



# CATALYTIC GENERATORS, INC.

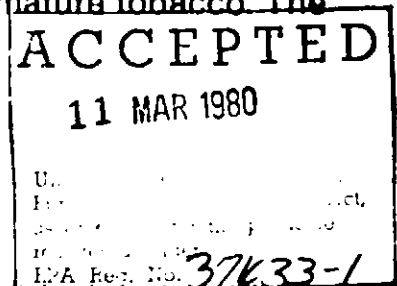
## SUGGESTED RECOMMENDATIONS FOR COLORING TOBACCO WITH ETHY-GEN® CONCENTRATE AND THE TOBACCO COLORING GENERATOR

ETHY-GEN® CONCENTRATE when used in the TOBACCO COLORING GENERATOR produces a hormone that acts as a "stimulant" to accelerate the degreening of mature tobacco leaves naturally. Also, ETHY-GEN® should give more uniform color when overripe, (yellow) and mature green tobacco are in the same cure.

The TOBACCO COLORING GENERATOR requires a 110-volt grounded electrical outlet. Be certain the TOBACCO COLORING GENERATOR discharges the gas inside the curing unit (airflow).

Mature tobacco should color faster when ETHY-GEN® is used. Do not over color the tobacco the first time when using ETHY-GEN®.

Using ETHY-GEN® should cut down curing time up to 24 hours on mature tobacco. The time saved on tobacco grown in dry or wet years will be less.



### PROPER PLACEMENT OF THE GENERATOR

#### BULK CURING UNITS:

Place generator on furnace room floor near a 110-volt, grounded electrical outlet, drill a hole through the floor to place tube so gas is injected into the airflow. Note: Place tube in position with airflow, **not against** airflow and in a **downward position** so any condensation can drip freely from tube.

#### CONVENTIONAL (STICK) CURING UNITS:

Place generator inside the unit on the floor, connect generator to 110-volt, grounded electrical outlet. NOTE: **DO NOT PLACE GENERATOR ON BURNER OR NEAR OPEN FLAME.**

All vents and doors should be closed while operating the generator.

For Best Results, remove the tube from generator allowing gas to move into light out the cure.

THE GENERATOR SHOULD BE REMOVED AT THE END OF THE 24 HOUR ETHY-GEN® TREATMENT.

**BEST AVAILABLE COPY**

## HOW TO USE ETHY-GEN® AND THE TOBACCO COLORING GENERATOR

1. As soon as the unit is COMPLETELY filled with tobacco, close the doors, vents, and start the fan, (if equipped), to circulate the air.
2. With the generator in the suggested position, pour one quart ETHY-GEN® into the generator's reservoir. Invert a second quart of ETHY-GEN® on top of the generator's reservoir so the system will operate for approximately 12 hours.

NOTE: Never start the generator with just one quart of ETHY-GEN® at the beginning of the coloring period.

It is important that you begin your treatment as soon as the unit is filled, continuing for 12-24 hours. During the treatment period, maintain 70-90° F. (Dry Bulb Temperature).

3. After 12 hours, pour two (2) additional quarts of ETHY-GEN® into the generator, as directed above, for 12 additional hours of treatment.

At the end of the gassing period, continue coloring process as normal.

Use your experience and observe the coloring process closely. Refer to manufacture's curing manual for specific coloring instruction.

### SPECIAL NOTE

Observe the coloring process closely — tobacco colored with ETHY-GEN® CONCENTRATE should color faster and more uniformly than if ETHY-GEN® were not used.

No phase of the normal coloring process should be left out. You should reduce the amount of time required to color your tobacco because ETHY-GEN® colors your tobacco (green fibers and shoulders) faster than normal.

After tobacco is properly conditioned with ETHY-GEN®, using proper humidity and temperature, then normal curing procedures should be followed.

### TYPES OF TOBACCO

1. FULLY MATURE TOBACCO — "ripe" yellow tobacco has green fibers and shoulders, generally a yellow color. ETHY-GEN® will accelerate the coloring of these green fibers and shoulders without affecting the yellow portion of the leaf. The generator gives best results on this type of fully mature tobacco.
2. MATURE GREEN LEAF — The leaf is green but physiologically mature showing distinct characteristics of maturity (observe midrib and other varietal characteristics).
3. IMMATURE TOBACCO — Tobacco which is still growing (filling out). ETHY-GEN® is reported by growers to have some advantages on this tobacco; however, not as good as the results on fully matured tobacco.

**It is suggested immature tobacco be left in the field to mature before harvesting.**

NOTE: Sometimes you will have all three types of tobacco in the same cure. ETHY-GEN® should reduce the amount of green and dead (trash) leaves giving you more high quality, marketable tobacco.

## WEATHER AND CROP CONDITIONS

ETHY-GEN® should be effective in all crop conditions:

### 1. NORMAL (GOOD) CROP

This condition occurs when the crop has matured properly due to proper fertilization, ample rainfall, etc. ETHY-GEN® works best on this crop, and normally 4 quarts are needed for full benefits.

### 2. DROUGHT (DRY) CROP

This condition produces a hard to color tobacco — the tobacco has not had the water to create the necessary chemical changes within the leaf for natural coloring. ETHY-GEN® proper humidity and temperature will accelerate the coloring process.

### 3. EXCESSIVE MOISTURE (SURFACE)

This condition, excessive surface moisture on the leaf from rainfall or morning dew at harvest, must be corrected prior to using ETHY-GEN®. The unit should be filled, start the fan, and apply low heat (Below 90°F) with the vents open until surface moisture is removed, then apply ETHY-GEN® as directed. NOTE: The fan should remain running.

### 4. OVER FERTILIZED (RANK) TOBACCO AND DROUGHT STRESSED

This tobacco will require a longer period of time to color,

You will not

see as good results as a normal season — but you will see better results than if generator was not used.

**NOTE: THESE ARE RULE OF THUMB SUGGESTIONS. CURING TOBACCO IS AN ART AND YOU SHOULD USE YOUR JUDGMENT IN TEMPERATURE AND HUMIDITY ADJUSTMENTS.**

**ETHY-GEN® CONCENTRATE AND THE TOBACCO COLORING GENERATOR IS A TOOL WHICH WHEN USED AS DIRECTED SHOULD AID YOU IN CURING YOUR TOBACCO FASTER AND MORE UNIFORMLY, GIVING MORE HIGH QUALITY MARKETABLE TOBACCO, REDUCING THE PERCENTAGE OF TRASH AND GREEN— AND INCREASING THE PERCENTAGE OF HIGH QUALITY TOBACCO.**

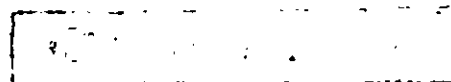
### CAUTION

ETHY-GEN® CONCENTRATE is especially formulated to produce a natural plant hormone when used in the TOBACCO COLORING GENERATOR.

**DO NOT POUR ANY LIQUID OTHER THAN ETHY-GEN® INTO THE GENERATOR, THAT MAY DAMAGE IT.**

1—The customer is responsible for repairs which are caused by the use of liquids other than ETHY-GEN® that may damage it.

2—ETHY-GEN® is a registered pesticide with the Environmental Protection Agency (EPA), EPA #37433-1, Establishment #37433-VA-1, and must be used according to directions under penalty of Federal Law.



**ETHY-GEN® CONCENTRATE is FLAMMABLE in liquid form.**

**DO NOT STORE NEAR HEAT OR FLAMES.**

**NOTE: DO NOT USE ETHY-GEN® IN AIR-TIGHT ENCLOSURES (coolers, refrigerators, etc.) less than 1,000 cubic feet.**

### **IMPORTANT**

**If you plan to use ETHY-GEN® CONCENTRATE and TOBACCO COLORING GENERATOR to color tomatoes, etc. (crops other than tobacco) contact us prior to use.**

### **STORAGE**

The generator should be kept from year to year. When not in use place the generator in a plastic bag and store in a dry room away from direct sunlight and the weather. If properly stored, the generator will provide you with good service.

### **GENERATOR MAINTENANCE**

The generator is calibrated to use 4 quarts of ETHY-GEN® in 24 hours.

#### **Slow Generator**

Should the generator appear to be too slow, remove tube and clean by using compressed air. With tube off, allow the generator to operate for 1/2 hour with no ETHY-GEN® in the reservoir.

#### **Fast Generator**

Should the generator use 4 quarts in less than 20 hours, the generator should be returned to the dealer as defective.

#### **Power Failure**

Should lights on front of generator fail to operate when generator is plugged into 110 volt, grounded electrical outlet and turned on, replace 2 amp fuse.

Should generator still fail to operate, check power source, be sure electrical power is available.

Should power light fail to come on but there is an audible click every few seconds, the generator is functioning properly.

The triac light will come on bright until catalyst bed is properly heated, then will flicker. Should this light not come on, but generator is hot to touch at outlet (on top where tube is mounted), the generator is functioning normally.

Should the generator fail to operate after checking the above, return to dealer as defective.

**FOR ADDITIONAL INFORMATION—SEE YOUR CATALYTIC GENERATOR DEALER  
OR CALL**

### **CATALYTIC GENERATORS, INC.**

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