

FOR DISTRIBUTION AND USE ONLY WITHIN NORTH CAROLINA BY THE NORTH CAROLINA DEPARTMENT OF AGRICULTURE & CONSUMER SERVICES' PLANT INDUSTRY DIVISION OR THEIR DESIGNATED AGENTS.

SPECIAL LOCAL NEED LABELING

THIS LABELING MUST BE IN THE POSSESSION OF THE USER AT THE TIME OF PESTICIDE APPLICATION.

Ethylene

PLANT GROWTH REGULATOR

FOR WITCHWEED (*Striga asiatica*) CONTROL

FOR DISTRIBUTION AND USE ONLY WITHIN BLADEN, BRUNSWICK, COLUMBUS, CUMBERLAND, DUPLIN, HARNETT, HOKE, JOHNSTON, ONSLOW, PENDER, ROBESON, SAMPSON, SCOTLAND AND WAYNE COUNTIES IN NORTH CAROLINA

EPA REG. NO. 69180-1
SLN# NC-200003

ACTIVE INGREDIENT

Ethylene98.5%
INERT INGREDIENTS.....1.5%
Total.....100.0%

KEEP OUT OF REACH OF CHILDREN

DANGER

BEFORE USING PRODUCT, SEE CONTAINER LABEL FOR ADDITIONAL INFORMATION. ALL APPLICABLE DIRECTIONS, RESTRICTIONS, AND PRECAUTIONS ON THE EPA REGISTERED LABEL ARE TO BE FOLLOWED.

PRECAUTIONS

DANGER

**EXTREMELY FLAMMABLE.
CAN FORM EXPLOSIVE MIXTURES WITH AIR.**

In case of product leakage call the Airgas emergency number.

(866) 734-3438

Exposure to liquefied or pressurized gas can cause frost burns, anesthetic effects and rapid suffocation. Do not get in eyes or on skin. Harmful if inhaled. Avoid breathing vapors. Do not enter unventilated treatment areas unless wearing a respirator approved by NIOSH/MSHA.

Personal Protective Equipment (PPE)

All handlers must wear at a minimum:

- Long-sleeved shirt and long pants,
- Boots,
- Goggles, and
- Chemical-resistant gloves.

DIRECTIONS FOR USE

IT IS A VIOLATION OF FEDERAL LAW TO USE THIS PRODUCT IN A MANNER INCONSISTENT WITH ITS LABELING.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification and emergency assistance. It also contains specific Instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated such as plants, soil, or water is: Coveralls, waterproof gloves, shoes plus socks and protective eyewear.

METHOD OF APPLICATION

WITCHWEED CONTROL FOR THE FOLLOWING CROPS/SITES:

Bean (lima and string), Cabbage, Cantaloupe, Collard, Corn, Cotton, Cucumber, Eggplant, Okra, Onion, Pea (field and sweet), Peanuts, Pepper, Potato, Sorghum, Soybeans, Squash, Sweet potato, Tobacco, Tomato, Turnip, Watermelon, Christmas trees, Noncropland, Pasture grass, Rights-of-way, Turf and Lawns.

APPLICATION DATES: March through October

PRECONDITIONING PERIOD: The witchweed seeds must be exposed to adequate moisture and temperatures above 72°F (22.2°C) for a period of at least two weeks prior to application of the ethylene.

APPLICATION: Up to two applications per acre per season can be made. A soil injector is used to apply the ethylene, and the gas is delivered from the cylinder through a regulator and a flowmeter. Shanks attached to a tool bar release the gas approximately 6 to 10 inches (15.24-25.4 centimeters) below the soil surface. The maximum shank spacing will not exceed 40 inches (101.60 centimeters). The rate of application is 1.5 pounds per acre [1.5 pounds (.6795 kg) per acre equals 19.47 cubic feet (.545 cubic meters)]. The treatment rate can be calculated using the following formula:

$(\text{Tractor speed, MPH})(.12)(\text{Treatment width, ft.})(\text{Recommended application rate, cubic ft. per acre}) = \text{Flow rate in cubic feet per hour.}$

NOTE: The flow meter is used to measure the flow rate in cubic feet per hour of the gas applied.

The ethylene may be injected broadcast throughout a fallow field or it may be injected between the crop rows.

Do not till the soil within 8 hours after application.

Witchweed commonly occurs in sandy soil; however, the use of ethylene to control witchweed is not restricted to soil texture. In coarse, sandy soil the ethylene disperses in a 48-inch (121.92 centimeters) radius from the point of injection, while a 30-inch (76.2 centimeters) radius of dispersal is found in clay soils.

For use by or under supervision of USDA or NCDA&CS personnel in accordance with the U.S. Department of Agriculture's manual instructions for witchweed eradication or control.

Injection between row crops without additional weed control techniques will give no witchweed control in the current season. Sequential applications with other herbicides may result in crop injury.

TECHNICAL REFERENCE: "A Witchweed Seed Germination Stimulant", Robert E. Eplee, USDA Witchweed Method Development Laboratory, Whiteville, NC.

Piping and connections exposed to pressurized ethylene gas should be capable of withstanding a working pressure of 2,000 pounds (906 kg.) per square inch.

Cylinders must be firmly secured in an upright position during discharge. Use approved regulators only. The cylinder should be weighed before and after dispensing to determine the exact amount applied.

With the valve closed and the cylinder cap in place, return all unused or residual product to the supplier for proper disposal. Return empty cylinder to supplier for reuse.