

NET CONTENTS 1 GALLON

**GENERAL INFORMATION**

A foliar spray of ETHREL<sup>®</sup> plant regulator hastens "yellowing" of mature tobacco and reduces curing time. ETHREL can reduce the number of primings required to harvest a crop of flue cured tobacco. ETHREL shortens the time interval between the second or third priming and the final harvest. ETHREL increases the capacity of the curing barn by shortening the curing time and allows adjustments in harvest schedules.

**DIRECTIONS FOR USE FLUE CURED TOBACCO**

Apply 4 to 5 quarts of ETHREL per acre in 40 to 50 gallons of water. Apply on normal tobacco after the second or third priming when remaining leaves are fully developed and physiologically mature (leaves are mottled and begin to pucker). To insure that the tobacco is physiologically mature, treat a few plants and observe them for 72 hours or longer, depending on weather conditions. If the test plants yellow as desired, the remaining tobacco may be treated. If however the tobacco fails to yellow, it is necessary to allow the tobacco to mature naturally a little longer, and then spray a few other test plants to make another "ripening" determination. Generally, the primings should have removed 6 to 8 leaves, leaving 12 to 14 leaves on the stalk. Use of a surfactant such as λ-77 (1 pint per 100 gallons or equivalent) is recommended in North Carolina.

Direct ETHREL spray in a fine mist to thoroughly cover the remaining foliage. Apply with a three nozzle arrangement similar to those used to apply maleic hydrazide treatments. Adjust one nozzle tip over the center of the row and one nozzle tip on each side, dropped low enough so the spray will thoroughly cover the plant. Adjust sprayer pressure to 40 to 60 psi.

All mature leaves will generally turn yellowish to yellow in 3 to 5 days after application. The yellowing process can proceed faster or slower, depending upon weather conditions. If the weather is cool and cloudy, the process may be delayed; if the weather is hot and sunny, the process may be faster.

Harvest treated tobacco when the leaves have reached the desired stage of ripeness and color, before they become over-ripe and too advanced in yellow color. Leaf drop or decreased yield can be expected if leaves are not harvested at the proper time. It may be desirable to harvest when there is still a little green in the leaves, even though it will be necessary to color them for a few hours in the barn.

ETHREL treated tobacco will have good color when harvested and the coloring phase of curing will be reduced. Treated tobacco should be dried faster. To obtain maximum quality, care must be taken to observe and control the curing process more closely, especially during the late "coloring" and early "drying" stages of the leaf.

Because ETHREL treated leaves cure faster, treated and untreated tobacco should not be cured together in the same barn. See supplemental information for guidance on the amount of tobacco needed to fill a barn and for additional curing information.

To approximate the rate recommended on the label for small quantities, mix 4 teaspoons ETHREL in one quart of water. Thoroughly mix and apply one ounce of this solution in a fine mist to the upper half of the plant after the second or third priming. Observe the treated plants. For further help in determining the time of application, changes in curing procedure, and/or the required number of treated acres needed to fill one barn, contact your County Extension Agent, Area Tobacco Specialist, or your Amchem Representative.

Form No. 4171 10m 4-75 H.C.P.

# ETHREL<sup>®</sup>

## PLANT REGULATOR

### For Flue Cured Tobacco

### Aids Harvesting and Curing Efficiency

**WARNING: Keep Out of Reach of Children.  
See Other Warnings on Side Panel.**

**ACTIVE INGREDIENT:**

Ethephon [(2-chloroethyl) phosphonic acid]\* . . . . . 21.2%

**INERT INGREDIENTS:** . . . . . 78.8%

\*Contains 2 pounds ethephon per gallon.



A RORER-AMCHEM COMPANY

**AMCHEM PRODUCTS, INC.**

First Name in Herbicide Research

Ambler, Pa. ■ Clinton, Iowa ■ St. Joseph, Mo. ■ Fremont, Calif.

EPA Reg. No. 264-292

REGISTERED  
May 1, 1975  
264-292  
EPA REG. NO. 264-292

264-292

## USE PRECAUTIONS

Due to shorter growing seasons, top leaves may not develop fully and overall crop yields may be reduced. DO NOT treat more tobacco at any one time than can be harvested in one day, or more than barn capacity. Application made to immature leaves may result in no or only partial yellowing, and cause some reduction in yield and quality. Do not allow crop to over mature.

Do not plant another crop within 30 days after treatment. Use only one ETHREL spray per season.

Do not treat before anticipated major storm which could prevent harvest and resultant crop loss.

## WARNING

**Harmful if swallowed. May cause eye damage. Wear safety goggles when handling. In case of splashing into eyes, flood eyes immediately with plenty of water and get medical attention. Avoid contact with skin or clothing and do not inhale vapors as this product will irritate skin and mucous membranes. In case of skin contact, wash immediately with plenty of soap and water and remove contaminated clothing.**

Avoid spray drift to nearby crops as this product may cause temporary modifications in plant growth.

Do not contaminate water used for irrigation or domestic purposes.

Do not reuse empty containers. Destroy in a safe place.

Do not use ETHREL plant regulator with any additives other than those specifically recommended on this label.

Do not use this product for purposes other than those listed on the label. Mix only the amount of spray you expect to use each day. Do not allow mixed solution to stand overnight.

## WARRANTY

Amchem warrants that composition of this product conforms to the chemical description given in the ingredient statement and the product is suited for the purposes described when used according to directions. Because of the broad range of conditions which may be encountered with the use of this product, it is impossible to eliminate all risks, even though label directions are followed. Amchem therefore makes no other express or implied warranty, and no agent of Amchem is authorized to do so. Buyer agrees in purchasing this product to assume the risks and in the event of damages arising from a breach of the warranty, to accept refund of the purchase price of the product as full discharge of Amchem's liability.

## ETHREL ON TOBACCO SUPPLEMENTAL INFORMATION

If tobacco leaves are green or contain some green when harvested it may be necessary to color them for a few hours. If the leaves are completely yellow the temperature and ventilation must be adjusted in a manner to dry the tobacco as fast as possible without scalding. Once the leaf is dried (3/4 shuck dry) the grower should follow standard procedures for curing. Since treated and untreated tobacco should not be cured in the same barn, care is needed in determining the amount of tobacco to be treated to fill a barn. Use the following as a chart to help calculate the number of leaves obtained from a given area of land.

## NUMBER OF PLANTS PER ACRE AT DIFFERENT ROW WIDTHS AND DRILL SPACINGS

Row Width	Spacing in Drill						
	16 in.	18 in.	20 in.	22 in.	24 in.	26 in.	28 in.
36 in.	10,890	9,680	8,712	7,920	7,260	6,701	6,222
38 in.	10,317	9,170	8,255	7,503	6,878	6,349	5,896
40 in.	9,801	8,712	7,841	7,128	6,535	6,032	5,601
42 in.	9,334	8,297	7,467	6,788	6,222	5,744	5,333
44 in.	8,912	7,920	7,128	6,480	5,940	5,483	5,091
46 in.	8,523	7,576	6,818	6,198	5,682	5,245	4,870
48 in.	8,167	7,260	6,534	5,940	5,445	5,026	4,667

## NUMBER OF LEAVES PER ACRE AT DIFFERENT PLANT POPULATIONS

Plants per Acre	Height of Topping (Number of Leaves)					
	16	18	20	22	24	26
9800	156,800	176,400	196,000	215,600	235,200	254,800
9300	148,800	167,400	186,000	204,600	223,200	241,800
8900	142,400	160,200	178,000	195,800	213,600	231,400
8700	139,200	156,600	174,000	191,400	208,800	226,200
8500	136,000	153,000	170,000	187,000	204,000	221,000
8300	132,800	149,400	166,000	182,600	199,200	215,800
8200	131,200	147,600	164,000	180,400	196,800	213,200
7900	126,400	142,200	158,000	173,800	189,600	205,400
7800	124,800	140,400	156,000	171,600	187,200	202,800
7600	121,600	136,800	152,000	167,200	182,400	197,600
7500	120,000	135,000	150,000	165,000	180,000	195,000
7300	116,800	131,400	146,000	160,600	175,200	189,800
7100	113,600	127,800	142,000	156,200	170,400	184,600
6800	108,800	122,400	136,000	149,600	163,200	176,800
6500	104,000	117,000	130,000	143,000	156,000	169,000
6200	99,200	111,600	124,000	136,400	148,800	161,200
6000	96,000	108,000	120,000	132,000	144,000	156,000
5900	94,400	106,200	118,000	129,800	141,600	153,400
5700	91,200	102,600	114,000	125,400	136,800	148,200
5500	88,000	99,000	110,000	121,000	132,000	143,000
5400	86,400	97,200	103,000	118,800	129,600	140,400
5200	83,200	93,600	104,000	114,400	124,800	135,200
5000	80,000	90,000	100,000	110,000	120,000	130,000

For further help in determining the time of application, changes in curing procedure, and/or the required number of treated acres needed to fill one barn, contact your County Extension Agent, Area Tobacco Specialist, or your Amchem Representative.