

PM 32 8536-15

10/17

**RESTRICTED USE PESTICIDE  
DUE TO ACUTE TOXICITY**

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

**METHYL BROMIDE 100  
COMMODITY FUMIGANT****ACTIVE INGREDIENTS:**

METHYL BROMIDE	100.00%
TOTAL	100.00%



Soil  
Chemicals  
Corporation  
PRODUCTS

P.O. BOX 782 • HOLLISTER, CA 95024

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

NET CONTENTS . . . . . LBS.

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

PRECAUCION AL USUARIO: Si usted no lee ingles, no use este producto hasta que le otorga la hoja side expli-  
code implemente.

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

**STATEMENT OF PRACTICAL  
TREATMENT**

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

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

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

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

See Side Panel for Additional Precautionary Statements.

**BEST AVAILABLE COPY**

207  
2087

**PRECAUTIONARY STATEMENTS  
HAZARD TO HUMANS  
AND DOMESTIC ANIMALS:  
DANGER  
EXTREMELY HAZARDOUS LIQUID AND  
VAPOR UNDER PRESSURE.  
INHALATION MAY BE FATAL OR CAUSE  
SERIOUS ACUTE ILLNESS OR DELAYED  
LUNG OR NERVOUS SYSTEM INJURY.  
DO NOT BREATHE VAPORS.  
LIQUID OR EXCESSIVE VAPOR CAN CAUSE  
SERIOUS SKIN OR EYE INJURY WHICH MAY  
HAVE A DELAYED ONSET.  
DO NOT GET LIQUID ON SKIN, IN EYES,  
OR ON CLOTHING.**

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

**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 substantially 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/m<sup>3</sup>), no respiratory protection is required. If this concentration is exceeded at any time, all persons in the fumigation area must wear protective clothing and a NIOSH/MSHA approved self-contained breathing apparatus (SCBA) or combination air-supplied/SCBA respirator (such as a T-15 filter, Muntzair or respirable device).

**CLOTHING PRECAUTIONS:**

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

**WARNING SIGNS:**

1. The applicator must place or post all entrances to the fumigated area with signs bearing in English and Spanish: (1) The signal word DANGER/PELIGRO and the skull and crossbones symbol; (2) the statement "Area under fumigation. No entry without permit"; (3) the date of fumigation; (4) Name of fumigant used; (5) Name, address, and telephone number of the applicator.
2. Do not remove a placard until the treated community is completely evacuated. To determine whether evacuation is complete, each fumigated site or vehicle must be monitored and shown to contain less than 5 ppm methyl bromide in the air space around and, when feasible, in the case of the community, if less than 5 ppm methyl bromide is detected, the placard may be removed. However, if 5 ppm or greater methyl bromide is detected, the placard must be transferred with the community to the new site. Workers who transfer or handle immediately removed community must be instructed in appropriate measures (i.e., ventilation or respiratory protection) to prevent exposures from exceeding 5 ppm or greater methyl bromide.
3. Placards must be placarded with U.S.F. specified warning signs. Warning signs are available from your dealer or distributor.

**SPILL OR LEAK PROCEDURE:**

1. Evacuate the immediate area of the spill or leak. Use SCBA or combination air-supplied/SCBA respirator for entry into the affected area to correct problem. Move leaking or damaged cylinders or containers outdoors or to an isolated location. Observe strict safety precautions. Shut up used if possible. Allow spill to evaporate. Do not permit entry into spill area by unprotected persons until the concentration of methyl bromide is determined to be less than 5 ppm (20 mg/m<sup>3</sup>).
2. Contaminated soil, water, and other cleaning debris in a tank bottom must be reported to the National Response Center (800-424-6002) if reportable quantity of 1000 lbs. is exceeded.

3067

#### PRECAUTIONS FOR COMMODITY USE

##### GENERAL PRECAUTIONS:

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

##### AERATION AND REENTRY:

1. After fumigation, treated areas must be aerated until the level of methyl bromide is below 5 ppm (20 mg/m<sup>3</sup>).
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.

#### ENVIRONMENTAL HAZARD

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

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

#### CHEMICAL HAZARD

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

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

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

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

#### DIRECTIONS FOR USE

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

BEST AVAILABLE COPY



## STORAGE AND DISPOSAL

### STORAGE AND HANDLING:

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

### RETURN OF CYLINDERS:

Cylinders are the property of:

Shell Chemicals Corporation  
8770 HIGHWAY 25  
Bullitts, CA 95023

Shell Chemicals Corporation  
2846 East 220th Street  
Long Beach, CA 90810

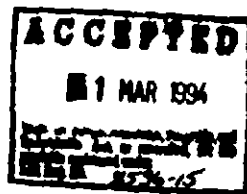
and should be returned promptly by collect auto freight. Do not ship cylinders without safety caps or valve protection bonnets. When a cylinder is partially full and there is no further requirement for the product, contact SCC for return instructions.

### SHIPPING:

This fumigant is classified in the U.S. Department of Transportation Hazardous Materials Regulations as Methyl Bromide, 2.2, UN 1882, Poison-Inhalation Hazard, Hazard Zone C and an exemption from specifications, packaging, marking, or labeling are allowed. Describe empty cylinders as having last contained Methyl Bromide (Inhalation hazard). Do not ship with funds, food, or clothing.

### DISPOSAL:

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



BEST AVAILABLE COPY

5087

## GENERAL INSTRUCTIONS

THIS FUMIGANT IS A HIGHLY DANGEROUS MATERIAL AND SHOULD BE USED ONLY BY INDIVIDUALS TRAINED IN ITS PROPER USE. BEFORE USING, READ AND FOLLOW ALL LABEL PRECAUTIONS AND DIRECTIONS. ALL PERSONS WORKING WITH THIS FUMIGANT MUST BE IMMEDIATELY ADVISED OF THE DANGERS, AND TRAINED IN THE USE OF SAFETYING, VENTILATING, EQUIPMENT AND SAFETYING DEVICES, EMERGENCY PROCEDURES, AND PROPER USE OF THE FUMIGANT.

### COMMODITY FUMIGATION

#### AREAS TO BE FUMIGATED:

Under sealed tarpaulins, in flower mills, food mills, spice mills, textile mills, warehouses, hogars, fumigation vaults, flat or upright bulk grain storages, tobacco warehouses, and cargo ships.

#### INSECTS AND PESTS CONTROLLED:

Wheat Weevil	European Grain Weevil	Pink Boll Worm
Wheat Weevil	Lesser Grain Weevil	Potato Tuber Weevil
Cotton and Red	Lesser Grain Weevil	Woolly Acker
Vinegar Weevils	Lesser Grain Weevil	Vegetable Weevil
Drug Store Beetle	Lesser Grain Weevil	Leaf Miner
Caddis	Lesser Grain Weevil	Flour Weevil
Mealworms	Lesser Grain Weevil	Pin Worm
Bean Weevil	Lesser Grain Weevil	Shaper Beetle
Wired Fruit Beetle	Lesser Grain Weevil	Tramp Weevil
Wheat Weevil	Lesser Grain Weevil	Tramp Weevil
Almond Weevil	Lesser Grain Weevil	Tramp Weevil
Indian Meal Weevil	Lesser Grain Weevil	Tramp Weevil
Red Flour Weevil	Lesser Grain Weevil	Tramp Weevil
Wheat Weevil	Lesser Grain Weevil	Tramp Weevil
Sweet Potato Weevil	Lesser Grain Weevil	Tramp Weevil
Oriental Fruit Weevil	Lesser Grain Weevil	Tramp Weevil
Corn Weevil	Lesser Grain Weevil	Tramp Weevil
Wheat Weevil	Lesser Grain Weevil	Tramp Weevil
Carpet Beetle	Lesser Grain Weevil	Tramp Weevil
Warehouse Beetle	Lesser Grain Weevil	Tramp Weevil

#### PREPARATION FOR FUMIGATION:

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

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

#### FUMIGATION:

Release Methyl Bromide through a heat exchanger or suitable leak proof tube (such as polyethylene) from outside of structure. If it is necessary to release fumigant from inside of structure, a gas mask of 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.

## PROCEDURES - SHIP

#### IMPORTANT:

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

#### PREFUMIGATION PROCEDURES:

1. Prior to fumigating a vessel for intracast cargo fumigation, the master, or his representative, and the fumigator must determine whether the vessel is suitably designed and configured so as to allow for safe occupancy by the ship's crew throughout the duration of the fumigation. If it is determined that the design and configuration of the vessel does not allow for safe occupancy by the ship's crew throughout the duration of the fumigation, the vessel will not be fumigated unless all crew members are removed from the vessel. The crew members will not be allowed to reoccupy the vessel until the vessel has been properly sealed and a determination has been made by the master of the vessel, and the fumigator that the vessel is safe for occupancy.
2. The person responsible for the fumigation must notify the master of the vessel, or his representative, of the requirements relating to personal protection equipment, detection equipment and that a person qualified in the use of this equipment must accompany the vessel with cargo under fumigation. Emergency procedures, cargo ventilation, periodic monitoring and inspections, and fire and seawater must be discussed with and understood by the master of the vessel or his representative.

BEST AVAILABLE COPY

6011

6087

**PROCEDURES, CONTINUED:**

- c. During the fumigation or until a fumigated vessel leaves port or the cargo is secured, the person in charge of the fumigation shall insure that a qualified person using gas or vapor detection equipment tests spaces adjacent to spaces containing fumigated cargo and all regularly occupied spaces for fumigation leakage. If leakage of the fumigant is detected, the person in charge of the fumigation shall take action to correct the leakage, or shall inform the master of the vessel, or his representative, of the leakage so that corrective action can be taken.
- d. If the fumigation is not completed and the vessel departed before the fumigated vessel leaves port, the person in charge of the vessel shall insure that at least two units of personal protection equipment and one gas or vapor detection device, and a person qualified in their operation be on board the vessel during the voyage.

**PRECAUTIONS AND PROCEDURES DURING VOYAGE:**

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

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

**AERATION AND REENTRY**

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

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

Certain materials absorb methyl bromide during fumigation and desorption during aeration may call for extended monitoring and aeration periods.

**DRAGER GAS DETECTOR, BENDIX GASTEC DETECTOR:**  
(Read Pump and Detector Tube) Methyl bromide may be detected at the Threshold Limit Value (T.L.V.) of 5 ppm. Detectors are available from Bell Chemical Corporation.

**HALIDE LAMP DETECTOR:**

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

METHYL BROMIDE ppm	LB/1000 CU. FT.	FLAME COLOR (DAYLIGHT*)
0	0	None
75	0.00225	None
50	0.0150	Moderate Green
125	0.0375	Green
250	0.0750	Strong Green
500	0.1500	Strong Blue-Green Fringe
1000	0.3000	Strong Blue-Green
1000	0.3000	Blue

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

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

**WARRANTY**

NOTICE: Bellish warrants that the product included on its chemical description and so reasonably fit for the purpose 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.

MP-22301

CA March 1993

**BEST AVAILABLE COPY**

7067

### RATE OF APPLICATION, METHYL BROMIDE 100

COMMODITY	Sample or Pests Controlled	dosage lb/1000 cu. ft.	Exposure Time in Hours	Minimum Temperature in F	Estimated* Exposure Time in Hrs.
Beans & Peas, Dry: For samples: Lima, Kidney, Blackeye, plate, snap-on	Indian meal moth Almond moth Cowpea weevil	2 2	24 24	60 60	12
Candy	Indian meal moth Sawtoothed grain beetle	1-2	12-24	60	24
Cocoa Beans (bags)	Yobacco moth, Sawtoothed grain beetle	15	12-24	60	12
Fruit Brind: For samples: Apple apricot, date, fig peach, pear, prune, raisins	Indian meal moth Almond moth Wired Fruit beetle Sawtoothed grain beetle	15 1	12-24	50-55 60	
Flour and cereal products (bags, packages)	Flour beetle Sawtoothed grain beetle Indian meal moth	1-2	12-24	60	24
Grain Shelled corn	Indian meal moth, Anagallis grain moth, Granary weevil	2	24	60	12
Hay, oats, Rice, Rye, Wheat	Flour beetle Saw weevil Sawtoothed grain beetle	2	24	60	See forward re-circulation for bulk bins
Grain sorghum (mill)	Lesser grain borer Indian meal moth, Granary weevil	4	24	60	See forward re-circulation for bulk bins
Nuts: Almond, Brazil, macadamia, Filbert, chestnut, pecan, hickory, pinecone, walnut	Beetle orange worm Almond moth Wired Fruit beetle	24	12-24	60	24
Processed Foods	Sawtoothed grain beetle Cigarette beetle Indian meal moth	1-2	12-24	60	
Tobacco Atmospheric	Tobacco moth Tobacco beetle	2	60-72	45-70	24
Vacuum chamber		4	4	70	4
Hay (bale)	Sawtoothed grain beetle Anagallis grain moth	2	12-24	70	24
Lumber	Lyctid, or Pantry pest beetle	2	24-24	60	12
Miscellaneous such as: beryl bags, wood blocks	Indian meal moth Lyctid, or Pantry pest beetle	2-4	24	60	
Cotton and Cotton seed Targuila migration	Indian meal moth Cigarette beetle	2	24	60	12-24
Vacuum chamber		4	4	60	4
Bag Feed	Indian meal moth, Cigarette beetle	1-2	12-24	60	60
Strawberries	Mite Thrips	2	2-4	60	2
Fresh fruits and vegetables*	Fruit flies	1-4	3	60	24

\* Pulpate only fruits and vegetables for which tolerance have been established.

SPACE CONTAINING COMMODITIES	Sample or Pests Controlled	dosage lb/1000 cu. ft.	Exposure Time in Hours	Minimum Temperature in F	Estimated* Exposure Time in Hrs.
Buildings, warehouses, flour mills, food processing plants	Indian meal moth Sawtoothed grain beetle Sawtoothed grain beetle				
Less than 100,000 cu. ft.		1-2	12-24	60	12
100,000 - 500,000 cu. ft.		2-3	12-24	60	12
100,000 - 500,000 cu. ft.		1	12-24	60	12
100,000 - 500,000 cu. ft.		2	12-24	60	12

Note: The above dosages are for fumigation control.  
For rodents, bats, mice, and other warm blooded animals, 1/2 lb/1000 cu. ft. with 6 hours  
exposure should be sufficient.  
At temperatures below 50 F (10.5 C) the dosage should be increased by 1/2 lb. (227 grams)  
per thousand cubic feet (28.3 cu. meters) for every 10 F (5.5 C) drop in temperature.

USE CASE	Sample or Pests Controlled	dosage lb/1000 cu. ft.	Exposure Time in Hours	Minimum Temperature in F	Estimated* Exposure Time in Hrs.
NOTE: FUMIGATE STATIC CASE ONLY, DO NOT FUMIGATE IN TRANSIT.					
Steel	Sawtoothed grain beetle Flour beetle	2-24	12-24	60	4
Wood	Indian meal moth	25-25	12-24	60	4
Wagon Trailers**	Sawtoothed grain beetle Flour beetle Indian meal moth	1-2	12-24	60	4
Vacuum chamber	Sawtoothed grain beetle Flour beetle Indian meal moth	1-2	2	60	4
Large Ships *** (No Hot Pockets Underway) ***	Sawtoothed grain beetle Flour beetle Indian meal moth	1 1.5	20 12	60 and above 50-55 60-55	

\* Exposure time per lb. of fumigant if the fumigant were to be contained to be free of methyl bromide  
by a suitable methyl bromide detector. If no detector like to given in table, a suitable methyl  
bromide detector must be used to determine when fumigation is completed.  
Nuts products 60 hours before offering to consumer.

\*\* Do not use trucks, vans, or trailers on roadways during fumigation. They must be  
completely secured before fumigation is allowed. Transfer of contaminated commodities  
under fumigation onto and off of ships is permissible.

ACCEPTED  
31 MAR 1954  
U.S. DEPARTMENT OF AGRICULTURE  
BUREAU OF ENTOMOLOGY AND PLANT QUARANTINE  
REC-15

BEST AVAILABLE COPY