

PM 215  
9993-2

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<b>ACCEPTED</b>
SEP 3 0 1986
Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 9993-2

VAPOROOTER<sup>R</sup> PLUS

A FOAMING FUMIGANT

RIDS SEWER LINES OF ROOTS

WILL NOT HARM TREES, NON-SYSTEMIC

A formulation of metam-sodium plus dichlobenil

ACTIVE INGREDIENTS:

Sodium Methyldithiocarbamate (anhydrous).....	28.40%
Dichlobenil (2,6-Dichlorobenzonitrile).....	1.73%

INERT INGREDIENTS:.....	69.87%
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	100.00%

AIRRIGATION ENGINEERING CO., INC.  
P.O. BOX H, CARMEL VALLEY, CA 93924 - 408/659-4312  
EPA REG. NO. 9993-2, PAT. NO. 3,741,807 EPA EST. NO. 476-AR-1  
(279-CA-1)

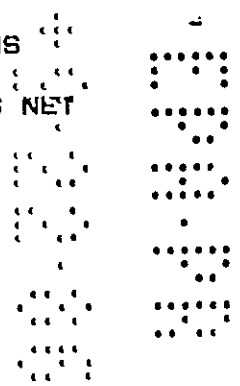
DANGER

KEEP OUT OF REACH OF CHILDREN

CAUSES SKIN IRRITATION, SEE OTHER LABEL PRECAUTIONS

5 GALLONS NET, WEIGHT PER GALLON 9.78 LBS. 18.9 LITERS NET

RECOMMENDED FOR USE BY TRAINED PERSONNEL



PRECAUTIONS

STOP!

PUT ON ALL REQUIRED SAFETY PROTECTION EQUIPMENT . GLOVES SHOULD BE CHEMICAL RESISTANT AND OF THE GAUNTLET TYPE.

DO NOT USE IN CONFINED AREA WITHOUT ADEQUATE VENTILATION.

Avoid any entry into manholes or confined areas. When absolutely necessary to enter these areas, be sure to use all safety protection equipment as required by law.

- \* May be harmful if swallowed or inhaled.
- \* Irritating to eyes, nose and throat.
- \* Avoid breathing vapor or mist.
- \* Keep children and pets out of area being treated
- \* Wash and dry clothing and shoes before use.
- \* Do not get in eyes, on skin, or on clothing:

If in eyes: Flush eyes with water for 15 minutes, get medical attention if eye irritation persists.

In case of contact with skin or clothing, remove contaminated clothing or shoes, and flush with plenty of water for 15 minutes.

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STORAGE AND DISPOSAL:

STORAGE - Do not store near feed or food stuffs. Keep container tightly closed when not in use. Do not store below 33° or above 90° F.

DISPOSAL - Do not contaminate water, food, or feed by storage or disposal. Wastes resulting from the use of this product may be disposed of on-site or at an approved waste disposal facility. Triple rinse. Then puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

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USE SOLUTION PROMPTLY AFTER MIXING. Wash and flush all equipment with water after each day's use.

KEEP OFF DESIRABLE LAWNS AND PLANTS. If excessive spillage occurs on the street or other paved areas near growing plants, immediately flush the spill thoroughly with water at moderate pressure.

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SPECIAL NOTICE

VAPOROOTER<sup>R</sup> PLUS should not be used to treat roots in storm sewers or other drains where waste water will not be treated or controlled.

PRODUCT INFORMATION

VAPOROOTER<sup>R</sup> PLUS is a sudsing, surface-active formulation of metam-sodium plus dichlobenil for dilution in water.

VAPOROOTER<sup>R</sup> PLUS is a non-systemic chemical for control of roots in sewer mains, drain-lines, and other conduits. Only the roots and organic deposits in the sewer lines are affected by VAPOROOTER<sup>R</sup> PLUS.

VAPOROOTER<sup>R</sup> PLUS is a packaged containing two separate units within an outer fiberboard container: A plastic bag of dichlobenil herbicide powder and a plastic container holding the VAPOROOTER<sup>R</sup> PLUS liquid concentrate.

MIXING INSTRUCTIONS:

1. Open outer fiberboard container, and remove plastic bag containing the dichlobenil herbicide.
2. Remove plastic inner container containing VAPOROOTER<sup>R</sup> PLUS liquid.
3. Carefully add contents of plastic bag to the liquid concentrate container of VAPOROOTER<sup>R</sup> PLUS. MIX THOROUGHLY UNTIL DICHLOBENIL POWDER IS COMPLETELY MIXED.
4. Transfer the mixture into the VAPOROOTER<sup>R</sup> PLUS solution tank. The tank should contain the correct amount of water.
5. Rinse container, and add rinse water to contents of solution tank.
6. Dispose of container in accordance with disposal instructions.

GENERAL DIRECTIONS FOR USE OF  
VAPOROOTER<sup>R</sup> PLUS

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

For additional information on special applications, contact sales representative or manufacturer. All application procedures must be in accordance with established methods and systems as developed by Irrigation Engineering Co., Inc.

- 1) DETERMINE WHICH OF THE COLLECTION LINES HAVE KNOWN ROOT

PROBLEMS. Start with the first manhole section in the upstream end of the line.

Caution must be used by operator. Consideration of slope, flow, lateral connections, line obstructions, terrain and other field conditions is necessary for safe operations.

Caution must be used to assure solution does not travel into adjacent structures. If the label and user manual instructions are not followed carefully, Airirrigation Engineering Co., Inc. will not be held responsible.

2) DETERMINE QUANTITY OF SOLUTION NEEDED.

FORMULATION CALCULATIONS

For required 1% solution, add 1 gallon of VAPOROOTER<sup>R</sup> PLUS to every 100 gallons of solution required.

	Pipe Diameter	Gallons of Solution per 1-foot lengths
SEWER PIPE CAPACITY	4 inches	.7
	6 inches	1.5
	8 inches	2.5
	9 inches	3.3
	10 inches	4.
	12 inches	6.

From this table, compute the quantity of solution necessary to treat a length of sewer, by multiplying the pipe length by the solution required per foot.

(Pipe lengths) X (Solution per foot) = (Quantity of solution required).

EXAMPLE:

An 8" pipe requires 2.5 gallons of solution per foot to fill the pipe. Therefore, 1000 gallons of solution will fill an 8" pipe 400 feet in length. To compensate for solution which enters laterals or exfiltrates from the pipe, a protection factor of 10% to 25% should be added to calculations.

APPLICATION INSTRUCTIONS

TREATING THE LINE

- Method 1  
Premix method - Preferred

Obtain holding tank of 1000 gallon capacity or more. Fill tank with water, observing all water department regulations on backflow devices and other safety requirements. Add Vaporooter Plus mixture to tank of water, using chemical

resistant transfer pump, if available; stirring constantly to assure homogenous mixture. Rinse pump thoroughly with clear water.

- a). Fill the line with the pre-mixed chemical by pumping or using gravity flow from the holding tank.
- b). Fill the line until solution level reaches approximately one foot above the top of the pipe being treated. This will establish a hydrostatic head of pressure and evacuate all air pockets.
- c). Retain solution in line for a minimum of one hour for best results. Should a situation occur that requires the chemical to be released before the full hour, generally satisfactory results can be achieved within 30-40 minutes exposure time.

2. Method II

On-site mixing method - to be used only if premix method is impractical.

- a). Provide water source at upstream manhole. Use water tank wagon, hydraulic cleaner, or fire hydrant with backwater valve, as a source of water.
- b). Calculate amount of chemical needed for capacity of pipe. Provide chemical at upstream manhole.
- c). Determine approximate rate of water flow from source to be used.
- d). Calculate the rate of chemical flow to produce a 1% solution: 1 gallon of chemical to 100 gallons of water.
- e). Start the water flow.
- f). Pour in the appropriate amounts of chemical to assure a consistent 1% solution throughout the pipe.

3. SPECIAL APPLICATION PROCEDURE:

When impractical to treat lines in the recommended manner, another Vaporooter<sup>R</sup> product may be applied by spraying by means of specialized methods. Vaporooter<sup>R</sup> Plus is not suitable for this purpose. Before treating, contact manufacturer for complete information.

SPECIAL NOTICE:

Airrigation Engineering Co., Inc., makes no warranty, express or implied, including the warranties of merchantability and/or fitness for any particular purpose, concerning this material, except those which are contained on this label.

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KEEP OUT OF REACH OF CHILDREN

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5 Gallons Net, Weight Per Gallon 9.78 lbs.  
18.9 Liters Net - For Complete Mixture

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