

**SOIL FUMIGATION DIRECTIONS**

For the preparation of ready-to-use treatments of the soil, an emulsion for soil fumigation to be used as a preplant or replant treatment on seed beds or transplants is prepared for the use of transplants as follows:

**ACTIVE FUMIGANT USES:** Meth-O-Gas is an effective soil fumigant for the control of nematodes, root rots and certain soil borne disease causing fungi in seed beds and potting soils. It contributes to a maximum production of healthy, vigorous tobacco and vegetable transplants, nursery and forest tree seedlings. Where "slips," "cuttings," "spades" or seeds are used as in greenhouses, nurseries, golf greens, lawns and ornamental gardens, healthy and vigorous plants are established quickly.

**SOIL PREPARATION:** Know or otherwise work soil to a depth of 18 inches before fumigation is complete. Soil should be moist and friable. Fumigation should be done when soil is dry. An excess of water

will reduce the effectiveness of the fumigant. Temperature should be above 50° F. Meth-O-Gas can be applied to any soil type, but is most effective on transplants.

**EXPOSURE PERIOD:** Exposed to the fumigant for 96 hours after application is necessary for 1 lb. and 96 lb. cans. For 24 lb. cans, 48 hours will suffice.

**DOSAGE:** For most purposes, 1 lb. of Meth-O-Gas per 100 sq. ft. of soil is sufficient.

**WHEN TO PLANT:** For the most successful results, transplant seedlings to the soil 7 days after the fumigation has been completed.

**APPLICATION:** For the most effective results, use the following procedure: 1. Prepare soil to a depth of 18 inches. 2. Apply Meth-O-Gas to the soil by chisel application spaced 18 inches apart to a depth of 24-30 inches. 3. Cover with a 4 mil tarp and expose to fumigation for 96 hours. 4. Aerate 2 weeks before setting transplants in treated area.

**PREPARATION FOR APPLICATION:** To obtain the maximum control of *Armillaria mellea* (oak root fungus) and nematodes in grape vineyards, citrus groves, and all deciduous fruit tree orchards on a preplant or replant basis, Do not apply to soil where trees or vines will bear fruit within 24 months.

**DEEP INJECTION AUGER PROBE TREATMENT:** 36 inches or more below the surface of the soil will effectively control *Armillaria mellea* (oak root fungus) and nematodes in grape vineyards, citrus groves, and all deciduous fruit tree orchards. Use one pound of Meth-O-Gas per injection site in lighter soils and two pounds of Meth-O-Gas in firm, textured soils. Treat one acre of one acre site per 100 sq. ft. using a 10 mil x 1/2" drill pattern. With the injection in the center of the area to be treated.

**TREE AND VINE SITE FUMIGATION DIRECTIONS**

**CONTROL OF ARMILLARIA MELLEA (OAK ROOT FUNGUS) AND NEMATODES ON DECIDUOUS FRUITS, ALMONDS, CITRUS AND VINE YARDS:**

**PREPARATION FOR APPLICATION:** To obtain the maximum control of *Armillaria mellea* (oak root fungus) and nematodes in grape vineyards, citrus groves, and all deciduous fruit tree orchards on a preplant or replant basis, Do not apply to soil where trees or vines will bear fruit within 24 months. Apply with chisels spaced 18 inches apart to a depth of 6 to 8 inches. Seal fumigant with a drag or cultipacker immediately behind chisels. Apply at the rate of 1 lb. per 100 sq. ft. Cover with a 4 mil tarp and expose to fumigation for 96 hours. Will control disease to a depth of 4 feet. Aerate 2 weeks before setting transplants in treated area.

**CONTROL OF ARMILLARIA MELLEA (OAK ROOT FUNGUS) AND NEMATODES ON DECIDUOUS FRUITS, ALMONDS, CITRUS AND VINE YARDS:**

**DOSAGE AND METHOD OF APPLICATION:** This is a preplant or replant treatment. Crops which are planted in this treated soil will not have harvestable fruit for a period of at least 24 months. Methods and dosage of application are as follows:

1. After the soil has been properly prepared, inject 2 pounds of Meth-O-Gas per 100 sq. ft. by chisel application spaced 18 inches apart to a depth of 24-30 inches. Cover with a 4 mil polyethylene film seal. Will control *Armillaria mellea* (oak root fungus) and nematodes in grape vineyards, citrus groves, and all deciduous fruit tree orchards on a preplant or replant basis. Do not apply to soil where trees or vines will bear fruit within 24 months.

2. **DEEP INJECTION AUGER PROBE TREATMENT:** 36 inches or more below the surface of the soil will effectively control *Armillaria mellea* (oak root fungus) and nematodes in grape vineyards, citrus groves, and all deciduous fruit tree orchards. Use one pound of Meth-O-Gas per injection site in lighter soils and two pounds of Meth-O-Gas in firm, textured soils. Treat one acre of one acre site per 100 sq. ft. using a 10 mil x 1/2" drill pattern. With the injection in the center of the area to be treated.

**PREPARATION FOR APPLICATION:** To obtain the maximum control of *Armillaria mellea* (oak root fungus) and nematodes in grape vineyards, citrus groves, and all deciduous fruit tree orchards on a preplant or replant basis, Do not apply to soil where trees or vines will bear fruit within 24 months. Apply with chisels spaced 18 inches apart to a depth of 6 to 8 inches. Seal fumigant with a drag or cultipacker immediately behind chisels. Apply at the rate of 1 lb. per 100 sq. ft. Cover with a 4 mil tarp and expose to fumigation for 96 hours. Will control disease to a depth of 4 feet. Aerate 2 weeks before setting transplants in treated area.

**EXPOSURE PERIOD:** Exposed to the fumigant for 96 hours after application is necessary for 1 lb. and 96 lb. cans. For 24 lb. cans, 48 hours will suffice.

# METH-O-GAS

**ACTIVE INGREDIENT:**

Methyl bromide ..... 100%

**DANGER**

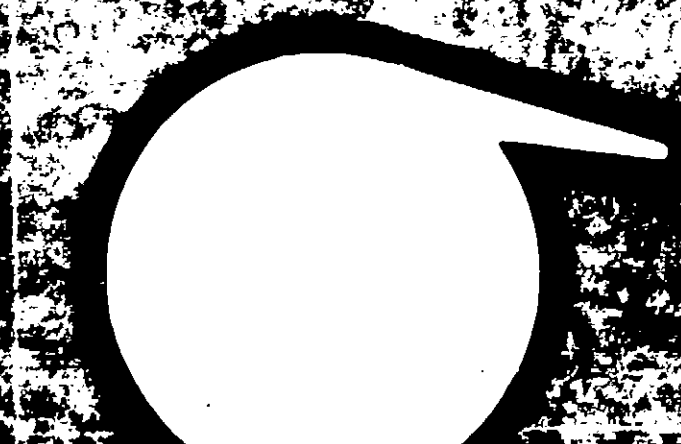
KEEP OUT OF REACH OF CHILDREN

POISON

NET WEIGHT

LBS

EPA



## GENERAL FUMIGATION DIRECTIONS

For specific information on dosage rates, insect problems, procedures, or safety precautions, consult Great Lakes Chemical Corporation.

This fumigant may be used in boxes, warehouses, fumigation vaults, food and cereal mills, ships and bulk grain storages. Do not fumigate if grain moisture is high, or if grain temperature is low (below 60 F.) or if there is excessive dockage.

**INSECTS CONTROLLED** — Granary weevil, grain beetle, rice weevil, cadelles, mites, bran bugs, grain borers, mealworms, Indian meal moth. Kills insects in all life stages. Kills rats and mice in the fumigated area.

**SPACE FUMIGATION** — The dosage rate for each 1000 cu. ft. will range from 1 to 3 lbs., 12 to 24 hours exposure, depending on tightness of structure and kind and amount of commodity in storage.

### BULK GRAIN DOSAGE RATES

(General above 65 F.)

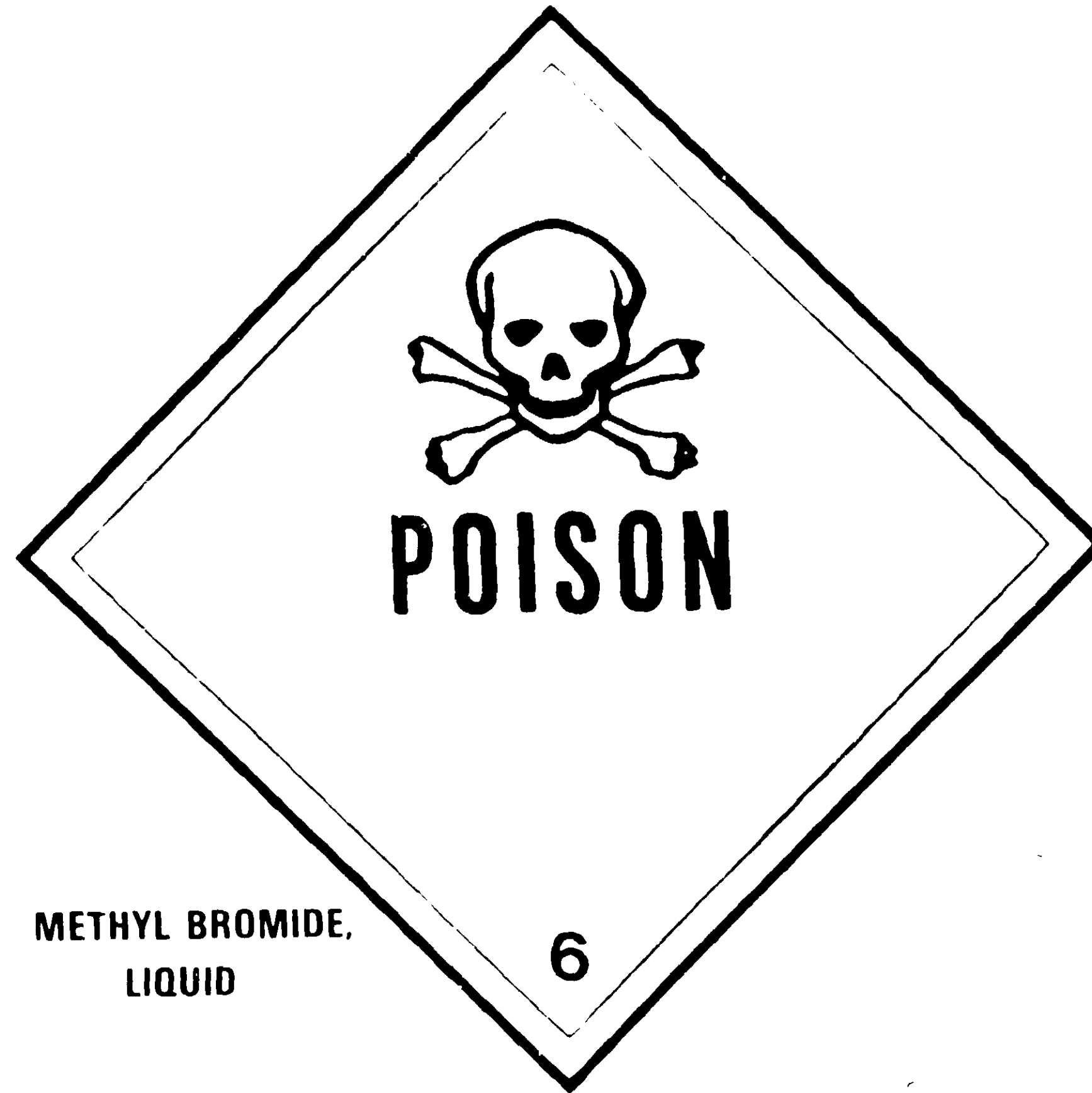
Shelled corn	2 lbs. each 1000 cu. ft.
Wheat (similar small grains)	3 lbs. each 1000 cu. ft.
Milo (gram sorghum)	4 lbs. each 1000 cu. ft.

Extinguish all flames, vacuolights, and glowing heating units to avoid corrosion.

Do not use dosages higher than recommended as this may, in some cases, result in more than excess of those permitted. Do not fumigate food products other than those specified in directions.

Remove the following materials from fumigation before fumigation as they may absorb and retain gas, reduce fumigant penetration, and create hot spots: oil-soaked materials, paint, leather articles, rubber goods, fur, containing compounds, or synthetic detergents.

The basic container for protection against vapors, vapors, and heat, and with a full face piece and airtight gaskets, and airtight opening for air flow after fumigation. Protective equipment can be purchased from suppliers approved by the U.S. Bureau of Mines. The halide level detector is necessary for the proper use of the



**METHYL BROMIDE,  
LIQUID**

**6**

**POISON**

**ANTIDOTE**

- Do not use in confined spaces.
- Do not use in areas where there is a possibility of fire or explosion.
- Do not use in areas where there is a possibility of frost or freezing.
- Do not use in areas where there is a possibility of rain or snow.
- Do not use in areas where there is a possibility of wind or strong currents.
- Do not use in areas where there is a possibility of high humidity.
- Do not use in areas where there is a possibility of low humidity.
- Do not use in areas where there is a possibility of high pressure.
- Do not use in areas where there is a possibility of low pressure.
- Do not use in areas where there is a possibility of high temperature.
- Do not use in areas where there is a possibility of low temperature.
- Do not use in areas where there is a possibility of high altitude.
- Do not use in areas where there is a possibility of low altitude.
- Do not use in areas where there is a possibility of high latitude.
- Do not use in areas where there is a possibility of low latitude.
- Do not use in areas where there is a possibility of high longitude.
- Do not use in areas where there is a possibility of low longitude.

#### SOIL FUMIGATION DIRECTIONS

The following are general instructions on the use of Meth O Gas for soil fumigation to be used as preplanting soil treatment in seed beds or transplant beds for the production of transplants only.

**SOIL FUMIGANT USES** Meth O Gas is an effective soil fumigant for the control of nematodes, weed seeds and certain soil borne disease causing fungi. In seed beds and potting soils it contributes to a maximum production of healthy, vigorous tobacco and vegetable transplants, nursery and forest tree seedlings. Where "ships," "cuttings," "spuds" or "seeds" are used as in greenhouses, nurseries, golf greens, lawns and ornamental gardens, healthy and vigorous rooting is established quickly. Consult Bulletin GLK 128 (Re: 1) for further use and safety information.

**SOIL PREPARATION** Plow or otherwise work soil to a fine tilth. Add fertilizer, manure or compost, work in well. Soil should be moist and friable for best results. Do not fumigate when soil is dry or excessively wet.

**WARNING** Do not fumigate when soil temperature is below 50° F. Meth O Gas use in vegetable beds is limited to the production of transplants only.

**EXPOSURE PERIODS** Expose for 48 hours when soil temperature is between 50° F. and 60° F. and for 24 hours when above 60° F.

**DOSAGE** For most purposes use 1 lb. of Meth O Gas for each 100 sq. ft. of soil to be treated.

**WHEN TO PLANT** After the exposure aerate soil for 3 days before seeding or 5 to 7 days before setting out vegetative growth.

**APPLICATION OF METH O GAS** The most effective method consists of conveying the liquid methyl bromide from the applicator

#### TREE AND VINE SITE FUMIGATION DIRECTIONS

**CITRUS SOIL FOR CONTROL OF PHYTOPHTHORA AND CITRUS NEMATODES IN FLORIDA SANDY SOILS** This is a preplant or replant treatment. Do not apply to soil where trees (or vines) will bear harvestable fruit within 24 months. Apply with chisels spaced 12 inches apart to a depth of 6 to 8 inches. Seal fumigant with a drag or cultipacker immediately behind chisels. Apply at the rate of 1 lb./100 sq. ft. Cover with a 4 mil tarp and expose to fumigation for 96 hours. Will control disease to a depth of 4 feet. Aerate 2 weeks before setting transplants in treated area.

**CONTROL OF ARMILLARIA MELLEAE (OAK ROOT FUNGUS) AND NEMATODES ON DECIDUOUS FRUITS, ALMONDS, CITRUS AND VINE YARDS**

**DOSAGE AND METHOD OF APPLICATION** This is a preplant or replant treatment. Crops which are planted in this treated soil will not have harvestable fruit for a period of at least 24 months. Methods and dosage of application are as follows:

1. After the soil has been properly prepared, inject 2 pounds of Meth O Gas per 100 sq. ft. by chisel application spaced 48 inches apart to a depth of 24-30 inches. Covered with adequate polyethylene film seal, it will control *Armillaria melleae* (oak root fungus) and nematodes in grape vineyards, citrus groves, and all deciduous fruit tree orchards on a preplant or replant basis. Do not apply to soil where trees or vines will bear fruit within 24 months.

2. **DEEP INJECTION AUGER PROBE TREATMENT:** 36 inches or more below the surface of the soil will effectively control *Armillaria melleae* (oak root fungus) and nematodes in grape vineyards, citrus groves, and all deciduous fruit tree orchards. Use one pound of Meth O Gas per injection site in lighter soils; two pounds of Meth O Gas in fine textured soils. There is one (1) injection site per 100 sq. ft. on a 10 ft. x 10 ft. grid pattern, with the injection in the center of the area to be treated.

**PREPARATION FOR APPLICATION** To obtain the maximum control of *Armillaria melleae*

# METH-O-GAS®

#### ACTIVE INGREDIENT:

Methyl bromide ..... 100%



**DANGER**

**KEEP OUT OF REACH OF CHILDREN**

**POISON**

DO NOT INHALE VAPORS • SEE ANTIDOTE & WARNINGS ON SIDE PANEL

NET WEIGHT \_\_\_\_\_ LBS.

EPA Reg No 5785 41 AA

#### GENERAL FUMIGATION DIRECTIONS

For specific information on dosage, uses, insect problems, procedures, or safety precautions consult Great Lakes Chemical Corporation.

This fumigant may be used in boxcars, ware houses, fumigation vaults, food and cereal mills, ships and bulk grain storages. Do not fumigate if grain moisture is high, or if grain temperature is low (below 60° F.) or if there is excessive damage.

**INSECTS CONTROLLED** Granary weevil, grain beetle, rice weevil, cadellies, mites, bran bugs, grain borers, mealworms, Indian meal moth. Kills insects in all life stages. Kills rats and mice in the fumigated area.

**SPACE FUMIGATION** The usual dosage rate for each 1000 cu. ft. will range from 1 to 3 lbs., 12 to 24 hours exposure depending on tightness of structure and kind and amount of commodity in storage.

**BULK GRAIN DOSAGE RATES**  
(General) above 65° F.  
Shelled corn 2 lbs. each 1000 cu. ft.  
Wheat (similar) 3 lbs. each 1000 cu. ft.  
small grains  
Milo (grain sorghum) 4 lbs. each 1000 cu. ft.

(A-11) Extinguish all flames with as pilot lights and glowing heating units to avoid corrosion.

Do not use dosages higher than recommended at the maximum temperature result in combustion.

rate for each 1000 cu. ft. will range from 1 to 3 lbs., 12 to 24 hours exposure, depending on tightness of structure and kind and amount of commodity in storage.

**BULK GRAIN DOSAGE RATES:**

(General) above 65° F.

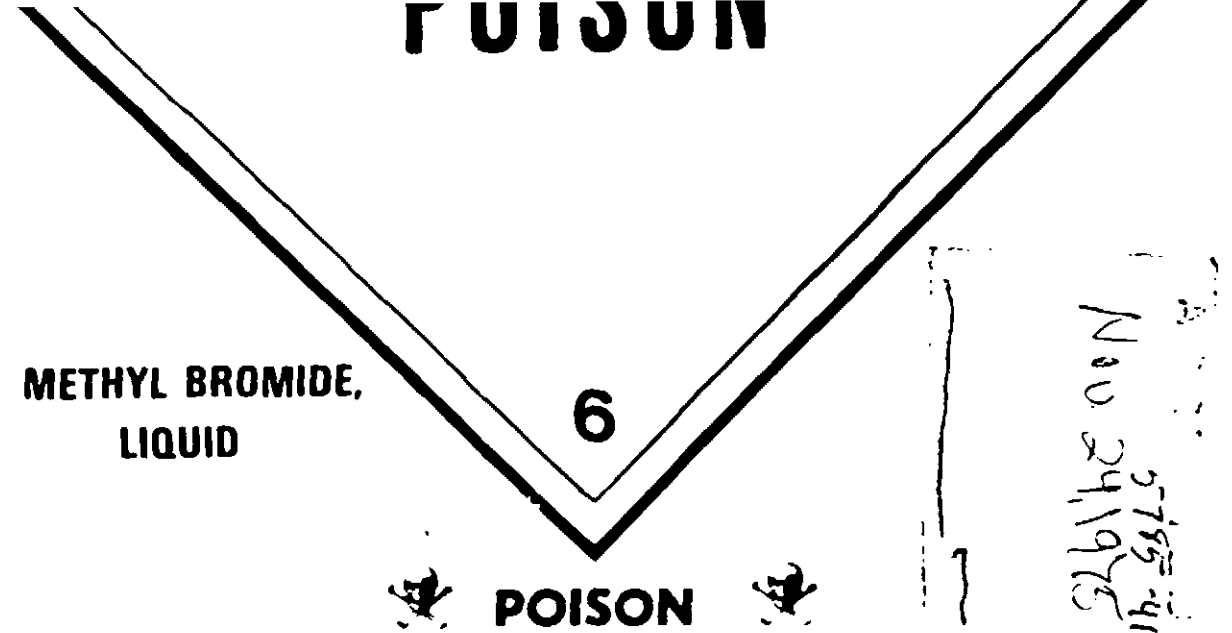
- Shelled corn 2 lbs. each 1000 cu. ft.
- Wheat (similar small grains) 3 lbs. each 1000 cu. ft.
- Milo (grain sorghum) 4 lbs. each 1000 cu. ft.

**CAUTION** Extinguish all flames such as pilot lights and glowing heating units to avoid corrosion.

Do not use dosages higher than recommended as this may in some cases result in residues in excess of those permitted. Do not fumigate food products other than those specified in directions.

Remove the following materials from building before fumigation as they may develop undesirable odors: furs, high protein flour and cereals, horsehair articles, iodized salt, patent leather articles, rubber goods, sulfur-containing compounds or synthetic detergents.

**WARNING** The black canister, for protection against organic vapors, should be used with a full-faced gas mask when releasing gas in buildings and when opening up for aeration after fumigation. Protective masks and canisters should be types approved by the U. S. Bureau of Mines. Use halide leak detector to determine thoroughness of aeration.



**METHYL BROMIDE,  
LIQUID**

**6**

**POISON**

**ANTIDOTE**

- Remove victim to fresh air immediately
- Keep victim lying down and warm
- Give artificial respiration if breathing has stopped
- Call a physician immediately

**DANGER**

Warning: Poisonous liquid and vapor

- Vapors can be fatal if inhaled
- Contact with methyl bromide can cause burns
- Do not get in eyes, on skin, or on clothing
- In case of contact wash skin thoroughly with soap and water for at least 15 minutes. Remove contaminated clothes and shoes immediately and thoroughly aerate before reuse
- Harmful or fatal if swallowed
- Get medical attention

**CAUTION**

- Be sure container is closed completely. Store in a cool, well ventilated place
- This product is toxic to fish and wildlife. Keep out of lakes, streams, or ponds. Apply this product only as specified on this label. Shipboard fumigation is regulated by the U.S. Coast Guard regulations 46 CFR 147A
- Empty cylinder should be returned freight collect to Great Lakes Chemical Corporation's location from which this shipment was made. If questions arise consult local sales office