

## **COTTON - PRECONDITIONER FOR DEFOLIATION - COOL, ABOVE 65°F OR RANK COTTON**

### General Information

#### This Product:

Encourages faster coloration and maturity of APPLES, GRAPES, PEPPERS, and TOMATOES.

Loosens APPLES, CHERRIES, and WALNUTS for an earlier and more efficient harvest.

Encourages earlier, uniform coloring of mature FLUE-CURED TOBACCO.

Encourages fruit abscission (slipping) in CANTALOUPEs.

Augments hardiness in dormant fruit buds and helps to delay the spring bloom of SWEET CHERRIES in the Pacific Northwest.

Accelerates the loosening and ripening of BLACKBERRIES.

Minimizes lodging in WHEAT and BARLEY.

Eliminates leafy mistletoe from ORNAMENTAL DECIDUOUS TREES and dwarf mistletoe from ORNAMENTAL CONIFERS.

Removes unwanted fruit on APPLE, CRABAPPLE, CAROB, and OLIVE trees.

### GENERAL INFORMATION

Contact your Extension Pomologist, Farm Advisor, Horticultural Specialist or Arysta LifeScience Representative for local recommendations on product spray volume, spray equipment and rates of application for varying weather conditions.

## APPLICATION VOLUMES AND SPRAY COVERAGE

For optimum product efficacy, thorough spray coverage is necessary. This can be influenced by type of spray equipment, spray boom setup, nozzle selection, plant size, canopy density and spray pressure. Depending on these choices, the necessary spray volume will vary. For applications by air in California and Arizona, more than 5 gallons per acre must be used.

## USE PRECAUTIONS

THE MIXTURE OF THIS PRODUCT WITH AMMONIUM THIOSULFATE IS PROHIBITED AS IT MAY CREATE TOXIC FUMES. Other than recommended on this label, this product should not be used with additives.

Upon mixture, this product should be applied as soon as possible; in no case should the spray solution be stored overnight.

Detrimental changes to plant growth, reduced yields, and plant injury may result from spray drift of this product to nearby crops and thus should be avoided. Do not plant another crop within 30 days after treatment.

This product is corrosive. Therefore, spills of concentrated product on the aircraft or other spray equipment should be avoided. Should such contact be made, immediately rinse with water.

## EQUIPMENT CLEANING

This product is corrosive. As a result, spray deposit exposure will, over a period of time, damage metal, some paints and acrylic plastics. No more than one hour after exposure to spray deposits, these materials should be carefully rinsed with water and detergent.

## Limitations, Restrictions, and Exceptions

### COTTON

ETHEPHON 2 used as a foliar spray will improve boll opening of mature bolls that are unopened and assist in overall defoliation, which can result in improved yields and earlier harvesting. Foliar sprays of ETHEPHON 2 promote once-over harvesting that can increase efficiency.

## SPRAY PREPARATION

Begin by filling the spray tank with 1/2 to 3/4 of the necessary spray volume and begin agitation. The required amount of ETHEPHON 2 and remaining amount of water can then be added. Prepare only as much spray solution as can be used on the day the product and water are mixed. Do not allow spray solution to stand overnight. Prevent spillage of concentrated product onto airplane parts or spray equipment.

ANY SPILLS SHOULD BE RINSED IMMEDIATELY WITH PLENTY OF WATER.

Use of a nurse tank is highly recommended for avoiding possible spills of concentrated formulation on spray equipment or any airplane parts.

#### APPLICATION INFORMATION

- Thorough and uniform coverage of cotton leaves and bolls is required for optimum regrowth inhibition and boll opening. Apply as a dilute spray in 10 to 25 gallons of water per acre by ground or 3 to 5 gallons of water per acre by air.
- Good agitation in the spray tank is essential and a tank mixture should not be allowed to stand without agitation for more than 5 to 10 minutes.
- Read and observe all appropriate label use directions and precautions for the defoliants and insecticides used.
- DO NOT MIX WITH DESICCANTS IF COTTON IS TO BE SPINDLE HARVESTED.
- DO NOT TANK MIX ETHEPHON 2 WITH DEFOLIANTS CONTAINING SODIUM CHLORATE BECAUSE THIS RESULTS IN THE FORMATION OF HYPOCHLOROUS ACIDS WHICH UPON HEATING EMIT TOXIC CHLORINE FUMES.

#### EQUIPMENT CLEANING

- Because of the acidic nature of this product, prolonged exposure to spray deposits will damage acrylic plastics, certain paints, and metals.
- Rinse thoroughly with a detergent and water all exposed acrylic plastic-type materials (e.g., aircraft windshields), and painted surfaces within an hour after exposure to spray deposits.
- At the end of each day, rinse thoroughly with a detergent and water all the metal parts of the aircraft and the associated spray equipment exposed to the spray deposits.

## EXPECTED CONDITIONS (Preconditioner for defoliation)

- Apply 4 to 7 days prior to defoliant.
- Enhances top crop defoliation reducing deterioration of bottom crop and allows for earlier harvest.

## Use of Defoliant Prior to ETHEPHON 2:

A pretreatment with a defoliant will enhance spray coverage when using ETHEPHON 2 in a boll opening treatment on cotton that has excessive vegetative growth or otherwise is spread across the middles. Use boll opening rates of ETHEPHON 2 as recommended. Observe label recommendations for the defoliant used and follow all label directions and precautions.

NOTE: For aerial applications in Arizona and California, use an application rate of at least 5 gal of water per acre.

## Boll Maturity

A boll is mature when it is difficult to make a crosswise cut with a sharp knife, and when the outer seed coat has changed from white to a tan or light brown color. In addition, when squeezed between the thumb and fingers, a mature boll will not dent.

## Use Limitations

- Maximum labeled rate of ETHEPHON 2 is 2.0 lb ai/A for combined uses of ETHEPHON 2 (or other ethephon containing products) per acre per year. Do not exceed 2.0 lb ai/A.
- Boll Opening: If cotton is to be spindle picked do not mix with desiccants.
- Pre-Condition for Defoliation: ETHEPHON 2 and desiccants should not be tank mixed unless desiccation is desired. The use of a defoliant before there are sufficient mature unopened bolls can reduce expected yield (see General Information section on how to test for boll maturity).

## When to Harvest

Allow 7 days after a treatment with ETHEPHON 2 before harvesting. Harvest may commence at the point of optimum boll opening; however, please note that premature harvesting could reduce the boll opening advantage of the treatment and a delayed harvest could reduce quality and affect total yield due to lint dropping from the plant.

ONE GAL ETHEPHON 2 TREATS: 2.0-2.664-8 acres

SPRAY VOLUME

GROUND: 10-25 gal

AIR: 3-5 gal

Method

[Broadcast/Foliar Air](#)

[Broadcast/Foliar Ground](#)

Rates

[field\\_rates 0](#)

[field\\_rates 1](#)

[field\\_rates 2](#)

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Restricted Entry Interval

48 hours

The REI is 72 hours in areas where average rainfall is less than 25 inches per year.

Timings

[Apply 4 to 7 days prior to defoliant.](#)