

DOWFUME* C

EFFECTIVE FUMIGANT FOR CONTROLLING INSECT PESTS IN STORED GRAIN

Active Ingredients 100%
Carbon Tetrachloride 81.3%, Carbon Bisulfide 12.1%;
Ethylene Dibromide 6.6%

E.P.A. Registration No. 464-171-AA

E.P.A. Est. No. 464-TX-1^{TA} ^{TB}; 464-CA-1^{WP}; 32761-MO-1^D.

Superscript used corresponds to letter in Lot No.

THIS PRODUCT TO BE APPLIED ONLY BY, OR UNDER THE SUPERVISION, OF TRAINED PERSONNEL

GENERAL INFORMATION AND SAFETY PRECAUTIONS

The successful use of liquid grain fumigants depends upon several details: (1) All grain storages should be tightly built. Before applying the fumigant, seal the structure as gas-tight as possible, especially below the surface of the grain. (2) Have the grain surface level and no higher than six inches below the top of the bin sides. (3) Apply the fumigant in a safe manner, from **outside** the building if at all possible. During actual application, **always** have someone on hand to help in case of accident. Have him stand outside where he can see the man working inside. If it is necessary to enter a large bin for application or to enter an area already under fumigation, wear a **suitable gas mask**, such as a full-face mask with a FRESH black canister meeting specifications of the U.S. Bureau of Mines for organic vapors. (4) In general, fumigant should be applied with a hand or power sprayer. Replace the nozzle with a tube or pipe flattened at the end to give a broad, coarse stream. (5) For best results do not disturb stored grain for at least 3 days and preferably 1 week after treatment. (6) Do not fumigate often or at higher dosages than recommended here. (7) Best results are obtained during cool, calm periods of the day since high air temperatures and strong winds increase vaporization and loss of the fumigant.

In fumigating, the temperature of the grain itself is important (rather than the temperature of the air outside the grain mass). It is not advisable to fumigate grains other than rice when the average grain temperature is below 60 F. Even with rice, it is better to fumigate when grain temperature is above 60 F, since at lower temperatures the insects are relatively inactive, and the fumigant is less effective because of its reduced volatility. Several methods are available for determining grain temperature. Consult your dealer or other authorities for suggestions.

NOTE: For better insect control, spray the inside of the bin with a grain bin insecticide 10 to 14 days before filling. Spray the outside of the bin just before fumigation.

DIRECTIONS

FLAT STORAGE: Large flat storages such as quonset huts should be treated with power equipment. Speed of application and observance of above safety precautions are essential in this type of fumigation.

ELEVATOR STORAGE: Fumigate grain with Dowfume C when it is being put into the bin or being turned. The fumigant may be pumped or poured from outside over the grain between drafts, which should not exceed 15-foot depths in the bin. Give double dosages to top and bottom drafts. Under conditions of long storage or intense insect attack

retreatment may be necessary. Need may be determined by observation of live insects and by overheating of grain because of insect activity.

BOX CARS: Apply Dowfume C from outside the doorway of the car (or wear a gas mask), using hand or power sprayer with special pipe nozzle. Close and seal doors immediately. For best results, do not move the car for at least 12 hours.

BULK CERTIFIED OR HYBRID SEED GRAIN: Bulk seed grain may be fumigated by strict adherence to dosage recommendations, and by observing the following precautions to avoid damage and loss of seed viability: (1) The moisture content of the seed must be less than 12% and preferably less than 10%. (2) The seed temperature during the exposure period should be between 65 F and 85 F. (3) The fumigant exposure period should be not more than 24 hours, and 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, as germination may be further reduced. See Safety Precautions.

RECOMMENDED DOSAGES

Grain Temperature 60 F. or Higher		Wheat Rye Barley	Corn Oats	Grain Sorghums
Types of Storage		Gallons per 1000 Bushels†		
Flat Storage	Wooden Bins	4	6	8
	Steel and Concrete Bins	3	5	7
Elevator Storage	Wooden or Bred Bins	3	6	8
	Steel and Concrete Bins	2	4	6
Box Cars	Average Condition and Load	Gallons per Box Car		
		5	8	12

† **Note:** On less-than-1000-bushel lots, use the same dosage as recommended for 1000 bushels. With very small lots, wet the entire surface with fumigant.

RICE: For farm-stored rice, use 4 gallons of Dowfume C 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. See Safety Precautions.

NOTE: Do not use containers or handling equipment of aluminum, magnesium, or their alloys, as under certain conditions Dowfume C may be severely corrosive to such metals.

Dispose of empty containers by punching holes in them and burying in non-croplands away from water supplies.

STORE IN A TIGHTLY CLOSED CONTAINER, IN A COOL LOCATION AWAY FROM DWELLINGS. KEEP FUMIGANT PROPERLY LABELED.

SPECIMEN LABEL

AGRICULTURAL CHEMICAL

Do Not Ship or Store with Food, Feeds, or Clo.
PRECAUCION AL USUARIO: Si usted no lee inglés, no use este p hasta que la etiqueta le haya sido explicada ampliamente.

TRANSLATION: (TO THE USER: If you cannot read English, do not product until the label has been fully explained to you.)

DANGER POISON

**KEEP OUT OF REACH OF CHILDREN
HAZARDOUS VAPOR AND LIQUID
MAY BE FATAL IF INHALED OR SWALLOWED
CAUSES SKIN IRRITATION AND BLISTERS ON
PROLONGED CONTACT
MAY CAUSE EYE IRRITATION**

**USE ONLY WITH ADEQUATE VENTILATION
DO NOT BREATHE VAPOR • DO NOT TAKE INTERNALLY
AVOID CONTACT WITH EYES, SKIN AND CLOTHING**

**WHEN NECESSARY, USE GAS MASK SUITABLE FOR ORGANIC VA
In case of skin contact, wash with soap and water. For eyes, flush with
of water for at least 15 minutes and get medical attention. Remove and
clothing before re-use. Do not wear shoes until free of all chemical**

**If illness results from inhalation, remove to fresh air and call a physic
swallowed, call a physician. Induce vomiting by giving an emetic such
tablespoonfuls of salt in a glass of warm water.**

**Do not use fumigated material or feed it to livestock until aeration has
nated the odor of the fumigant.**

AVOID CONTACT WITH FLAME OR HOT SURFACE

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

CLASSIFIED BY UNDERWRITERS LABORATORIES, INC. AS TO FIRE HAZARD
DOWFUME C CLASSED 1 TO 5 LESS HAZARDOUS THAN PARAFFIN OIL IN
RESPECT TO FIRE HAZARD
SEE UL INDEX OF CLASSIFIED PRODUCTS 993P

THE DOW CHEMICAL COMPANY

AND SUBSIDIARIES

MIDLAND MICHIGAN 48640 USA ZURICH SWITZERLAND HONG KONG B
CORAL GABLES FLORIDA 33134 USA SARNIA ONTARIO CANADA

*Trademark of THE DOW CHEMICAL COMPANY

86-1028 PRINTED IN U.S.A. IN NOVEMBER, 1974

REPLACES SPECIMEN LABEL 86-1028 PRINTED IN NOVEMBER, 1972

REVISIONS INCLUDE: (1) ADD EPA ESTABLISHMENT NUMBERS
(2) ADD AGRICULTURAL CHEMICAL STATEMENT (3) ADD UL

Jan 6, 1975



SPECIMEN LABEL

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Chloride 81.3%; Carbon Bisulfide 12.1%;
Ethylene Dibromide 6.6%
71-AA
; 464-CA-1^{WP}; 32761-MO-1^D.
to letter in Lot No.
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Dispose of empty containers by punching holes in them and burying in non-croplands away from water supplies.

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**USE ONLY WITH ADEQUATE VENTILATION
DO NOT BREATHE VAPOR • DO NOT TAKE INTERNALLY
AVOID CONTACT WITH EYES, SKIN AND CLOTHING**

WHEN NECESSARY, USE GAS MASK SUITABLE FOR ORGANIC VAPORS
In case of skin contact, wash with soap and water. For eyes, flush with plenty of water for at least 15 minutes and get medical attention. Remove and wash clothing before re-use. Do not wear shoes until free of all chemical odor.

If illness results from inhalation, remove to fresh air and call a physician. If swallowed, call a physician. Induce vomiting by giving an emetic such as 2 tablespoonfuls of salt in a glass of warm water.

Do not use fumigated material or feed it to livestock until aeration has eliminated the odor of the fumigant.

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Jan. 6, 1975