



BROZONE*

SOIL FUMIGANT

To Control Many And Insect Pests

Active Ingredients:
 Methyl Bromide 68.6%
 Chloropicrin 1.4%
Inert Ingredients: Petroleum hydrocarbons 30.0%

U.S.D.A. Registration No. 5549-50

A preplant soil fumigant for the control of nematodes, insects and weeds in certain plant beds, nurseries and certain field crop areas. Typical nematodes controlled are root-knot, lesion, dagger, stunt, spiral, cyst formers, lance, sting, pin, and certain other species. Insects such as wireworm and white grubs in the soil at the time of treatment are also controlled. Examples of weeds controlled are chickweed, pigweed, nutgrass, crabgrass, goosegrass, crawfootgrass, barnyardgrass, purslane, wild morning glory, and many other broadleaved weeds and grasses. BROZONE soil fumigant will give excellent performance in fruit and forest tree, ornamental and turf nurseries; also for growing annual and perennial flowers, tomato, tobacco and strawberry plant beds; and in soil where strawberries and tomatoes are to be grown for food

DIRECTIONS FOR APPLICATION AND PLANTING

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 land to be planted to early spring crops.

SOIL PREPARATION: To facilitate fumigant penetration, plant refuse should be worked into the soil and time allowed to decompose before treating. Soil must be in good workable seed bed condition, warm, preferably 50 to 80°F at a depth of five inches, with moisture adequate for good seed germination. Do not treat if the soil temperature is below 45°F at the five inch level. Pretreatment tillage to a depth of 12 to 18 inches often improves results, especially in heavy or muck soils.

APPLICATION: A special inexpensive chisel-type applicator is used to inject BROZONE soil fumigant about 5-8 inches into the soil. Due to the volatility of this fumigant, treated areas must be covered with polyethylene film or other suitable tarpaulin as soon as possible after application—preferably within 20 minutes. Lay film manually or with a mechanical tarp layer. BROZONE soil fumigant is toxic to plants. Therefore, do not apply to soil containing roots of desirable plants. The edges of the tarpaulin cover should be at least 18 inches away from the foliage drip-line of desirable plants.

Cylinders containing BROZONE are pressurized to expel the entire contents through metering orifices. No additional pressure is necessary for application of this fumigant.

EXPOSURE PERIOD AFTER APPLICATION

For soil temperatures above 60 F, leave the treated soil covered for at least 48 hours to insure maximum fumigant diffusion. For soil temperatures below 60 F, extend the exposure period to 3 or 4 days for best results. In all instances best results are obtained from fall applications where the covers are left on all winter

DOSAGE RECOMMENDATIONS

Use BROZONE soil fumigant according to the following dosage table

Use	Pounds/ Acre
Seed and plant beds:	
Tomato, tobacco, forest trees	500
Vegetables (for production of transplants only)	500
Strawberries and tomatoes: For fruit production*	350
Nurseries:	
Floral crops and turf	500
Woody perennials including fruit and forest trees, ornamentals	600

* When transplants are for fruit production allow at least two weeks between field fumigation and planting

Consult the following table to determine the proper pressures and orifice sizes required to deliver the desired dosage per acre. These calibrations are based on the use of 2 or more chisels spaced 12 inches apart.

DOSAGE CALIBRATION CHART

Dosage Pounds Per Acre	Tractor Speed			
	2 Miles Per Hour		3 Miles Per Hour	
	Orifice Diameter In Inches	Approximate Pressure psi	Orifice Diameter In Inches	Approximate Pressure psi
350	.043	31	.055	32
500	.055	30	.063	36
600	.055	38	.063	44

WHEN TO PLANT AFTER THE EXPOSURE PERIOD

Crops can usually be seeded 2 to 3 days after the cover is removed. For transplants aerate the soil 7 to 10 days prior to planting. NOTE: To avoid the possibility of exceeding bromide tolerances allow an aeration period of at least 2 weeks when transplants of strawberries and tomatoes for crop production are set in fumigated fields. If rains or soil temperatures below 60°F occur during aeration, delay seeding or planting until the soil is returned to a tillable condition with suitable moisture and temperature for good plant growth.

USE PRECAUTIONS

NOTE CAREFULLY: 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, avoid using fertilizers containing ammonium soils and use only fertilizers 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.

Fumigation of soil may accentuate phosphate deficiency. Therefore, in soils low in available phosphorus, add and work into the soil 500 pounds of superphosphate per acre before fumigating. Avoid reinfestation of treated soil. Do not walk from untreated area into

treated areas. Do not use tools, equipment, transplants, or other materials in infested with soil-borne plant parasitic pests and weedy areas. If the treated area is in a location where heavy rains or flooding or washing, plow a furrow or make trenches to ensure proper drainage away from the treated portion. Soil fumigant barriers around the treated plant beds are also satisfactory to prevent this type of re-contamination.

CAUTION. Food crops other than strawberries and be grown to maturity in soil treated with BROZONE. Under certain conditions BROZONE soil fumigant may be toxic to certain metals. Do not use containers or applicators made of aluminum, magnesium, or their alloys. Clean applicators immediately after use by flushing thoroughly with diesel fuel. Do not store BROZONE soil fumigant in tightly closed cylinders in a dwelling and out of the reach of children.

DANGER

**KEEP OUT OF REACH OF CHILDREN
 HIGHLY VOLATILE LIQUID
 LIQUID MAY CAUSE BURNING
 VAPORS MAY BE FATAL IF INHALED
 Do Not Breathe Vapor • Keep Away from Fire
 Do Not Get in Eyes, on Skin, on Clothing**

In case of contact immediately remove all contaminated clothing and wash with soap and water. Wash skin well with soap and plenty of water. If in eyes get medical attention. If inhaled get medical attention. Free contaminated clothing and shoes.

If a person experiences any ill effects from the breathing of the vapors, remove patient to fresh air immediately. Keep him warm and quiet. If breathing stops, call a physician immediately.



POISON



SEND FOR A DOCTOR IMMEDIATELY IN CASE OF POISONING
ANTIDOTE: No known antidote, treat symptoms as directed.
KEEP CHILDREN AND ANIMALS AWAY FROM TREATED AREAS UNDER TREATMENT

DO NOT SPILL OR DISCHARGE CONTENTS OUTSIDE GROUND COVER
 In case of trouble or other emergency where high concentrations of vapor may be present, use a full face gas mask fitted with a black canister as approved by the U.S. Dept. of Health with organic vapors.

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

• Brozone — Trademark of The Dow Chemical Company

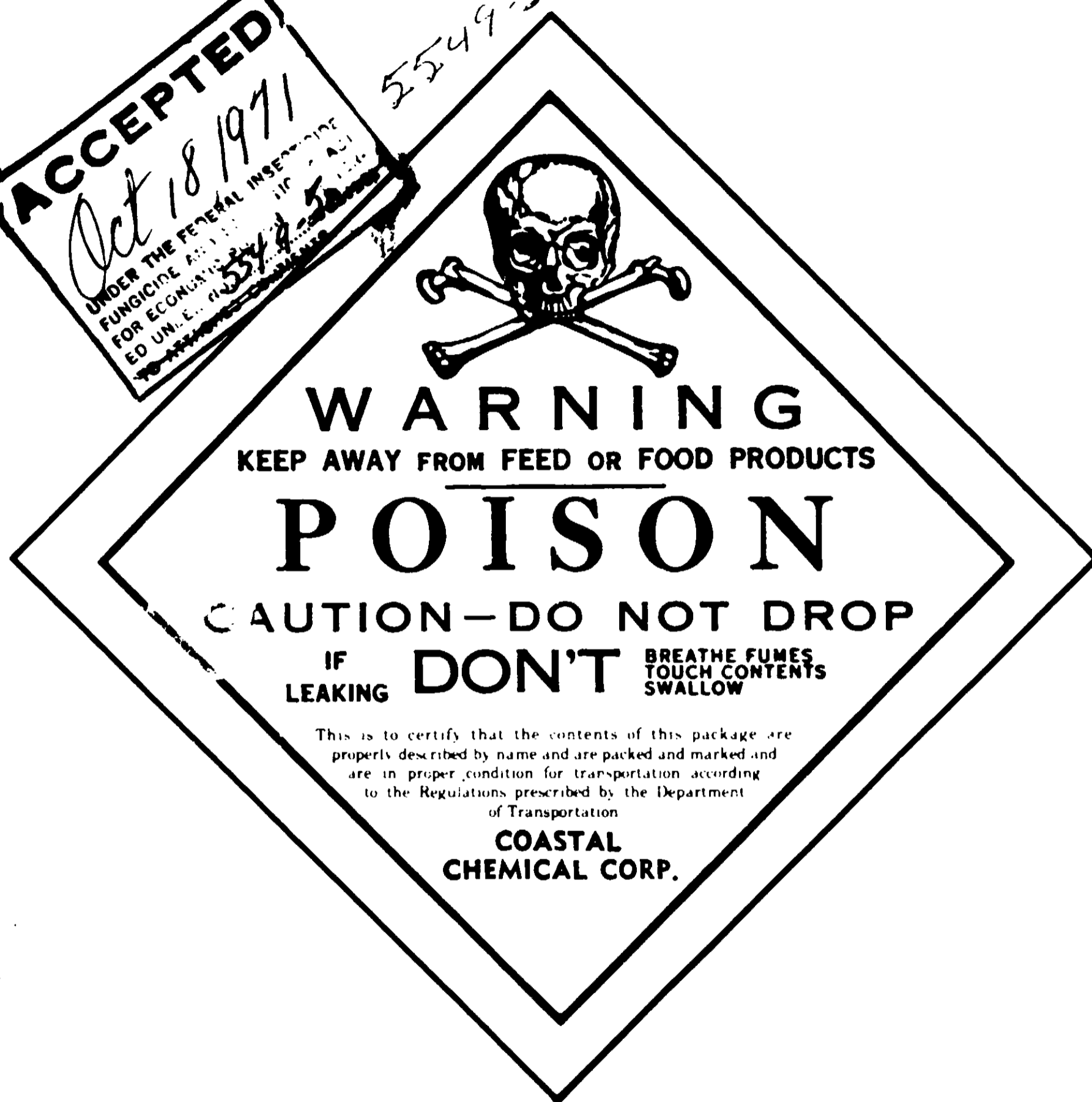
SOIL FUMIGANT

To Control Many Weeds, Grasses, Nematodes And Insect Pests In Plant Beds And Nurseries

treated areas. Do not use tools, equipment, transplants or crop remains infested with soil-borne plant parasitic pests and weed seeds in the fumigated areas. If the treated area is in a location where heavy rainfall may cause flooding or washing, plow a furrow or make trenches around the area to assure proper drainage away from the treated portion. Suitable wooden-frame barriers around the treated plant beds are also satisfactory for preventing this type of re-contamination.

CAUTION. Food crops other than strawberries and tomatoes should not be grown to maturity in soil treated with BROZONE.

Under certain conditions BROZONE soil fumigant may be severely corrosive to certain metals. Do not use containers or application equipment made of aluminum, magnesium, or their alloys. Clean application equipment immediately after use by flushing thoroughly with diesel oil or kerosene. Store BROZONE soil fumigant in tightly closed cylinders in a cool place away from dwellings and out of the reach of children.





DANGER

**KEEP OUT OF REACH OF CHILDREN
HIGHLY VOLATILE LIQUID
LIQUID MAY CAUSE BURNS
VAPORS MAY BE FATAL IF INHALED**

**Do Not Breathe Vapor • Keep Away from Heat
Do Not Get in Eyes, on Skin, on Clothing**

In case of contact immediately remove all contaminated clothing including shoes, adhesive or other bandages. Wash skin well with soap and plenty of water, flush eyes with plenty of water for at least 15 minutes. For eyes get medical attention. If skin irritation or blisters develop get medical attention. Free contaminated clothing and shoes of chemical before re-use.

If a person experiences any ill effects from the breathing of the vapors of this product, remove patient to fresh air immediately, keep him warm and quiet. Give artificial respiration if breathing stops. Call a physician immediately.

 **POISON** 

SEND FOR A DOCTOR IMMEDIATELY IN CASE OF AN ACCIDENT
ANTIDOTE: No known antidote, treat symptomatically.
KEEP CHILDREN AND ANIMALS AWAY FROM PLOTS UNDER TREATMENT

DO NOT SPILL OR DISCHARGE CONTENTS OUTSIDE GROUND COVER. In case of equipment trouble or other emergency where high concentrations of vapor may be encountered, wear a full face gas mask fitted with a black canister as approved by the U. S. Bureau of Mines for use with organic vapors.

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.

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METHYL BROMIDE — CHLOROPICRIN

MIXTURE, LIQUID

— Manufactured by —

Coastal Chemical Corp.

GREENVILLE, N. C.

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UNDER THE FEDERAL INSECTICIDE
FUNGICIDE AND FUMIGANT ACT
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FUNGICIDE AND FUMIGANT ACT

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WARNING

KEEP AWAY FROM FEED OR FOOD PRODUCTS

POISON

CAUTION—DO NOT DROP

**IF DON'T BREATHE FUMES
LEAKING TOUCH CONTENTS
SWALLOW**

This is to certify that the contents of this package are properly described by name and are packed and marked and are in proper condition for transportation according to the Regulations prescribed by the Department of Transportation.

**COASTAL
CHEMICAL CORP.**