be applied at a rate between 1/2 pint - 1 1/2 pints per acre. 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. Total seasonal use per season (early plus late application) must not exceed 3 pt/A.

#### **SPRAY VOLUMES**

Thorough coverage is required.

#### IN WATER:

#### Areas other than California:

Ground Application - Use a minimum of 2 gallons of water per acre.

Aerial Application - Use a minimum of 2 gal/A.

#### California Only:

Ground Application - Use a minimum of 5 gal/A.

Aerial Application - Use a minimum of 5 gal/A.

#### IN OIL:

Use a minimum total oil volume of 2 pt/A for ultra-low volume (ULV) aerial application. Application in oil is permitted only in AL, AR, FL, GA, KS, 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, provides good mixing quality in the jar test (see **COMPATIBILITY** section), and has been used successfully in your locality. The oil diluent should contain emulsifiers which 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 **MEPICHLOR 4.2% LIQUID** as ULV without using emulsifiers. 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, followed by the emulsifier (if the oil does not already contain one) at approximately 3% of the final spray-tank volume, and then pour in the **MEPICHLOR 4.2% LIQUID** while the remainder of the oil is added. Constant, moderate 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% LIQUID** 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.

#### **COMPATIBILITY**

**MEPICHLOR 4.2% LIQUID** 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% LIQUID** 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% LIQUID treated crops can lead to yield decreases or other undesirable
  effects.
- Do not apply MEPICHLOR 4.2% LIQUID to cotton that is under stress. If using low rate multiple applications, discontinue use until your crop has overcome any stress.
- Do not apply more than 48 fl oz of MEPICHLOR 4.2% LIQUID per acre per season. The sum of all products and formulations containing mepiquat chloride must not exceed 0.132 pounds (60 grams) of mepiquat chloride per acre per season.
- Do not apply MEPICHLOR 4.2% LIQUID within 30 days of harvest.
- Do not graze or feed cotton forage to livestock.
- MEPICHLOR 4.2% LIQUID 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 plant another crop within 75 days after last treatment.

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

Directions for use should be observed as specified in the following tables:

#### I. HIGH RATE SINGLE OR MULTIPLE 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.

AREA	TIME OF APPLICATION	RATE PER ACRE	
AREA	First Application	8 - 16 fl oz	
AL, AR, AZ, CA, FL, GA, KS, LA,	Apply when cotton is actively		
MO, MS, NM, NC, SC, TN, VA	growing and is between 20" and		
	30" tall, but not more than 7 days		
	beyond early bloom (5 to 6 blooms		
	per 25 row feet). Also apply if		
	cotton is 24" tall and has no		
	blooms.		
	Second Application	8 - 16 fl oz	
Make another application in 2			
	weeks if additional growth control is		
	desired.		
	Third Application for control of	8 - 16 fl oz	
	excessive Vegetative Growth	6 - 16 11 02	
	If the cotton field has a history of		
	vigorous growth, apply a third		
	application 1 to 2 weeks after the		
	second application.		
	Late Season Application	8 - 24 fl oz	
	See section titled Late Season		

	Application of MEPICHLOR 4.2% LIQUID.	
OK, TX (except Rio Grande	First Application	8 fl oz
Valley)	Apply when cotton is in the early	
Areas without a history of	bloom stage (5 to 6 blooms per 25	
excessive vegetative growth	row feet) and actively growing. Also	
	apply if no blooms are present and	
	the cotton is 20" tall and actively	
	growing.	
	See <b>RESTRICTIONS AND</b>	
	LIMITATIONS.	
	Second Application	8 fl oz
	Make a second application in 2 to 3	
	weeks if additional growth control is	
	desired.	
Third Application		8 fl oz
	If conditions after the second	
	application of MEPICHLOR 4.2%	
	LIQUID continue to favor vigorous	
	growth, apply a third application 1	
	to 2 weeks after the second	
	application.  Late Season Application:	8 - 24 fl oz
	See section titled Late Season	0 - 24 11 02
	Application of MEPICHLOR 4.2%	
	LIQUID.	
OK, TX	First Application	16 fl oz
OK, TX Areas with a history of	First Application For best results, apply when	16 fl oz
		16 fl oz
Areas with a history of	For best results, apply when	16 fl oz
Areas with a history of	For best results, apply when plants are in early bloom stage (5	16 fl oz
Areas with a history of	For best results, apply when plants are in early bloom stage (5 to 6 blooms per 25 row feet) and an average of 24" tall. Treatments can also be made when cotton	16 fl oz
Areas with a history of	For best results, apply when plants are in early bloom stage (5 to 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"	16 fl oz
Areas with a history of	For best results, apply when plants are in early bloom stage (5 to 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 30" provided	16 fl oz
Areas with a history of	For best results, apply when plants are in early bloom stage (5 to 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 30" provided cotton is not more than 7 days	16 fl oz
Areas with a history of	For best results, apply when plants are in early bloom stage (5 to 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 30" provided cotton is not more than 7 days beyond early bloom. If cotton is	16 fl oz
Areas with a history of	For best results, apply when plants are in early bloom stage (5 to 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 30" provided cotton is not more than 7 days beyond early bloom. If cotton is 24" tall and has no blooms, apply	16 fl oz
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Areas with a history of	For best results, apply when plants are in early bloom stage (5 to 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 30" provided cotton is not more than 7 days beyond early bloom. If cotton is 24" tall and has no blooms, apply MEPICHLOR 4.2% LIQUID. See RESTRICTIONS AND LIMITATIONS.  Second Application  For fields with a history of	
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Areas with a history of	For best results, apply when plants are in early bloom stage (5 to 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 30" provided cotton is not more than 7 days beyond early bloom. If cotton is 24" tall and has no blooms, apply MEPICHLOR 4.2% LIQUID. See RESTRICTIONS AND LIMITATIONS.  Second Application  For fields with a history of excessive growth, or if conditions after the first application favor	8 - 16 fl oz
Areas with a history of	For best results, apply when plants are in early bloom stage (5 to 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 30" provided cotton is not more than 7 days beyond early bloom. If cotton is 24" tall and has no blooms, apply MEPICHLOR 4.2% LIQUID. See RESTRICTIONS AND LIMITATIONS.  Second Application  For fields with a history of excessive growth, or if conditions after the first application favor excessive growth, make a second application in 2 to 3 weeks.  Third Application	
Areas with a history of	For best results, apply when plants are in early bloom stage (5 to 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 30" provided cotton is not more than 7 days beyond early bloom. If cotton is 24" tall and has no blooms, apply MEPICHLOR 4.2% LIQUID. See RESTRICTIONS AND LIMITATIONS.  Second Application  For fields with a history of excessive growth, or if conditions after the first application favor excessive growth, make a second application in 2 to 3 weeks.  Third Application  If conditions after the second	8 - 16 fl oz
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Areas with a history of	For best results, apply when plants are in early bloom stage (5 to 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 30" provided cotton is not more than 7 days beyond early bloom. If cotton is 24" tall and has no blooms, apply MEPICHLOR 4.2% LIQUID. See RESTRICTIONS AND LIMITATIONS.  Second Application  For fields with a history of excessive growth, or if conditions after the first application favor excessive growth, make a second application in 2 to 3 weeks.  Third Application  If conditions after the second application of MEPICHLOR 4.2%	8 - 16 fl oz

application.	
Late Season Application:	8 - 24 fl oz
See section titled Late Season	
Application of MEPICHLOR 4.2%	
LIQUID.	

#### **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 NOT WORKED IN THE PAST	EXCESSIVE GROWTH EXPECTED OR HIGHER RATES HAVE BEEN NECESSARY IN THE PAST
AL, AR, AZ, CA, FL, GA,	First Application:	2 fl oz	4 fl oz
KS, LA, MO, MS, NC,	Apply at the matchhead		
NM, OK, SC, TN, TX, VA	square <sup>1</sup> stage of growth.		
	Second Application:	2 fl oz	4 fl oz
	7 to 14 days later, or		
	when regrowth occurs.		
	Third Application	2 - 4 fl oz*	4 - 8 fl oz*
	7 to 14 days later, or		
	when regrowth occurs.		
	Fourth Application	2 - 8 fl oz*	4 - 12 fl oz*
	7 to 14 days later, or when regrowth occurs.		
	Fifth Application	4 - 8 fl oz*	4 - 12 fl oz*
	(If needed): 7 to 14 days		
	later, or when regrowth		
	occurs.		
	Late Season	8 - 16 fl oz*	12 - 24 fl oz*
	Application:		
	See section titled Late		
	Season Application of		
	MEPICHLOR 4.2%		
	LIQUID.		

<sup>\*</sup>Use the higher rate if previous application was not made or if growing conditions favor excessive growth.

## STORAGE AND DISPOSAL

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

**PESTICIDE 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.

**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 HANDLING:**

<sup>&</sup>lt;sup>1</sup>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.

Rigid Non-refillable containers that are small enough to shake (i.e., with capacities less than 5 gallons or 50 lbs). Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix-tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix-tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Offer for recycling if available, 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. Rigid Non-refillable containers that are too large to shake (i.e., with capacities greater than 5 gallons or 50 lbs). Non-refillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix-tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Empty the rinsate into application equipment or a mix-tank or store rinsate for later use or disposal. Repeat this procedure two more times.

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix-tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix-tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

#### **Warranty and Disclaimer Statement**

The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Such risks may arise from weather conditions, soil factors, off-target movement, unconventional farming techniques, the presence of other materials, the manner of use or application, or other unknown factors, all of which are beyond the control of Arysta LifeScience North America Corporation ("Arysta"), and can cause crop injury, injury to non-target crops or plants, ineffectiveness of the product, or other unintended consequences. All such risks shall be assumed by the user or buyer.

Arysta warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks described above, when used in accordance with the Directions for Use under normal conditions. This warranty does not extend to the use of this product contrary to label instructions or under conditions not reasonably foreseeable to Arysta, and is subject to the inherent risks described above.

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