

DOWFUME[®] MC-33

SOIL FUMIGANT

FOR PREPLANT CONTROL OF MANY SOIL-BORNE PESTS IN PLANT BEDS AND NURSERIES

ACTIVE INGREDIENTS	100%
Methyl Bromide	67%
Chloropicrin	33%
E.P.A. Registration No. 5549-68	

USES

Use DOWFUME MC 33 soil fumigant for preplanting application in soil for control of nematodes, certain soil-borne diseases, insects, and weeds in nurseries and in certain seed bed, plant bed and field crop areas. Typical pests controlled are nematodes such as root knot, lesion dagger, stunt, spiral, cyst formers, lance, sting and pin, damping off diseases caused by certain species of *Rhizoctonia*, *Fythyum*, *Fusarium* and certain others; insects (wireworms and white grubs) in the soil at time of treatment and weeds such as chickweed, pigweed, nutgrass, crabgrass, goosegrass, crowfootgrass, barnyardgrass, purslane, morning glory and many other broadleaf and grass weeds. DOWFUME MC 33 will give excellent performance in forest tree, ornamental shrub and turf nurseries, in annual and perennial flower, forest tree, tomato, tobacco, strawberry and ornamental seed and plant beds, in vegetable seed beds for production of transplants and plants, where strawberries and tomatoes are to be grown for food.

DIRECTIONS

WHEN TO TREAT: Treatments can be made in the spring, summer, or fall, whenever soil conditions are suitable. In northern states, late summer or early fall treatments are best for, and to be planted to early spring crops.

SOIL PREPARATION: To facilitate fumigant penetration, crop residues should be worked into the soil and allowed time to decompose before treating. Soil must be in good workable seed bed condition with a temperature between 50 F. and 80 F. at the five-inch level, and with adequate moisture for good seed germination. Deep tillage (2 to 18 inches) often improves results, especially in heavy or muck soils.

APPLICATION AND DOSAGE: For overall applications of DOWFUME MC 33, use 250 to 350 pounds per acre with the following application: laying the rows spaced no more than 12 inches apart and injecting the fumigant at a depth of 6 to 8 inches below the soil surface. For row applications, use at the same dosage rates per acre as suggested for overall treatment. The actual amounts used per acre, however, will be proportionately less and dependent upon the distance between rows and the width of the tilled row area. Due to the volatility of this fumigant, treated soil must be sealed after application by rolling or tight packing immediately behind the injection wheels and then covered as soon as possible, preferably within 20 minutes, with polyethylene film or other suitable gas tight tarpaulin.

EQUIPMENT CALIBRATION: For best results, an accurate sprayer fumigant applicator must be used. Refer to the Dosage Calibration Chart to determine proper nozzle size and pressure required to deliver the prescribed dosage. Calibrations are based on a ground speed of 2 miles per hour, spaced 12 inches apart.

AERATION: Remove tarpaulin after 24 to 48 hours. Allow the soil to aerate for two weeks before planting. After this period, DOWFUME MC 33 persists in the soil as indicated by the following table and use precautions discussed below the soil fumigant.

NOTICE: This fumigant is extremely toxic to humans. A detailed label and MSDS (Material Safety Data Sheet) are available from the manufacturer. Do not use this fumigant in conjunction with other fumigants or other chemicals. Do not use this fumigant in conjunction with other fumigants or other chemicals. Do not use this fumigant in conjunction with other fumigants or other chemicals. Do not use this fumigant in conjunction with other fumigants or other chemicals.

DOSAGE CALIBRATION CHART

Dosage Pounds Per Acre	Tractor Speed			
	2 Miles per Hour (176 ft. per min.)		3 Miles per Hour (264 ft. per min.)	
	Orifice Diameter In Inches	Approximate Pressure psi	Orifice Diameter In Inches	Approximate Pressure psi
200	029	23	029	34
250	029	28	035	30
300	029	34	035	36
350	035	28	043	29

USE PRECAUTIONS

Fumigation may temporarily raise the level of ammonia nitrogen and soluble 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 plants, fertilize as indicated by plant nutrient tests made after fumigation. To avoid ammonia injury or nitrate starvation, or both, to crops, avoid using fertilizers containing ammonium salts and use only those containing nitrate nitrogen until after the crop is well established and the soil temperature is above 65 F. Certain crops are tolerant to ammonia, therefore the above rule does not apply to them. Liming highly acid soils before fumigation stimulates nitrification and reduces the possibility of ammonia toxicity.

NOTE: To avoid the possibility of exceeding crop tolerances, food crops other than strawberries and tomatoes should not be grown to maturity in soil treated with DOWFUME MC 33 soil fumigant. Transplant 3-3 1/2" crops to untreated soil or to soil treated at a rate no higher than registered pesticide uses.

Vapors of DOWFUME MC 33 are extremely irritating to the eyes. Provide good ventilation when applying or transferring to other containers. If it is necessary to handle fumigant vapor concentrations, wear a full face gas mask with canister recommended for use in acid gases and irritant vapors. Do not apply to areas adjacent to birds, where calibrations are not known, or near buildings inhabited by humans and livestock.

DOWFUME MC 33 should not be applied where there is a high air movement nor where there is an atmospheric inversion. Vapors of fumigant at tolerable concentrations of 100 ppm may drift to nearby areas, including your treated area with plastic tarpaulin. The tarpaulin should be sealed to prevent air circulation and be removed during the application of the escaping vapors. A full face gas mask with canister as indicated by the manufacturer of the escaping vapors should be worn during application. Avoid contact with the escaping fumigant. The maximum tolerable concentration will be reduced to one percent of the above concentration.

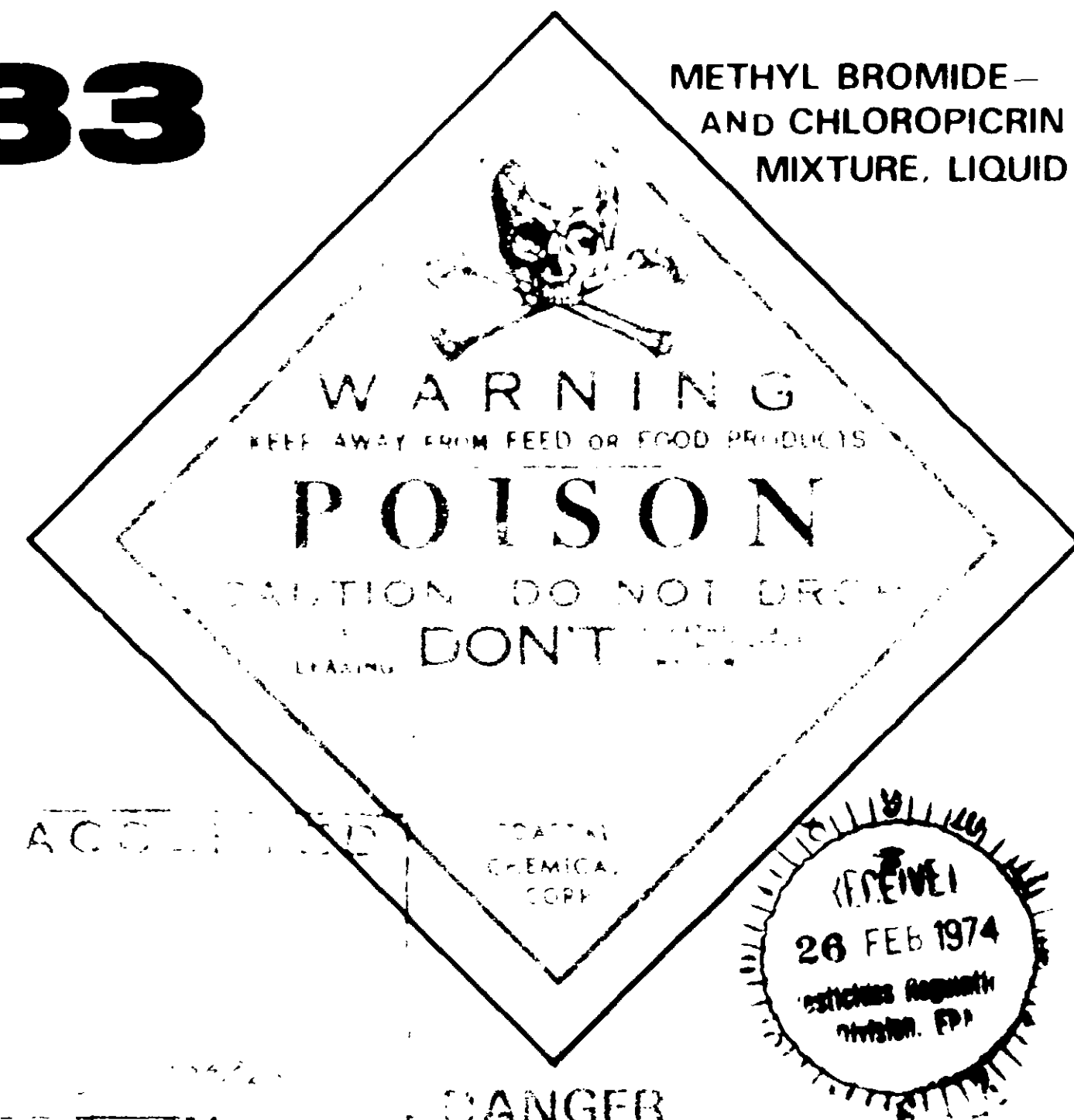
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Manufactured by

Coastal Chemical Corp.
GREENVILLE, N. C.

• Trademark of The Dow Chemical Company

METHYL BROMIDE—
AND CHLOROPICRIN
MIXTURE, LIQUID



DANGER

KEEP OUT OF REACH OF CHILDREN
POISONOUS IF SWALLOWED
KEEP AWAY FROM FEED OR FOOD PRODUCTS

DOWFUME MC-33

SOIL FUMIGANT

METHYL BROMIDE
AND CHLOROPICRIN
MIXTURE (LIQUID)

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DOSAGE CALIBRATION CHART

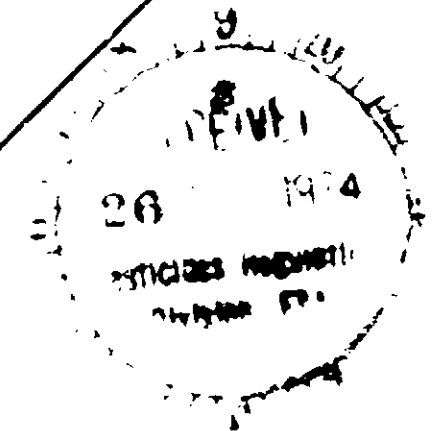
Gauge Pounds Per Acre	Tractor Speed			
	2 Miles per Hour (176 ft. per min.)		3 Miles per Hour (264 ft. per min.)	
	Orifice Diameter In Inches	Approximate Pressure psi	Orifice Diameter In Inches	Approximate Pressure psi
10	.29	13	.29	34
20	.29	28	.35	30
30	.35	34	.35	36
40	.43	38	.43	29

USES

USE PRECAUTIONS

DIRECTIONS

NOTE



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GREENVILLE N. C.

• In compliance with Federal Insecticide, Fungicide, and Rodenticide Act