RESTRICTED USE PESTICIDE DUE TO ACUTE TOXICITY
For retail sale to and use only by Certified Applicators or persons under their direct supervision and only for those uses covered by the Certified Applicator’s certification.

SANAFOM VAPOROOTER® II
A FOAMING FUMIGANT, RIDS SEWER LINES OF ROOTS, WILL NOT HARM TREES, NON-SYSTEMIC
THIS PRODUCT CONTAINS:

1. SANAFOM® VAPOROOTER® II liquid concentrate
   Active Ingredient: Metam-Sodium (sodium methylthiocarbamate) % By weight
   Other Ingredients: Total 30.0% 70.0% 100.0%

2. DICHLOROBENIL 50W
   Active Ingredient: Dichlobenil (2,6-dichlorobenzonitrile) % By weight
   Other Ingredients: Total 50.0% 100.0%

KEEP OUT OF REACH OF CHILDREN DANGER
CAUSES SKIN IRRITATION. SEE OTHER LABEL PRECAUTIONS
Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.
(If you do not understand the label, find someone to explain it to you in detail.)

EPA Reg. No. 1015-70
EPA Est. No. 1015-MO-1

Manufactured For:
Douglas Products & Packaging Company
1550 East Old 210 Highway
Liberty, MO 64068

Net Contents
1. SANAFOM VAPOROOTER II LIQUID CONCENTRATE: 5 gal.
2. DICHLOROBENIL 50W POWDER: 30 oz.

FIRST AID

IF INHALED • Move person to fresh air.
• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.
• Call a poison control center or doctor for further treatment advice.

IF ON SKIN OR CLOTHING • Take off contaminated clothing.
• Rinse skin immediately with plenty of water for 15-20 minutes.
• Call a poison control center or doctor for treatment advice.

IF SWALLOWED • Call a poison control center or doctor immediately for treatment advice.
• Have person sip a glass of water if able to swallow.
• Do not induce vomiting unless told to do so by a poison control center or doctor.
• Do not give anything by mouth to an unconscious person.

IF IN EYES • Hold eye open and rinse slowly and gently with water for 15-20 minutes.
• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
• Call a poison control center or doctor for treatment advice.

HOT LINE NUMBER
Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact 1-800-858-7378 for emergency medical treatment information.

SEE ADDITIONAL PRECAUTIONARY STATEMENTS ON SIDE PANELS
SEE ADDITIONAL PRECAUTIONARY STATEMENTS ON CONTAINERS INSIDE THIS PACKAGE
PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER
Corrosive, causes skin irritation. May be harmful or fatal if absorbed through skin or inhaled. Harmful if swallowed. Causes eye irritation. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Do not get in eyes, on skin or on clothing. Do not breathe vapor or spray mist. A mask or pesticide respirator jointly approved by the Mining Enforcement and Safety Administration and the National Institute for Occupational Safety and Health must be available for use in case of an emergency. Wear protective clothing and chemical-resistant gloves. Wash thoroughly with soap and water after handling and before eating or smoking. Remove contaminated clothing and wash before reuse.

Keep all unprotected persons, children, livestock and pets away from treated area or where there is danger of drift, such as a spill.

Do not rub eyes or mouth with hands. If you feel sick in any way, STOP work and get help immediately. See First Aid section.

PERSONAL PROTECTIVE EQUIPMENT (PPE)
1. The following protective clothing and equipment are required to be used by persons actually engaged in carrying out any operations that are likely to involve direct contact with metan-sodium including mixing, loading, equipment calibrations or adjustments, cleaning and repair of application equipment, entering into treated areas, sampling, cleaning, up of spills, rinse disposal, or any other activities likely to result in direct contact with the product. This protective equipment must also be used for any operations that are carried out within six feet of unshielded, pressurized hoses containing metan-sodium solutions.
   - Splash-resistant eye protection.
   - Body covering including shirt and long pants or long sleeved clothing. When a closed system is not used, mixers and loader must also wear a chemical-resistant apron or cloth coveralls.
   - Chemical-resistant gauntlet-type gloves and boots.
2. The following protective equipment must be worn at all times by persons operating or monitoring application equipment.
   - Chemical-resistant footwear.
   - Body covering including shirt and long pants or long sleeved clothing.
3. The following protective clothing and equipment must be immediately available at all times for use by persons operating or monitoring application equipment.
   - A properly fit tested NIOSH- or MSHA-approved half face respirator with organic vapor cartridge(s) plus splash resistant eye protection or a NIOSH- or MSHA-approved full face respirator with organic vapor cartridge(s). This equipment must be worn in case of emergencies or leaks when the pungent, rotten egg or sulfur-like odor of metan-sodium is detected.
   - Chemical-resistant gauntlet-type gloves. These must be worn when a person is engaged in carrying out any operation that is likely to involve direct contact with the product, including the operations listed in paragraph No. 1 above.

USE PRECAUTIONS
Consideration must be given to all sewer service lines and building elevations and basements for the possibility of foam coming up out of drains. Consideration must be given to distance between houses and sewers to be treated, depth of sewers compared to lines in buildings, line obstructions, broken and empty traps. Drains which may be subject to backup and flooding must be plugged. Follow the directions for measurement and use carefully to avoid using excess foam that may be forced up lateral lines to building drains. Building occupants should exit structures if the rotten egg or sulfur-like odor of metan-sodium is detected. Open windows and ventilate with fans. Flush drains with ample water if the odor comes from them. Use a squeegee, dust pan or wet vacuum and garbage bags for spills or backups and dispose of foam and liquid, wash area of spill or back up with water and detergent and flush down drain. If rugs or cloth are contacted, take outside and dry before laundering separately.

Do not use in confined areas 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 and procedures as required by law.

ENVIRONMENTAL HAZARDS

Keep out of lakes, ponds or streams. Toxic to fish and aquatic life. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash waters. Equipment wash waters and wastes resulting from the use of this product may be disposed of on site according to label directions or at an approved waste disposal facility. Do not use in potable sewer systems. Do not use in storm, field or other drains unless effluent is treated in a sanitary sewer system. Keep off lawns and plants as they may be severely injured. Foam should be shaved off planted areas immediately rather than washing off with water.

USE PRECAUTIONS NEAR TREATMENT PLANTS
High concentrations of these chemicals in wastewater may adversely affect the biological sewage breakdown process in wastewater treatment plants. Large scale applications to sewage collection systems in proximity to a treatment plant should be divided into smaller sectional treatments done at one or two day intervals to minimize effects on the sewage treatment process. Inform appropriate wastewater treatment plant officials prior to use so they may check for any unusual rotten egg or sulfur-like odor of metan-sodium above that of sewage and monitor the performance of filter beds or digesters. If the odor is detected at the sewage treatment plant or the biological breakdown process is adversely affected, root control applications should cease until normal conditions are established. Subsequent treatments should be reduced in size or volume and spread over greater time intervals.

NOTE: Never exceed the daily use of more than 15 gallons of Sanafoam Vaporoater II Liquid Concentrate for each million gallons of sewage flow (MGD) into the wastewater treatment plant (WWT). Example: Inflow into the WWT is 2.4 MGD, therefore, use a maximum of 36 gallons (2.4 x 15) of Sanafoam Vaporoater II per day. When Vaporoating within one mile distance of the WWT or when applying at night reduce the maximum application use by 50% to 18 gallons (36 x .5). The above maximum daily use must extend over an eight hour work period.

PHYSICAL OR CHEMICAL HAZARDS

Do not use or store near heat or open flames.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage and disposal.

PESTICIDE STORAGE: Do not store near food or feed, seeds, bulbs, tubers, nursery stock or other vegetative matter. Do not store near pet or livestock quarters. Store in a cool, dry, and well ventilated area. Keep containers tightly closed when not in use.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product must be disposed of on site by discharging into sewer pipes being treated or at an approved, waste disposal facility.

CONTAINER DISPOSAL (Plastic Container): Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinse into application equipment or a mix tank or store rinse for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

CONTAINER DISPOSAL (WSP PACKAGING): Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available or, dispose of the empty outer foil pouch in the trash as long as WSP is unbroken.

OUTER BOX: Dispose of empty box in a sanitary landfill or by incineration or, if allowed by state and local law, by burning. If burned, stay out of smoke.

PRODUCT INFORMATION

SANAAFOAM VAPOROATER II is a foaming, surface-active formulation of metan-sodium plus DICHLOROBEN 50W for dilution in water.

SANAAFOAM VAPOROATER II is a non-synthetic chemical for control of roots in sewer mains and drain lines. Only the roots and organic deposits in the sewer lines are affected by SANAAFOAM VAPOROATER II liquid concentrate.

SANAAFOAM VAPOROATER II is packaged to contain separate units within an outer fiberboard container; a foil bag of dichlobenil herbicide powder and a plastic container holding the SANAAFOAM VAPOROATER II liquid Concentration.

SANAAFOAM VAPOROATER II must not be used to treat roots in storm sewers or other drains where the wastewater will not be treated or controlled.
DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Refer to the Personal Protective Equipment (PPE) section under PRECAUTIONARY STATEMENTS and use all required protective clothing and equipment. The metam-sodium and dichlobenil components must be used in combination and with a foaming agent (contained in the liquid concentrate) to control roots in sewer systems according to the directions for use.

DIRECTIONS FOR USE OF SANAFoAM VAPOROOTER II WITH FOAMAKER GENERATORS

A. DETERMINE WHICH OF THE COLLECTION LINES HAVE KNOWN ROOT PROBLEMS.

1. SURVEY TREATMENT AREA
   Confirm the line size and length. Evaluate slope, flow, lateral connections, line length, outfall, line obstructions, terrain and other field conditions. A thorough evaluation prior to starting will assure safe and accurate application of SANAFoAM VAPOROOTER II.

2. DETERMINE QUANTITY OF FOAM NEEDED
   From Table 1 compute the quantity of foam required to fill the length of pipe (in feet) to be treated.

   **TABLE 1: Foam Requirements and Hose Retrieval Rates for SANAFoAM VAPOROOTER II APPLICATIONS**

<table>
<thead>
<tr>
<th>PIPE I.D. (INCHES)</th>
<th>FOAM CAPACITIES (Gal./Fl.)</th>
<th>RETRIEVAL RATE (sec/10 Fl.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>0.7</td>
<td>4.2</td>
</tr>
<tr>
<td>6</td>
<td>1.5</td>
<td>9.0</td>
</tr>
<tr>
<td>8</td>
<td>2.5</td>
<td>15.0</td>
</tr>
<tr>
<td>9</td>
<td>3.3</td>
<td>20.0</td>
</tr>
<tr>
<td>10</td>
<td>4.1</td>
<td>24.0</td>
</tr>
<tr>
<td>12</td>
<td>5.9</td>
<td>36.0</td>
</tr>
<tr>
<td>15</td>
<td>9.2</td>
<td>55.0</td>
</tr>
<tr>
<td>16</td>
<td>10.4</td>
<td>62.0</td>
</tr>
<tr>
<td>18</td>
<td>13.2</td>
<td>78.0</td>
</tr>
<tr>
<td>21</td>
<td>18.0</td>
<td>108.0</td>
</tr>
<tr>
<td>24</td>
<td>23.5</td>
<td>141.0</td>
</tr>
<tr>
<td>27</td>
<td>29.7</td>
<td>178.0</td>
</tr>
</tbody>
</table>

   **Example:** An 8" pipe requires 2.5 gallons of foam per foot to fill the pipe. Therefore, 3750 gallons of foam are required to fill an 8" pipe 1500 feet in length (1500 ft X 2.5 Gal./Fl. = 3750 Gal.).

3. MEASUREMENT DIRECTIONS TO PRODUCE DESIRED QUANTITY OF FOAM

   **TABLE 2: Mixing Instructions For Diluting SANAFoAM VAPOROOTER II LIQUID CONCENTRATE**

<table>
<thead>
<tr>
<th>FOAM REQUIREMENT</th>
<th>TOTAL MIX VOLUME</th>
<th>WATER</th>
<th>SANAFoAM VAPOROOTER II</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 gal.</td>
<td>5.25 gal.</td>
<td>5 gal.</td>
<td>1.0 qt.</td>
</tr>
<tr>
<td>125 gal.</td>
<td>6.25 gal.</td>
<td>6 gal.</td>
<td>1.0 qt.</td>
</tr>
<tr>
<td>200 gal.</td>
<td>10.5 gal.</td>
<td>10 gal.</td>
<td>2.0 qt.</td>
</tr>
<tr>
<td>250 gal.</td>
<td>12.5 gal.</td>
<td>12 gal.</td>
<td>0.5 gal.</td>
</tr>
<tr>
<td>500 gal.</td>
<td>25.0 gal.</td>
<td>24 gal.</td>
<td>1.0 gal.</td>
</tr>
<tr>
<td>700 gal.</td>
<td>36.75 gal.</td>
<td>35 gal.</td>
<td>1.75 gal.</td>
</tr>
<tr>
<td>800 gal.</td>
<td>42.0 gal.</td>
<td>40 gal.</td>
<td>2.0 gal.</td>
</tr>
<tr>
<td>1000 gal.</td>
<td>52.5 gal.</td>
<td>50 gal.</td>
<td>2.5 gal.</td>
</tr>
<tr>
<td>1250 gal.</td>
<td>62.5 gal.</td>
<td>60 gal.</td>
<td>2.5 gal.</td>
</tr>
<tr>
<td>1400 gal.</td>
<td>73.5 gal.</td>
<td>70 gal.</td>
<td>3.0 gal.</td>
</tr>
<tr>
<td>1600 gal.</td>
<td>84.0 gal.</td>
<td>80 gal.</td>
<td>4.0 gal.</td>
</tr>
<tr>
<td>2500 gal.</td>
<td>125.0 gal.</td>
<td>120 gal.</td>
<td>5.0 gal.</td>
</tr>
<tr>
<td>3750 gal.</td>
<td>187.5 gal.</td>
<td>180 gal.</td>
<td>7.5 gal.</td>
</tr>
<tr>
<td>5000 gal.</td>
<td>250.0 gal.</td>
<td>240 gal.</td>
<td>10.0 gal.</td>
</tr>
</tbody>
</table>

   **Example:** 180 gallons of water plus 7.5 gallons of SANAFoAM VAPOROOTER II solution will produce 3750 gallons of foam.

4. MIXING PROCEDURES

1. Fill the Foamaker Equipment mix tank 1/4 to 1/2 full of clean water leaving room in the tank for the rinse water to be used as described below.

2. Open outer fiberboard container and remove the foil bag containing the dichlobenil herbicide.

3. Remove the 5 gallon inner container containing the SANAFoAM VAPOROOTER II Liquid Concentrate as needed.

4. Remove the Dichlobenil 50W water soluble inner bag from the labeled protective outer foil bag.

5. Place the unopened water soluble bag through the access lid and into the water in the mix tank as needed.

6. Allow about 7 minutes for the bag to dissolve and the powder to thoroughly mix.

7. Transfer the liquid from the 5 gallon container as necessary into the Foamaker solution mix tank using the suction pump system on the Foamaker.

8. Triple rinse the 5 gallon liquid container (again using the suction pump system to add the rinse water to the mix tank).

9. Add to the mix tank the remainder of the required water and mix thoroughly.

10. Dispose of containers in accordance with disposal instructions.

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

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

APPLICATION GUIDELINES FOR SANAFoAM VAPOROOTER II

1. TO APPLY FOAM TO MAIN LINES: Insert foam discharge hose through entire section of line to be treated. Start foam generating equipment and withdraw discharge hose at a rate calibrated to fill the pipe line to capacity (as listed in Table 1), until foam appears at input manhole. Use appropriate foam application equipment designed to produce required foam volume.

   You may multiply the retrieval rates in Table 1 by 1.10 to allow for some treatment of laterals (about 3-6 feet) and to allow more foam to push into cracks and broken joints.

2. IF TREATING A BUILDING LATERAL: Be sure foam application discharge hose is of a specialized type and is securely positioned and inflated in the clean-out to prevent foam overflow and/or plug blowout. Operate foam generating equipment until required amount of foam has been produced, as calculated from information in Table 1.

Note: Care should be taken not to overfill lateral.

FOAMAKER Generators produce 20 gallons of foam from each gallon of SANAFoAM VAPOROOTER II mixed solution.

FOAMAKER Generators are manufactured for Douglas Products to our specifications and are available from Douglas Products.

For additional information on special applications contact sales representative of manufacturer. All application procedures must be in accordance with established methods and systems as developed by Douglas Products.

SPECIAL NOTICE

To the extent consistent with applicable law Douglas Products makes no warranty, expressed or implied, including the warranties of merchantability and/or fitness for any particular purpose, concerning this material, except for those which are contained on this label.

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