

According to our records, the EPA
Registration No assigned to this product
is 8536-15.

RESTRICTED USE PESTICIDE

DUE TO ACUTE TOXICITY

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.

METHYL BROMIDE 100

COMMODITY FUMIGANT

ACTIVE INGREDIENTS

METHYL BROMIDE 100.0%

TOTAL 100.0%

ACCEPTED

22 SEP 1987

8536-15

UNDER THE FEDERAL INSECTICIDE
ACT OF 1947
EPA REGISTRATION NO. 8536-15
METHYL BROMIDE 100
COMMODITY FUMIGANT
EPA OFFICE OF PESTICIDE REGISTRATION
WASHINGTON, D.C. 20460


Front of Label

July 17, 1987

FRONT PANEL

Red

KEEP OUT OF REACH OF CHILDREN

DANGER  **PELIGRO**

POISON

PRECAUCION AL USUARIO: Si usted no lee Ingles, no use este producto hasta que la etiqueta le haya sido explicada ampliamente.

IN ALL CASES OF OVEREXPOSURE, GET MEDICAL ATTENTION IMMEDIATELY. TAKE PERSON TO A DOCTOR OR AN EMERGENCY TREATMENT FACILITY

STATEMENT OF PRACTICAL TREATMENT

IF INHALED: Get exposed person to fresh air. Keep warm. Make sure person can breathe freely. If breathing has stopped, give artificial respiration. Give oxygen if needed. Do not give anything by mouth to any unconscious person. Seek medical attention.

IF ON SKIN: Immediately remove contaminated clothing, shoes and other items covering the skin. Wash contaminated skin area thoroughly with soap and water.

IF IN EYES: Hold eyelids open and flush with a steady, gentle stream of water for at least 15 minutes.

NOTE TO PHYSICIAN: Early symptoms of overexposure are dizziness, headache, nausea and vomiting, weakness and collapse. Lung edema may develop in 2 to 48 hours after exposure, accompanied by cardiac irregularities; these effects are the usual cause of death. Repeated overexposures can result in blurred vision, staggering gait and mental imbalance, with probable recovery after a period of no exposure. Blood bromide levels suggest the occurrence, but not the degree, of exposure. Treatment is symptomatic.

See Side Panel For Additional Precautionary Statements

Red

Red Headings

Red Border



Soil
Chemicals
Corporation
PRODUCTS
for Pest
Management

P.O. Box 782
Halliwell, CA 95024

FRONT PANEL

E.P.A. EST. 8536-CA-1, 2, 3, 4-FL-1
E.P.A. REG. NO. 08536-00M-AA

NET CONTENTS..... LBS.

**PRECAUTIONARY STATEMENTS
HAZARD TO HUMANS
AND DOMESTIC ANIMALS:**

Very **DANGER**

**EXTREMELY HAZARDOUS LIQUID AND
VAPOR UNDER PRESSURE.**

**INHALATION MAY BE FATAL OR CAUSE
SERIOUS ACUTE ILLNESS OR DELAYED LUNG
OR NERVOUS SYSTEM INJURY.**

DO NOT BREATHE VAPORS.

**LIQUID OR EXCESSIVE VAPOR CAN CAUSE
SERIOUS SKIN OR EYE INJURY WHICH MAY
HAVE A DELAYED ONSET.**

**DO NOT GET LIQUID ON SKIN, IN EYES,
OR ON CLOTHING.**

**METHYL BROMIDE VAPOR IS ODORLESS AND NON-IRRITATING
TO SKIN AND EYES DURING EXPOSURE. EXPOSURE TO TOXIC
LEVELS MAY OCCUR WITHOUT WARNING OR DETECTION
BY THE USER.**

OBSERVE THE FOLLOWING PRECAUTIONS:

GENERAL PRECAUTIONS

1. Do not get in eyes, on skin, or on clothing.
2. Do not spill or discharge contents outside of areas confined for treatment.
3. Comply with all local regulations and ordinances.
4. It is advisable to supply your physician with information on Methyl Bromide. Literature is available from your dealer or from Soil Chemicals Corporation.
5. Obtain medical assistance at once in case of illness after exposure, and do not allow conditions which could accidentally cause further exposure until recovery is complete. (See Note to Physician.)

RESPIRATORY PROTECTION

If the concentration of methyl bromide in the working area, as measured by a direct-reading detector device (such as a Draeger gas detector) does not exceed 5 ppm (20 mg/cu.m), no respiratory protection is required. If this concentration is exceeded at any time, all persons in the fumigation area must wear protective clothing and a NIOSH/MSHA approved self-contained breathing apparatus (SCBA) or combination air-supplied/SCBA respirator (such as a U.S. Divers' Survivair or comparable device).

CLOTHING PRECAUTIONS

1. Wear loose clothing and socks that are cleaned after each wearing. Do not wear jewelry, gloves, or tight clothing when handling Methyl Bromide. It is heavier than air and may be trapped inside clothing and cause skin injury. If full-face respiratory protection is not required, wear goggles or full face shield for eye protection when handling liquid.
2. Following application, immediately remove clothing, shoes and socks. Do not reuse contaminated clothing or shoes until thoroughly cleaned and aerated. Drenched clothing cannot be adequately decontaminated.
3. Do not wear gloves of any type or rubber protective clothing or rubber boots.

WARNING SIGNS

1. The applicator must placard or post all entrances to the fumigated area with signs bearing in English and Spanish:
 - (1) The signal word DANGER/PELIGRO and the skull and crossbones symbol.
 - (2) The statement, "Area under fumigation. DO NOT ENTER/NO ENTRE"
 - (3) The date of fumigation.
 - (4) Name of fumigant used.
 - (5) Name, address, and telephone number of the applicator.
2. Do not remove a placard until the treated commodity is completely aerated. To determine whether aeration is complete, each fumigated site or vehicle must be monitored and shown to contain less than 5 ppm methyl bromide in the air space around and, when feasible, in the mass of the commodity. If less than 5 ppm methyl bromide is detected, the placard may be removed. However, if 5 ppm or greater methyl bromide is detected, the placard will be transferred with the commodity to the new site. Workers who transfer or handle fumigated commodities must be informed of appropriate measures to be taken. Entry into fumigated areas without respiratory protection to prevent exposures from exceeding 5 ppm or greater methyl bromide.
3. Boxes must be placarded with D O T specified warning signs. Warning signs are available from your dealer or Soil Chemicals Corporation.

SPILL OR LEAK PROCEDURE

1. Evacuate the immediate area of the spill or leak. Use SCBA or combination air-supplied SCBA respirator for entry into the affected area to correct problem. Move leaking or damaged cylinders or containers outdoors or to an isolated location observing strict safety precautions. Work upwind if possible. Allow spill to evaporate. Do not permit entry into spill area by unprotected persons until concentration of methyl bromide is determined to be less than 5 ppm (20 mg/cu.m).
2. Contaminated soil, water, and other cleanup debris is a toxic hazardous waste. Report spill to the National Response Center (800-424-8802) if the reportable quantity of 1000 lbs is exceeded.

PRECAUTIONS FOR COMMODITY USE**GENERAL PRECAUTIONS:**

1. Keep animals, children and unauthorized people away from area under treatment until area is certified free of Methyl Bromide. (See aeration statement.)
2. When used for fumigation of enclosed spaces containing commodities, persons trained in the use of this product must be present during introduction of the fumigant, initiation of aeration, and after aeration when testing for reentry. Two persons do not need to be present if monitoring is conducted remotely (outside the area being fumigated).
3. Do not fumigate with this product when commodity temperature is below 40 degrees F.
4. Whenever possible, apply Methyl Bromide from outside of structure or car being fumigated. Make sure the fumigated area is properly sealed and posted. Do not move trucks, trailers or vans during fumigation. They must be completely aerated before movement is allowed.

AERATION AND REENTRY:

1. After fumigation, treated areas must be aerated until the level of methyl bromide is below 5 ppm (20 mg/cu m).
2. Do not allow entry into the treated area by any person before this time unless loose clothing and a respiratory protection device (SCBA or combination air-supplied SCBA) is worn.

DIRECTIONS FOR USE

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

STORAGE AND DISPOSAL**STORAGE AND HANDLING:**

Store in dry, cool, well-ventilated area under lock and key. Post as a pesticide storage area. Do not contaminate water, food, or feed by storage. Persons moving or handling containers should wear protective clothing. Open container only in a well-ventilated area wearing protective clothing, and respiratory protection if necessary. Store cylinders upright, secured to a rack or wall to prevent tipping. Cylinders should not be subjected to rough handling or mechanical shock such as dropping, bumping, dragging, or sliding. Do not use rope slings, hooks, tongs, or similar devices to unload cylinders. Transport cylinders using hand truck, fork truck or other device to which the cylinder can be firmly secured. Do not remove valve protection bonnet and safety cap until immediately before use. Replace safety cap and valve protection bonnet when cylinder is not in use. When cylinder is empty, close valve, screw safety cap onto valve outlet, and replace protection bonnet before returning to shipper. Only the registrant is authorized to refill cylinders. Do not use cylinders for any other purpose. Follow registrant's instructions for return of empty or partially empty cylinder.

RETURN OF CYLINDERS:

Cylinders are the property of:

Soil Chemicals Corp.
8770 Hwy. 25
Foster, CA 95023

Soil Chemicals Corp.
1029 Railroad St.
Corona, CA 91720

and should be returned properly by collect auto freight. Do not ship cylinders without safety caps or valve protection bonnets. When a cylinder is partially full and there is no further requirement for the product, contact Soil Chemicals Corporation for return instructions.

SHIPPING:

This fumigant is classified in the U.S. Department of Transportation Hazardous Materials Regulations as Methyl Bromide Liquid or Methyl Bromide and Nonflammable, Non-liquefied compressed gas mixture, liquid, class "B" poison (inhalation hazard), and no exemptions from specifications, packaging, marking or labeling are allowed. Describe empty cylinders as having least contained Methyl Bromide Liquid or Methyl Bromide and Nonflammable, Non-liquefied compressed gas mixture, liquid (inhalation hazard). Do not ship with foods, feeds, or clothing.

DISPOSAL:

Do not contaminate water, food, or feed by storage or disposal. Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinse is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

GENERAL INSTRUCTIONS

THIS FUMIGANT IS A HIGHLY HAZARDOUS MATERIAL AND SHOULD BE USED ONLY BY INDIVIDUALS TRAINED IN ITS PROPER USE. BEFORE USING, READ AND FOLLOW ALL LABEL PRECAUTIONS AND DIRECTIONS. ALL PERSONS WORKING WITH THIS FUMIGANT SHOULD BE KNOWLEDGEABLE ABOUT THE HAZARDS AND TRAINED IN THE USE OF REQUIRED RESPIRATOR EQUIPMENT AND DETECTOR DEVICES, EMERGENCY PROCEDURES, AND PROPER USE OF THE FUMIGANT.

COMMODITY FUMIGATION

AREAS TO BE FUMIGATED: Under sealed tarpaulins, in flow mills, feed mills, spice mills, textile mills, warehouses, bays, fumigation vaults, flat or upright bulk grain storages, tobacco warehouses, and cargo ships.

INSECTS AND PESTS CONTROLLED:

| | | |
|--------------------------------|--------------------------|---------------------------------------|
| Granary Weevil | Dermeestes sp. | Pink Soil Worm |
| Red Weevil | Angoumois Grain Moth | Potato Tuber Moth |
| Confused and Red Flour Beetles | Naval Orange Worm | Mealy Bugs |
| Drug Store Beetle | Brachymerus sp. | Vegetable Miner |
| Colelets | Cowpea Weevil | Leaf Miner |
| Mealworms | Rusty Grain Beetle | Flour Moth |
| Rice Weevil | Merchant Grain Beetle | Pin Worms |
| Dried Fruit Beetle | European Corn Borer | Khopra Beetle |
| Rainbow Moth | Red Legged Ham Beetle | Trogoderma sp. |
| Almond Moth | European Pine shoot Moth | Anthrenus sp. |
| Indian Meal Moth | Tobacco Moth | Cigarette Beetle |
| Mediterranean Flour Moth | Japanese Beetle | Peach Twig Borer |
| Mites | Thrips | Lesser Grain Borer |
| Sweet Potato Weevil | Flint Grain Beetle | Red Weevil |
| Oriental Fruit Moth | Golden Nematode | Smoothed Grain Beetle |
| Corn Borer | Tobacco Beetle | Heavy Fungus Beetle |
| Rice and Bam | White Fungus Beetle | Fruit Flies of the family Tephritidae |
| Carpet Beetle | Bullflies | (quarantine species) |
| Warehouse Beetle | Aphids | Bamboo Shoot-hole Borer |
| | Olive Scale | |

PREPARATION FOR FUMIGATION:

- (1) Remove fresh fruit, seeds, bulbs and living plants from the area to be fumigated as they may be damaged during treatment. Certain food crops require fumigation at times, most of which are specified by certain quarantines. In such cases follow quarantine regulations, and fumigate only those products for which a tolerance for residual bromide has been established by the U.S. Food and Drug Administration.
 - (2) Do not fumigate food products other than those for which a residue tolerance is registered with the Environmental Protection Agency (E.P.A.).
 - (3) Do not use dosages higher than those recommended as this may, in some cases result in residues in excess of those permitted. Repeated fumigations may also result in excess residues.
 - (4) Do not fumigate grain if moisture is high, temperature is low (below 60° F) or there is excessive dockage.
- (5) Commodity to be fumigated should be covered with tarpaulins and sealed, or in the case of bays, buildings and cargo ships, all external openings should be closed. Seal building roof ventilation and chimneys by wrapping them with a tarpaulin, or plastic sheet, or by stopping the screened openings with a wide commercial masking tape. Stairways and interior doors should be closed. Any broken window panes should be replaced, then exterior doors and windows should be wedged tight, locked, and cracks caulked or taped. Check for cracks in the floor, roof and around eaves and seal them.

Special care should be taken to seal partitions to adjacent storages or work areas in buildings and ships. Adjoining buildings sharing a common wall should be cleaned before fumigation. If this is not feasible, spread a glassy type building paper, Suihrah or asphalt laminated paper, plastic film, or a heavily oiled Kraft or wrapping paper to prevent spread of the fumigant into undesired areas. In all such cases where the adjoining building or ship compartment is occupied, it should be checked frequently with a Holte detector during fumigation to insure the safety of the occupants.

FUMIGATION: Release Methyl Bromide through a heat exchanger or suitable leak proof tube (such as polyethylene) from a suitable structure. If it is necessary to release fumigant from inside of the structure, a gas meter or S.F. 8-A must be worn as described in the following Statements. Operate meter (or) for a minimum of 30 minutes after release to accelerate distribution of gas.

PROCEDURES**Ship****IMPORTANT**

Shipboard, intransit ship or shiphold fumigation is also governed by U.S. Coast Guard Regulations. Refer to and comply with these regulations prior to fumigation.

Prefumigation Procedures

- a. Prior to fumigating a vessel for intransit cargo fumigation, the master of the vessel or his representative, and the fumigator must determine whether the vessel is suitably designed and configured so as to allow for safe occupancy by the ship's crew throughout the duration of the fumigation. If it is determined that the design and configuration of the vessel does not allow for safe occupancy by the ship's crew throughout the duration of the fumigation, then the vessel will not be fumigated unless all crew members are removed from the vessel. The crew members will not be allowed to reoccupy the vessel until the vessel has been properly aerated and a determination has been made by the master of the vessel and the fumigator that the vessel is safe for occupancy.
- b. The person responsible for the fumigation must notify the master of the vessel or his representative, of the requirements relating to personal protection equipment*, detection equipment and that a person qualified in the use of this equipment must accompany the vessel with cargo under fumigation. Emergency procedures, cargo ventilation, periodic monitoring and inspection, and first aid measures must be discussed with and understood by the master of the vessel or his representative.
- c. During the fumigation or until a manned vessel leaves port or the cargo is aerated, the person in charge of the fumigation shall insure that a qualified person using gas or vapor detection equipment tests spaces adjacent to spaces containing fumigated cargo and all regularly occupied spaces for fumigation leakage. If leakage of the fumigant is detected, the person in charge of the fumigation shall take action to correct the leakage, or shall inform the master of the vessel, or his representative, of the leakage so that corrective action can be taken.
- d. If the fumigation is not completed and the vessel aerated before the manned vessel leaves port, the person in charge of the vessel shall insure that at least two units of personal protection equipment and one gas or vapor detection device, and a person qualified in their operation be on board the vessel during the voyage.

Precautions and Procedures During Voyage

If necessary to enter hold prior to discharge, test spaces directly above grain surface for fumigant concentration, using appropriate gas detection and personal safety equipment. Do not allow entry to fumigated areas without personal safety equipment, unless fumigant concentrations are at safe levels, as indicated by a suitable detector.

* Personal protection equipment means a gas mask or respirator for the fumigant, jointly approved by the Mining Enforcement and Safety Administration and the National Institute of Occupational Safety and Health.

RATE OF APPLICATION METHYL BROMIDE 100

| COMMODITY | Examples of Pests Controlled | Dose in lbs per 1000 cu ft | Exposure time in hours | Minimum temperature in ° F | Estimated* Aeration time in hrs and comments |
|--|---|----------------------------|------------------------|----------------------------|--|
| Beans & peas dry for example in a bin, blister beetle, weevils, sawflies | Indian meal moth | 2 | 24 | 60 | 12 |
| | Almond moth, cow, or weevil | 3 | 24 | 60 | |
| Candy | Indian meal moth, Sawtoothed grain beetle | 1.2 | 12-24 | 60 | 24 |
| Cereal bins (bagged) | Tobacco moth, Sawtoothed grain beetle | 1H | 12-24 | 60 | 12 |
| Fruit Dried for example Apple, apricot, date, fig, peach, pear, prunes, raisins | Indian meal moth, Almond moth, Dried fruit beetle | 1H | 12-24 | 50-58 | 60 |
| | Sawtoothed grain beetle | 1 | | | |
| Flour and cereal products (bags or kegs) | Flour beetles, Sawtoothed grain beetle, Indian meal moth | 1.2 | 12-24 | 60 | 24 |
| Grain Shelled corn | Indian meal moth, Angoumois grain moth, Granary weevil | 2 | 24 | 60 | 12 |
| Bales, Cans, Rice, Rye, Wheat | Flour beetles, Rice weevil, 3-toothed grain beetle | 2 | 24 | 60 | Use forced recirculation for both bins |
| Grain storage (Mto) | Lesser grain borer, Indian meal moth, Granary weevil | 4 | 24 | 60 | |
| Nuts Almond, Brazil, macadamia, filbert, chestnut, pecan, hickory, pistachio, cashew, walnut | Naval orange worm, Almond moth, Dried fruit beetle | 3H | 12-24 | 60 | 24 |
| Processed foods | Sawtoothed grain beetle, Cigarette beetle, Indian meal moth | 1.2 | 12-24 | 60 | |
| Tobacco Atmospheric | Tobacco moths | 2 | 48-72 | 45-70 | 24 |
| | Vermorel chamber | 4 | 4 | 70 | 4 |
| Hay (Alfalfa) | Sawtoothed grain beetle, Angoumois grain moth | 2 | 16-24 | 70 | 24 |
| Lumber | Lytinus or Powder post beetles | 2 | 24-36 | 60 | 12 |
| Mix, such as burley bags, wood shales | Indian meal moth, Lytus or Powder post beetles | 3-4 | 24 | 60 | |
| Cotton and Cotton seed Targeted fumigation | Indian meal moth | 3 | 24 | 60 | 12-24 |
| | Vermorel chamber | Cigarette beetle | 4 | 4 | 60 |
| Dog feed | Indian meal moth, Cigarette beetle | 1.2 | 12-24 | 60 | 48 |
| Food stores | Mites, thrips | 6 | | 60 | 3 |
| Fresh fruits and vegetables* | Fruit flies | 4H | | 60 | 24 |

* Fumigate only fruits and vegetables for which tolerances have been established.

Spaces Containing Commodities

| | | | | | |
|--------------------------|-------------------------|-----|-------|----|----|
| Buildings, warehouses | Indian meal moth | | | | |
| Flour mills, food stores | Warehouse beetle | | | | |
| Shipping plants | Sawtoothed grain beetle | 2-3 | 16-24 | 40 | 12 |
| | | 1-2 | 16-24 | 60 | 12 |
| Less than 100,000 cu ft | | 1 | 16-24 | 60 | 12 |
| 100,000 to 500,000 cu ft | | 2 | 16-24 | 40 | 12 |

NOTE: The above dosages are for insect control. For rodents, rats, moles, and other warm-blooded animals, 1 lb./1000 cu. ft. with six hours exposure should be sufficient. At temperatures below 60° F. (15.5° C.) the dosages should be increased by 1 lb. (227 g.) per thousand cubic feet (28.3 cu. meters) for every 10° F. (5.5° C.) drop in temperature.

Box Cars

Fumigants static can only do NOT fumigate in transit

| | | | | | |
|--------------------------|--|-------------|----------|-----------------------|---|
| Steel | Sawtoothed grain beetle | 3-3 1/2 | 16-24 | 60 | 4 |
| Wood | Flour beetles, Indian meal moths | 3 1/2-4 1/2 | 16-24 | 60 | 4 |
| Vans, Trailers** | Sawtoothed grain beetles Flour beetles, Indian meal moths | 1-3 | 16-24 | 60 | 4 |
| Vacuum chambers | Sawtoothed grain beetles Flour beetles, Indian meal moths | 1-2 | 3 | 60 | 4 |
| Large Ships | Sawtoothed grain beetles Flour beetles, Indian meal moths | 1 | 10 12 | 60 and above 50-59 | |
| Do Not fumigate Underway | Sawtoothed grain beetles Flour beetles, Indian meal moths | 1-5 | 12 | 40-49 | |

* Aeration time can be shortened if the fumigated area is determined to be free of Methyl Bromide by a suitable Methyl Bromide detector. If no aeration time is given in table, a suitable Methyl Bromide detector must be used to determine when aeration is completed. Aerate products 48 hours before offering to consumer.

** Do not move trucks, vans, or trailers during fumigation. They must be completely aerated before movement is resumed.

AERATION AND REENTRY

At the end of the exposure period, remove all seals and open all doors and windows that are operational. Allow for complete ventilation. Use ventilation fans whenever possible to remove fumigant from dead air pockets.

After fumigation, treated areas must be aerated until the level of methyl bromide is below 5 ppm. Do not allow entry into the treated area by any person before this time unless provided with loose clothing and a respiratory protection device (SCBA or combination air-supplied SCBA).

Certain materials absorb Methyl Bromide during fumigation, and desorption during aeration may call for extended monitoring and aeration periods.

DRAEGER GAS DETECTOR, BENDIX GASTECH DETECTOR

Hand Pump and Detector Tube: Methyl Bromide may be detected at the Threshold Limit Value (T.L.V.) of 5 ppm. Detectors are available from Soil Chemicals Corporation.

HALIDE LAMP DETECTOR

Color of the flame is an index of the concentration of Methyl Bromide present. The following tabulated information provides an index of flame color and concentration of Methyl Bromide present.

| METHYL BROMIDE P.P.M. | LB./1000 CU. FT. | FLAME COLOR IN DAYLIGHT* |
|--------------------------|------------------|-----------------------------|
| 0 | 0 | None |
| 25 | 0.00625 | None |
| 50 | 0.0125 | Moderate Green |
| 125 | 0.031 | Green |
| 250 | 0.0625 | Strong Green |
| 500 | 0.125 | Strong Blue-Green Fringe |
| 800 | 0.20 | Strong Blue-Green |
| 1000 | 0.25 | Blue |

* Night-time color is identical, but allowance must be made for the bluish cast of the flame itself.

Halide lamp detector is suitable for locating leaks and for determining extent of aeration down to approximately 50 ppm. It is not suitable for clearing a structure for reentry.

WARRANTY

NOTICE: Seller warrants that the product conforms to its chemical description and is reasonably fit for the purposes stated on the label when used in accordance with directions under normal conditions of use, but neither this warranty nor any other warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE, express or implied, extends to the use of this product contrary to label instructions, or under abnormal conditions, or under conditions not reasonably foreseeable to seller, and buyer assumes the risk of any such use.