

COTTON: ALL STATES - FIRST APPLICATION

General Information

GENERAL INFORMATION

This product is a foliar-applied plant regulator that modifies the cotton plant in several beneficial ways. 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. The use of this product will often favorably influence the yield potential of the cotton plant through several or all of the following:

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

The purple color of this product may fade under some conditions; however, effectiveness is not related to color of spray solution or color of this product.

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 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.

GENERAL RESTRICTIONS AND LIMITATIONS

- Maximum Seasonal Use Rate: Do not apply more than a total of 48 fluid ounces (3 pints) of this product (0.132 pound mepiquat chloride) per acre per season.
- The sum of all products and formulations containing mepiquat chloride must not exceed 0.132 pound of mepiquat chloride per acre per season. This maximum equals 48 fluid ounces (3 pints) of this product (0.35 pound mepiquat chloride per gallon).
- 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 this product to cotton that is stressed due to a lack of soil moisture.
- Do not graze or feed cotton forage to livestock.
- Do not apply through any type of irrigation equipment.

SPRAY DRIFT MANAGEMENT

The interaction of many equipment and weather-related factors determines the potential for spray drift. The applicator is responsible for considering all these factors when making application decisions.

AVOIDING SPRAY DRIFT IS THE RESPONSIBILITY OF THE APPLICATOR.

Temperature and Humidity

When making applications in hot and dry conditions, set up equipment to produce larger droplets to reduce effects of evaporation.

Temperature Inversions

Drift potential is high during a temperature inversion. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain close to the ground and move laterally in a concentrated cloud. Temperature inversions are characterized by increasing temperature 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.

Shielded Sprayers

Shielding the boom or individual nozzles can reduce the effects of wind. However, it is the responsibility of the applicator to verify that the shields are preventing drift and not interfering with uniform deposition of the product.

APPLICATION INSTRUCTIONS

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 management flexibility. The multiple application option gives the grower the ability to discontinue usage of this product if any significant stresses occur after an earlier application. In such a case, the total quantity of this product used over a season may be reduced. If stress is relieved, the grower has the option of continuing treatments with this product. In addition, the rate and timing ranges indicated in Table 1 and Table 2 allow the grower to tailor usage of this product 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 Tank Mixing Information).

Fields should be carefully scouted and this product 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, 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 this product 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 this product is increased as excess vegetative growth is likely due to the poor fruit load.

SPRAY VOLUME

Ground Application

- Water as Diluent: Use a minimum of 2 gallons of water per acre.

Air Application

- Water as Diluent: Use a minimum of 2 gallons of water 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 non-phytotoxic
 - 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 this product in a ULV treatment without using emulsifiers. Highly refined vegetable oils have proven more satisfactory than unrefined vegetable oils. For additional information, see Compatibility Test for Mix Components.

Variable Rate Application

This product is recommended for use in variable rate applications to address site-specific or localized needs within individual fields. Timing, rate, and spray volume used in variable rate applications must fall within the ranges specified in other portions of this label. All restrictions and precautions on this label also apply to variable rate applications. In applications where rate variation is achieved by adjusting spray volume, particular care must be taken to ensure that thorough coverage of cotton plants is achieved and spray drift is minimized.

ADDITIVES

If rain is expected within 4 hours, use a high-quality EPA-exempt surfactant to make this product rain-safe after 1 to 2 hours.

GENERAL TANK MIXING INFORMATION

This product has an aqueous base, and as such, is compatible with most insecticides and miticides. You may combine this product with foliar fertilizers if prior experience has shown this product to be compatible and noninjurious under your conditions. Always perform a 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.

Limitations, Restrictions, and Exceptions

COTTON

First application:

Apply this product to actively growing cotton that is 16 to 26 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 this product. Use 8 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.

Notes

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

Method

[Broadcast/Foliar Air](#)

[Broadcast/Foliar Ground](#)

Pre-Harvest Interval

30 days

Restricted Entry Interval

12 hours

Timings

[To actively growing cotton that is 16 to 26 inches tall, provided cotton is not more](#)

than 7 days beyond early bloom stage (5 to 6 blooms per 25 row feet).