

PRECAUTIONARY STATEMENTS**HAZARDS TO HUMANS & DOMESTIC ANIMALS****DANGER**

Liquefied or pressurized gas can cause frost burns. Do not get in eyes or on skin. Wear long sleeve shirt, long pants, boots, goggles and chemical resistant gloves while handling cylinders or any application equipment under pressure. Harmful if inhaled. Avoid breathing vapors. Do not enter unventilated treatment areas unless wearing a respirator approved by NIOSH/MSHA.

May cause rapid suffocation.
May cause anesthetic effects.
May cause frostbite.

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 125° F (52° C) may cause bursting. Use equipment rated for cylinder pressure. **CAN FORM EXPLOSIVE MIXTURES WITH AIR.**

DIRECTIONS FOR USE

It is a violation of federal law to use this product in a manner inconsistent with its labeling. Use only in accordance with this label and Air Products' MATERIAL SAFETY DATA SHEET. Close valve tightly and replace cylinder cap when not in use and when empty.

STORAGE AND DISPOSAL

STORAGE: Store in a cool, well ventilated area with valve closed and cylinder cap in place, isolate cylinders from combustible or oxidizing materials. Outside or detached storage is preferred. Store cylinders in an upright position and firmly secured. In case of product leakage call the Air Products emergency number:

(800) 523-9374 Continental U.S.
(610) 481-7711 outside U.S.

DISPOSAL: Waste resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. Do not contaminate water, food or feed by storage or disposal. With the valve closed and the cylinder cap in place, return all unused or residual product to the supplier for proper disposal.

DE-01-LABE 4100 (9/95)

**ETHYLENE,
COMPRESSED**

UN 1962



CAS No. 74-85-1

C₂H₄**PLANT GROWTH REGULATOR**

ETHYLENE	98.5%
INERT INGREDIENTS	1.5%
TOTAL	100.0%

THIS CYLINDER CONTAINS

(CIRCLE ONE) 0.2, 2.0, 4.5, 11, 26, 30, 34 LBS.

OF PRODUCT**KEEP OUT OF REACH OF CHILDREN****DANGER****STATEMENT OF PRACTICAL TREATMENT**

IF INHALED: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

IF ON SKIN: Contact with ethylene may cause frostbite. Flush with plenty of soap and water. Get medical attention.

IF IN EYES: Flush with plenty of water. Call a physician.

See side panel for additional precautionary statements.

DO NOT REMOVE THIS LABEL

EPA REG. NO. 28472-9

EPA EST. NO. 28472-FL-001

AIR PRODUCTS AND CHEMICALS, INC.
ALLENTOWN, PA 18195-1501

**ETHYLENE FOR RIPENING AND
DEGREENING**

The produce for which ethylene has been used as a ripening or degreening agent are listed below along with the optimum concentrations of ethylene required. Concentrations in excess of those recommended may result in discoloration of the produce.

PRODUCE	CONCENTRATION OF ETHYLENE (PPM)
Banana	100-150
Citrus Fruit (Orange, Grapefruit)	1-10
Honeydew Melon	100-150
Avocado	10-100
Pear	10-100
Kiwi Fruit	10-100
Mango	100-150
Stone Fruit (Nectarine, Peach)	10-100
Tomato	100-150

Ethylene for fruit ripening should only be used with commercially available ripening rooms. These rooms are usually gas tight, have systems for controlling humidity and concentrations of ethylene and carbon dioxide, and have equipment to control product temperature. The optimum temperature and duration of treatment may vary slightly for each produce but are generally between 65 to 80° F and 24 to 48 hours. In addition, the relative humidity should be maintained between 80 and 90%.

In order to determine the volume of gas required for a particular ripening room, the following formula may be used:

$$\frac{\text{Size of room in cubic feet} \times \text{Desired ppm}}{1,000,000}$$

cubic feet of gas required.

A room having a volume of 1,000 cubic feet where a concentration of 100 ppm is desired would require 0.1 cubic foot of ethylene.

The amount of gas discharged from the cylinder may be measured by volume, in which a flow meter is used to measure flow rate (in cubic feet/hour).