

**RESTRICTED USE PESTICIDE**  
 For retail sale to and use only by Certified Applicators or persons under their direct supervision, and only for those uses covered by the Certified Applicator's certification.

# TERR-O-GAS® 80

## PREPLANT SOIL FUMIGANT

ACTIVE INGREDIENTS:	By Wt.
Methyl Bromide .....	80.0%
Chloropicrin .....	20.0%
Total	100.0%

**☠ DANGER ☠**  
**KEEP OUT OF REACH OF CHILDREN**  
**POISON**

**Statement of Practical Treatment**

- IF INHALED** Remove victim to fresh air immediately. • Keep victim lying down and warm. • Give artificial respiration if breathing has stopped. • Call a physician at once.
- SKIN CONTACT** Remove all contaminated clothing and shoes at once. Clean or launder contaminated clothing before reuse. Be sure all chemical odors are gone from contaminated articles before reuse. • Wash exposed areas thoroughly with soap and water. • If a rash or blisters develop, get medical attention.
- EYE CONTACT** Flush thoroughly with running water for at least 15 minutes. • Get medical attention promptly.

SEE SIDE PANEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS



**Great Lakes**  
**Chemical Corporation**

5765-1-62

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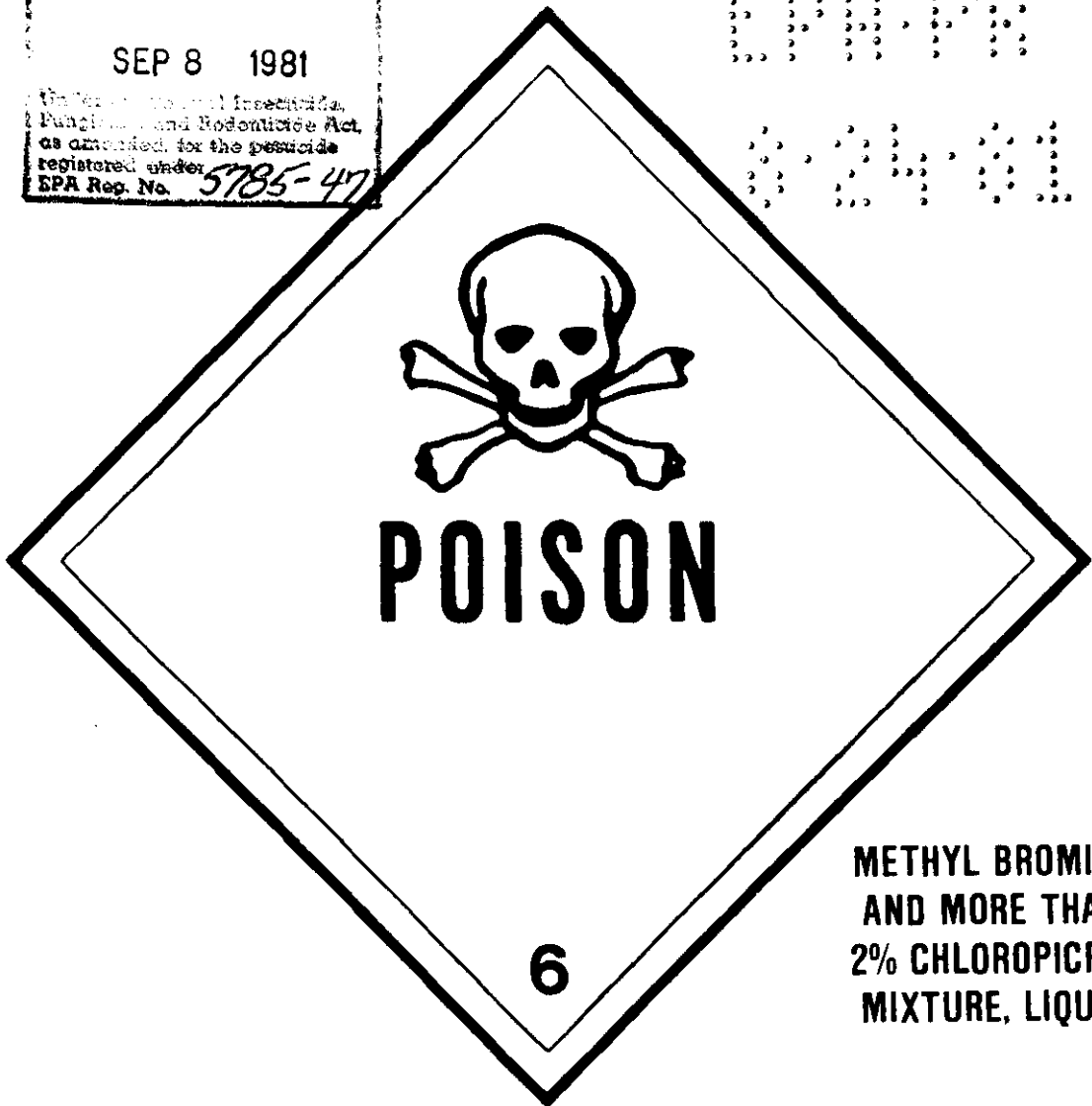
**ACCEPTED**

SEP 8 1981

Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 5785-47

EP 47

5785-47



**METHYL BROMIDE  
AND MORE THAN  
2% CHLOROPICRIN  
MIXTURE, LIQUID**

**NOTE:** Many pesticidal chemicals are poisonous and may leave a toxic residue on the plants to which they are applied. The U.S. Food and Drug Administration has established maximum amounts of such pesticidal chemicals that may remain on raw agricultural products at harvest, and it is the user's responsibility to see that there is no residue on such crops at harvest in excess of these amounts. The "Directions for Use" are based on the best available information, and if followed carefully should not leave excessive residues at harvest. However, Great Lakes Chemical Corporation assumes no responsibility as to their accuracy nor for any loss due to excessive residues.

**NOTE:** Seller warrants that this product complies with the specifications expressed in this label. Seller makes no other warranties; and disclaims all other warranties, express or implied, including but not limited to warranties of merchantability and fitness for the intended purpose. Seller's liability for default, breach, or failure under this label shall be limited to the amount of the purchase price. Seller shall have no liability for consequential damages.

## PRECAUTIONARY STATEMENTS

### HAZARDS TO HUMANS AND DOMESTIC ANIMALS DANGER

Poisonous if inhaled. Do not breathe vapors. May burn skin and eyes. Do not get in eyes, on skin, or on clothing. Vapors of Terr-O-Gas 80 may be extremely irritating to the eyes. When applying or transferring to other containers, provide good ventilation. In the presence of discomforting concentrations of Terr-O-Gas 80 vapors, wear a full-faced gas mask with a NIOSH or MSHA approved black canister for organic vapors.

Applications near structures occupied by humans and animals should be made in accordance with local regulations.

### ENVIRONMENTAL HAZARDS

This product is toxic to fish and wildlife. Keep out of lakes, ponds and streams. Do not contaminate water by cleaning of equipment or disposal of wastes.

Following soil fumigation, undesirable concentrations of chloropicrin may drift to nearby areas. If this occurs, immediately recover treated area with a plastic tarpaulin. Leave tarpaulin on overnight and remove during the daytime. Recover the area if eye irritation indicates that the undesirable concentration is continuing. These concentrations are most likely to occur in the evening or at night when the air is most likely to be static in movement. Do not make application of Terr-O-Gas 80 when there is little or no air movement or there is an inversion condition in the atmosphere. Do not allow Terr-O-Gas 80 vapors to come in contact with any desirable living plant.

### PHYSICAL OR CHEMICAL HAZARDS

Contents under pressure. Do not use or store near heat or open flame. In fires fueled by other materials, Terr-O-Gas 80 may liberate hazardous gases. The use of Terr-O-Gas 80 with aluminum, magnesium, and alkali metals will result in the liberation of toxic gases.

### DIRECTIONS FOR USE

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

## STORAGE, SHIPMENT AND DISPOSAL

**STORAGE:** Store in a cool place away from dwellings. Do not allow contamination of seeds, plants, fertilizers or other pesticides. Do not contaminate food, feed stuffs, drugs or domestic water supplies. Do not remove eye safety caps until just prior to use.

**SHIPMENT:** Do not ship with food, feeds, drugs or clothing.

**DISPOSAL:** Close valve by turning clockwise until hand tight. Disconnect lines. Replace safety caps and bonnet. Return empty cylinders freight collect to the Great Lakes Chemical Corporation location from which shipment was made. Return partial cylinders only after consulting Great Lakes Chemical Corporation for proper shipping instructions.

## SOIL PREPARATION

Soil to be treated with Terr-O-Gas 80 should be in seedbed condition, free of clods and undecomposed organic material. Soil moisture should be in the range of 25-75% of field capacity depending on the soil type. Coarse textured soils can be fumigated with higher moisture content than fine textured soils. Soil temperature at the injection depth (6-8") should be between 50°F. and 80°F. Do not fumigate soils that are too cold or too wet.

Pests controlled are: nematodes, including *Meloidogyne*, *Tylenchulus*, *Pratylenchus*, *Xiphinema*, *Criconemoides*, and *Paratylenchus* species.

Soil-borne fungi, including *Verticillium*, *Fusarium*, *Pythium*, *Rhizoctonia*, *Phytophthora*, *Pyrenochaeta*, *Sclerotinia*, *Sclerotium*, *Armillaria*, and the clubroot organism, *Plasmodiophora*.

Weeds and weed seeds: seeds, roots, stolons, and bulbs of broadleaf weeds and grasses including quackgrass, annual bluegrass, broomrape, common lambsquarters, torpedograss and bermudagrass. For heavy infestations of weeds and diseases, use higher label rates. Not effective against mallow, dodder, and some species of clover.

Insects in the soil at the time of treatment including: wireworms, June beetle larvae, white grubs, and garden symphylan.

**Application Method:** Apply with chisels spaced 12" apart to a depth of 6-8". Seal immediately with polyethylene or other gas confining cover by means of an automatic tarp layer or seal with a drag or cultipacker immediately behind chisels and cover with a gas confining cover as soon as possible, preferably within 20 minutes. Row or bed applications may be made at the broadcast rates but the amount used will be proportionately less per acre depending on the row spacing and width of treatment in the row or bed.

**Exposure and Aeration:** Expose to fumigation for 24-48 hours. Aerate 2 weeks before setting transplants in treated areas. Tomato seeds may be planted 96 hours after exposure period. If odor of fumigant persists at the end of the aeration period, disc or plow the soil to assist aeration.

**NOTE:** Following fumigation, the level of soluble salts and ammonia nitrogen may be raised. This is most likely to occur when heavy rates of fumigant and fertilizers are applied to soils that are either acid, wet, cold, or high in organic matter. Fertilizers containing ammonium salts should not be used. Apply only fertilizers containing nitrates until after the crop is well established and the soil temperature is above 65°F. in order to avoid ammonia injury, nitrate starvation, or both. After fumigation, fertilize as indicated by soil test to protect against injury to plant roots. It is best that highly acid soils be limed before application to stimulate nitrification and reduce the possibility of ammonia toxicity.

**Dosage Rates:** Recommended application rates for soils to be planted to the following crops:

Strawberries	185-300 lbs/acre
Tomatoes	185-300 lbs/acre
Eggplant	185-300 lbs/acre
Muskmelon	185-300 lbs/acre
Broccoli	185-300 lbs/acre
Cauliflower	185-300 lbs/acre
Peppers	185-300 lbs/acre
Floral crops, ornamental nursery, and field grown ornamentals	250-335 lbs/acre
Seedbeds (for production of transplants only)	250-335 lbs/acre

### Citrus Soil For Control of Phytophthora in Florida Sandy Soils:

This is a preplant or replant treatment. Trees which are planted in this treated soil will not bear harvestable fruit for a period of at least 24 months. Use a minimum of 1-1½ pounds per 100 square feet. Expose to fumigation for 96 hours covering treated area with a 4 mil tarpaulin. Will control disease to a depth of 4 feet. Aerate 2 weeks before setting transplants in treated area.

**Greenhouse Fumigation:** Terr-O-Gas 80 may be used in field or in greenhouse. When used in greenhouse, the following safety precautions must be strictly observed.

The use of methyl bromide in confined spaces presents a potential hazard to humans and plant life. Special precautions must be made in order that these potential hazards be minimized. It is the responsibility of the individual supervising the fumigation operation to see that all safety precautions are strictly observed.

Before the fumigation operation commences, the supervisor of the fumigation job shall have conducted proper training of all personnel involved in the fumigation (includes use of safety equipment), removed all persons from the area not directly involved in the fumigation, and inspected the equipment to insure proper aeration.

If a wind is blowing, all injection should be made upwind from a previous injection site. Immediately after injection of the fumigant and tarping, a qualified person wearing protective equipment, should monitor the area with a halide leak detector. If excessive leaks are found, the source of the leak should be resealed immediately.

During this operation, all windows and doors should be open and fans operating to maximize ventilation. The fumigated area must be placarded on all entrances with signs containing at least the signal word DANGER and the "Skull and Crossbones" and the words, "Area under fumigation, do not enter until completely aerated," the date of fumigation, name of the fumigant used, emergency telephone number for contact, and the name and address of the fumigator. Do not remove warning signs until the fumigated area is completely aerated and safe for entry, as indicated by a suitable detector. Exposure time should be 24-48 hours.

Although Terr-O-Gas 80 contains chloropicrin, the absence of chloropicrin does not always indicate the absence of methyl bromide. Under no circumstances shall any person be allowed to enter the fumigated structure without the appropriate protective equipment from the time of injection of the fumigant until acceptable readings are obtained using an approved detector. To maintain adequate safety standards, the following equipment must be present on the site during the entire fumigation operation: 1) one or more full-face gas masks or self-contained breathing apparatuses; 2) one or more replacement black canisters per mask or air bottles per breathing apparatus; 3) one or more halide leak detectors; and 4) MSHA/NIOSH approved detection device.

A 15 ppm threshold limit value (TLV) for methyl bromide has been established. TLV is defined as the concentration below which personal protective devices are not required for persons entering or within a hazardous environment. Persons not wearing protective equipment should not enter the fumigated area until monitoring devices show methyl bromide concentrations of 15 ppm or less.