

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

FEB 20 2008

Mr. Larry Livingston  
Livingston Group, Inc.  
4768 Hermitage Road  
Virginia Beach, VA 23455

Subject: Livingston's Tobacco Curing Gas  
EPA Registration No. 47893-2  
Label Amendment to update First Aid Statements in compliance with PR Notice 2001-1.  
Application Dated: August 15, 2007

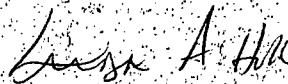
Dear Mr. Livingston:

The amendment referred to above, submitted in connection with registration under FIFRA section 3(c)(5), is acceptable provided that you:

1. Submit and/or cite all data required for registration/reregistration of your product under FIFRA section 3(c)(5) when the Agency requires all registrants of similar products to submit such data.
2. Submit five (5) copies of your final printed labeling before you release the product for shipment. Final printed labeling means the label or labeling of the product when distributed or sold. Clearly legible reproductions or photo reductions will be accepted for unusual labels, such as those silk-screened directly onto glass or metal containers or large bags or drum labels.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). Your release for shipment of the product bearing the amended labeling constitutes acceptance of these conditions. If you have any questions contact Andrew C. Bryceland at 703-305-6928 or by e-mail at: [bryceland.andrew@epa.gov](mailto:bryceland.andrew@epa.gov). A stamped copy of the label is enclosed for your records.

Sincerely,



Linda A. Hollis, Chief  
Biochemical Pesticides Branch  
Biopesticides and Pollution  
Prevention Division (7511P)

Enclosure

CONCURRENCES							
SYMBOL	7511P	7511P					
SURNAME	Bryceland	Benmhand					
DATE	2/12/08	2/12/08					

274

# LIVINGSTON'S TOBACCO CURING GAS™

For use in tobacco curing barns to accelerate the curing of flue-cured tobacco using Livingston's patented AC-CEL™ method of curing.

### Active Ingredient:

Ethylene: \_\_\_\_\_ 99.9%  
Other Ingredients: \_\_\_\_\_ 0.1%  
TOTAL: \_\_\_\_\_ 100.0%

**KEEP OUT OF REACH OF CHILDREN**

**FLAMMABLE GAS**  
**KEEP AWAY FROM HEAT and FLAME**

### DANGER (PELIGRO)

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

#### 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 the first 5 minutes, then continue rinsing. Call a poison control center or doctor for treatment advice.
- IF ON SKIN:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
- IF INHALED:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-222-1222 for emergency medical treatment information.

**SEE SIDE PANEL FOR PRECAUTIONARY STATEMENTS**

**SOLD BY:**



**LIVINGSTON  
GROUP, INC.**

Applied Ethylene Technology

4768 Hermitage Road  
Virginia Beach, Virginia 23455-4030

Telephone: 757-460-3115; 800-992-3893  
Fax: 757-460-0391

EPA REG. No. 47893-2  
EPA EST. No. 69901-OH-01

#### NET CONTENTS

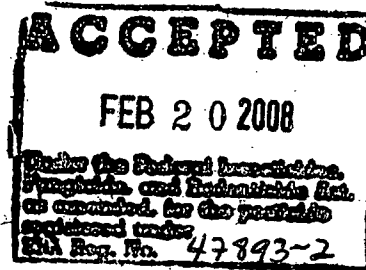
9 Pounds: \_\_\_\_\_

30 Pounds: \_\_\_\_\_

10 Pounds: \_\_\_\_\_

37 Pounds: \_\_\_\_\_

If other, write in here: \_\_\_\_\_



**PRECAUTIONARY STATEMENT  
Hazards to Humans and Domestic Animals  
DANGER**

Liquefied or pressurized gas can cause frost burns. Harmful if inhaled, or absorbed through skin. Causes moderate eye irritation. Avoid breathing vapors. Avoid contact with skin, eyes or clothing. Do not enter unventilated treatment areas unless wearing a respirator approved by NIOSH for this use. Wear chemical resistant (such as nitrile or butyl) gloves and protective eyewear such as goggles, face shield, safety glasses. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove contaminated clothing and wash before reuse.

**ENVIRONMENTAL HAZARDS**

Do not apply directly to water, or to areas where surface water is present or to inter-tidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash-water or rinsate.

**PHYSICAL OR CHEMICAL HAZARDS**

Extremely flammable. Contents under pressure. Keep away from fire, sparks, and heated surfaces. Do not puncture or incinerate container. Exposure to temperatures above 130 degrees Fahrenheit may cause bursting.

**IMPORTANT NOTICE**

This container is to be returned to Livingston Group, Inc. or its designated agent for refilling when empty. Unauthorized filling of this container is prohibited by Federal Law.

**GENERAL INFORMATION**

Plants produce ethylene to induce chlorophyll degradation and ripening. The exposure of mature tobacco leaves to **Livingston's Tobacco Curing Gas™** will reduce curing time of flue-cured tobacco using Livingston's patented AC-CEL™ method of application.

When used according to directions, **Livingston's Tobacco Curing Gas™** will reduce curing time of flue-cured tobacco by providing constant exposure to ethylene, the same type of hormone as is contained naturally in the mature tobacco leaf, until the tobacco is properly conditioned for coloring and curing.

**DIRECTIONS FOR USE**

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

**APPLICATION**

Livingston's Tobacco Curing Gas™ is designed for application to the curing barn with specially designed applicators kit, which is calibrated to maintain 10 to 300 parts per million (ppm) ethylene, applying 1 lb. per 24 hours. The concentration will vary according to the tightness of the barn.

The applicator's kit contains an ample length of rubber tubing (six feet) to connect the cylinder with the barn. The end of the tubing should be placed in the air flow on the discharge side of the fan with the open end of the tube pointed in the direction of the air flow. The discharge end of the tube must be open for the gas to enter the barn. Always check tubing for dirt, and any obstructions prior to operating the applicator's kit. Remove cylinder from the barn when the application is complete. The applicator's kit is locked to prevent tampering with the calibration.

**DO NOT ATTEMPT TO CALIBRATE THIS UNIT.**

**TOBACCO (FLUE-CURED)**

Use immediately after filling barn. Using the applicator's kit for Livingston's Tobacco Curing Gas™ will provide concentrations of 10-300 ppm ethylene in curing barns of 2,000 to 4,000 cubic feet with forced recirculation of air and an air exchange of approximately 50 to 100 times per 24 hours.

During the exposure time, vents and doors should be closed.

Start furnace heat at approximately 5° above the outside temperature. Apply Livingston's Tobacco Curing Gas™ at the beginning of the normal coloring process. Raise the dry bulb heat inside the curing barn to the range of 100°F to 105°F. Bring the wet bulb temperature to the range of 100°F to 105°F. Maintain this wet bulb temperature through the coloring process. When the dry bulb reaches the range of 100°F to 105°F, advance the dry bulb heat at the rate of 0.5° to 3°F per hour.

Continue to apply Livingston's Tobacco Curing Gas™ until all green pigment has left the leaf, which may include the wilting and early drying stages of the leaf and stems.

The normal concentrations reached inside a tobacco curing barn are 25 to 150 ppm. Livingston's Tobacco Curing Gas™ is flammable only in concentrations of 31,000 to 310,000 ppm in air.

Do not use on tobacco treated prior to harvest with ripening agents. Use of this product in enclosures of less than 1,000 cubic feet is prohibited.

**ADDITIONAL INFORMATION**

For addition information, contact your local Agricultural Extension Office, Agricultural University or Livingston Group, Inc.

**PESTICIDE STORAGE and DISPOSAL**

Do not contaminate water, food or feed by storage or disposal.  
STORAGE: Store cylinder and regulators in a safe and ventilated area, away from the weather, when not in use.  
CONTENTS UNDER PRESSURE: DO NOT MOVE OR STORE CYLINDER WITHOUT SAFETY CAP SECURELY IN PLACE.  
DO NOT STORE NEAR HEAT OR FLAME.  
  
PESTICIDE DISPOSAL: Cylinder containing excess gas that cannot be held in proper storage for later use should be returned to the supplier.  
  
CONTAINER DISPOSAL: Return empty cylinder for reuse.

**WARRANTY**

Seller makes no warranty, expressed or implied, concerning the use of this product other than as indicated on the label. Buyer assumes all risk of use and/or handling of this material when such use and/or handling is contrary to label instructions.