

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

JUL 1 1992

Shadow Mountain Products Corporation
P.O. Box 1327
Hollister, CA 95024

Attn: Tom Duafala, Ph.D.

Subject: Revised Labeling for Aeration and Reentry Statements
Methyl Bromide 99.5%
EPA Registration No. 59266-3

Your labeling package, revised in accordance with your company's May 18, 1992 letter of commitment, has been reviewed and the following comments apply.

Product Labeling

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable subject to the comments listed below. A stamped copy is enclosed for your records. Two copies of the finished printed labeling must be submitted to EPA before you distribute or sell the product. All products distributed or sold after August 1, 1992 must bear labeling which contains the revisions detailed in this letter.

1. On page one of the draft label, in the third column under the heading "General Precautions":

- Expand the first sentence under the "Aeration and Reentry" statement to read: "... Below 5ppm (20 mg/cu.m) and below 3ppm (12mg/cu.m) for residential and commercial structures."
- Add an item #3: "For residential and commercial structural fumigations, specific USEPA instructions as detailed elsewhere in this product label and supplemental manual, must be strictly followed."

2. On page two of the submitted draft label' in the left hand column, revise the heading "Space Fumigation" to read: "Space and Structural Fumigation".

CONCURRENCES							
SYMBOL	H.75011						
SURNAME	...						
DATE	JUL 1 1992						

3. Also on page two of the label, in the second column, insert the following paragraph and heading above the "Preplant Soil Fumigation" instructions:

STRUCTURAL FUMIGATION FACT SHEET
(See Supplemental Manual #MB-1 For Example of Fact Sheet)

A. The applicator must obtain a structural fumigation fact sheet which has been signed by, and provided to, the following persons: (1) an adult occupant of a single family dwelling prior to the parties entering into a fumigation agreement. (2) (a) The owner, manager, or designated agent of the building for multiple family dwellings, provided he or she acknowledges in writing to the applicator that a copy of the Structural Fumigation Fact Sheet has been provided to an adult occupant of each unit prior to the parties entering into a fumigation agreement; or (b) An adult occupant of each unit in a multiple family dwelling prior to the parties entering into a fumigation agreement, or (3) the owner, manager, or designated agent for all structures or businesses other than family dwellings,

B. The structural fumigation Fact Sheet will state: The purpose of this handout is to inform the consumer of possible health hazards associated with those of the structural fumigant, methyl bromide. To make sure you have been given an opportunity to read this, applicators are required to obtain the signature of the owners and occupants of property to be fumigated with methyl bromide. You will also be given a copy of the fact sheet to keep.

4. All products distributed or sold by the registrant after August 1, 1992, and distributed or sold by any other person after September 1, 1992 must bear the approved labeling revised in accordance with EPA's comments. Distribution or sale of methyl bromide pesticide products for commercial or structural fumigation after these dates without the revised labeling will be violation of FIFRA §12(a)(1)(E).

Additionally, the following conditions, as set forth in your May 18, 1992 letter of commitment, above been added to the above referenced registration:

1. Shadow Mountain Products Corporation will notify all its customers by certified mail that distribution or sale of methyl bromide pesticide products bearing EPA Registration No. 58266-3, for residential or commercial structural fumigation will be prohibited after September 1, 1992 unless the product's labeling includes the July 1992 revised use directions. Such notification will include a copy of the approved revised labeling. Shadow Mountain Products Corporation will keep a copy of each notification and return receipt for two (2) years.

2. Shadow Mountain Products Corporation will offer to relabel methyl bromide pesticide products for its distributors, and if the distributors accept the offer, Shadow Mountain Products Corporation will relabel such products.

3. All products bearing EPA Registration No. 58266-3 distributed or sold by registrant after August 1, 1992 will bear the July 1992 revisions concerning aeration and reentry and the fact sheet for commercial and residential structural fumigation.

If you should have any questions concerning this letter, you may call Robert Travaglini on (703) 305-6909.

Sincerely,



Ruth G. Douglas
Product Manager (32)
Antimicrobial Program Branch
Registration Division (H7505C)

BEST AVAILABLE COPY

4829

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

D A N G E R

**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.**

THIS PRODUCT CONTAINS CHLOROPICRIN AS A WARNING ODORANT. CHLOROPICRIN MAY BE IRRITATING TO THE UPPER RESPIRATORY TRACT, AND EVEN AT LOW LEVELS CAN CAUSE PAINFUL IRRITATION TO THE EYES, PRODUCING TEARING. IF THESE SYMPTOMS OCCUR, LEAVE THE FUMIGATION AREA IMMEDIATELY.

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 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.)

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/m³), no respiratory protection is required. If this concentration is exceeded at any time, all persons in the fumigation area must wear protective equipment such as NIOSH or EPA approved self-contained breathing apparatus (SCBA) or a combination of a supplied SCBA respirator and a U.S. Navy's Supervisor of the State (SOS) respirator.

Under normal use, fumigation conditions, the concentration of methyl bromide in the working area will not generally exceed 5 ppm as a time-weighted average and a respiratory protective device is not required. However, there is the possibility of a spill or leak during spill fumigation. Therefore, a SCBA or combination of a supplied SCBA respirator must be available and worn by personnel for entry into or affected area in the event of a leak or spill.

CLOTHING PRECAUTIONS:

1. Wear loose clothing and socks that are changed after each wear. Do not wear jewelry, gloves, or tight fitting under clothing. Do not wear shoes that are covered with dirt and may be trapped in the shoes. Do not use 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 wear contaminated clothing or shoes until thoroughly cleaned and aired. Soiled clothing cannot be adequately decontaminated.
3. Do not wear shoes of any type or rubber protective boots or shoe covers.
4. If liquid fumigant splashes on the face or clothing, wash the face and clothes with soap and water. The source of irritation should be eliminated.

WARNING SIGNS:

Warning signs should be placed at all entrances to the fumigation area. Signs should be placed at the top and bottom of the fumigation area. Signs should be placed at the top and bottom of the fumigation area. Signs should be placed at the top and bottom of the fumigation area. DO NOT ENTER.

RESTRICTION

For retail applicator supervision by the Cert.

FOR USE ON

**ACTIVE INGREDIENTS:
METHYL BROMIDE
INERT INGREDIENTS:
CHLOROPICRIN**

TOTAL

SHADOW

P. O. BOX

E. P. A.

NET CONTENTS

KEEP OUT

KEEP OUT

PRECAUTIONAL STATEMENTS

IN ALL MEDICAL EMERGENCIES

IF INHALED:

Wash face and clothing with soap and water. If symptoms persist, seek medical attention.

ACCEPTED WITH COMMENTS by EPA Letter D-660

7/11/69

LONG OR NERVOUS SYSTEM.

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.

THIS PRODUCT CONTAINS CHLOROPICRIN AS A WARNING ODORANT. CHLOROPICRIN MAY BE IRRITATING TO THE UPPER RESPIRATORY TRACT, AND EVEN AT LOW LEVELS CAN CAUSE PAINFUL IRRITATION TO THE EYES, PRODUCING TEARING. IF THESE SYMPTOMS OCCUR, LEAVE THE FUMIGATION AREA IMMEDIATELY.

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 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.)

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/m3), no respiratory protection is required. If this concentration is exceeded at any time, workers in the fumigation area must wear protective equipment.

Under normal conditions of use, the concentration of methyl bromide in the working area will not generally exceed 5 ppm as a time-weighted average and no respiratory protection is required. However, there is the possibility of a spill or leak during final fumigation. Therefore, a SCBA or equivalent self-supplied O2 respirator must be available and will be required for entry into an affected area in the event of a leak or spill.

CLOTHING PRECAUTIONS:

- 1. Do not use clothing or work clothes that are damaged after use. Wash and dry thoroughly before reuse. Do not put clothing which has been used in fumigation in a dryer. If full-face respiratory protection is required, wear goggles or full face shield for eye protection.
2. Following application, immediately remove all trash, shoes and socks. Do not wear contaminated clothing or shoes until thoroughly washed and separated. Damaged clothing cannot be adequately decontaminated.
3. Do not wear gloves of any type, or other protective clothing, or shoes.
4. If liquid should splash on eyes or irritate or burn, flush immediately with water for at least 15 minutes. If irritation persists, consult a physician.

WARNING SIGNS:

Warning signs should be placed at all entrances to the fumigation area. Signs should be in English and Spanish. Signs should be in both colors and black and white. Signs should be placed at the entrance to the fumigation area and at the exit. Signs should be placed at the entrance to the fumigation area and at the exit. Signs should be placed at the entrance to the fumigation area and at the exit.

Do not enter the fumigation area until the concentration of methyl bromide is below 5 ppm. Do not enter the fumigation area until the concentration of methyl bromide is below 5 ppm. Do not enter the fumigation area until the concentration of methyl bromide is below 5 ppm.

SPILL OR LEAK PROCEDURE:

Evacuate the area immediately. Do not enter the area until the concentration of methyl bromide is below 5 ppm. Do not enter the area until the concentration of methyl bromide is below 5 ppm. Do not enter the area until the concentration of methyl bromide is below 5 ppm.

5729

ACTIVE INGREDIENT METHYL BROMIDE
INERT INGREDIENT CHLOROPICRIN

TOTAL

SHADOW MO... COR

P. O. BOX 13

E.P.A. 45

E.P.A.

NET CONTENTS .

KEEP OUT OF...

FRAMER

FOR USE ONLY AS A...
This product has...
special instructions.

IN ALL CASES...
MEDICAL...
TAKE PRECAUTIONS...

STAFF

IF INHALED: Get...
warm. Make sure...
breathing has stopped...
Call a physician if...

IF ON SKIN: Wash...
with soap and water...
Do not use solvents...

IF IN EYES: Flush...
with water for at least...
15 minutes. Call a...

NOTE TO PHYSICIAN:
dizziness, headache,
collapse. Lung...
after exposure,
there is a risk of...
hypoxia and asphyxiation...
after a period...
of unconsciousness...
Treat...

See Side Panel 1

ACCEPTED with COMMENTS in EPA Letter Dated

July 1, 1962

Under the Federal Insecticide, Fungicide, and Rodenticide Act...

58266-3

BEST AVAILABLE COPY

BEST AVAILABLE COPY

6729

~~STATEMENT~~

**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.

**99.5%
FOR USE ONLY BY PROFESSIONAL FUMIGATORS**

ACTIVE INGREDIENTS:	
METHYL BROMIDE	99.5%
INERT INGREDIENTS:	
CHLOROPICRIN, ODORIZING AGENT	0.5%
TOTAL	100.00%

SHADOW MOUNTAIN PRODUCTS CORPORATION

P. O. BOX 1827 • HOLLISTER, CA 95024

E.P.A. FST. 11220-CA-1, 2, 3, 4; FL-1

E.P.A. REG. NO. 58266-03

NET CONTENTS LBS.

KEEP OUT OF REACH OF CHILDREN

**DAÑERO
PELIGRO
POISON**

PRECAUTION 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 HOSPITAL 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 medical attention if necessary. Do not induce vomiting by mouth to any person.

IF ON SKIN: Wash exposed area with plenty of water. Remove contaminated clothing. Wash skin with soap and water.

**PRECAUTIONS:
STRUCTURAL, TRANSPORT
OR SPACE FUMIGATION**

GENERAL PRECAUTIONS:

1. Keep animals, children, and unauthorized persons out of treated areas until area is certified safe for reentry. (See Aeration Statement).
2. When used for fumigation of structures, warehouses, vaults, etc., use appropriate safety procedures. Do not use in occupied areas. 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 damage to property. Do not use in areas where there is a possibility of damage to crops.
3. Do not mix with other fumigants.
4. Whenever possible, apply methyl bromide to structure or car being fumigated. Do not use in areas where there is a possibility of damage to property. Do not use in areas where there is a possibility of damage to crops.

AERATION AND REENTRY:

1. After fumigation, treated areas must be aerated until concentration of methyl bromide is below 5 ppm (100 ppb).
2. Do not allow entry into the treated area until this time unless loose clothing and device (SCBA or combination air-supply device) is worn.

**PRECAUTIONS:
SOIL FUMIGATION**

BEFORE TO FUMIGATION:

1. Read and understand the entire label before using this product.
2. Do not use in areas where there is a possibility of damage to property or crops.
3. Do not use in areas where there is a possibility of damage to property or crops.
4. Handle this fumigant in the open air from the container where there is no check fumigant pressure system in operation.
5. Two trained persons must be present during fumigation.
6. When fumigating soil from a tractor, carried on the tractor and placed in a pile, in addition to water available gallons of additional water must be used. This water must be applied to the soil immediately after the use of fumigant.

DURING FUMIGATION:

1. This fumigant is highly toxic. Do not breathe the gas. Do not get it on your skin or clothes. Do not get it in your eyes. Do not get it in your mouth. Do not get it on your face.
2. Do not use in areas where there is a possibility of damage to property or crops.
3. Do not use in areas where there is a possibility of damage to property or crops.
4. When changing the cylinder, the fumigant system is not to be used when there are people in the area above the fumigation area.

FOLLOWING FUMIGATION:

1. Post all treated areas with warning signs.
2. No children, unauthorized people, or animals in fumigation area for 48 hours.
3. When tarpaulin is used, two trained persons must be present during removal of the tarpaulin.

SPILL AND LEAK PROCEDURE

1. Do not breathe the gas. Do not get it on your skin or clothes. Do not get it in your eyes. Do not get it in your mouth. Do not get it on your face.
2. Do not use in areas where there is a possibility of damage to property or crops.

7929

ACTIVE INGREDIENTS:	
METHYL BROMIDE	99.5%
INERT INGREDIENTS:	
CHLOROPICRIN, ODORIZING AGENT	0.5%
TOTAL	100.00%

4. Whenever possible, apply methyl bromide structure or car being fumigated. Make sure is properly sealed and posted. Do not move vans during fumigation. They must be completely sealed. Movement is allowed.

AERATION AND REENTRY:

1. After fumigation, treated areas must be aerated until the concentration of methyl bromide is below 5 ppm (20 mg/cu ft).
2. Do not allow entry into the treated area until this time unless loose clothing and a respirator device (SCBA or combination air-supplied/

SHADOW MOUNTAIN PRODUCTS CORPORATION

P. O. BOX 1927 • HOLLISTER, CA 95024

E.P.A. EST. 11220-CA-1,2,3,4;FL-1

E.P.A. REG. NO. 58266-03

NET CONTENTS LBS.

PRECAUTIONS SOIL FUMIGATION

PRIOR TO FUMIGATION:

1. Read and understand the instructions on the label.
2. Never fumigate in a confined space unless the operator is trained and equipped with the proper equipment and all precautions and procedures. In addition, instruct their helpers in the mechanical operation and how to safely work with the tractor fumigant.
3. Handle this fumigant in the open, with the container where there is good ventilation.
4. Check fumigant pressure system for proper operation.
5. Two trained persons must be present during fumigation.
6. When fumigating soil from a tractor, 5 gallons of water must be carried on the tractor and placed where available. In addition to water available on the tractor, 5 gallons of additional water must be available. This water must be potable and suitable for drinking water. Do not use for irrigation.
7. The operator must be free of the fumigant.

DURING FUMIGATION:

1. This fumigant is highly toxic and should be handled with care. Do not inhale or get on skin. If it gets on skin, wash immediately with soap and water.
2. Do not use this fumigant in a confined space unless the operator is trained and equipped with the proper equipment and all precautions and procedures.
3. When operating the tractor, the operator must be trained and equipped with the proper equipment and all precautions and procedures. The operator must be free of the fumigant.
4. When operating the tractor, the operator must be trained and equipped with the proper equipment and all precautions and procedures. The operator must be free of the fumigant.

FOLLOWING FUMIGATION:

1. Post all treated areas with warning signs and tape.
2. No children, unacclimated people, or animals should be allowed in the fumigation area for 48 hours.
3. When the tractor is used, two trained persons must be present during removal of the fumigant.

SPILL AND LEAK PROCEDURE:

1. In case of a spill, do not inhale or get on skin. Do not use this fumigant in a confined space unless the operator is trained and equipped with the proper equipment and all precautions and procedures.
2. If a spill occurs, do not use this fumigant in a confined space unless the operator is trained and equipped with the proper equipment and all precautions and procedures.

NOTE TO USER:

1. This fumigant is highly toxic and should be handled with care. Do not inhale or get on skin. If it gets on skin, wash immediately with soap and water.

2. Do not use this fumigant in a confined space unless the operator is trained and equipped with the proper equipment and all precautions and procedures.

3. When operating the tractor, the operator must be trained and equipped with the proper equipment and all precautions and procedures. The operator must be free of the fumigant.

4. When operating the tractor, the operator must be trained and equipped with the proper equipment and all precautions and procedures. The operator must be free of the fumigant.

KEEP OUT OF REACH OF CHILDREN

PERIGEROSO **PELIGROSO**
POISON

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

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

SUMMARY 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 artificial respiration by mouth to mouth and artificial respiration. Get medical attention.

IF ON SKIN: Wash immediately with soap and water. Wash thoroughly with soap and water.

IF IN EYES: Flush with a steady 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; that effect is the usual cause of death. Reported overexposure can result in blurred vision, slurred speech, gait, and mental imbalance, with probable recovery after a period of no exposure. Methyl bromide is highly toxic to the nervous system, but not the degree of exposure. Treatment is symptomatic.

See Side Panel for Additional Precautionary Statements.

DIRECTIONS FOR USE

It is a violation of Federal law if any person is inconsistent with the following directions:

BEST AVAILABLE COPY

PRECAUTIONS STRUCTURAL, TRANSPORTATION, OR SPACE FUMIGATION 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, houses and other structures, appropriate ventilation should be provided during and after fumigation. Adequate ventilation should be provided during and after fumigation to prevent the possibility of asphyxiation. Do not use in enclosed spaces unless the fumigator is trained and certified. Do not use in enclosed spaces unless the fumigator is trained and certified.
3. Do not mix with this product when the temperature is below 50 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 ppp (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.

PRECAUTIONS SOIL FUMIGATION USE

PRIOR TO FUMIGATION:

1. Read and understand the label and all other instructions on this product. Read the label and all other instructions on this product.
2. Do not use this product in areas where there are children, animals, or unauthorized people. Do not use this product in areas where there are children, animals, or unauthorized people.
3. Do not use this product in areas where there are children, animals, or unauthorized people. Do not use this product in areas where there are children, animals, or unauthorized people.
4. Handle this fumigant in the open, with the operator "up wind" from the container where there is good ventilation.
5. Check fumigant pressure system for leaks before beginning operation.
6. Two trained persons must be present during introduction of the fumigant.
7. When fumigating soil from a tractor, 5 gallons of water must be carried on the tractor and placed where it is readily accessible. In addition to water available on the tractor, at least 5 gallons of additional water must be available from the service truck. This water must be potable and in containers marked "Potable Water" and must be used for drinking.
8. Field should be clear of trash before starting the fumigation.

DURING FUMIGATION:

1. This fumigant should be applied when there is an adequate breeze. Do not apply in areas where there is a wind speed of less than 1 mph. Do not apply in areas where there is a wind speed of less than 1 mph.
2. Do not use this product in areas where there are children, animals, or unauthorized people. Do not use this product in areas where there are children, animals, or unauthorized people.
3. If there is a leak, stop immediately by closing the valve at the end of the hose. If there is a leak, stop immediately by closing the valve at the end of the hose.
4. When changing the cylinders be sure they are turned off and fumigant system is not under pressure. Do not use the system when there are people or animals in the area. Do not use the system when there are people or animals in the area.

FOLLOWING FUMIGATION:

1. Post all treated areas with warning signs available from your dealer or representative.
2. No children, unauthorized people, or animals should be in the fumigation area for 48 hours.
3. When tarpaulin is used, two trained persons must be present during removal of the tarpaulin.

SPILL AND LEAK PROCEDURE:

1. In case of a spill or leak of liquid or solid material, apply fumigant immediately. Do not use water to clean up. Do not use water to clean up.
2. Do not use this product in areas where there are children, animals, or unauthorized people. Do not use this product in areas where there are children, animals, or unauthorized people.

NOTE: READ LABEL

STORAGE AND DISPOSITION

STORAGE AND HANDLING:

Store in dry, cool, well-ventilated area as a pesticide storage area. Do not store in areas where people are working or handling. Do not store in areas where people are working or handling. Do not store in areas where people are working or handling. Do not store in areas where people are working or handling.

RETURN OF CYLINDERS:

Cylinders are the property of: Soil Chemicals Corporation, 8770 HIGHWAY 25, Hollister, CA 95023. Cylinders should be returned promptly by collector. When a cylinder is partially full and there is no label for the product, contact SCF for return instructions.

SHIPPING:

This fumigant is classified in the U.S. Department of Transportation Hazardous Materials Regulations as Toxic Gas, Methyl bromide and Nonflammable, Gaseous mixture, liquid, class 2.1, poison, with exceptions from specifications. Packaging is allowed. Describe empty cylinders as Methyl Bromide Liquid or Methyl Bromide Gas. Do not ship with foods, feeds, or bedding.

DISPOSAL:

Do not dump waste water. Do not dump in streams, rivers, or oceans. Do not dump in streams, rivers, or oceans. Do not dump in streams, rivers, or oceans. Do not dump in streams, rivers, or oceans.

ENVIRONMENTAL HAZARD

This pesticide is toxic to wildlife. Do not apply to streams, rivers, or oceans. Do not apply to streams, rivers, or oceans. Do not apply to streams, rivers, or oceans. Do not apply to streams, rivers, or oceans.

CHEMICAL HAZARD

Methyl bromide is practically nonflammable. Do not use in areas where there are children, animals, or unauthorized people. Do not use in areas where there are children, animals, or unauthorized people. Do not use in areas where there are children, animals, or unauthorized people.

The following materials can develop an embrittlement in structural fumigation and should be replaced during fumigation:

1. Ferrous (iron) iodized salt.
2. Any type of materials that contain sulfur, such as soap powders, detergents, and shampoos used for cattle lice.
3. Certain rubber goods (e.g., gaskets, seals, or gaskets).
4. Leather goods (especially saddles).
5. Goods treated with organic phosphorus.

- 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, treated areas must be aerated until the level of methyl bromide is below 5 ppm (20 mg/cu.m).
- 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.

**PRECAUTIONS
SOIL FUMIGATION USE**

PRIOR TO FUMIGATION:

- Read and understand the label and instructions. Contact an appropriate person for regulatory agencies as required.
- Read the instructions on the operator's manual for the application equipment. The operator must advise the driver of all precautions and procedures. In addition, drivers must instruct their helpers in the mechanical operation of the tractor and how to safely work with the tractor and driver while fumigating.
- Handle this fumigant in the open, with the operator "up wind" from the container where there is good ventilation.
- Check fumigant pressure system for leaks before beginning operation.
- Two trained persons must be present during introduction of the fumigant.
- When fumigating soil from a tractor, 5 gallons of water must be carried on the tractor and placed where it is readily accessible. In addition to water available on the tractor, at least 5 gallons of additional water must be available from the service truck. This water must be potable and in containers marked "potable water" after use for drinking.
- The area to be fumigated must be free of trash refuse, stumps, etc.

DURING FUMIGATION:

- This fumigant is highly toxic. Do not breathe the gas. If you breathe the gas, get to fresh air immediately. If you feel dizzy, nauseated, or have trouble breathing, get to fresh air immediately. If you have trouble breathing, get to fresh air immediately. If you have trouble breathing, get to fresh air immediately.
- Do not breathe the gas. Do not breathe the gas. Do not breathe the gas.
- If frost is present, do not fumigate. Do not fumigate.
- When operating the equipment, do not breathe the gas. Do not breathe the gas.

FOLLOWING FUMIGATION:

- Post all treated areas with warning signs available from your dealer or representative.
- No children, unauthorized people, or animals should be in the fumigation area for 48 hours.
- When tarpaulin is used, two trained persons must be present during removal of the tarpaulin.

SPILL AND LEAK PROCEDURE:

- In case of a spill of gas or liquid while applying fumigant, contact your dealer and follow the instructions on the label. Do not breathe the gas. Do not breathe the gas.

NOTE ON FERTILIZER

Fertilizers should be applied before the level of soil moisture and sulfate salts in the soil. This is most likely to occur when heavy rates of fertilizer and fumigant are applied to soils that are either cold, wet, acid, or high in organic matter. To avoid injury to plant roots, fertilize as indicated by soil tests made after fumigation. To avoid ammonia injury and/or nitrate starvation to crops, avoid using fertilizers containing ammoniacal salts and use only fertilizers containing nitrate salts after the crop is well established and the soil temperature is above 45 degrees F. Do not apply fertilizer to soil that is saturated with water and do not apply fertilizer to soil that is saturated with water.

DIRECTIONS FOR USE

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

Cylinders:

RETURN OF CYLINDERS:

Cylinders are the property of Soil Chemicals Corporation. Soil Chemicals Corporation, 2060 East 100th Avenue, Long Beach, CA 95023. and should be returned promptly by collect auto ship cylinders without safety caps or valve protection. When a cylinder is partially full and there is no label for the product, contact SCC for return instructions.

SHIPPING:

This fumigant is classified in the U.S. Department of Transportation Hazardous Materials Regulations as Methyl Bromide and Nonflammable Methyl Bromide mixture, liquid, class "B" poison, inhalant. Exceptions from specifications pertaining to cylinders are allowed. Describe empty cylinders as Methyl Bromide Liquid or Methyl Bromide and Nonflammable Methyl Bromide mixture, liquid, class "B" poison, inhalant. Do not ship with foods, feeds, or clothing.

DISPOSAL:

Do not discharge water or gas from used cylinders. Pesticide wastes are toxic and are not to be disposed of in any manner or mixture or dilution as a violation of Federal laws. Do not be disposed of by use according to label. Contact your State Pesticide Control Agency, or the Hazardous Waste representative at Regional Office for guidance.

ENVIRONMENTAL HAZARD

This pesticide is toxic to wildlife and should not be applied to water bodies, streams, rivers, oceans, or public waters. Do not apply to identified and addressed areas. Do not apply to areas containing this product. Do not apply to areas containing this product. Do not apply to areas containing this product.

For more information, contact your State Pesticide Control Agency. Do not apply to areas containing this product. Do not apply to areas containing this product.

The high volatility of the fumigant may cause the space being fumigated and to disperse into the surrounding areas with correct monitoring.

CHEMICAL HAZARD

Methyl bromide is practically nonflammable. Do not breathe the gas. Do not breathe the gas. Do not breathe the gas.

Do not apply gas directly to metal surfaces. Do not apply gas directly to metal surfaces. Do not apply gas directly to metal surfaces.

The following materials may develop an odor when encountered in structural fumigation and should be avoided:

1. Fertilizers: (a) iodized salt; (b) ...
2. Certain rubber goods: (a) ...
3. Furs, horsehair, and yellow ...
4. Leather goods (particularly ...)
5. ...
6. ...
7. ...
8. ...
9. ...
10. Any materials that may contain ...

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STORAGE AND DISPOSAL

STORAGE AND HANDLING:

Store in dry, cool, well-ventilated area under cover and not as a primary storage area. Do not contain here water, fire, or fuel. Use proper shipping and handling practices. Always wear protective clothing. Operate container only if you are 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, etc. Do not use rope slings, hooks, tongs, or similar devices on cylinders. Transport cylinders using hand trucks or other devices to which the cylinder can be fastened. Always remove valve protection bonnet and safety cap before use. Before use, replace safety cap and valve protection bonnet on cylinder when cylinder is empty. When cylinder is empty, return valve protection bonnet and safety cap to cylinder. Do not use cylinders for other purposes than those registered in accordance with instructions for return of empty cylinders.

RETURN OF CYLINDERS:

Cylinders are the property of
Soil Chemicals Corporation Soil Chemicals Corporation
6770 HIGHWAY 25 2060 East 11th Street
Hollister, CA 95023 Long Beach, CA 90803
and should be returned promptly by collect same for shipment cylinders without safety caps or valve protection bonnets. When a cylinder is partially full and there is no further requirement for the product, contact SCC for return instructions.

SHIPPING:

This fumigant is classified on the U.S. Department of Commerce Hazardous Materials Regulations as Methyl Bromide (Methyl Bromide and Nonflammable Hydrocarbon Liquid Mixture, Liquid, class 2.2 poison, flammable gas, and no exemptions from specifications) packaging markings and labels are allowed. Describe empty cylinders as having last contained Methyl Bromide Liquid or Methyl Bromide and Nonflammable Non-liquefied compressed gas mixture, liquid, and/or hazardous, do not ship with leaks or damage.

DISPOSAL:

Do not discharge water or other liquids from cylinders or the residue which remains after use. Do not discharge residue to the spray mixture or residue to a water body or Federal, State, or local waste dump. Do not discharge to any area considered a water body. Discharge residue to a water body only after obtaining approval from the appropriate agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

ENVIRONMENTAL HAZARD

This pesticide is toxic to aquatic life and may be harmful to birds. It may also be harmful to bees and other insects. Avoid contact with fish, birds, and other animals. Do not apply near water bodies or in areas where water bodies are present. If you are having trouble with this pesticide, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

For spray use, avoid contact with plants and animals. Do not apply near water bodies or in areas where water bodies are present. If you are having trouble with this pesticide, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

The high volatility of the fumigant gas may cause irritation to the eyes, nose, and throat. Avoid breathing the gas. If you experience irritation, move to a well-ventilated area. If you are having trouble with this pesticide, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CHEMICAL HAZARD

Methyl bromide is practically nonflammable. There is no danger from fire or explosion if use concentrations are observed. Flame can change the chemical to produce some corrosive fumes to items in the space being fumigated. Pilot lights and all open flame heaters should be turned off.

Do not apply gas directly to metal surfaces. Some types of plastic can have a corrosive effect on certain metals. Do not use mixers or other vibration equipment made of magnesium aluminum or their alloys.

The following materials may develop a white, powdery deposit or structural degradation and should be removed from the space being fumigated:

1. Some types of inorganic salts; it is particularly important to avoid materials that contain calcium, sodium, and potassium.
2. Some types of soap powders, especially those used for cattle dips.
3. Certain rubber goods; e.g., gaskets, seals, washers, or rug padding, pillows, cushions, etc.
4. Stamps and other similar foils.
5. Some porous, and pillows.
6. Leather goods (particularly saddles).
7. Goods treated with sulfur preservative.
8. Goods containing extreme moisture.
9. Goods containing extreme acidity or alkalinity.
10. Goods containing extreme heat.
11. Goods containing extreme cold.
12. Goods containing extreme humidity.
13. Goods containing extreme dryness.
14. Goods containing extreme light.
15. Goods containing extreme darkness.

is the property of
 Soil Chemicals Corporation Soil Chemicals Corporation
 8770 HIGHWAY 25 2060 East 11th Street
 Hollister, CA 95023 Long Beach, CA 90801

and should be returned promptly by collect with freight to ship cylinders without safety caps or valve protection caps. When a cylinder is partially full and there is no further requirement for the product, contact SCC for return instructions.

SHIPPING:

This fumigant is classified in the U.S. Department of Transportation Hazardous Materials Regulations as Methyl Bromide, Methyl Bromide and Nonflammable Nitrogen Dioxide Gas mixture, liquid, class 2.2 poison, extremely toxic, and no exceptions from specifications, packaging, marking, or labeling are allowed. Describe empty cylinders as containing either methyl bromide liquid or Methyl Bromide and Nonflammable Nitrogen Dioxide gas mixture, liquid, nonflammable hazard. Do not ship with foods, feeds, or clothing.

DISPOSAL:

Do not discharge water from or feed by drainage to any sea. Pesticide wastes are toxic unless they are of excess feed. No spray mixture or residue is a violation of Federal law. If these wastes cannot be disposed of by the appropriate local instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

ENVIRONMENTAL HAZARD

This pesticide is toxic to wildlife. Do not discharge effluents containing this product into lakes, streams, rivers, oceans, or public waters unless the discharge is specifically identified and addressed in the permit. Do not discharge effluents containing this product into any water body unless the discharge is specifically identified and addressed in the permit.

For space fumigation with methyl bromide, use the following procedure: 1. Seal the space to be fumigated with a suitable material to prevent the escape of gas. 2. Place the fumigant in the space and allow it to act for the required period of time.

The high volatility of the fumigant requires that the space being fumigated and to disperse the fumigant in the 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 toxic gases. A range of items in the space being fumigated. Pilot lights and other wire heaters should be turned off.

Do not apply gas directly to metal surfaces because of its corrosive effect on certain metals. Do not use containers or application equipment made of potassium aluminum silicate alloys.

The following materials can develop an embrittlement after being fumigated in structural fumigation and should be removed from the space being fumigated:

1. Iodized salts: (a) Iodized salts; (b) Iodized salts; (c) Iodized salts.
 2. Certain materials that contain iodine, such as some soap powders, detergents, and bleaches used for cattle ticks.
 3. Certain rubber goods: (a) Springs; (b) O-rings; (c) Gaskets; (d) In rug padding, pillows, mats, and other similar forms of rubber goods.
 4. Furs, furshair, and pillows.
 5. Leather goods (particularly shoes, boots, and saddles) which are not treated with sulfur dioxide.
 6. Extreme caution should be exercised in the use of silver-plated items, such as silver-plated cutlery, silver-plated jewelry, and silver-plated electrical contacts.
 7. Silver-plated items, such as silver-plated cutlery, silver-plated jewelry, and silver-plated electrical contacts.
 8. Silver-plated items, such as silver-plated cutlery, silver-plated jewelry, and silver-plated electrical contacts.
 9. Silver-plated items, such as silver-plated cutlery, silver-plated jewelry, and silver-plated electrical contacts.
 10. Any materials that may contain iodine, such as iodized salt, iodized salt, iodized salt.
- THE FUMIGANT IS TOXIC AND MAY BE HARMFUL IF INHALED. Do not use materials which contain iodine, such as iodized salt, iodized salt, iodized salt.
- If there is a question whether a material is safe or not, a fumigation may be run with a small amount of the fumigant.

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GENERAL INSTRUCTIONS

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THIS FUMIGANT IS A HIGHLY TOXIC MATERIAL AND SHOULD BE USED ONLY BY INDIVIDUALS TRAINED IN ITS PROPER USE. BEFORE USING, READ AND FOLLOW ALL LABEL PRECAUTIONS AND DIRECTIONS, INCLUDING THE ATTACHED SUPPLEMENTARY INFORMATION. ALL PERSONS WORKING WITH THIS FUMIGANT MUST BE KNOWLEDGEABLE ABOUT THE HAZARDS AND TRAINED IN THE USE OF REQUIRED RESPIRATORY EQUIPMENT AND OTHER DEVICES, EMERGENCY PROCEDURES, AND PROPER USE OF THE FUMIGANT.

SPACE FUMIGATION

DIRECTIONS FOR USE:

METHYL BROMIDE 99.5% is intended for professional use in empty walls, warehouses, basements, fumigation vaults, under sealed bagging, etc., or to treat bulk grain or casks for the control of all stored product insects, including grain beetles, weevils, stored product beetles, and other insects.

Methyl bromide should not be used to control or eradicate... it is not effective against... such insects as... spiders, ants, millipedes, carpet beetle, etc. It is effective against... such as... stored product beetles, etc.

RATES OF APPLICATION:

For structural fumigation at temperatures above 70°F, use 1-3 ppm methyl bromide 99.5% per 1,000 cu.ft. for 16-24 hours exposure... increase the dosage from 3 1/2 to 3 ppm per 1,000 cu.ft. fumigation rate.

DAZZER:

The only aerate building after application. Do not fumigate food products other than those specified in directions and do not use fumigant stronger than recommended as this can, in some cases, result in loss of crops, or on fresh fruits or vegetables... or if grain moisture is high... or if there is excessive leakage.

PREPARATION FOR FUMIGATION:

Remove from the structure to be fumigated all persons, domestic animals, pets, fish, and growing plants. Remove from the premises all... polyethylene bags (thickness not less than 4 mils)... all food... Polyethylene bags must be sealed with masking tape or... all... attics, and sub-floors... Provide for force... during the gassing period... Seal all edges of the covering... Soak soil with water 1 foot free...

FUMIGATION:

Release methyl bromide from outside of structure through a heavy... leak proof tube... necessary to release fumigant from inside of structure... Operate electric fan(s) for a minimum of 30 minutes after release to accelerate distribution of gas... more than one release location may have to be set up.

AERATION AND REENTRY:

FUMIGATION FOR RESIDENTIAL OR COMMERCIAL STRUCTURES

Aeration and Reentry: At the end of the exposure period, after all tarpaulins or seals are removed from the structure, open all interior and exterior doors, windows, and vents that are operational. No person shall be allowed to reenter the structure unless wearing protective clothing and a NIOSH/MSHS approved self-contained breathing apparatus... If non-mechanical or natural ventilation is used, the structure must be aerated for a minimum of seven days from the time the tarpaulins are removed... After aeration is completed, the level of methyl bromide in the structure must be measured using a gas detector device with a minimum detection limit of 3 ppm for methyl bromide... If the level of methyl bromide is 3 ppm or greater, the structure shall be aerated for an additional 24 hours... If mechanical aeration is used: (A) For structures without attics... (B) After aeration is completed, the level of methyl bromide in the structure must be measured...

3 ppm for methyl bromide residues. M... within an interior electrical outlet by... in the ground receptacle, or other end... (C) (1) The... (2) If the level of methyl bromide is less than 3 ppm from each area measured... (3) If the level of methyl bromide is 3 ppm or greater... At the end of the 24 hour... must be measured from the... must be repeated until the... For structures with basements... the wind... must be open... (A) A... with a minimum detection... (B) A measurement... by inserting the... or enclosed spac... of an interior w... in the basement;... If... must be... or an addit... of the addition... must be measured... The procedures... below 3 ppm.

STRUCTURAL FUMIGATION (See Supplemental Manual #MB-1)

A. The applicator must obtain a structural fumigation permit... B. The applicator must obtain a structural fumigation permit... C. The applicator must obtain a structural fumigation permit... D. The applicator must obtain a structural fumigation permit... E. The applicator must obtain a structural fumigation permit... F. The applicator must obtain a structural fumigation permit... G. The applicator must obtain a structural fumigation permit... H. The applicator must obtain a structural fumigation permit... I. The applicator must obtain a structural fumigation permit... J. The applicator must obtain a structural fumigation permit... K. The applicator must obtain a structural fumigation permit... L. The applicator must obtain a structural fumigation permit... M. The applicator must obtain a structural fumigation permit... N. The applicator must obtain a structural fumigation permit... O. The applicator must obtain a structural fumigation permit... P. The applicator must obtain a structural fumigation permit... Q. The applicator must obtain a structural fumigation permit... R. The applicator must obtain a structural fumigation permit... S. The applicator must obtain a structural fumigation permit... T. The applicator must obtain a structural fumigation permit... U. The applicator must obtain a structural fumigation permit... V. The applicator must obtain a structural fumigation permit... W. The applicator must obtain a structural fumigation permit... X. The applicator must obtain a structural fumigation permit... Y. The applicator must obtain a structural fumigation permit... Z. The applicator must obtain a structural fumigation permit...

PREPLANT SOIL

METHYL BROMIDE 99.5% may be used on land in which plants may be grown... uses are for seed and plant beds, nurseries for tobacco, lawns, and other turf areas, forest and shade trees, shrubs and other similar plants... in vegetable seed beds for products transplanted in untreated soil or soil for registered products, and in ornamental and soils where tomatoes, strawberries, cauliflower, broccoli, etc. eggplants are to be grown for food.

APPLICATION

SEED AND PLANT BEDS: (Plant Prior to planting, apply Methyl Bromide... TURF, NURSERIES, AND FL... TOMATOES, STRAWBERRIES, MUSKMELONS, EGGPLANTS, ONIONS, CAULIFLOWER: PINEAPPLE: Prior to planting pineapple, apply...

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RATE OF APPLICATION:

Fumigation at temperatures above 70°F. use 1.2 lbs. Methyl Bromide 99.5% per 1,000 cu. ft. for 16-18 hours exposure time under average conditions. Increase the dosage from 1 1/2 to 2 1/2 lbs. per 1,000 cu. ft. fumigation rate.

PRECAUTIONS:

The facility aerate building after application. Do not fumigate food plants other than those specified in instructions and do not use fumigant higher than recommended as this can cause plant death. Do not use Methyl Bromide 99.5% on fresh produce or on fresh fruits or vegetables. Do not use if the grain moisture is high. Do not use if the grain temperature is above 70°F. Do not use if there is excessive frostage.

PREPARATION FOR FUMIGATION:

Remove from the structure to be fumigated all persons, domestic animals, pets, fish, and growing plants. Remove from the premises all polyethylene bags (thickness not less than 4 mils.), all food, and all plants. Polyethylene bags must be sealed with masking tape or heavy fasteners. Seal all fixtures including pilot lights. Open all doors and passages to crawl spaces, attics, and sub-floors. For fabric pest control, open storage chests, drawers, and closets. Provide for forced air circulation of fumigant during the gassing period. For assembly of seals, use caulk or tape all cracks and other air leaks around doors, windows, vents. Wood structures and others that cannot be sealed may be enveloped in a gas cover tarpaulin or polyethylene plastic sheet at least 4 mils. thick. Seal all edges of the envelope with caulk or wood shaves. Soak soil with water 1 foot from the edge of the envelope as necessary to protect nearby plants.

FUMIGATION:

Release Methyl Bromide from outside of structure through a heat resistant, airtight leak proof tube, such as polyethylene, attached to an escape opening to prevent splashing over interior. If it is necessary to release fumigant from inside of structure, a S.C.B.A. must be worn as described in Precautionary Statements. Operate electric fan(s) for a minimum of 30 minutes after release to accelerate distribution of gas. Relative to the complexity of the structure to be fumigated, more than one release location may have to be set up.

AERATION AND REENTRY:

AERATION AND REENTRY FOR RESIDENTIAL OR COMMERCIAL STRUCTURES

Aeration and Reentry: At the end of the exposure period, after all tarpaulins or seals are removed from the structure, open all interior and exterior doors, windows, and vents that are operational. No person shall be allowed to reenter the structure unless wearing protective clothing and a NIOSH MSHA approved self-contained breathing apparatus (SCBA) or combination air-supplied SCBA respirator until the following conditions are met:

(A) If mechanical or natural ventilation is used, the structure must be aerated for a minimum of seven days from the time the tarpaulins are removed. (B) After aeration is completed, the level of methyl bromide in the structure must be measured using a gas detector device with a minimum detection limit of 3 ppm for methyl bromide. Measurements must be taken from an interior electrical outlet by inserting the detection device in the ground receptacle, or from other end of case within the wall on an interior and a perimeter wall. (C) (i) The level of methyl bromide is less than 3 ppm from each area measured; or (ii) if the level of methyl bromide is 3 ppm or greater, the structure shall be aerated for an additional 24 hours. At the end of the 24 hour period, the level of methyl bromide must be measured from the areas previously sampled. These procedures must be repeated until the level of methyl bromide is below 3 ppm.

2. If natural aeration is used: (A) For structures without attics, an aeration fan must be inserted in a window or other exterior opening and sealed so that the air inside the structure is exhausted out of the structure. The aeration fan must be capable of displacing 5,000 cubic feet of air per minute. To facilitate aeration, exterior openings, such as windows, vents, or an access door to the structure should be utilized. The structure must be aerated with the fan operating for a minimum of 72 hours; (B) After aeration is completed, the level of methyl bromide in the structure must be measured using a gas detector with a minimum detection limit of 3 ppm for methyl bromide. Measurements must be taken from an interior electrical outlet by inserting the detection device in the ground receptacle, or from other enclosed space within the wall on an interior and a perimeter wall; and (C) (i) The level of methyl bromide is less than 3 ppm from each area measured; or (ii) if the level of methyl bromide is 3 ppm or greater, the structure must be aerated for an additional 12 hours. At the end of the 12 hour period, the level of methyl bromide must be measured from the areas previously sampled. These procedures must be repeated until the level of methyl bromide is below 3 ppm.

3. For structures with attics, an aeration fan must be inserted in the attic access door and a window or other exterior opening, and must be sealed so that air inside the structure is exhausted out of the structure. The aeration fans must be capable of displacing a minimum of 5,000 cubic feet of air per minute. To facilitate aeration, exterior openings, such as windows, vents, or an access door to the structure should be utilized. The structure must be aerated with the fan operating for a minimum of 72 hours; (B) After aeration is completed, the level of methyl bromide in the structure must be measured using a gas detector device with a minimum detection limit of 3 ppm for methyl bromide. Measurements must be taken from an interior electrical outlet by inserting the detection device in the ground receptacle, or from other enclosed space within the wall on an interior and a perimeter wall; and (C) (i) The level of methyl bromide is less than 3 ppm from each area measured; or (ii) if the level of methyl bromide is 3 ppm or greater, the structure must be aerated for an additional 12 hours. At the end of the 12 hour period, the level of methyl bromide must be measured from the areas previously sampled. These procedures must be repeated until the level of methyl bromide is below 3 ppm.

STRUCTURAL FUMIGATION OF THE
See Supplemental Manual (MSB) For complete

The application of methyl bromide to soil for the control of nematodes and other soil-borne pests is a critical step in the production of high quality crops. This manual provides detailed instructions for the application of methyl bromide to soil, including the selection of appropriate fumigant, the preparation of the soil, and the application of the fumigant. The manual also discusses the safety precautions that must be taken when handling methyl bromide, and the methods for monitoring the fumigant concentration in the soil. The manual is intended for use by growers and applicators who are familiar with the use of methyl bromide for soil fumigation.

PREPLANT SOIL FUMIGATION

METHYL BROMIDE 99.5% may be used as a preplant soil fumigant in which plants may be grown for nonfood uses are for seed and plant beds, nurseries and sites for tobacco, lawn, and other ornamental turf areas, forest and shade trees, ornamental shrubs and other similar plants. Methyl Bromide in vegetable seed beds for production of plant transplanted in untreated soil or soil treated for registered products, and in orchard and sites and soils where tomatoes, strawberries, plums, peaches, cauliflower, broccoli, lettuce, onion, eggplants are to be grown for food.

APPLICATION

SEED AND PLANT BEDS: Plants Grown For Prior to planting, apply Methyl Bromide at the rate of dosage table by means of tractor mounted applicator spaced at a depth of 5 - 8 inches surface to seed. Fumigant after application with a gas cover tarpaulin by means of a mechanic must be removed until after the proper, indicated in the dosage table has passed. Prior to soil should be in seed bed condition with adequate soil permeability. The soil should be worked to be desirable for the fumigant to penetrate. It be worked into the soil and time allowed for re before treatment.

TURF, NURSERIES, AND FLORAL CROPS: Follow directions for seed and plant beds. If fum the soil should be worked up before fumigating, that the old turf be incorporated into the soil discing, or plowing. Rate and exposure time is dosage table.

TOMATOES, STRAWBERRIES, BROCCOLI, MUSKMELONS, EGGPLANTS, ASPARAGUS, ONIONS, CAULIFLOWER: Follow directions for seed and plant beds. Rate is indicated in the dosage table Row or bed any side at the broadcast rates but the amount proportionately less per acre depending on the width of treatment in the row or bed.

PINEAPPLE: Prior to planting pineapple apply methyl bromide specified in the dosage table by means of tractor spaced not more than 5 1/2 feet apart and at a depth of 5 - 8 inches. Cover immediately with pineapple dispersed by a sled mounted on the same tractor. Pineapples may be planted through the bed which is after fumigation.

GRAPES: Prior to planting apply Methyl Bromide at the rate of dosage table by means of tractor mounted applicator spaced not less than 12 inches. To seal fumigant after disease control, cover immediately with a gas-tight cover of a mechanical tarp layer. Do not remove after the proper exposure period indicated in the dosage table. For nematode control, seal soil in application of the fumigant by discing or similar to application. The soil should be ripped to 6 inches and the sub-surface should be as dry as possible. The soil will block deep penetration of the methyl bromide and soil very high in organic content fumigated to control Armillaria rot with methyl bromide and soils that fresh plow may be dried to control and fumigating area from 10 to 15 days before planting. The soil should be as dry as possible before planting.

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3 ppm for methyl bromide residues. Measurements must be taken from within an interior electrical outlet by inserting the detection device in the ground receptacle, or other enclosed space within an interior and a perimeter wall; and (C) (i) The level of methyl bromide is less than 3 ppm from each area measured; or (ii) If the level of methyl bromide is 3 ppm or greater, aeration must continue for an additional 12 hours. At the end of the 12 hour period, the level of methyl bromide must be measured from the areas previously sampled. These measurements must be repeated until the level of methyl bromide is below 3 ppm.

4. For structures with basements, in addition to the requirements of paragraphs 1, 2, and 3 above, the windows, vents, and interior doors of the basement must be open, and (A) After aeration is completed, the level of methyl bromide in the basement must be measured using a gas detector with a minimum detection limit of 3 ppm for methyl bromide. A measurement must be taken from an interior electrical outlet by inserting the detection device in the ground receptacle, or in a other enclosed space within the wall on an interior wall, or in the presence of an interior wall, a measurement must be taken from the basement in the basement; and (B) (i) The level of methyl bromide is 3 ppm or greater; or (ii) If the level of methyl bromide is 3 ppm or greater, aeration must be continued for an additional 12 hours. At the end of the additional 12 hours period, the level of methyl bromide must be measured from the area in the basement previously sampled. These procedures must be repeated until the level of methyl bromide is below 3 ppm.

STRUCTURAL FUMIGATION FACT SHEET
(See Supplemental Manual ENB-1 For Example of Fact Sheet)

A. The applicator must obtain a structural fumigation fact sheet which has been signed by, and provided to, the following persons: (1) an occupant of a single family dwelling unit, or the parties entering into a commercial agreement; (2) a The label manager or designated representative of the fumigant manufacturer, provided he has been given a copy of the fact sheet, or (3) a representative of the fumigant manufacturer, provided he has been given a copy of the fact sheet, or (4) a representative of the fumigant manufacturer, provided he has been given a copy of the fact sheet, or (5) a representative of the fumigant manufacturer, provided he has been given a copy of the fact sheet, or (6) a representative of the fumigant manufacturer, provided he has been given a copy of the fact sheet, or (7) a representative of the fumigant manufacturer, provided he has been given a copy of the fact sheet, or (8) a representative of the fumigant manufacturer, provided he has been given a copy of the fact sheet, or (9) a representative of the fumigant manufacturer, provided he has been given a copy of the fact sheet, or (10) a representative of the fumigant manufacturer, provided he has been given a copy of the fact sheet.

The Structural Fumigation Fact Sheet shall state: the purpose of fumigation is to inform the consumer of possible health hazards associated with the use of the structural fumigant, methyl bromide. To ensure the consumer is given an opportunity to read this, applicators are required to obtain the signature of the owner and occupants of the dwelling to be fumigated with methyl bromide. You will also be given a copy of the fact sheet to the owner.

PREPLANT SOIL FUMIGATION

METHYL BROMIDE 99.5% may be used as a preplant soil fumigant for land in which plants may be grown for nonfood crop uses. These uses are for seed and plant beds, nurseries and permanent planting sites for tobacco, lawns, and other ornamental and recreational turf areas, forest and shade trees, ornamental flowers, vines and shrubs and other similar plants. Methyl Bromide 99.5% may be used in vegetable seed beds for production of plants that are later transplanted in untreated soil or soil treated to label directions for registered products, and in orchard and vineyard planting sites and soils where tomatoes, strawberries, pineapples, peppers, muskmelons, cauliflower, broccoli, lettuce, onions, asparagus, and eggplants are to be grown for food.

APPLICATION

SEED AND PLANT BEDS: (Plants Grown For Transplanting) Prior to planting, apply Methyl Bromide at the rate that appears in the dosage table by means of tractor mounted chisels spaced 12 inches apart and at a depth of 5 - 6 inches below the soil surface. To seal fumigant after application, cover immediately with a gas-tight tarpaulin by means of a mechanical tarp layer. Do not remove tarpaulin until after the proper exposure period indicated on the dosage table has passed. Prior to fumigation the soil should be in seed bed condition with adequate moisture to support seed germination. The soil should be worked to the depth it is desirable for the fumigant to penetrate. Plant refuse should be worked into the soil and time allowed for refuse to decompose before treatment.

TURF, NURSERIES, AND FLORAL CROPS: Follow directions for seed and plant beds. If fumigating old turf, the soil should be worked up before fumigating. It is desirable that the old turf be incorporated into the soil by rototilling, discing, or plowing. Rate and exposure time is indicated in the dosage table.

TOMATOES, STRAWBERRIES, BROCCOLI, LETTUCE, MUSKMELONS, EGGPLANTS, ASPARAGUS, PEPPERS, ONIONS, CAULIFLOWER: Follow directions for seed and plant beds. Rate and exposure time is indicated in the dosage table. Row or bed applications may be made at the broadcast rates but the amount used will be proportionately less per acre depending on the row spacing and width of treatment in the row or bed.

PINEAPPLE:

DECIDUOUS FRUITS, NUTS, CI AND OTHER PERENNIAL CROPS: (Do not harvest crop for 24 months after planting.) Apply Methyl Bromide at a rate indicated in the dosage table. To seal fumigant after application, cover immediately with a mechanical tarp layer. Do not remove tarpaulin until after the proper exposure period indicated on the dosage table has passed. Prior to fumigation the soil should be in seed bed condition with adequate moisture to support seed germination. The soil should be worked to the depth it is desirable for the fumigant to penetrate. Plant refuse should be worked into the soil and time allowed for refuse to decompose before treatment.

BACK HOING: Field tests have demonstrated that back hoing is an effective method for preventing the replanting of weeds and other plants in the soil. This method is suitable in nonfood crops that are lightly stratified. Dig hole 5 feet wide and 2 feet deep, insert applicator tube, entire dose of fumigant for 100 square feet and back soil loosely over opening to site.

MOUNDING: This method is suitable in nonfood crops that are lightly stratified. Dig hole 5 feet wide and 2 feet deep, insert applicator tube, entire dose of fumigant for 100 square feet and back soil loosely over opening to site.

DOSE AND APPLICATION FOR SOIL FUMIGATION WITH METHYL BROMIDE

PEST CONTROL OBJECTIVE	TYPE OF SOIL AND/OR CROP	DOSEAGE*
Seedbeds, seed beds, nurseries	TURF RENOVATION, Lawns and other recreational Turf Areas	400-500 lb/A
Seedling and plant beds, nurseries, forest and shade trees, ornamental flowers, vines and shrubs, and other similar plants, vegetable seed beds, preplant soil or soil treated to label directions for registered products, and in orchard and vineyard planting sites and soils where tomatoes, strawberries, pineapples, peppers, muskmelons, cauliflower, broccoli, lettuce, onions, asparagus, and eggplants are to be grown for food.	400-500 lb/A	400-500 lb/A
Sealing off diseases such as Pythium, Rhizoctonia, Fusarium	TURF RENOVATION Lawns and other recreational areas as listed above	600 lb/A
Nonfood and nonfood crop areas: Some plants as listed above, vegetable for production of transplants only, floral and nursery crops.	NONFOOD AND NONFOOD CROP AREAS: Some plants as listed above, vegetable for production of transplants only, floral and nursery crops.	600 lb/A
Seedbeds, seed beds, nurseries	Permanent Planting For Tomatoes, Strawberries, Pineapples, Muskmelons, Eggplants, Peppers, Broccoli, Cauliflower	240-400 lb/A
Brown rot fungus, Armillaria root rot, Phytophthora root rot, Rhizoctonia root rot, Citrus lesion pinning and dagger	GRAPES: For control of Rhizoctonia in light sandy soil and fine textured clay soils; Control of Armillaria in light sandy soil; Control of Armillaria in fine textured clay soils	400-600 lb/A 400 lb/A 400 lb/A
Armillaria root rot, Phytophthora root rot, Crown rot fungus, Citrus nematodes, Burrowing nematodes	DECIDUOUS FRUITS, NUTS, CITRUS, AND OTHER PERENNIAL WOODY PLANTS: Control of Phytophthora root rot; Control of Armillaria root rot in sandy light soil and fine textured clay soil	400-650 lb/A 400-450 lb/A
Root knot nematodes	CITRUS: For control of burrowing and root knot nematodes	400-650 lb/A
	TRIFOLIUM: For control of Phytophthora root rot	1-1 1/2 lb/100 sq. ft.
	Control of Armillaria root rot in light sandy soil	1-1 1/2 lb/100 sq. ft.
	Control of Armillaria root rot	1-1 1/2 lb/100 sq. ft.

...of an additional 12 hours for ...
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 ...100 square feet
 ...entire dose of fumigant has been released, remove applicator and fill hole with soil to prevent too rapid escape of fumigant

STRUCTURAL FUMIGATION FACT SHEET
 (See Supplemental Manual #NB-1 For Example of Fact Sheet)

A. The applicator must obtain a structural fumigation fact sheet which has been signed by, and provided to, the following persons: (1) an occupant of a single family dwelling prior to the parties entering a fumigation agreement; (2) the owner, manager, or designee of the building for multiple-family dwellings, provided he is in writing to the applicator that a copy of the structural fumigation fact sheet has been provided to an adult occupant of each unit in a multiple family dwelling; (3) the parties entering into a fumigation agreement; or (4) the designated agent for all structures or businesses other than dwellings.

The structural fumigation fact sheet shall state: The purpose of fumigation is to inform the consumer of possible health hazards associated with the use of the structural fumigant, methyl bromide. To ensure that you have been given an opportunity to read this applicator's fact sheet prior to the signature of the owners and occupants of any property to be fumigated with methyl bromide, you will also be given a copy of this fact sheet to keep.

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**DOSEAGE AND EXPOSURE TABLE
 FOR SOIL FUMIGATION WITH METHYL BROMIDE**

PEST CONTROL DESIRED	TYPE OF SOIL AND/OR CROP	DOSEAGE*	EXPOSURE
Nematodes Seed Seeds Insects	TURF RENOVATION: Lawns and Other Recreational Turf Areas	400-500 lb/A	48 hrs
	FRUIT AND VEGETABLE PRODUCTION: Seed beds and young plants for trees, shrubs and forest trees, ornamentals, shrubs and vines. Vegetables for production of crops other than fruit and vegetable crops.	400-500 lb/A	48 hrs
Damping off diseases such as Pythium, Rhizoctonia, Fusarium	TURF RENOVATION: Same sites as listed above.	500 lb/A	48 hrs
	NONFOOD AND SHORTED CROP AREAS: Same plants as listed above. Vegetables for production of transplants only. Floral and nursery crops.	400 lb/A	48 hrs
Nematodes Seed Seeds Insects	Permanent Planting For: Strawberries, Pineapples, Muskmelons, Eggplants, Peppers, Cauliflower	240-400 lb/A	48 hrs
Crown rot fungus Armillaria root rot Phytophthora root rot Nematodes root rot Citrus lesion pinning and feather	FRUIT: For control of Nematodes in light sandy soils and fine textured clay soils. Control of Phytophthora in light sandy soil and fine textured clay soils. Control of Armillaria in light sandy soils. Control of Armillaria in fine textured clay soil.	400-600 lb/A	5-7 days
Armillaria root rot Phytophthora root rot Crown rot fungus Citrus Nematodes Burrrowing Nematodes	DECIDUOUS FRUITS, WITS, CITRUS, AND OTHER PERENNIAL WOODY PLANTS Control of Phytophthora root rot. Control of Armillaria root rot in sandy light soil and fine textured clay soil.	400-650 lb/A	5-7 days
Root knot Nematodes	CITRUS: For control of burrowing and root knot Nematodes. TREE SITES: For control of Phytophthora root rot. Control of Armillaria root rot in light sandy soils. Control of Armillaria in fine textured clay soil.	400-650 lb/A 1-1 1/2 lb/ 100 sq. ft. 1-1 1/2 lb/ 100 sq. ft. 1-1 1/2 lb/ 100 sq. ft.	5-7 d. & e. 5-7 days 5-7 days 5-7 days

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**FOR USE WEST OF ROCKY MOUNTAINS
 ONIONS, DIRECT SEEDED**

APPLICATION: Treatment can be made whenever soil conditions are suitable. In northern states, late summer fall treatments are best for land to be planted in early spring crops. Follow application directions described for SEED AND PLANT BEDS.

USE: For control of White Rot, weeds (grasses, Nematodes).

DOSEAGE: 300 lbs/Acre

EXPOSURE: Remove tarpaulin after 48 hours

RESERATION: Remove tarpaulin before planting

LIMITS: Use the fact sheet and the fact sheet for the Rocky Mountains area. Any other fact sheet should be used.

PREPLANT SOIL FUMIGATION

METHYL BROMIDE 99.5% may be used as a preplant soil fumigant for land in which plants may be grown for nonfood crop uses. These uses are for seed and plant beds, nurseries and permanent planting sites for tobacco, lawns, and other ornamental and recreational turf areas, forest and shade trees, ornamental flowers, vines and shrubs and other similar plants. Methyl Bromide 99.5% may be used in vegetable seed beds for production of plants that are later transplanted in untreated soil or soil treated to label directions for registered products, and in orchard and vineyard planting sites and soils where tomatoes, strawberries, pineapple, peppers, muskmelons, cauliflower, broccoli, lettuce, onions, asparagus, and eggplants are to be grown for food.

APPLICATION

SEED AND PLANT BEDS: (Plants Grown For Transplanting)
 Prior to planting, apply Methyl Bromide at the rate that appears in the dosage table by means of tractor mounted chisels spaced 12 inches apart and at a depth of 5 - 8 inches below the soil surface. To seal fumigant after application, cover immediately with a gas-tight tarpaulin by means of a mechanical tarp layer. Do not remove tarpaulin until after the proper exposure period indicated on the dosage table has passed. Prior to fumigation, the soil should be in seed bed condition with adequate moisture to support seed germination. The soil should be worked to the depth it is desirable for the fumigant to penetrate. Plant refuse should be worked into the soil and time allowed for refuse to decompose before treatment.

TURF, NURSERIES, AND FLORAL CROPS:
 Follow directions for seed and plant beds. If fumigating old turf, the soil should be worked up before fumigating. It is desirable that the old turf be incorporated into the soil by rototilling, discing, or plowing. Rate and exposure time is indicated in the dosage table.

TOMATOES, STRAWBERRIES, BROCCOLI, LETTUCE, MUSKMELONS, EGGPLANTS, ASPARAGUS, PEPPERS, ONIONS, CAULIFLOWER:
 Follow directions for seed and plant beds. Rate and exposure time is indicated in the dosage table. Row or bed applications may be made at the broadcast rates but the amount used will be proportionately less per acre depending on the row spacing and width of treatment in the row or bed.

PINEAPPLE:
 Prior to planting pineapple, apply methyl bromide at a rate specified in the dosage table by means of tractor mounted chisels set not more than 5 1/2 feet apart and at a depth of 12-18 inches. To seal fumigant, cover immediately with pineapple bed mulch film dispensed by a sled mounted on the same tractor. Pineapple propagules may be planted through the bed mulch film 7 or 14 days after fumigation.

GRAPES:
 Prior to planting, apply Methyl Bromide at the rate that appears in the dosage table by means of tractor mounted chisels spaced not more than 5 1/2 feet apart. Inject the Methyl Bromide at a depth of not less than 12 inches. To seal fumigant after application for disease control, cover immediately with a gas-tight tarpaulin by means of a mechanical tarp layer. Do not remove tarpaulin until after the proper exposure period indicated in the dosage table has passed. For nematode control, seal soil immediately after application of the fumigant by discing or similar operation. Prior to application, the soil should be ripped to not less than 20 inches and the subsurface should be as dry as possible. Excess moisture will block deep penetration of the Methyl bromide. Seal soils and soils very high in organic content should not be fumigated to control Armillaria species with Methyl Bromide. Clay soils and soils that drain poorly may be dried out by planting a crop and withholding water from it during the summer. This will increase penetration of methyl bromide. Do not apply methyl bromide to soils where vines will bear within 14 months.

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DECIDUOUS FRUITS, NUTS, CITRUS, VINEYARDS AND OTHER PERENNIAL CROPS:

(Do not harvest crop for 24 months after fumigation.) Prior to planting, apply Methyl Bromide at a rate and exposure time that is indicated in the dosage table. To seal fumigant after application, use a tarp or cover immediately with a gas tight tarpaulin by means of a mechanical tarp layer. For nematode control, seal soil immediately after application of the fumigant by disking or similar operation. The soil should be tamped to not less than 30 inches and the substrate should be as dry as possible. Excess moisture will block deep penetration of the Methyl Bromide. Peat soils and soils very high in organic content should not be fumigated to control Armillaria rot with Methyl Bromide. Clay soils and soils that are sandy may be dried out by planting sudan grass and withstanding water from it during the summer. This will increase the efficiency of Methyl Bromide. Bark boring is a danger to the fumigant. Methods of applying Methyl Bromide to the tree site. Attach a Methyl Bromide dispenser to the cylinder of Methyl Bromide and to it attach a polyethylene applicator tube. The correct dosage can be measured with the dispenser and then applied to the tube.

BACK HOLES: Field tests have demonstrated that this is an effective method for preventing the re-plant site from being infested with soil-borne nematodes. The method has been found to be effective in the soil. The soil of the deep hole is in contact with the fumigant. During fumigation, soil should be kept moist. A hole 5 feet deep with a diameter of 12 inches is satisfactory. For stratified soils, a single hole 5 feet deep with a diameter of 12 inches is satisfactory. Back hole size with 2 feet of soil placed applicator tube at the level, complete back fill, and release entire dose of fumigant for 100 square foot tree site. After fumigant has been released, remove tube and tamp soil lightly over opening to seal fumigant in the site.

AUGERING: This method is suitable in noncompacted soils or soils that are lightly stratified. Dig hole 5 feet deep with auger, back fill hole two feet, insert applicator tube, fill hole, and release entire dose of fumigant for 100 square foot tree site. When fumigant has been released, remove applicator and tamp or compact hole with soil to prevent too rapid escape of fumigant.

FOR USE IN CALIFORNIA ON ASPARAGUS AND LETTUCE

APPLICATOR: Follow application directions as shown on label.

PLANT USE:

PLANT	DOSEAGE AND USE TABLE
Asparagus	Seeds (including salts) 100-400 lbs Nematodes 300-400 lbs Soil Vets 300-400 lbs

FOR USE IN FLORIDA CITRUS CONTROL OF PHYTOPHTHORA IN

This is preplant or replant treatment. Trees which treated soil will not bear harvestable fruit for 24 months. Use a minimum of 1 to 1 1/4 pounds of Methyl Bromide per acre. Exposure to fumigation for 48 hours, covering treated tarpaulin will control disease to a depth of 4 feet before setting transplants in treated area.

GREENHOUSE FUMIGATION

This fumigant may be used in field or in greenhouses. The following safety precautions must be observed:

PRIOR TO FUMIGATION: The use of methyl bromide presents a potential hazard to humans and plant. Cautions must be made in order that these potential hazards are minimized. It is the responsibility of the individual fumigator to see that all safety precautions are observed before the fumigation operation commences. The fumigation should only be conducted by a person trained and experienced in the fumigation process. All persons involved in the fumigation should wear protective clothing and equipment. All persons should be removed from the area during fumigation and instructed to leave the area until the fumigant has been completely aerated.

DURING FUMIGATION: If a wind is blowing, all injection should be made from a previous injection site. Immediately the fumigant and tarping, a qualified person wearing protective clothing should monitor the area with a halide leak detector. If leaks are found, the source of the leak should be repaired. During this operation, all windows and doors should be kept closed to maximize ventilation.

PLACARDING OF AREA: The fumigated area must be placarded with signs containing at least the signal "Skull and Crossbones" and the words, "Area Under Fumigation - Do Not Enter Until Completely Aerated." The date of fumigation used; emergency telephone number for contact; address of the fumigator. Do not remove warning signs until fumigated area is completely aerated and safe for re-planting. Exposure time should be 24 hours.

PROTECTIVE EQUIPMENT: Although fumigant contains a small amount of chloropicrin, which is a warning agent, the absence of chloropicrin does not always indicate the absence of methyl bromide. Under no circumstances shall any person enter the fumigated structure without the appropriate protective equipment from the time of injection of the fumigant until the fumigant is completely aerated. To meet these standards, the following equipment must be present during the entire fumigation operation: (1) One or more sealable air lock; (2) One or more replacement air lock apparatus; (3) One or more halide leak detectors.

A 5 ppm maximum exposure level for Methyl Bromide in the air has been defined as the concentration at which protective devices are not required. Persons not wearing protective equipment should not enter the fumigated area until the Methyl Bromide concentrations are 5 ppm or less.

WARRANTY

NOTICE: Seller warrants that the product conforms to the description and is reasonably fit for the purposes stated. Seller does not warrant for any other purposes.

DOSEAGE TABLE FOR SOIL FUMIGATION WITH METHYL BROMIDE

PEST CONTROL DESIRED	TYPE OF SOIL AND/OR CROP	DOSEAGE*	MIN. EXP.	AERATION TIME BEFORE PLANTING
Nematodes Seed Insects	TURF RENOVATION: Lawns and other recreational turf areas	400-500 lb/A	48 hrs	3 days
	ORCHARD AND VEGETABLE GROUNDS: Turf for ornamental purposes, lawns and other recreational purposes, shrubs and vines, vegetables, etc. or sections of trees, lawns, etc. and other crops	400-500 lb/A	48 hrs	3 days
Rooting off diseases such as Phythium, Rhizoctonia, Fusarium	TURF RENOVATION: Same sites as listed above	800 lb/A	48 hrs	14 days if planted to transplants 3 days if seeded
	NONFOOD AND BERRYED CROP AREAS: Same plants as listed above. Vegetables for production of transplants only. Floral and Nursery Crops.	800 lb/A	48 hrs	14 days if planted to transplants 3 days if seeded
Nematodes Seed Insects	Permanent Planting for Tomatoes, Strawberries, Pineapples, Muscavines, Eggplants, Peppers, Broccoli, Cauliflower	240-400 lb/A	48 hrs	3 days if seeded 7-14 days if vegetable growth set in treated soil
Armillaria root rot Phytophthora root rot Nematodes (root knot, citrus lesion, pinning and galling)	GRAPES: For control of Nematodes in light sandy soils and fine textured clay soils Control of Phytophthora in light sandy soil and fine textured clay soils Control of Armillaria in light sandy soil Control of Armillaria in fine textured clay soils	400-600 lb/A	5-7 days	14 days
Armillaria root rot Phytophthora root rot Crown rot fungus Citrus Nematodes Burying Nematodes	DECIDUOUS FRUITS, NUTS, CITRUS, AND OTHER PERENNIAL WOODY PLANTS Control of Phytophthora root rot Control of Armillaria root rot in sandy soil and fine textured clay soil	400-650 lb/A	5-7 days	14 days
Root knot Nematodes	CITRUS: For control of burrowing and root knot Nematodes	400-650 lb/A	5-7 days	In colder climates treat in fall and plant following spring
	TREE SITES: For control of Phytophthora root rot	1-1 1/2 lb/100 sq. ft.	5-7 days	In warmer climates do not plant until 30 days after application.
	Control of Armillaria root rot in light sandy soils	1-1 1/2 lb/100 sq. ft.	5-7 days	
	Control of Armillaria in fine textured clay soil	1-1 1/2 lb/100 sq. ft.	5-7 days	

* Do not treat when temperature is below 50°F

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FOR USE IN FLORIDA
CITRUS CONTROL OF PHYTOPHTHORA IN

This is preplant or replant treatment. Trees which treated soil will not bear harvestable fruit for 24 months. Use a mixture of 1 to 1 1/4 pounds of Tarpaulin for 48 hours. Covering treated tarpaulin will control disease to a depth of 4 before setting transplants in treated area.

DOSEAGE AND EXPOSURE TABLE
FOR SOIL FUMIGATION WITH METHYL BROMIDE

PEST CONTROL DESIRED	TYPE OF SOIL AND/OR CROP	DOSEAGE*	MIN. EXP.	AERATION TIME BEFORE PLANTING
Nematodes Weed Seeds Insects	TURF RENOVATION, Lawns And Other Recreational Turf Areas	400-500 lb/A	48 hrs	3 days
	SOFTWOOD AND HARDWOOD PINE APPLICATOR: Seed and young trees for trees to 20 feet. Shade and forest trees. Grasses, Shrubs and Vines. Vegetables for production of transplants only. Floral and Nursery Crops.	400-500 lb/A	48 hrs	3 days
Deeping off diseases such as Pythium, Rhizoctonia, Fusarium	TURF RENOVATION Lawns sites as listed above.	500 lb/A	48 hrs	14 days if planted to transplants 3 days if seeded
	SOFTWOOD AND SOFTWOOD CROP AREAS: Same plants as listed above. Vegetables for production of transplants only. Floral and Nursery Crops.	500 lb/A	48 hrs	14 days if planted to transplants 3 days if seeded
Nematodes Weed Seeds Insects	Permanent Planting For Tomatoes Strawberries Pineapples Guavaeons Eggplants Peppers Broccoli Cauliflower	240-400 lb/A	48 hrs	3 days if seeded 7-14 days if vegetable growth set in treated soil
Crown rot fungus Armillaria root rot Phytophthora root rot Nematodes root anastomosis lesion pinning and dagger	GRAPES For control of Nematodes in phloem xylem and fine textured clay soils Control of Phytophthora in light sandy soil and fine textured clay soils Control of Armillaria in light sandy soil Control of Armillaria in fine textured clay soil	400-600 lb/A 500 lb/A 400 lb/A 500 lb/A	5-7 days 5-7 days 5-7 days 5-7 days	14 days 14 days 14 days 14 days
Armillaria root rot Phytophthora root rot Crown rot fungus Citrus Nematodes Burying Nematodes	DECIDUOUS FRUITS, WTS. CITRUS, AND OTHER PERENNIAL WOODY PLANTS Control of Phytophthora root rot Control of Armillaria root rot in sandy light soil and fine textured clay soil	400-650 lb/A 400-650 lb/A	5-7 days 5-7 days	14 days 14 days
Root knot Nematodes	CITRUS: For control of burrowing and root knot Nematodes TREE SITES: For control of Phytophthora root rot Control of Armillaria root rot in light sandy soil Control of Armillaria in fine textured clay soil	400-650 lb/A 1-1 1/2 lb/100 sq.ft. 1-1 1/2 lb/100 sq.ft. 1-1 1/2 lb/100 sq.ft.	5-7 days 5-7 days 5-7 days 5-7 days	In colder climates treat in fall and plant following spring In warmer climates do not plant until 30 days after application.

* Do not treat when temperature is below 50° F

GREENHOUSE FUMIGATION

This fumigant may be used in field or in green greenhouse, the following safety precautions must be

PRIOR TO FUMIGATION: The use of methyl bromide presents a potential hazard to humans and plant cautions must be made in order that these potent risks. It is the responsibility of the individual fumigation operator to see that all safety precautions are observed. Before the fumigation operation commence the fumigation job shall have conducted proper personnel involved in the fumigation including use of treated all persons from the area not directly fumigation and inspected the equipment to insure a proper

DURING FUMIGATION: If a wind is blowing, all inlets upwind of the fumigation site immediately seal the fumigant and tarping. A qualified person wear sent should monitor the area with a halide leak detector. If leaks are found, the source of the leak should be. During this operation, all windows and doors should operating to maximize ventilation.

ENCLOSING OF AREA: The fumigated area must be entrances with signs containing at least the signs "Skull and Crossbones" and the words "Area Under until completely aerated."; the date of fumigant used; emergency telephone number for contact address of the fumigator. Do not remove warn fumigated area is completely aerated and safe for by a suitable detector. Exposure time should be 14

PROTECTIVE EQUIPMENT: Although fumigant contains absence of microorganisms does not always indicate provide. Under no circumstances shall any person the fumigated structure without the appropriate standards, the following equipment must be present the entire fumigation operation: (1) One or more ring apparatus; (2) One or more replacement air apparatus; (3) One or more halide leak detectors.

A 5 ppm maximum exposure level for Methyl Bromide. This level has been defined as the concentration protective devices are not required. Persons no equipment should not enter the fumigated area until show Methyl Bromide concentrations of 5 ppm or less

WARRANTY

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

FOR USE WEST OF ROCKY MOUNTAINS
ONIONS, DIRECT SEEDED

APPLICATION: Treatment can be made whenever soil conditions are suitable. In northern states, late summer or early fall treatments are best for land to be planted to early spring crops. Follow application directions as described for SEED AND PLANT SEEDS.

USE: For control of White Rot, weeds (grasses) and Nematodes.

DOSEAGE: 300 Lbs/Acre

EXPOSURE: Remove Tarpaulin after 48 hours

AERATION: Aerate 14 days before planting

LIMITS: Use only in states west of the Rocky Mountains. Do not treat any area where the soil is very heavy or montes

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FOR USE IN CALIFORNIA
ASPARAGUS AND LETTUCE

APPLICATING: Follow application directions as described for ASP and LETTUCE.

DOSAGE AND USE TABLE

CROP	Formulation	Rate	Application
Asparagus	100-400 lbs A	Remove tarpaulin after 48 hrs.	
Lettuce	Wesdis (including salts) 300-400 lbs A	Remove tarpaulin after 48 hrs.	
	Nerastofes		
	Big Vert 200-300 lbs A	Remove tarpaulin after 48 hrs.	

FOR USE IN FLORIDA
DISEASE CONTROL OF PHYTOPHTHORA IN SANDY SOILS

This is preplant or replant treatment. Trees which are planted in this treated soil will not bear harvestable fruit for a period of at least 24 months. Use a maximum of 1 to 1 1/4 pounds per 100 square feet. Expose to fumigation for 48 hours, covering treated area with a 4 mil tarpaulin. Will control disease to a depth of 4 feet. Aerate 2 weeks before setting transplants in treated area.

GREENHOUSE FUMIGATION

This fumigant may be used in field or in greenhouse. When used in greenhouse, the following safety precautions must be strictly observed:

PRIOR TO FUMIGATION: The use of methyl bromide in confined spaces presents a potential hazard to humans and plant life. Special precautions must be taken in order that these potential hazards be minimized. It is the responsibility of the individual supervising the fumigation operation to see that all safety precautions are strictly observed. Before the fumigation operation commences, the supervisor of the fumigation job shall have conducted proper training of all personnel involved in the fumigation, including use of safety equipment, removed all persons from the area not directly involved in the fumigation, and inspected the equipment to insure proper operation.

DURING FUMIGATION: If a wind is blowing, all injections should be made upwind from a previous injection site. Immediately after injection of the fumigant and tarping, a qualified person wearing protective equipment should monitor the area with a halide leak detector. If excessive leaks are found, the source of the leak should be resealed immediately. During this operation, all windows and doors should be open and fans operating to maximize ventilation.

PLACARDING OF AREA: The fumigated area must be placarded on all entrances with signs containing at least the signal word DANGER and the "Skull and Crossbones" and the words, "Area under fumigation. Do not enter until completely aerated."; the date of fumigation; name of the fumigant used; emergency telephone number for contact; and the name and address of the fumigator. Do not remove warning signs until the fumigated area is completely aerated and safe for entry, as indicated by a suitable detector. Exposure time should be 24 - 48 hours.

PROTECTIVE EQUIPMENT: Although fumigant contains chloroform, the absence of chloroform does not always indicate the absence of methyl bromide. Under no circumstances shall any person be allowed to enter the fumigated structure without the appropriate protective equipment from the time of injection of the fumigant until acceptable readings are obtained using an approved detector. To maintain adequate safety standards, the following equipment must be present on the site during the entire fumigation operation: (1) One or more self-contained breathing apparatus; (2) One or more replacement air bottles per breathing apparatus; (3) One or more halide leak detectors.

A 5 ppm maximum exposure level for Methyl Bromide has been established. This level has been defined as the concentration below which personal protective devices are not required. Persons not wearing protective equipment should not enter the fumigated area until monitoring devices show Methyl Bromide concentrations of 5 ppm or less.

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.

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ACCEPTED
with COMMENTS
to EPA Letter Docket

JUL 1 1982

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

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FOR USE IN FLORIDA
CIPRUS CONTROL OF PHYTOPHTHORA IN SANDY SOILS

This is preplant or replant treatment. Trees which are planted in this treated soil will not bear harvestable fruit for a period of at least 24 months. Use a maximum of 1 to 1 1/4 pounds per 100 square feet. Expose to fumigation for 48 hours, covering treated area with a 4 mil tarpaulin, will control disease to a depth of 4 feet. Aerate 2 weeks before setting transplants in treated area.

GREENHOUSE FUMIGATION

This fumigant may be used in field or in greenhouse. When used in greenhouse, the following safety precautions must be strictly observed:

PRION TO FUMIGATION: The use of methyl bromide in confined spaces presents a potential hazard to humans and plant life. Special precautions must be made in order that these potential hazards be minimized. It is the responsibility of the individual supervising the fumigation operation to see that all safety precautions are strictly observed before the fumigation operation commences. The supervisor of the fumigation job shall have conducted proper training of all personnel involved in the fumigation, including use of safety equipment, removed all persons from the area not directly involved in the fumigation, and inspected the equipment to be used before operation.

DURING FUMIGATION: If a wind is blowing, all injections should be made upwind with a previous injection site. Immediately after injection of the fumigant and tarping, a qualified person wearing protective equipment should monitor the area with a halide leak detector. If excessive leaks are found, the source of the leak should be resealed immediately. During this operation, all windows and doors should be open and fans operating to maximize ventilation.

PLACARDING OF AREA: The fumigated area must be placarded on all entrances with signs containing at least the signal word DANGER and the "Skull and Crossbones" and the words "Area under fumigation. Do not enter until completely aerated."; the date of fumigation; name of the fumigant used; emergency telephone number for contact; and the name and address of the fumigator. Do not remove warning signs until the fumigated area is completely aerated and safe for entry, as indicated by a suitable detector. Exposure time should be 24 - 48 hours.

PROTECTIVE EQUIPMENT: Although fumigant contains microcapsules, the absence of microcapsules does not always indicate the absence of methyl bromide. Under no circumstances shall any person be allowed to enter the fumigated structures without the appropriate protective equipment from the time of injection of the fumigant until acceptable readings are obtained using an approved detector. To maintain adequate safety standards, the following equipment must be present on the site during the entire fumigation operation: (1) One or more self-contained breathing apparatus; (2) One or more replacement air bottles per breathing apparatus; (3) One or more halide leak detectors.

A 5 ppm maximum exposure level for Methyl Bromide has been established. This level has been defined as the concentration below which personal protective devices are not required. Persons not wearing protective equipment should not enter the fumigated area until monitoring devices show Methyl Bromide concentrations of 5 ppm or less.

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.

ACCEPTED
with COMMENTS
in EPA Letter Dated:

JUL 10 1982

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

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Supplemental Manual

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ACCEPTED
with COMMENTS
to EPA Letter Dated:

JUL 16 1992

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

58266-3

METHYL BROMIDE

SAFETY

INFORMATION

6/92

PHYSICAL PROPERTIES

Methyl Bromide at ambient temperature is a colorless and odorless gas. It is a water white liquid below its boiling point. Commercially, Methyl Bromide is handled in liquified form under pressure.

PROPERTY	VALUE
Molecular Weight	94.94
Pounds per gallon, Liquid	14.4 @ 0°C
Specific Gravity, Liquid	1.732 @ 32°F/0°C (H ₂ O = 1)
Percent Volatile	100% (by volume)
Boiling Point	38.4°F/3°C
Critical Temperature	194.00 °C
Refractive Index, n.	1.4432 @ -20°C
Vapor Pressure	1400 mmHg @ 68°F/20°C
Viscosity, cP.	0.397 @ 0°C
Flash Point	None
Flammable Limits (At S.T.P.).	Lel 10%, Uel 15% with high energy ignition source
Freezing Point	-94.1 °C
Autoignition Temperature	537 °C
Odor	None
Solubility in Water	1.34 gms/100 ml @ 77°F/25°C

HANDLING PRECAUTIONS TO AVOID SKIN CONTACT WITH METHYL BROMIDE

If carelessly handled, methyl bromide may be spilled on the skin surface. Since methyl bromide has a very low boiling point, very rapid evaporation takes place and within a few seconds the methyl bromide will entirely disappear from the surface of exposed skin. From such casual contacts, little or no difficulty need be anticipated. However if methyl bromide is spilled on clothing, gloves, or other materials covering the skin, such coverings may keep the methyl bromide in close and continuous contact with the skin. Since there is no particular sensation produced by such contact, methyl bromide may be maintained in contact with the skin for extended periods of time without an awareness that this has occurred.

Where methyl bromide has remained in contact with the skin for some time, a blister commonly forms which is not unlike the blisters resulting from thermal burns or severe chilling. Where blister formation has resulted from contact with methyl bromide, experience has shown that these seem to respond best to treatment when left intact. The blistered area is covered with a sterile petrolatum dressing which should be changed as required.

No one should be permitted to handle methyl bromide while wearing gloves, bandages, or occlusive dressing. Finger rings should be removed before handling the liquid product. Since methyl bromide will penetrate ordinary rubber gloves, these also should not be used. Where methyl bromide has been spilled on the clothing, such clothing should be removed immediately and thoroughly cleaned and aerated before being re-worn.

The results of brief skin contact by methyl bromide are mild, very simply treated, and accompanied by no serious after effects.

FOOD COMMODITIES

Methyl bromide has been used successfully for many years for the fumigations of a wide variety of commodities. The tolerances of various commodities for methyl bromide, however, vary considerably. Therefore, unless the tolerance of a given commodity for methyl bromide is known, consult Federal or State Experiment Station authorities or your dealer before fumigation is performed.

Precautions for the use of methyl bromide for fumigation of processed food and feedstuffs:

Overdosing and/or overexposure of any food or feedstuff commodity should be avoided. When the prior history is not known, or in those instances where a repeated fumigation is necessary, the commodity

should be analyzed for bromide residues before fumigation to make certain the proposed treatment will not result in residues that will exceed the tolerances established by the E.P.A. Special care must be exercised to determine whether methyl bromide fumigation of edible commodities will not result in above-tolerance bromide residues.

DETECTION EQUIPMENT

Detection equipment is a valuable aid to the fumigator. It can be used to help determine the success of a fumigation as well as protect the fumigator from over-exposure. There are several types of detection equipment available. Of the equipment described here, only the detector tubes can be used to clear an area for re-entry.

THERMAL CONDUCTIVITY GAS DETECTORS

This instrumentation is excellent for periodic determination of interior gas concentrations from outside the building. They are not, however, sensitive enough to determine the health hazards presented by low concentrations of methyl bromide. For more complete information, consult the U.S.D.A., the instrument manufacturers, or your Pesticide dealer. Units are available from Gow-Mac Instrument Company, 100 Kings Road, Madison, New Jersey 07940, and the Robert K. Hassler Company, Box 177, Altadena, California 91001.

THE HALIDE GAS DETECTOR

The Halide Gas Detector, which operates with a gas flame, is the easiest and most useful means of determining the presence or absence of harmful concentrations of methyl bromide gas. The detector consists of a torch which heats a copper plate, and an air tube through which the air to be tested is passed over the hot copper plate. If air contains methyl bromide, a green or blue flame will be seen in the torch, depending on the concentration.

If used properly, it will help to eliminate some of the practical hazards to the fumigator, and detect excessive leaks in a building. Halide detectors are available from refrigeration supply houses and some hardware stores.

Please note that the Halide Gas Detector operates with an open flame and, therefore, can be a hazard where dust or other flammable materials are present. However, this type of detector can be used to determine whether areas in or around a mill are free from hazardous concentrations of the gas by simply drawing the air and gas from the building through 1/4" (.635cm) plastic or copper tubing to suitable outside areas where the use of this instrument is safe. For instance, areas in and around the top of a building can be checked from atop the roof, or gas from areas around the bottom of the building can be checked on the ground out-of-doors.

DETECTOR TUBES

This method uses a small hand held pump and methyl bromide detector tubes. Methyl bromide is drawn through small chemical reagent tubes in which the methyl bromide is decomposed by an oxidizing agent to liberate bromine. The bromine concentration is then indicated by intensity of color formed in reaction with o-tolidine. The detector tubes are capable of measuring methyl bromide concentrations of 2.5-500 ppm. Methyl bromide detector tubes and pumps listed below are available from safety supply distributors.

1. Gastex pump, part number F-2417534, detector tube #136.
2. Draeger pump, part number CH 304, detector tube #67-28211.
3. Matheson-Kitagawa pump, part number 8014K, detector tube #157Sb.

CONDITIONS OF EXPOSURE TO METHYL BROMIDE

Methyl bromide should be handled and applied only by individuals who are thoroughly trained in its proper use. The use of concentrations which vary from those recommended can result in injury to the user and/or damage to the commodities being fumigated.

Exposure of individuals to hazardous concentrations of methyl bromide can be avoided when using proper fumigation procedures. Under accidental conditions, however, such exposure may occur. Following are possible symptoms of methyl bromide exposure:

- Nausea and vomiting
- Dizziness or headache
- Profound weakness
- Slurred speech
- Blurring vision
- Staggering gait
- Difficult breathing
- Convulsions

At the first sign of any of the above symptoms, immediately get out of fumigation area and into the fresh air. It is advisable for the entire crew of men on a fumigation job, working under the same conditions, to stop immediately if one of their members becomes sick. This is advise based on the possibility that if one man is being over-exposed, they all are.

Take the affected operator to a physician, or call a physician immediately. Under no conditions should this operator re-enter a methyl bromide atmosphere until he has received the approval of a physician. Since there is a possibility that the other members of the crew have also been unnecessarily exposed to the gas, they too should refrain from re-entering the building. Another experienced crew should be called to complete the fumigation.

SUGGESTIONS FOR ATTENDING PHYSICIAN

Overexposure to methyl bromide may produce serious effects on the central nervous system and it will also cause lung irritation. The resulting symptoms will be proportionate to the concentration of the material and the duration of the exposure.

1. Nausea and vomiting may require an antiemetic and it may be necessary to give it parenterally if vomiting is severe.
2. Cardiac embarrassment may result in hypotension and it may be necessary to use a vasopressor.
3. Respiratory embarrassment should be treated with oxygen and it may be necessary to use oxygen under pressure. Ethyl alcohol vapor added to the oxygen may be considered if there is pulmonary edema, and the use of bronchodilators may be necessary if there is broncho-constriction.
4. If respiration fails, artificial respiration should be immediately instituted, preferably by mouth-to-mouth method.
5. Quick acting barbiturates should be used to control excitement or convulsions.
6. Patient should be hospitalized for at least 48 hours and observed for late respiratory and central nervous system effects.

There is some evidence that severe pneumonia may react dramatically to the employment of corticosteroid medication. Experience to date seems to indicate that if the individual survives the more serious effects of acute exposure, his recovery in all probability will be complete but may require a considerable period of time, depending on the severity of the exposure. In case of chronic intoxication resulting from prolonged or repeated exposure, where lung involvement is not a factor, the primary effect of methyl bromide is on the nervous system.

Recovery from such effects can be expected to be slow but, in all probability, will be complete. Thus, the importance of early diagnosis and the cessation of exposure is emphasized.

STRUCTURAL FUMIGATION FACT SHEET

A. The applicator must obtain a structural fumigation fact sheet which has been signed by, and provided to, the following persons: (1) an adult occupant of a single family dwelling prior to the parties entering into a fumigation agreement, (2) (a) The owner, manager, or designated agent of the building for multiple-family dwellings, provided he or she acknowledges in writing to the applicator that a copy of the Structural Fumigant Fact Sheet has been provided to an adult occupant of each unit prior to the parties entering into a fumigation agreement; or (b) An adult occupant of each unit in a multiple family dwelling prior to the parties entering into a fumigation agreement, or (3) the owner, manager, or designated agent for all structures or businesses other than family dwellings,

B. The Structural Fumigation Fact Sheet shall state: The purpose of this handout is to inform the consumer of possible health hazards associated with the use of the structural fumigant, methyl bromide. To make sure you have been given an opportunity to read this, applicators are required to obtain the signature of the owners and occupants of property to be fumigated with methyl bromide. You will also be given a copy of this fact sheet to keep.

STRUCTURAL FUMIGANTS: METHYL BROMIDE

ATTENTION

READ THIS FACT SHEET COMPLETELY BEFORE SIGNING

Fumigation involves the introduction of poisonous gases into every part of the structure, including inside the walls. Because overexposure to these gases can be harmful to people, your building will be ventilated before you will be allowed to return.

This fact sheet provides basic information about the structural fumigant, methyl bromide, as well as information about why and how buildings are fumigated, methyl bromide health risks, how to know if you are exposed, ways to minimize your exposure, and several phone numbers to call for more information.

New rules for structural fumigation have substantially increased the time between fumigant use and the time an occupant is allowed back into the building. Post-fumigation ventilation has also been improved significantly. These changes should be adequately protective, but you should know some basic facts about structural fumigants.

Why Buildings Are Fumigated - Houses and other structures are fumigated to kill insect pests living in walls or wood. There are sometimes other ways to deal with these pests, and building owners should investigate them. However, fumigation is sometimes the only method for handling extensive infestations of wood-destroying insects. You can discuss the possibility of alternatives with your pest control company.

Why Buildings Are Fumigated - There are two pesticides used for structural fumigations: methyl bromide and sulfuryl fluoride (known by the trade name, Vikane.) Each has advantages and disadvantages in terms of their effectiveness in killing pests which professional fumigators can discuss with you. Your fumigator should also provide you with a list of items you need to remove from your home before the fumigation starts.

Methyl bromide is a gas. Before fumigation starts, the building to be fumigated is completely sealed and covered with a tarp to keep the gas in the building so it can penetrate wood to kill the pests. The tarp is left on for one to two days. Warning signs are posted around the building notifying people to keep out because the levels of the pesticide in the building during fumigation can kill a person.

After the tarp is removed, a professional fumigator will go into the building wearing a compressed air tank and mask and open the doors and windows. Powerful fans may also be set up to pull fresh air into the building.

It is now required that buildings fumigated with methyl bromide be aired out for a minimum of 72 hours after the tarp is removed. Then, the fumigators are required to measure the levels of methyl bromide inside the walls of buildings to make sure they are below three parts per million before you are allowed to go back in.

The ventilation procedures make it unlikely that any remaining fumigant in the living space will be a health hazard after the house is cleared for reoccupancy. However, you should be aware of the symptoms of overexposure to methyl bromide, since it is sensible to be cautious when dealing with a potentially hazardous chemical.

Small pockets of fumigant can remain in dead air space between walls and inside cabinets, and in porous material such as furniture, and may enter into the living space for a few days after fumigation. That's why a mandatory aeration period is required after the tarp is removed. Your building should not be cleared for reoccupancy until it is safe for you to reenter.

How Do You Know Whether You Are Exposed - Methyl bromide is a colorless, odorless gas, so a warning agent is added which causes watery eyes and a scratchy throat. If you experience these symptoms in a building that has been recently fumigated, you should leave immediately and call the pest control company to have your building retested. You should also consult with your physician.

Methyl Bromide Health Risks - Methyl Bromide enters your body as a gas when you breathe it. Exposure which may occur from touching treated surfaces is insignificant.

Nervous system, eyes, and respiratory irritations: Overexposure to methyl bromide can cause blurred vision, headache, and nausea. At higher concentrations, it can cause tremors, sleepiness, convulsions, pneumonia, and excess fluid in the lungs. These symptoms may not appear for 12 to 24 hours. If you experience these symptoms in a recently fumigated building, you should leave immediately and call the pest control company to have the building retested. You should also call your personal physician. Physicians are encouraged to report suspected pesticide-related illnesses to EPA.

Birth defects: In recent animal studies, methyl bromide caused birth defects when pregnant animals were exposed under experimental conditions. There is no evidence that methyl bromide affects human reproduction, although some chemicals which cause birth defects in animals may also cause birth defects in humans. Any person, including pregnant women, should avoid unnecessary exposure.

Other effects: It is not known whether long-term exposure to methyl bromide causes cancer. Experiments in animals are underway to study this, although tests so far are negative. However, even if methyl bromide were shown to cause cancer over a lifetime of exposure in animals, it is unlikely that your exposure from the one-time fumigation of your building would be high enough to cause a significant risk of cancer.

Ways To Reduce Your Exposure If You Are Having Your Building Fumigated -

- Carefully evaluate all your pest control alternatives.
- Talk over your treatment program in advance with the pest control company, so you fully understand what will be done, and what you need to do.
- Carefully follow the instructions you are given about items you are to remove from your building.
- Stay out of the treated building for at least three days after the tarp is removed. If you have additional concerns, you may choose to be away for an extra period of time after the building is cleared for reoccupation.
- If you are interested or concerned, you can ask your pest control company to show you the records of the air monitoring it did before your building was cleared for reoccupation.
- You may wish to increase ventilation by opening doors and windows.
- If you have symptoms of exposure, or you believe that the aeration was not done properly, you should leave the building and contact the pest control company and your physician. You may also wish to call one of the phone numbers listed below.

For information about pesticides, the U.S. Environmental Protection Agency has a toll-free information service, the National Pesticide Telecommunications Network Hotline, which can be reached at 1 (800) 858-7378.

In a medical emergency, call 911, or contact the nearest Poison Control center. See "Crisis Hotlines" listed near the front of the white pages in your phone book.

If you feel uncomfortable entering the structure, or if you do not fully understand the potential hazards, you should call the company that performed the fumigation:

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Name: _____

Address: _____

City: _____

Telephone: _____

I acknowledge receiving a copy of the methyl bromide fact sheet. (You will sign one copy for the company doing the fumigation, and get a second copy to keep for later reference.)

Signature: _____ Date: _____

Please print your name here: _____

Your address: _____

FOR FUMIGATION OF RESIDENTIAL AND COMMERCIAL STRUCTURES, THESE DIRECTIONS SUPERSEDE ANY OTHER DIRECTIONS ON THE LABEL CONCERNING AERATION AND REENTRY

LABELING FOR END-USE PRODUCTS:

The label language for Fumigation of Residential and Commercial structures: Aeration and Reentry would be the same as for manufacturing-use products except the introductory paragraph concerning formulation into end-use products would be omitted.