

ACCEPTED
MAY 1 1982

MACCO

**PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS
AND DOMESTIC ANIMALS
DANGER**

Hazardous vapor. May be fatal if swallowed or inhaled. Consisting of volatile materials. Fumigant #2FR should be handled so as to prevent breathing of vapors. Wear a gas mask approved by U.S. Bureau of Mines for protection against organic vapors. Do not get in eyes or on skin or clothing. Wash thoroughly with soap and water after any contact.
Do not feed treated feed or grain to livestock until it has been aired enough to remove all fumigant odor. Do not use as a contact spray or to fumigate flour.

ENVIRONMENTAL HAZARDS
Misuse as to quantity, timing or method of application can cause damage or injury to animals, persons, property or crops or cause residues in excess of official tolerances.

PHYSICAL OR CHEMICAL HAZARDS
Grain Fumigant #2 classed 1 to 5 less hazardous than paraffin oil in respect to fire hazard.

AVOID CONTACT WITH FLAME OR HOT SURFACES.

DIRECTIONS FOR USE

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

RE-ENTRY STATEMENT

Do not re-enter treated structure until it has been aired for at least 24 hours.

STORAGE AND DISPOSAL

Prohibitions: Do not contaminate water, food, or feed by storage or disposal.
Pesticide Disposal: Pesticide spray mixture or residue that cannot be used according to label instructions must be disposed of according to Federal, State or local procedures under the Resource Conservation and Recovery Act.
Container Disposal: Triple rinse (or equivalent) and offer for recycling or reconditioning, or dispose of in a sanitary landfill, or by other approved State and local procedures.
General: Consult Federal, State or Local disposal authorities for approved alternative procedures.



KILLS ALL STAGES: Grain Weevil, Rice Weevil, Lesser Grain Borer, Angoumois Grain Moth, Indian Meal Moth, Sawtooth Grain Beetle, Mediterranean Flour Moth, Confused Flour Beetle, Black Carpet Beetle, Cadelle.

NOT FOR USE OR STORAGE IN OR AROUND THE HOME.

ACTIVE INGREDIENTS:	BY WEIGHT
Carbon Tetrachloride	83.1%
Carbon Disulfide	16.5%
Normal Pentane	4%

Keep Out of Reach of Children

DANGER  **POISON**

STATEMENT OF PRACTICAL TREATMENT

If swallowed — call a physician — Poison Control Center. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger. Do not induce vomiting or give anything by mouth to an unconscious person.
If inhaled — remove to fresh air. Call a physician at once. Keep patient warm and quiet. If breathing stops, apply artificial respiration.
If on skin — wash thoroughly with soap and water.
If in eyes — rinse with water for 15 minutes and get prompt medical attention.

NET CONTENTS _____ **GALLONS** (_____ **Liters**)
EPA Reg. No. 36480-48 **EPA Est. No.** _____

Manufactured by:

AMERICA CHEMICAL CO., INC.
402 South Fifth Street
Lawrence, Kansas 66044

AMOUNTS TO USE

The following dosages are recommended for satisfactory results under normal treating conditions only. When grain shows heavy infestation or is of high moisture content (except for seed grain - see Special Precautions for Grain to be Used for Seed Purposes) the dosages listed below should be increased from 1/2 to 1 gallon per 1000 bushels.

DOSAGE TABLE

GALLONS PER 1000 BUSHELS OF GRAIN

TYPE BIN	WHEAT RYE	GRAIN SORGHUM	OATS CORN
Steel or Concrete	2	6	4
Wood Bins Ship's Holds	3	8	6
Flat Storage Building	4	8	6

IMPORTANT

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

PROCEDURES

Prefumigation Procedures

Prior to fumigating a vessel for intransit cargo fumigation, the master of the vessel or his representative and the fumigator must determine whether the vessel is suitably designed and configured so as to allow for safe occupancy by the ship's crew throughout the duration of the fumigation.

If it is determined that the design and configuration of the vessel does not allow for safe occupancy by the ship's crew throughout the duration of the fumigation, then the vessel will not be fumigated unless all crew members are removed from the vessel. The crew members will not be allowed to reoccupy the vessel until the vessel has been properly aerated and a determination has been made by the master of the vessel and the fumigator that the vessel is safe for occupancy.

The person responsible for the fumigation must notify the master of the vessel or his representative of the requirements relating to personal protection equipment, detection equipment and that a person qualified in the use of this equipment must accompany the vessel with cargo under fumigation. Emergency procedures, cargo ventilation, periodic monitoring and inspections and first aid measures must be discussed with and understood by the master of the vessel or his representative.

During the fumigation or until a manned vessel leaves port or the cargo is aerated, the person in charge of the fumigation shall ensure 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.

If the fumigation is not completed and the vessel aerated before the manned vessel leaves port, the person in charge of the vessel shall ensure 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

Using appropriate gas detection equipment, monitor spaces adjacent to areas containing fumigated cargo and all regularly occupied areas for fumigant leakage. If leakage is detected, the area should be evacuated of all personnel, ventilated, and action taken to correct the leakage before allowing the area to be occupied.

Do not enter fumigated areas except under emergency conditions. If necessary to enter a fumigated area, appropriate personal protection equipment must be used. Never enter fumigated areas alone. At least one other person, wearing personal protection equipment, should be available to assist in case of an emergency.

PRECAUTIONS AND PROCEDURES DURING DISCHARGE

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

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

RICE

Use 4 gallons of fumigant per 1000 bushels if average grain temperature is 75 F. or above. If temperature is between 60 F. and 75 F., use 6 gallons per 1000 bushels. If necessary to fumigate when grain temperature is below 60 F., use 8 gallons per 1000 bushels. Note warning statements.

Fumigants containing Carbon Bisulfide tend, under certain conditions, to impart off odors to rice.

SPECIAL PRECAUTIONS FOR GRAIN TO BE USED FOR SEED PURPOSES

These precautions must be followed in order to avoid germination reduction:

1. Do not apply unless moisture content of grain is less than 12% and preferably less than 10%.
2. The grain temperature during the exposure period should be between 65 F. and 85 F.
3. The fumigant exposure period must not be more than 24 hours. Provision must be made to remove the fumigant by aeration immediately after the 24 hour exposure. This may be accomplished in tight structures by the use of aeration fans and in loosely constructed storages by breaking all seals applied when preparing for fumigation. Do not fumigate low viability seed grain, as germination may be further reduced.

COUNTRY ELEVATOR, FLAT STORAGE AND BOXCAR APPLICATION

Before Fumigation

First--Make grain bin airtight as possible. Close all cracks and openings in walls and floor of bin. Seal all crevices with heavy paper. Plug holes with tightly packed wet newspapers or sacks.

Second--Remove crusted and molded layers from the surface of the grain. Level grain and keep surface six inches below top.

COUNTRY ELEVATOR BINS

(Open or Closed Top)

Apply when bins are being filled with grain or during grain turning. Pour fumigant rapidly directly on the grain stream as it enters the bin to avoid gas loss. Apply regular required dosage so timed that an application is made for each 10 feet of bin height filled. Application may be made from this container, a bucket, a sprinkling can with sprinkler removed or any other method that will give a quick addition of the needed volume. **TO AVOID EXCESSIVE LOSS OF GASES, DO NOT FOG, SPRAY OR SPRINKLE ON GRAIN. AVOID TOXIC GASES. DO NOT ENTER BIN DURING OR AFTER TREATMENT. USE A FULL FACE GAS MASK WITH CANISTER FOR VOLUME APPLICATIONS.** Seal bin immediately after treatment and allow at least 72 hours for results (except for seed grain - see Special Precautions for Grain to be Used for Seed Purposes).

FLAT STORAGE BUILDINGS

(Quonset Huts, Airplane Hangars, Old Buildings)

This type of grain storage is best treated by evenly wetting the grain surface with the required dosage. Heavier dosages usually are applied to grain piles, which cannot be eliminated by mechanical leveling. Due to the large quantities of grain usually involved, power pump application is generally used. Gas masks should be used if application must be made from inside the building.

Always have an assistant on hand to assist in case of accident. If it is necessary to enter the bin or space already under fumigation, the assistant should stay outside.

BOXCARS

To help prevent damage to grain in transit from infested boxcars, use 5 to 6 gallons of Fumigant 82 FR per boxcar. Seal car tightly. For best results, boxcars should remain sealed for a minimum of 48 hours (except for seed grain - see Special Precautions for Grain to be Used for Seed Purposes). Boxcars must remain static during fumigation.

MILL AND TERMINAL APPLICATION

Apply when bins are being filled or turned. Apply fumigant as close to the bin being filled as possible to avoid excessive vaporization. Pour fumigant as rapidly as possible directly on the grain stream as it enters the bin. Apply necessary amount at intervals so that an application is made once for each twenty feet of bin height filled. Close all openings after application and allow a minimum of 72 hours for best results (except for seed grain - see Special Precautions for Grain to be Used for Seed Purposes). Better results are obtained if treated grain is left undisturbed for longer periods. **AVOID TOXIC GASES. DO NOT ENTER BIN DURING OR AFTER TREATMENT.** Inspect treated grain monthly for signs of reinfestation and reheat as needed.

Fumigated areas must be guarded on all entrances with signs containing at least the signal word DANGER and the Skull and Crossbones. 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.