

**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 INGREDIENT:**

METHYL BROMIDE	100.0%
TOTAL	100.0%

This product weighs 14.4 pounds per gallon.

SPECIMEN

**KEEP OUT OF REACH OF CHILDREN**

**DANGER**  **PELIGRO**

**POISON**

PELIGRO: Si Usted no entiende la etiqueta, busque a alguien para que se la explique a Usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

**IN ALL CASES OF OVEREXPOSURE  
GET MEDICAL ATTENTION IMMEDIATELY.  
TAKE PERSON TO A DOCTOR OR TO 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 overexposure 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.**

**ACCEPTED**

SEP 9 1995

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended for the purpose of the FIFRA Act of 1974

8536-15



Soil  
Chemicals  
Corporation  
PRODUCTS

P.O. BOX 782 • HOLLISTER, CA 95024

E.P.A. EST. 8536-CA-1, 2, 3, 4; FL-1  
E.P.A. REG. NO. 8536-15

NET CONTENTS ..... LBS.

# BEST COPY AVAILABLE

PRECAUTIONARY STATEMENTS  
HAZARD TO HUMANS  
AND DOMESTIC ANIMALS:

**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.

**AIR CONCENTRATION LEVEL**

The acceptable air concentration level for persons exposed to methyl bromide is 5 ppm (20 mg/m<sup>3</sup>), except that for entry into residential and commercial structures the acceptable air concentration level is 3 ppm. The air concentration level is measured by a direct reading detection device, such as a Matheson-KiGawa.

**PERSONAL PROTECTIVE EQUIPMENT**

Applicators and other handlers must wear:  
Loose-fitting or well-ventilated long-sleeved shirt and long pants  
Shoes and socks  
Full-face shield or safety glasses with brow and temple shields (DO NOT wear goggles).  
When the acceptable air concentration level is above 5 ppm and a respirator is required, protect the eyes by wearing a full-face respirator.  
No respirator is required if the air concentration level of methyl bromide in the working area is measured to be less than 5 ppm.  
A respirator is required if the acceptable air concentration level of 5 ppm for methyl bromide is exceeded at any time. The respirator must be one of the following types: (a) a supplied air respirator (MSHA/NIOSH approval number prefix TC-19C OR (b) a self-contained breathing apparatus (SCBA) (MSHA/NIOSH approval number TC-12F).

**WORK SAFETY REQUIREMENTS**

- Do not wear jewelry, gloves, goggles, tight clothing, rubber protective clothing, or rubber boots when handling. Methyl bromide is heavier than air and can be trapped inside clothing and cause skin injury.
- If liquid fumigant splashes or spills on clothing, remove them at once, as fumes will be an intolerable source of irritation.
- Immediately after decontamination, remove outer clothing, shoes, and socks and do not reuse until thoroughly rinsed or ventilated. Keep such clothing and shoes outdoors until thoroughly aerated. Then follow the PPE manufacturer's instructions for cleaning/maintaining PPE. If there are no such instructions for washables, use a detergent and hot water. Keep and wash PPE and work clothing separately from other laundry.
- Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product. Do not reuse them.
- Follow PPE manufacturer's instructions for cleaning/maintaining protective eyewear and respirators.

**USER SAFETY RECOMMENDATIONS**

- Users should:
- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
  - Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
  - Remove PPE immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing.

**OBSERVE THE FOLLOWING PRECAUTIONS**

**GENERAL PRECAUTIONS**

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

See Precautions Continued in Third Column

**PRECAUTIONS FOR COMMODITY USE**

**GENERAL PRECAUTIONS:**

- When used for fumigation of enclosed spaces (houses and other structures, warehouses, vaults, chambers, greenhouses, trucks, vans, boxcars, ships, and other transport vehicles, and tarpaulin-covered areas), two 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).
- Do not fumigate with this product when the temperature is below 40 degrees F.
- 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:**

- After fumigation, fumigated areas must be aerated until the air concentration level of methyl bromide is measured to be less than 5 ppm (3 ppm for residential and commercial structures).
- Until the acceptable air concentration level is reached, do not allow any person to enter into the fumigated area unless he/she is wearing the personal protective equipment (including prescribed respirator) specified in the Hazards to Humans section of this labeling. In greenhouses, additional Worker Protection Standard restrictions apply.
- For residential and commercial structural fumigations, specific USEPA instructions as detailed elsewhere in this product label and supplemental manual must be strictly followed.

**SPILL AND LEAK PROCEDURES FOR ENCLOSED SPACE**

**FUMIGATION:** Evacuate everyone from the immediate area of the spill or leak. For entry into the fumigated area to correct problem, wear the personal protective equipment (including prescribed respirator) specified in the Hazards to Humans section of this labeling. Move leaking or damaged containers outdoors or to an isolated location. Observe strict safety precautions. Work upward, if possible. Allow spilled fumigant to evaporate. Only correctly trained and PPE-equipped handlers are permitted to perform such cleanup. Do not permit entry into the spill or leak area by any other person until the air concentration level of methyl bromide is measured to be less than 5 ppm.

Contaminated soil, water, and other cleanup debris is a toxic hazardous waste. Report spill to the National Response Center (800-424-8602) if the reportable quantity of 1000 lbs. is exceeded.

**ENVIRONMENTAL HAZARD**

This pesticide is toxic to wildlife. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public waters unless this product is specifically identified and addressed in an NPDES permit. Do not discharge effluent containing this product to sewer systems without previously notifying the sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

Monitor area immediately surrounding the fumigation site with a halide detector during exposure and aeration periods to establish that dangerous levels of the fumigant are not present (see Aeration Statement for Halide Detector use). The high volatility of the fumigant permits it to be vented from space being fumigated and to dissipate rapidly with no hazard to surrounding areas with correct monitoring.

**CHEMICAL HAZARD**

Methyl bromide is practically nonflammable. There is no danger from fire or explosion in use concentrations. However, fumes can change the chemical to produce some corrosive damage to items in the space being fumigated. Pilot lights and glowing wire heaters should be turned off.

Do not apply gas directly to metal surfaces because of possible corrosive effect on certain metals. Do not use containers or application equipment made of magnesium, aluminum, or their alloys.

The following materials can develop an undesirable odor when encountered in structural fumigation and should be removed from the space being fumigated:

- Feedstuffs: (a) iodized salt; (b) Full-fat soya flour; (c) Any kinds of materials that contain reactive sulfur compounds, such as some soap powders, some baking sodas, and some salt blocks used for cattle licks.
- Carish rubber goods: (a) sponge rubber; (b) Foam rubber, as in rug padding, pillows, cushions, and mattresses; (c) Rubber stamps and other similar forms of reclaimed rubber.
- Furs, horsehair, and pillows (especially leather pillows).
- Leather goods (particularly white kid or any other leather goods tanned with sulfur processes).
- Woolens (extreme caution should be used in the fumigation of any angora woolsens, and some adverse effect has been noted on the fumigation of woolen suits, coats, blankets, hand-knit woolen socks, sweaters, shawls, and woolen yarn).
- Vacuum rayons (those rayons processed or manufactured by a process in which carbon bisulfide is used).
- Paper: (a) Silver-polishing papers; (b) Certain writing papers cured by sulphide processes; (c) Carbonless paper or Blue-prints.
- Photographic chemicals as used in photo processing darkrooms (does not include camera film).
- Cinder blocks, or mixed concrete which occasionally picks up odors.
- Any materials that may contain reactive sulfur compounds. THESE PRODUCTS MAY HINDER EFFECTIVENESS OF THE FUMIGANT: Charcoal materials (charcoal absorbs the methyl bromide, reducing the effective concentration and continuing the charcoal).
- If there is a question whether a material may develop an odor, a test fumigation may be run with a small quantity of the material).

**BEST COPY AVAILABLE**

**PRECAUTIONS FOR COMMODITY USE****GENERAL PRECAUTIONS:**

1. When used for fumigation of enclosed spaces (houses and other structures, warehouses, vaults, chambers, greenhouses, trucks, vans, boxcars, ships, and other transport vehicles, and tarpaulin-covered areas), two 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).
2. Do not fumigate with this product when the temperature is below 40 degrees F.
3. 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, fumigated areas must be aerated until the air concentration level of methyl bromide is measured to be less than 5 ppm (3 ppm for residential and commercial structures).
2. Until the acceptable air concentration level is reached, do not allow any person to enter into the fumigated area unless he/she is wearing the personal protective equipment (including prescribed respirator) specified in the Hazards to Humans section of this labeling. In greenhouses, additional Worker Protection Standard restrictions apply.
3. For residential and commercial structural fumigations, specific USEPA instructions as detailed elsewhere in this product label and supplemental manual must be strictly followed.

**SPILL AND LEAK PROCEDURES FOR ENCLOSED SPACE**

**FUMIGATION:** Evacuate everyone from the immediate area of the spill or leak. For entry into affected area to correct problem, wear the personal protective equipment (including prescribed respirators) specified in the Hazards to Humans section of this labeling. Move leaking or damaged containers outdoors or to an isolated location. Observe strict safety precautions. Work upwind, if possible. Allow spilled fumigant to evaporate. Only correctly trained and PPE-equipped handlers are permitted to perform such cleanup. Do not permit entry into the spill or leak area by any other person until the air concentration level of methyl bromide is measured to be less than 5 ppm.

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.

**ENVIRONMENTAL HAZARD**

This pesticide is toxic to wildlife. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public waters unless this product is specifically identified and addressed in an NPDES permit. Do not discharge effluent containing this product to sewer systems without previously notifying the sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

Monitor area immediately surrounding the fumigation site with a halide detector during exposure and aeration periods to establish that dangerous levels of the fumigant are not present (see Aeration Statement for Halide Detector use). The high volatility of the fumigant permits it to be vented from space being fumigated and to dissipate rapidly with no hazard to surrounding areas with correct monitoring.

**CHEMICAL HAZARD**

Methyl bromide is practically nonflammable. There is no danger from fire or explosion in use concentrations. However, flame can change the chemical to produce some corrosive damage to items in the space being fumigated. Pilot lights and glowing wire heaters should be turned off.

Do not apply gas directly to metal surfaces because of possible corrosive effect on certain metals. Do not use containers or application equipment made of magnesium, aluminum, or their alloys.

The following materials can develop an undesirable odor when encountered in structural fumigation and should be removed from the space being fumigated:

1. Foodstuffs: (a) Iodized salt; (b) Full-fat soya flour; (c) Any kinds of materials that contain reactive sulfur compounds, such as some soap powders, some baking sodas, and some salt blocks used for cattle licks.
2. Certain rubber goods: (a) sponge rubber; (b) Foam rubber, as in rug padding, pillows, cushions, and mattresses; (c) Rubber stamps and other similar forms of reclaimed rubber.
3. Furs, horsehair, and pillows (especially leather pillows).
4. Leather goods (particularly white kid or any other leather goods tanned with sulfur processes).
5. Woolens (extreme caution should be used in the fumigation of any angora wools, and some adverse effect has been noted on the fumigation of woolen suits, coats, blankets, hand-knit woolen socks, sweaters, shawls, and woolen yarn).
6. Viscose rayons (those rayons processed or manufactured by a process in which carbon bisulfide is used).
7. Paper: (a) Silver-polishing papers; (b) Certain writing papers cured by sulphate processes; (c) Carbonless paper or Blue-prints.
8. Photographic chemicals as used in photo processing darkrooms (does not include camera film).
9. Cinder blocks, or mixed concrete which occasionally picks up odors.
10. Any materials that may contain reactive sulfur compounds. **THESE PRODUCTS MAY HINDER EFFECTIVENESS OF THE FUMIGANT:** Charcoal materials (charcoal absorbs the methyl bromide, reducing the effective concentration and containing the fumigant).
11. If there is a question whether a material may develop an odor, a test fumigation may be run with a small quantity of the material).

**BEST COPY AVAILABLE**

**STORAGE AND DISPOSAL**

**STORAGE AND HANDLING:** Store in a secure manner, either outdoors under ambient conditions or indoors in a well ventilated area. Post as a pesticide storage area. Do not contaminate water, food, or feed by storage. Persons moving, handling, or opening containers must wear the personal protective equipment (including prescribed respirators when necessary) specified in the Hazards to Humans section of this labeling. Open container only in a well-ventilated area. 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 striking. Do not use rope slings, hooks, lings, or similar devices to unload cylinders. Transport cylinders using hand truck, forklift 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 cylinders.

**RETURN OF CYLINDERS:** Cylinders are the property of:  
 Sol Chemicals Corporation      Sol Chemicals Corporation  
 8770 Highway 25                      2060 East 220th Street  
 Hollister, CA 95023                  Long Beach, CA 90810

and should be returned promptly 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 the company for return instructions.

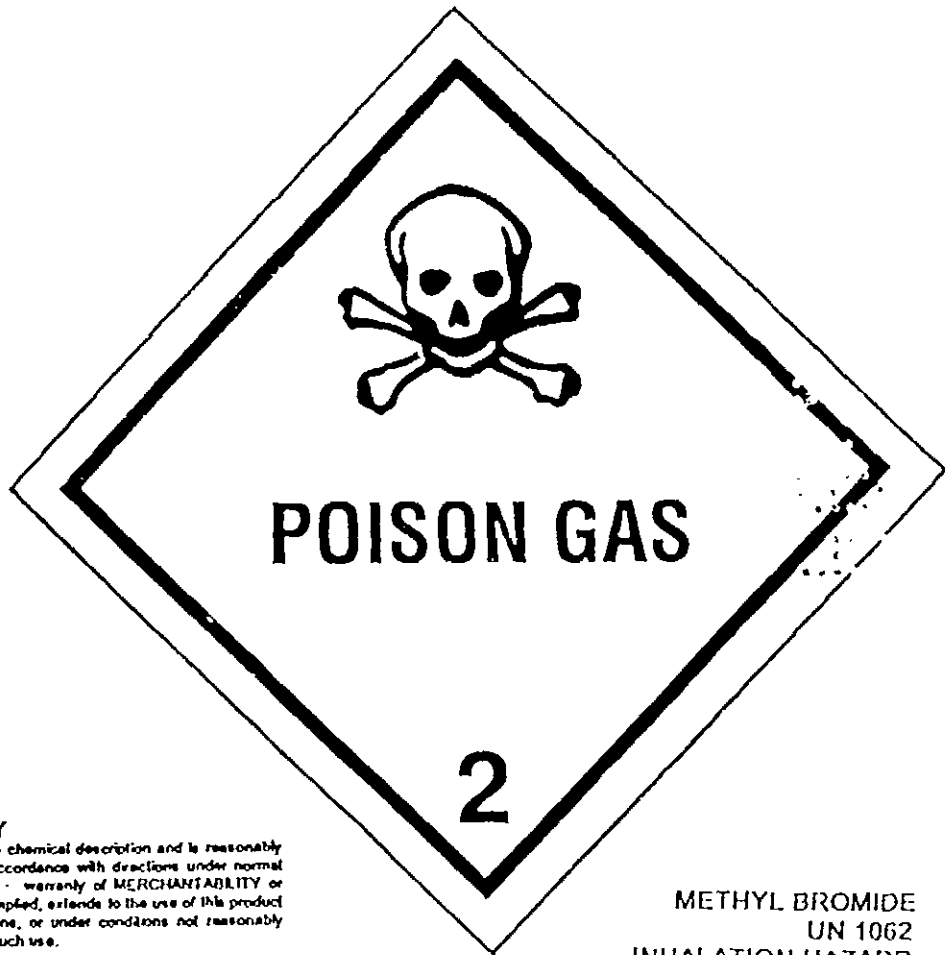
**SHIPPING:** This fumigant is classified in the U.S. Department of Transportation Hazardous Materials Regulations as Methyl Bromide, 2.3, UN 1062, Poison-Inhalation Hazard, Hazard Zone C and no exemptions from specifications, packaging, marking, or labeling are allowed. Describe empty cylinders as having last contained Methyl Bromide (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 rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instruction, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

**AGRICULTURAL USE REQUIREMENTS**

Use this product only in accordance with its labeling and with the Worker Protection Standard, 43 CFR 170. Refer to supplemental labeling under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.

ACCEPTED  
 SEP - 9 1995  
 This fumigant is registered under the FIFRA Act, as amended, for the use as a registered fumigant.  
 CA Reg No. 8236-15



**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 instruction, or under abnormal conditions, or under conditions not reasonably foreseeable to seller, and buyer assumes the risk of any such use.

CA April, 1994

MP-23969

METHYL BROMIDE  
 UN 1062  
 INHALATION HAZARD

**BEST COPY AVAILABLE**

**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 INGREDIENT:  
METHYL BROMIDE 100.0%  
TOTAL 100.0%  
This product weighs 14.4 pounds per gallon.

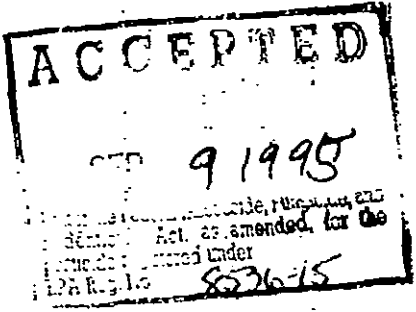


Soil  
Chemicals  
Corporation  
PRODUCTS


P.O. BOX 782 • HOLLISTER, CA 95024

E.P.A. EST. 8536-CA-1, 2, 3, 4; FL-1  
E.P.A. REG. NO. 8536-15

NET CONTENTS ..... LBS.



**KEEP OUT OF REACH OF CHILDREN**

**DANGER**  **PELIGRO**

**POISON**

PELIGRO: Si Usted no entiende la etiqueta, busque a alguien para que se la explique a Usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

**IN ALL CASES OF OVEREXPOSURE  
GET MEDICAL ATTENTION IMMEDIATELY.  
TAKE PERSON TO A DOCTOR OR TO 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 overexposure 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 Slide Panel For Additional Precautionary Statements.

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

**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.

**AIR CONCENTRATION LEVEL**

The acceptable air concentration level for persons exposed to methyl bromide is 5 ppm (20 mg/m<sup>3</sup>), except that for entry into residential and commercial structures the acceptable air concentration level is 3 ppm. The air concentration level is measured by a direct reading detection device, such as a Matheson-Kragawa.

**PERSONAL PROTECTIVE EQUIPMENT**

Applicators and other handlers must wear:  
Loose-fitting or well-ventilated long-sleeved shirt and long pants  
Shoes and socks  
Full-face shield or safety glasses with brow and temple shields (DO NOT wear goggles).  
When the acceptable air concentration level is above 5 ppm and a respirator is required, protect the eyes by wearing a full-face respirator.  
No respirator is required if the air concentration level of methyl bromide in the working area is measured to be less than 5 ppm.  
A respirator is required if the acceptable air concentration level of 5 ppm for methyl bromide is exceeded at any time. The respirator must be one of the following types: (a) a supplied air respirator (MSHA/NIOSH approval number prefix TC-19C OR (b) a self-contained breathing apparatus (SCBA) (MSHA/NIOSH approval number TC-12F).

**WORK SAFETY REQUIREMENTS**

1. Do not wear jewelry, gloves, goggles, tight clothing, rubber protective clothing, or rubber boots when handling. Methyl bromide is heavier than air and can be trapped inside clothing and cause skin injury.
2. If liquid fumigant splashes or spills on clothing, remove them at once, as fumes will be an intolerable source of irritation.
3. Immediately after contamination, remove outer clothing, shoes, and socks and do not reuse until thoroughly aerated or vented. Keep such clothing and shoes outdoors until thoroughly aerated. Then follow the PPE manufacturer's instructions for cleaning/maintaining PPE. If there are no such instructions for washables, use detergent and hot water. Keep and wash PPE and work clothing separately from other laundry.
4. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product. Do not reuse them.
5. Follow PPE manufacturer's instructions for cleaning/maintaining protective eyewear and respirators.

**USER SAFETY RECOMMENDATIONS**

- Users should:
- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
  - Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
  - Remove PPE immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing.

**OBSERVE THE FOLLOWING PRECAUTIONS**

**GENERAL PRECAUTIONS**

1. Do not get in eyes, on skin, or on clothing.
2. Do not spit or discharge contents outside of area 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 distributor.
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.)

See Precautions Continued in Third Column

**PRECAUTIONS FOR COMMODITY USE**

**GENERAL PRECAUTIONS:**

1. When used for fumigation of enclosed spaces (houses and other structures, warehouses, vaults, chambers, greenhouses, trucks, vans, boxcars, ships, and other transport vehicles, and tarpaulin-covered areas), two 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).
2. Do not fumigate with this product when the temperature is below 40 degrees F.
3. 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, fumigated areas must be aerated until the air concentration level of methyl bromide is measured to be less than 5 ppm (3 ppm for residential and commercial structures).
2. Until the acceptable air concentration level is reached, do not allow any person to enter into the fumigated area unless he/she is wearing the personal protective equipment (including prescribed respirator) specified in the Hazards to Humans section of this labeling. In greenhouses, additional Worker Protection Standard restrictions apply.
3. For residential and commercial structural fumigations, specific USEPA instructions as detailed elsewhere in this product label and supplemental manual must be strictly followed.

**SPILL AND LEAK PROCEDURES FOR ENCLOSED SPACE**

**FUMIGATION:** Evacuate everyone from the immediate area of the spill or leak. For entry into affected area to correct problem, wear the personal protective equipment (including prescribed respirators) specified in the Hazards to Humans section of this labeling. Move leaking or damaged containers outdoors or to an isolated location. Observe strict safety precautions. Work upwind, if possible. Allow spilled fumigant to evaporate. Only correctly trained and PPE-equipped handlers are permitted to perform such cleanup. Do not permit entry into the spill or leak area by any other person until the air concentration level of methyl bromide is measured to be less than 5 ppm.

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 lb. is exceeded.

**ENVIRONMENTAL HAZARD**

This pesticide is toxic to wildlife. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public waters unless this product is specifically identified and addressed in an NPDES permit. Do not discharge effluent containing this product to sewer systems without previously notifying the sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

Monitor area immediately surrounding the fumigation site with a halide detector during exposure and aeration periods to establish that dangerous levels of the fumigant are not present (see Aeration Statement for Halide Detector use). The high volatility of the fumigant permits it to be vented from space being fumigated and to dissipate rapidly with no hazard to surrounding areas with correct monitoring.

**CHEMICAL HAZARD**

Methyl bromide is practically nonflammable. There is no danger from fire or explosion in use concentrations. However, flame can change the chemical to produce some corrosive damage to items in the space being fumigated. Pilot lights and glowing wire heaters should be turned off.

Do not apply gas directly to metal surfaces because of possible corrosive effect on certain metals. Do not use containers or application equipment made of magnesium, aluminum, or their alloys.

The following materials can develop an undesirable odor when encountered in structural fumigation and should be removed from the space being fumigated:

1. Foodstuffs: (a) iodized salt; (b) Full-fat soya flour; (c) Any kinds of materials that contain reactive sulfur compounds, such as some soap powders, some baking sodas, and some salt blocks used for cattle licks.
2. Certain rubber goods: (a) sponge rubber; (b) foam rubber, as in rug padding, pillows, cushions, and mattresses; (c) Rubber stamps and other similar forms of reclaimed rubber.
3. Furs, horse-hair, and pillows (especially leather pillows).
4. Leather goods (particularly white kid or any other leather goods tanned with sulfur processes).
5. Woolens (extreme caution should be used in the fumigation of any angora woolsens, and some adverse effect has been noted on the fumigation of woolen suits, coats, blankets, hand-knit woolen socks, sweaters, shawls, and woolen yarn).
6. Viscose rayons (those rayons processed or manufactured by a process in which carbon bisulfide is used).
7. Paper: (a) Silver-polishing papers; (b) Certain writing papers cured by sulphide processes; (c) Carbonless paper or blue-prints.
8. Photographic chemicals as used in photo processing darkrooms (does not include camera film).
9. Cinder blocks, or mixed concrete which occasionally picks up odors.
10. Any materials that may contain reactive sulfur compounds. THESE PRODUCTS MAY HINDER EFFECTIVENESS OF THE FUMIGANT: Charcoal materials (charcoal absorbs the methyl bromide, reducing the effective concentration and contaminating the charcoal).
11. If there is a question whether a material may develop an odor, a test fumigation may be run with a small quantity of the material.

**STORAGE AND DISPOSAL**

**STORAGE AND HANDLING:** Store in a secure manner either outdoors under ambient conditions or indoors in a well ventilated area. Post as a pesticide storage area. Do not contaminate water, food, or feed by storage. Persons moving, handling, or opening containers must wear the personal protective equipment (including prescribed respirators when necessary) specified in the Hazards to Humans section of this labeling. Open container only in a well ventilated area. 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, lugs, 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 Corporation	Soil Chemicals Corporation
8770 Highway 25	2060 East 220th Street
Hollister, CA 95023	Long Beach, CA 90810

and should be returned promptly 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 the company for return instructions.

**SHIPPING:** This fumigant is classified in the U.S. Department of Transportation Hazardous Materials Regulations as Methyl Bromide, 2.3, UN 1062, Poison-Inhalation Hazard, Hazard Zone C and no exemptions from specifications, packaging, marking, or labeling are allowed. Describe empty cylinders as having last contained Methyl Bromide (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 rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instruction, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

**DIRECTIONS FOR USE**

It is a violation of Federal Law to use this product in any 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.

**PLACARDING OF FUMIGATED AREAS**

The applicator (or supervisor of the application) must placard all entrances to the fumigated area with signs bearing:

- skull and crossbones symbol
- "DANGER/PELIGRO"
- "Area under fumigation, DO NOT ENTER/NO ENTREE"
- "Methyl Bromide Fumigant in use."
- The date and time of fumigation, and
- name, address, and telephone number of the applicator.

Boxcars must be placarded with D.O.T. specified warning signs. Do not allow entry by unprotected persons into the fumigated area until the signs are removed. Such signs must only be removed when the air concentration level of methyl bromide is measured to be less than 5 ppm (3 ppm in residential and commercial structures). Signs must remain legible during the entire posting period. Warning signs are available from your dealer or distributor.

**AGRICULTURAL USE REQUIREMENTS**

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR 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 in this labeling about personal protective equipment, restricted-entry intervals, and notification to workers. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard (WPS). No instructions elsewhere on this labeling relieve users from complying with the requirements of the WPS.

**NOTIFICATION:** Notify workers of the application by warning them orally and by posting fumigant warning signs, as described in the "Placarding of Fumigated Areas" section of this labeling. Post the fumigant warning sign instead of the WPS sign for this application, but follow all WPS requirements pertaining to location, legibility, size, and timing of posting and removal.

**PPE FOR ENTRY DURING ENTRY-RESTRICTED PERIOD:**

PPE for entry that is permitted by this labeling is listed in the "Hazards to Humans and Domestic Animals" section of this labeling.

**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 instruction, or under abnormal conditions, or under conditions not reasonably foreseeable to seller, and buyer assumes the risk of any such use.

CA April, 1994

MP-23971

**BEST COPY AVAILABLE**

# Methyl Bromide 100 Columns 5,6 - Pamphlet

## GENERAL INSTRUCTIONS

8 7 9

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 MUST 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 four mills, feed mills, spice mills, textile mills, warehouses, boxcars, fumigation vaults, flat or upright bulk grain storages, tobacco warehouses, and cargo ships.

### INSECTS AND PESTS CONTROLLED:

- |                                |  |                         |
|--------------------------------|--|-------------------------|
| Almond Moth                    | Fruit Flies of the family Tephritidae (quarantine species) | Oriental Fruit Moth     |
| Angoumois Grain Moth           | Golden Weevil  | Pea Weevil              |
| Anthonus sp.                   | Granary Weevil   | Peach Twig Borer        |
| Aphids                         | Hairy Fungus Beetle  | Pin Worm                |
| Bamboo Shothole Borer          | Indian Meal Moth   | Pink Boll Worm          |
| Bean Weevil                    | Japanese Beetle  | Plum Moth               |
| Brachymerus sp.                | Knapweed Beetle  | Potato Tuber Moth       |
| But Flies                      | Lesser Grain Borer   | Raisin Moth             |
| Cadefo                         | Mealworms  | Red-Legged Ham Beetle   |
| Carpet Beetle                  | Mealy Bugs   | Rice Weevil             |
| Cigarette Beetle               | Medicinal Weevil   | Rusty Grain Beetle      |
| Confused and Red Flour Beetles | Moths  | Sawtoothed Grain Beetle |
| Corn Borer                     | Merchant Grain Beetle                                      | Sweet Potato Weevil     |
| Cowpea Weevil                  | Mice and Rats  | Thrips                  |
| Dermestes sp.                  | Mites  | Tobacco Beetle          |
| Dried Fruit Beetle             | Naval Orange Worm  | Tobacco Moth            |
| Drug Store Beetle              | Olive Scale  | Trogodroma sp.          |
| European Corn Borer            |  | Vegetable Miner         |
| European Freshoot Moth         |  | Warehouse Beetle        |
| Flat Grain Beetle              |  | White Fringed Beetle    |

### PREPARATION FOR FUMIGATION:

1. Remove fresh fruit, seeds, buds 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 show result in excess residues.
4. Do not fumigate grain if moisture is high, temperature is low (below 60 degrees F), or there is excessive dockage.
5. Commodity to be fumigated should be covered with tarpaulins and sealed, or in the case of boxcars, buildings and cargo ships, all external openings should be closed. Seal building roof ventilators and chimneys by wrapping them with a tarpaulin, or plastic sheet, or by stripping the screened openings with a wide commercial masking tape. Stairwells 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 lapped. Check for cracks in the floor, roof and around eaves and seal them.

Special care should be taken to seal partitions to adjacent storage or work areas in buildings and ships. Adjoining buildings sharing a common wall should be cleared before fumigation. If this is not feasible, spread a glossy type building paper, Siskraft or asphalt laminated paper, plastic film, or a heavy 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 halide 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 outside of structure. If it is necessary to release fumigant from inside of structure, a gas mask or S.C.B.A. must be worn as described in Hazards to Humans and Domestic Animals section of this labeling\*. Operate electric fan(s) 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:

1. 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.
2. 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 inspections, and first aid measures must be discussed with and understood by the master of the vessel or his representative.
3. 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.

### Procedures - Ship, Continued:

4. 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 holds 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.

### AERATION AND REENTRY

1. After fumigation, fumigated areas must be aerated until the air concentration level of methyl bromide is measured to be less than 5 ppm (3 ppm for residential and commercial structures).
2. 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.
3. Certain materials absorb methyl bromide during fumigation and desorption during aeration may call for extended monitoring and aeration period.

**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 Sol 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 ppm	LB/1000 CU.FT.	FLAME COLOR (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

\* Nighttime color is identical but allowance must be made for the bluish cast of the flame itself.

NOTE: 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.

BEST COPY AVAILABLE



RATE OF APPLICATION - METHYL BROMIDE 100<sup>(1)</sup>

COMMODITY	EXAMPLES OF PESTS CONTROLLED	DOSAGE LBS/1000 CU.FT.	EXPOSURE TIME IN HOURS	MINIMUM TEMPERATURE FAHRENHEIT	ESTIMATED* AERATION TIME IN HRS.	
Beans & Peas, Dry: for example: lima, kidney, blackeye, pink, cowpeas	Indian meal moth	2	24	60	12	
	Almond moth Cowpea Weevil	3	24	40		
Candy	Indian meal moth Sawtoothed grain beetle	1-2	12-24	60	24	
Cocoa Beans (bags)	Tobacco moth, Sawtoothed grain beetle	1 1/2	12-24	60	12	
Fruits Dried: For example: apple, apricot, date, fig, peach, pear, prune, raisins	Indian meal moth	1 1/2	12-24	50-59		
	Almond moth Dried Fruit beetle Sawtoothed grain beetle	1		60		
Flour and cereal products (bags, packages)	Flour beetles, Indian meal moth Sawtoothed grain beetle	1-2	12-24	60	24	
Grain Shelled corn	Indian meal moth, Granary weevil Angoumois grain moth,	2	24	60	12	
Barley, Oats, Rice, Rye, Wheat	Flour beetles, rice weevil, Sawtoothed grain beetle	3	24	60	Use forced re-circulation for bulk bins	
Grain sorghum (Milo)	Lesser grain borer, Granary weevil Indian meal moth,	4	24	60	Use forced re-circulation for bulk bins	
Note: Almond, Brazil, Macadamia, filbert, chestnut, pecan, hickory, pistachio, cashew, walnut	Naval orange worm	3 1/2	12-24	60	24	
	Almond moth Dried Fruit beetle					
Processed Foods	Sawtoothed grain beetle Cigarette beetle, Indian meal moth	1-2	12-24	60		
Tobacco	Tobacco moths, Tobacco beetle	Atmospheric:	2	48-72	45-70	24
		Vacuum chamber:	4	4	70	4
Hay (Alfalfa)	Sawtoothed grain beetle Angoumois grain moths	2	16-24	70	24	
Lumber	Lycius, or Powder post beetle	2	24-36	60	12	
Miscellaneous such as: burlap bags, wood stakes	Indian meal moth Lycius, or Powder post beetles	3-4	24	60		
Cotton and Cotton seed Tarpsulf fumigation: Vacuum chamber:	Indian meal moth, Cigarette beetle	3	24	60	12-24	
		4	4	60	4	
Dog Feed	Indian meal moth, Cigarette beetle	1-2	12-24	60	48	
Strawberries	Mites, thrips	3	3-4	60	3	
Fresh fruits & vegetables*	Fruit flies	1-4	3	60	24	

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

SPACES CONTAINING COMMODITIES	EXAMPLES OF PESTS CONTROLLED	DOSAGE LBS/1000 CU.FT.	EXPOSURE TIME IN HOURS	MINIMUM TEMPERATURE FAHRENHEIT	ESTIMATED* AERATION TIME IN HRS.	
Buildings, warehouses, flour mills, food processing plants	Indian meal moth Warehouse beetle Sawtoothed grain	Less than 100,000 cu.ft.:	1-2	16-24	60	12
		100,000 - 500,000 cu.ft.:	2-3	16-24	40	12
			1	16-24	60	12
			2	16-24	40	12

Note: The above dosages are for insect control.  
For rodents, bats, moles, and other warm blooded animals, 1/4 lb/1000 cu.ft. with 6 hours exposure should be sufficient.  
At temperatures below 60 degrees F (15.5 degrees C) the dosages should be increased by 1/2 lb. (227 grams) per hour and cubic feet (28.3 cu.meters) for every 10 degrees F (5.5 degrees C) drop in temperature.

BOX CARS	EXAMPLES OF PESTS CONTROLLED	DOSAGE LBS/1000 CU.FT.	EXPOSURE TIME IN HOURS	MINIMUM TEMPERATURE FAHRENHEIT	ESTIMATED* AERATION TIME IN HRS.
Steel	Sawtoothed grain beetle Flour beetles	3-3 1/2	16-24	60	4
Wood	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
Cargo Ships (Do Not Fumigate underway)	Sawtoothed grain beetles	1	10	60 and above	
	Flour beetles	1	12	50-59	
	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 on roadways during fumigation. They must be completely aerated before movement is allowed. Transfer of containerized commodities under fumigation only and off of ships is permissible.

(1) Consult APHIS Treatment Manual for additional rates and commodities.

