

DANGER
(PRECAUTIONS con'd)

- May be harmful if swallowed or inhaled.
- Irritating to eyes, nose and throat.
- Avoid breathing vapor or mist.
- Do not get in eyes, on skin, or clothing.
- In case of contact, immediately remove contaminated clothing or shoes and flush with plenty of water, and apply soothing lotion; for eyes, flush with water for at least 15 minutes and get medical attention, if eye irritation persists.
- Wash and dry clothing and shoes before re-use.
- When applying in enclosed areas, wear a mask or respirator of a type passed by the U.S. Bureau of Mines for VAPAM** protection.
- If eyes smart when working in manhole where VAPOROOTER[®] SANAFOAM[™] is present, leave area and use blower or mask before re-entering manhole.
- Keep children and pets out of area being treated.
- Do not store near feed or foodstuffs.
- Keep container tightly closed when not in use.
- Do not store below 0° or above 150° F.
- PERFORATE EMPTY CONTAINER OR BURY with waste in safe area away from crops and water supplies.

PRODUCT INFORMATION

SANAFOAM[™] VAPOROOTER[®] is a water soluble, foaming, surface-active formulation of VAPAM** plus Dichlobenil. When properly applied to sewer mains, **SANAFOAM[™] VAPOROOTER[®]** kills and inhibits the regrowth of plant roots in the interior of the mains, and by absorption into the root cells, kills the roots in and through the pipe joints.

SANAFOAM[™] VAPOROOTER[®] solution is converted into a gaseous fumigant and is maintained in an active foam state on pipe and root surfaces, when the sewer mains are properly foamed with **SANAFOAM[™] VAPOROOTER[®]**. Dichlobenil, a new root-growth inhibitor, is a

slightly soluble crystalline solid which is readily absorbed by the root and adsorbed on root and organic and inorganic colloids of sludge and clay, in the tile joint. The presence of dichlobenil in the tile joints furnishes a residual control of root regrowth by inhibiting the development of the actively-dividing meristem cells in the root tips. Therefore, new root shoots of branches which may regrow from outside the pipe joints (where cracks or leaks occur) are retarded or inhibited in their growth.

SANAFOAM[™] VAPOROOTER[®] is a nonsystemic chemical for control of roots in sewer mains, drain-lines, and other conduits. Root removal helps control septic spots that produce slimes and fatty acid deposits. These organic materials often generate hydrogen sulfide in the sewer main. Only the roots and organic deposits in the sewer lines are affected by **SANAFOAM[™] VAPOROOTER[®]**.

PROCEDURE FOR CONTROLLING ROOT GROWTH IN SEWER MAINS BY FILLING THE LINE WITH VAPOROOTER[®] SANAFOAM[™]

1. Determine which of the collection lines have known root problems. Start with the first manhole section in the upstream end of the line.
2. Plug the main securely at the manhole on the upstream end of the first section to be foamed with a plug that can be adapted to receive a one-inch hose connection from the **FOAMAKER[™]** and pass the **SANAFOAM[™]** through the plug into the upstream end of the main to be foamed. Be sure the plug has enough resistance to the back-pressure of the foam (which normally does not exceed 30 pounds per square inch) to force the foam down line, until the foam appears at the other end of the line being treated.

Repeat the above procedure in sections that have root growth downline, or move applicator to other sections of collection lines to be foamed with **VAPOROOTER[®] SANAFOAM[™]**.

It is important to know that **SANAFOAM[™]**

SANAFOAM[™] VAPOROOTER[®]

A FOAMING FUMIGANT

RIDS SEWER LINES OF ROOTS

ROOT GROWTH CAUSES SEPTIC SPOTS IN SEWAGE FLOW.

ANAEROBIC DIGESTION IN THIS RETARDED FLOW CAUSES GREASE DEPOSITS AND GENERATION OF HYDROGEN SULFIDE.

ACTIVE INGREDIENTS:

Sodium methyldithiocarbamate (anhydrous)..... 24.25%
Dichlobenil — 2,6-dichlorobenzonitrile 1.77%

INERT INGREDIENTS:

73.98%

Weight per gallon — 9.57 lbs.

A FORMULATION OF VAPAM**
PLUS DICHLOBENIL

*Airrigation's Reg. T.M.
**Stauffer Chemical Company's Reg. T.M. and U.S. Pat. Nos. 2,766,554; 2,791,605.

DANGER
KEEP OUT OF REACH OF CHILDREN
CAUSES SKIN BURNS

(See left panel for additional precautions.)

manufactured
exclusively for

AIRRIGATION ENGINEERING COMPANY, INC.

PATENTS APPLIED FOR

Post Office Box H

Carmel Valley, California 93924

PHONE: 408-659-2000

EPA Reg. No. 9993-3—50002 AA

5 GAL. NET

*REG. TM

**REG. TM (STAUFFER)

VAPOROOTER[®] can be applied in section of line where conditions of downflow or upflow, on normal grades. To allow flow to drain from manhole lengths, it is desirable to stream until a root-infested collection pipe has been completely treated.

DIRECTIONS FOR USE OF SANAFOAM[™] VAPOROOTER[®] WITH THE FOAMAKER[™]

First determine foam volume in gallons necessary to fill the section of sewer to be treated with **SANAFOAM[™]**. This is easily computed, using the following sewer pipe capacity:

	Pipe Diameter	Gallons per Foot
SEWER PIPE CAPACITY	4 inches	1
	6 inches	1
	8 inches	1
	9 inches	1
	10 inches	1
	12 inches	1

From this table, compute the gallons of foam necessary to treat a length of sewer by multiplying the pipe length by the foam volume per foot.

EXAMPLE: Assuming the section of sewer to be filled with foam is 6" i.d. and 600 feet long, 600 gallons of foam will just to fill the line.

However, 400' of 6" line could not be filled with foam. Extensive tests indicate that at least 10 household connections of 4" pipe length of these 4" connections filled with **VAPOROOTER[®] SANAFOAM[™]** will require 700 gallons of foam.

Therefore, approximately 100 household connections will require 700 gallons of foam. We suggest that you use approximately 700 gallons of **VAPOROOTER[®] SANAFOAM[™]** to be sure of filling 400-foot, 6" sewer.

The **FOAMAKER[™]** generates 20 gallons of foam per gallon of **SANAFOAM[™] VAPOROOTER[®]** solution. Therefore, 700 gallons of **VAPOROOTER[®] SANAFOAM[™]** solution will generate 14,000 gallons of foam. 700 gallons of **VAPOROOTER[®] SANAFOAM[™]** will fill 400 feet of 6" sewer by the **FOAMAKER[™]**.

FOAMAKERS[™] are available from **AIRRIGATION** only. **FOAMAKERS[™]** are manufactured for **AIRRIGATION** to our specifications, by Waukesha Foundry Company, Inc.,

SANAFOAM™ VAPOROOTER®

A FOAMING FUMIGANT

REMOVES SEWER LINES OF ROOTS

ROOT GROWTH CAUSES SEPTIC SPOTS IN SEWAGE FLOW.
ANAEROBIC DIGESTION IN THIS RETARDED FLOW CAUSES GREASE
DEPOSITS AND GENERATION OF HYDROGEN SULFIDE.

ACTIVE INGREDIENTS:

Sodium methylthiocarbamate (anhydrous)..... 24.25%
Dichlobenil — 2,6-dichlorobenzonitrile 1.77%

INERT INGREDIENTS: 73.98%

Weight per gallon — 9.57 lbs.

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EPA Reg. No. 9993-3—50002 AA

5 GAL. NET

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**REG. TM (STAUFFER)

VAPOROOTER® can be applied in any single section of line where conditions dictate, either downflow or upflow, on normal or hillside grades. To allow flow to drain from progressive manhole lengths, it is desirable to treat downstream until a root-infested collection line has been completely treated.

DIRECTIONS FOR USE OF SANAFOAM™ VAPOROOTER® WITH THE FOAMAKER™

First determine foam volume in gallons, necessary to fill the section of sewer line to be treated with SANAFOAM™. This volume is easily computed, using the following chart of sewer pipe capacity:

SEWER PIPE CAPACITY	Gallons of Foam 1-foot lengths	
	Pipe Diameter	
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 foam necessary to treat a length of sewer, by multiplying the pipe length by the foam required per foot.

EXAMPLE: Assuming the section of line to be filled with foam is 6" i.d. and 400 feet long, 600 gallons of foam will be required just to fill the line.

However, 400' of 6" line could normally have 10 household connections of 4" diameter. Extensive tests indicate that an average 10-foot length of these 4" connections will be filled with VAPOROOTER® SANAFOAM™.

Therefore, approximately 100 feet of 4" houselines will require 70 gallons of SANAFOAM™. We suggest that you use approximately 700 gallons of VAPOROOTER® SANAFOAM™ to be sure of filling the average 400-foot, 6" sewer.

The FOAMAKER™ generates 20 gallons of VAPOROOTER® SANAFOAM™ from each gallon of VAPOROOTER® solution. Therefore, 35 gallons of VAPOROOTER® solution will produce 700 gallons of VAPOROOTER® SANAFOAM™, by the FOAMAKER™.

To make VAPOROOTER® solution, to produce any desired quantity of VAPOROOTER® SANAFOAM™, use the following table:

To Water:	Add SANAFOAM™ VAPOROOTER®	FOAM PRODUCED
5 Gal.	1 Quart	100 Gal.
10 Gal.	2 Quarts	200 Gal.
20 Gal.	1 Gal.	400 Gal.
35 Gal.	1.75 Gal.	700 Gal.
40 Gal.	2 Gal.	800 Gal.
50 Gal.	2½ Gal.	1000 Gal.
60 Gal.	3 Gal.	1200 Gal.
70 Gal.	3½ Gal.	1400 Gal.
80 Gal.	4 Gal.	1600 Gal.
100 Gal.	5 Gal.	2000 Gal.

For best results use 5% SANAFOAM™ VAPOROOTER® solution.

USE CAUTIONS

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

KEEP OFF DESIRABLE LAWNS AND PLANTS. Do not spill or discard solution waste within three feet of the drip-line of plants, shrubs, or trees. If excessive spillage occurs on the street or other paved areas near growing plants, immediately flush the spill thoroughly with water-spray at moderate pressure, to prevent fumes from drifting toward critical areas.

THIS PRODUCT IS TOXIC TO FISH AND OTHER AQUATIC LIFE.

DO NOT USE IN STORM-DRAINS.

DO NOT USE IN CONFINED AREAS WITHOUT ADEQUATE VENTILATION.

SPECIAL NOTICE

SANAFOAM™ VAPOROOTER® should not be used to treat roots in storm sewers or other drains where waste water will not be treated or controlled. VAPOROOTER is effective for killing roots in storm sewers or drains.

NOTICE: Airrigation Engineering Company, 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.

From AIRRIGATION only. FOAMAKERS™ are manufactured for AIRRIGATION to our specifications, by Waukesha Foundry Company, Inc., Waukesha, Wisconsin