

US ENVIRONMENTAL PROTECTION AGENCY OFFICE OF PESTICIDES PROGRAMS REGISTRATION DIVISION (75-767) WASHINGTON, DC 20460	EPA REGISTRATION NO. 64898-4	DATE OF ISSUANCE 10/30/92
	TERM OF ISSUANCE CONDITIONAL	
	NAME OF PESTICIDE PRODUCT ROUT, ROUT-D & ROUT-M	

NOTICE OF PESTICIDE: REGISTRATION
 REREGISTRATION
 (Under the Federal Insecticide, Fungicide,
 and Rodenticide Act, as amended)

NAME AND ADDRESS OF REGISTRANT (Include ZIP code)

Stephen L. Roof, President
 Florida Petrochemicals, Inc.
 1020 Hiawatha Boulevard W.
 Syracuse, NY 13204

NOTE: Changes in labeling formula differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above U.S. EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby Registered/Reregistered under the Federal Insecticide, Fungicide, and Rodenticide Act.

A copy of the labeling accepted in connection with this Registration/Reregistration is returned herewith.

Registration is in no way to be construed as an indorsement or approval of this product by this Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA section 3(c)(7)(A) provided you:

1. Submit/cite all data required for registration/reregistration of your product under FIFRA section 3(c)(5) when the Agency requires all registrants of similar products to submit such data; and submit acceptable responses required for reregistration of your product under FIFRA Section 4.
2. Make the labeling changes listed below before you release the product for shipment:
 - a. Add the phrase "EPA Registration No. 64898-4".
 - b. Complete the Net Contents section of each part of the three part labeling.
 - c. Complete the EPA Establishment Number section for each part of the labeling.
 - d. Change "clean" to "cleaning" in the first paragraph under Protective Clothing and Equipment Requirements for each part of the three part labeling. In the first paragraph under Protective Clothing and Equipment on the dichlobenil subpack part of the labeling add "of" between "up" and 1.

ATTACHMENT IS APPLICABLE

SIGNATURE OF APPROVING OFFICIAL: Susan Lewis
 DATE: 10/30/92

"spills" and add "case" between "in" and "of" in paragraph 3.A.

- e. Add the word "treatment" between water and facility on the last line of the second paragraph of Directions for Use on the outer package or combined labeling and "Plastic Pail" is written twice under Container Disposal. Delete the second.
 - f. On the dichlobenil part of the subpack labeling, change "housed" to "houses" under Use Precautions and add "metam-sodium product" between "package" and "labeling" in the seventh line of the second paragraph under Directions for Use.
 - g. In the Statement of Practical Treatment on labeling of the outer package and inner package of metam-sodium add "Call a physician or poison control center." between "If Swallowed:" and "Drink promptly...".
3. Develop a training manual for the use of metam-sodium plus dichlobenil in sewers for control of roots. This training manual should be a collective effort of this particular industry done in cooperation with municipal wastewater treatment authorities. If cooperation cannot be obtained among industry members, the training manual may then be a product of an individual company, preferably done in cooperation with municipal authorities. This manual must address safety as well as use and be submitted to the Agency by June 30, 1993.
 4. Agree in writing that this product use will become a Restricted Use pesticide for use under direction of a Certified Pesticide Applicator by October 31, 1993.
 5. Submit five (5) copies of your final printed labeling before you release the product for shipment.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

A stamped copy of the label is enclosed for your records.

Sincerely yours,



Susan T. Lewis
Product Manager (21)
Fungicide-Herbicide Branch
Registration Division (H7505C)
2.

Enclosure

ROUT™

A NONSYSTEMIC, SURFACE ACTIVE FORMULATION FOAMING FUMIGANT FOR SEWER ROOT CONTROL

Only for use as a combination of metam-sodium, dichlobenil and foaming agent as directed.

This product contains:

- ROUT-M LIQUID METAM SODIUM** % by weight

Active Ingredient: Metam-sodium (sodium methylthiocarbamate) .	33.0%
Inert Ingredients	67.0%
Total	100.0%

This product contains 3.1 pounds of active ingredient per gallon.
- ROUT-D POWDER DICHLOBENIL** % by weight

Active Ingredient: Dichlobenil (2,6-dichlorobenzonitrile)	50.0%
Inert Ingredients	50.0%
Total	100.0%

This product contains 0.5 pounds of active ingredient per pound of product.
- ROUT FOAMING AGENT**

KEEP OUT OF REACH OF CHILDREN

WARNING

PLEASE SEE PRECAUTIONARY STATEMENTS, STATEMENT OF PRACTICAL TREATMENT, AND STORAGE AND DISPOSAL STATEMENTS ON SIDE PANEL

EMERGENCY INFORMATION

For spill, leak, fire, exposure, or accident call CHEMTREC 1 800-424-9300.

Net Contents

ROUT-M Liquid Metam-Sodium: _____ Gal./L.; EPA ESTABLISHMENT NUMBER: _____
 ROUT-D Powder Dichlobenil: _____ lbs./Kg.; EPA ESTABLISHMENT NUMBER: _____
 ROUT FOAMING AGENT: _____ Gal./L.

FLORIDA PETROCHEMICALS, INC.
1020 HIAWATHA BOULEVARD, WEST
SYRACUSE, NY 13204

EPA REGISTRATION NUMBER: 64898-____

FPCI REV: 920904

ACCEPTED
with COMMENTS
in EPA Letter Dated:

OCT 30 1992

Under the Federal Insecticide,
Fungicide, and Rodenticide Act as
amended, for the pesticide
registered under EPA Reg. No. 64898-4

KEEP OUT OF REACH OF CHILDREN

WARNING

STATEMENT OF PRACTICAL TREATMENT

- IF INHALED:** Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Get medical attention.
- IF ON SKIN:** Wash with plenty of soap and water. Get medical attention.
- IF SWALLOWED:** Drink promptly a large quantity of milk, egg whites, gelatin solution or, if these are not available, drink large quantities of water. Avoid alcohol. Do not induce vomiting or give anything by mouth to an unconscious person.
- IF IN EYES:** Flush with plenty of water for at least fifteen minutes. Call a physician if irritation persists.

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

May be fatal if absorbed through skin or inhaled. Harmful if swallowed. Causes skin and 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. Immediately remove contaminated clothing and/or footwear. Wash contaminated clothing separately before reuse.

PROTECTIVE CLOTHING AND EQUIPMENT REQUIREMENTS

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 metam-sodium including mixing, loading, equipment calibrations or adjustments, clean and repair of application equipment, entering into treated areas, sampling, clean up of spills, rinsate 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 metam-sodium.
 - A. Splash resistant eye protection.
 - B. Body covering including shirt and long pants or long sleeved clothing. When a closed system is not used, mixers and loader must also wear chemical resistant apron or cloth coveralls.
 - C. Chemical resistant boots and gauntlet-type gloves.

2. The following protective equipment must be worn at all times by persons operating or monitoring application equipment.
 - A. Chemical resistant footwear.
 - B. 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. 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 when the pungent, rotten egg or sulfur-like odor of metam-sodium is detected.
 - B. 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 number 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 drains in buildings, line obstructions, broken and empty traps and drains with no traps that would allow foam to easily emerge. Building drains may be plugged to protect against backup and flooding. Follow the directions for measurement and use carefully to avoid using excess foam that may be forced up lateral lines to building drains. Lateral lines may be treated, but do not force excessive foam into service lines which may cause it to be forced up lateral lines to building drains. Building occupants should exit structures if the rotten egg or sulfur-like odor of metam-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 in an open drain or manhole. After removal of foam and liquid, wash area of spill or backup with water and detergent and flush down drain. If rugs or cloth are contacted take outside and dry before laundering separately.

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 washwaters. Equipment washwaters and wastes resulting from the use of this product may be disposed of on site according to label directions for use or at an approved waste disposal facility. Do not use in potable water 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 shoveled off planted areas immediately rather than washing off with water.

USE PRECAUTIONS

High concentrations of these chemicals in waste water may adversely affect the biological sewage breakdown process in waste water treatment plants. Large scale applications to sewage collection systems in proximity to a sewage 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 metam-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.

PHYSICAL OR CHEMICAL HAZARDS

Do not use or store near heat or open flames.

DIRECTIONS FOR USE

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

Refer to the protective clothing and equipment information under PRECAUTIONARY STATEMENTS and use all required protective clothing and equipment. The metam-sodium and dichlobenil may be used only in combination and with a foaming agent to control roots in sewer systems according to the directions for use. Do not use the soak method of application. They may be used only where waste water treated for root control will be processed through a waste water facility.

ROUT PRODUCT INFORMATION

1. The active ingredients in ROUT destroy tree roots that invade sewers, and deter their re-growth.
2. ROUT-M LIQUID METAM SODIUM is a water-soluble liquid. When properly applied, the liquid is converted into a gaseous fumigant, and absorbed by muck in root masses and line openings. After a sufficient waiting period, the gas dissipates from the sewer system.
3. ROUT-D POWDER DICHLOBENIL is a wettable powder. When properly applied, the dichlobenil attaches to roots and organic deposits in the line, providing residual control of root growth.
4. ROUT's foaming surfactant, ROUT FOAMALOT, cuts through greases and muck typically found in sanitary sewers, and delivers the active ingredients to the root tissues by producing a uniform foam THROUGHOUT the treated sewer section. ROUT FOAMALOT is specifically designed for use in sewers, and may be bought separately. ROUT SEWER ROOT CONTROL PRODUCTS MUST ONLY BE USED WITH ROUT FOAMALOT.
5. ROUT is non-systemic and when properly applied, should not harm trees. Only the roots and organic deposits in the lines are effected.

Equipment must be of a type approved by Florida Petrochemicals, Inc. Consult Florida Petrochemicals, Inc. regarding special applications.

Do not apply directly to water or through any type of irrigation system. Do not apply to storm drain lines unless the waste water is treated and controlled. Evaluate all field conditions prior to use. Consider pipe size, sewer flow, lateral connections, line obstructions, and severity of root intrusion in selecting proper application technique.

Begin at downstream sections of the area to be treated. For main-line sewers, insert foam discharge hose through entire length of section to be treated. Do not enter treated manholes.

Chemical should be applied evenly throughout the entire section of treated sewer.

TOTAL VOLUME TREATMENTS: In small diameter pipe with low volume sewer flow, discharge hose retrieval rates may be calibrated to fill pipe to capacity with foam. Monitor tank solution level and solution flow rate to calibrate discharge hose retrieval rates.

GALLONS SOLUTION	GALLONS FOAM	FOOTAGE FOR PIPE DIAMETER				
		4"	6"	8"	10"	12"
1	20	29 FT	13 FT	8 FT	5 FT	3 5 FT
2	40	58 FT	26 FT	16 FT	10 FT	7 FT

Example: To fill 10" diameter pipe, calibrate hose retrieval rate at 5 feet per gallon of tank solution used. (With equipment operating at 5 gallons per minute, this would be 5 feet per 12 seconds.)

Compensate for treatment of lateral connections and manhole wall surfaces accordingly.

IMPORTANT: ALWAYS USE CAUTION TO ASSURE THAT FOAM DOES NOT ENTER BUILDINGS. FOAM WILL FOLLOW THE PATH OF LEAST RESISTANCE IN PIPELINES AND LATERAL CONNECTIONS. FOAM CAN ENTER BUILDINGS WHEN RETRIEVAL RATES ARE TOO SLOW OR WHEN AN EXCESS AMOUNT OF FOAM IS PUMPED INTO THE LINE. LINE OBSTRUCTIONS AND SURCHARGING CONDITIONS CAN ALSO FORCE FOAM INTO BUILDINGS. DO NOT EXCEED RECOMMENDED DOSAGE RATES. DO NOT RETRIEVE DISCHARGE HOSE AT RATES SLOWER THAN THOSE GIVEN IN THE CHART ABOVE.
FOR TREATMENT OF ODD SIZE PIPES OR PIPES LARGER THAN 15", CONTACT FLORIDA PETROCHEMICALS, INC.

BUILDING LATERALS: For building laterals, foam may be injected via flow through inflatable cleanout plugs. Cap or plug all drain lines, cleanouts, and fixtures that tie into the line being treated. Determine lateral size and length and operate equipment for the time it takes to produce the required amount of foam. Caution must be used to prevent plug blow out.

MIXING INSTRUCTIONS

Use solution promptly after mixing.

Use clear, fresh water for mixing.

Assure that foam generating equipment is properly functioning and of a type APPROVED BY FLORIDA PETROCHEMICALS, INC. BEFORE MIXING.

Put on chemical resistant gauntlet-type gloves and all protective devices required by law before mixing. See precautionary statements on container label. Determine scope of work and assess field conditions before mixing. Mix only what is required for one day's operation, or to fill solution tank, whichever is less.

WHEN TOTAL VOLUME TREATMENTS ARE DESIRED. Determine pipe sizes and overall lineal footages. Use the chart below to determine gallons of total solution required.

TOTAL GAL'ONS PREPARED SOLUTION	GALLONS FOAM GENERATED	CUBIC FT OF FOAM	TREATMENT AREA (LINEAL FEET) PER PIPE SIZE					
			4"	6"	8"	10"	12"	15"
10	200	27	300	140	80	50	35	20
100	2000	267	3050	1350	800	500	350	200
200	4000	535	6150	2700	1600	1000	700	450
300	6000	802	9200	4100	2400	1500	1050	650

Mixing required for odd pipe sizes may also be extrapolated using the chart above.

For every 100 gallons of solution required (see table above), add 95 gallons of fresh water, 4 gallons of ROUT-M LIQUID METAM SODIUM, 30 ounces of ROUT-D POWDER DICHLOBENIL, and one gallon of ROUT FOAMALOT. Add water first to avoid excessive foaming in tank.

For example: To treat 1,000 feet of 10 inch diameter pipe would require approximately 200 gallons of solution (see table above). To prepare 200 gallons of solution, start by adding 190 gallons of water to equipment tank. Then add 8 gallons of ROUT-M LIQUID METAM SODIUM, 60 ounces of ROUT-D POWDER DICHLOBENIL, and 2 gallons of ROUT FOAMALOT. Stir solution until thoroughly mixed.

Add water to tank first. Allow for container rinsate. Rinse containers after use and add rinsate to solution tank. Dispose of containers in accordance with disposal instructions. Use leftover solution according to label instructions, or dispose of in accordance with state and local laws. Do not store the diluted product. ROUT will lose effectiveness when stored in dilute solution.

STORAGE AND DISPOSAL

GENERAL

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

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 well ventilated area. Keep containers tightly closed when not in use.

PESTICIDE DISPOSAL

Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes can not be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL

Plastic Pail: Plastic pail: Triple rinse (or equivalent). Then offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Plastic Bag: Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

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.

WARRANTY STATEMENT

Seller warrants that this product conforms to its chemical description and is reasonably fit for the purposes stated on the label when used in accordance with the directions and instructions specified on the label 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.

ROUT™

ROUT-M LIQUID METAM SODIUM (SUBPACK)

A NONSYSTEMIC, SURFACE ACTIVE FORMULATION FOAMING FUMIGANT FOR SEWER ROOT CONTROL

Only for use as a combination of metam-sodium, dichlobenil and foaming agent as directed.

This product contains:

ROUT-M LIQUID METAM SODIUM	% by weight
Active Ingredient: Metam-sodium (sodium methylthiocarbamate)	33.0%
Inert Ingredients	<u>67.0%</u>
Total	100.0%

This product contains 3.1 pounds of active ingredient per gallon.

KEEP OUT OF REACH OF CHILDREN

WARNING

PLEASE SEE PRECAUTIONARY STATEMENTS, STATEMENT OF PRACTICAL TREATMENT, AND STORAGE AND DISPOSAL STATEMENTS ON SIDE PANEL

EMERGENCY INFORMATION

For spill, leak, fire, exposure, or accident call CHEMTREC 1 800-424-9300.

Net Contents

ROUT-M Liquid Metam-Sodium: _____ Gal./L.; EPA ESTABLISHMENT NUMBER: _____

FLORIDA PETROCHEMICALS, INC.
1020 HIAWATHA BOULEVARD, WEST
SYRACUSE, NY 13204

EPA REGISTRATION NUMBER: 64898-____

FPCI REV: 920904

ACCEPTED
with COMMENTS
in EPA Letter Dated:

OCT 30 1992

Under the Federal Insecticide, Fungicide, and Rodenticide Act, this product is registered under the FIFRA Act. See the side panel for restrictions.

No. 64898-4

STATEMENT OF PRACTICAL TREATMENT

- IF INHALED: Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Get medical attention.
- IF ON SKIN: Wash with plenty of soap and water. Get medical attention.
- IF SWALLOWED: Drink promptly a large quantity of milk, egg whites, gelatin solution or, if these are not available, drink large quantities of water. Avoid alcohol. Do not induce vomiting or give anything by mouth to an unconscious person.
- IF IN EYES: Flush with plenty of water for at least fifteen minutes. Call a physician if irritation persists.

PRECAUTIONARY STATEMENTS

WARNING

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

May be fatal if absorbed through skin or inhaled. Harmful if swallowed. Causes skin and 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.

PROTECTIVE CLOTHING AND EQUIPMENT REQUIREMENTS

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 metam-sodium including mixing, loading, equipment calibrations or adjustments, clean and repair of application equipment, entering into treated areas, sampling, clean up of spills, rinsate 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 metam-sodium.
 - A. Splash resistant eye protection.
 - B. 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.
 - C. 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.
 - A. Chemical resistant footwear.
 - B. 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. 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 metam-sodium is detected.
 - B. Chemical resistant 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 sewer to be treated, depth of sewers compared to drains in buildings, line obstructions, broken and empty traps and drains with no traps that would allow foam to easily emerge. Building drains may be plugged to protect against backup and flooding. Follow the directions for measurement and use carefully to avoid using excess foam that may be forced up lateral lines to building drains. Lateral lines may be treated, but do not force excessive foam into service lines which may cause it to be forced up lateral lines into building drains. Do not use in storm, field or other drains unless effluent is treated in a sanitary sewer system. Building occupants should exit structures if the rotten egg or sulfur-like odor of metam-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 in an open drain or manhole. After removal of foam and liquid, wash area of spill or backup with water and detergent and flush down drain. If rugs or cloth are contacted, take outside and dry before laundering separately.

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 washwaters. Equipment washwaters and wastes resulting from the use of this product may be disposed of on site according to label directions for use or at an approved waste disposal facility. Do not use in potable water 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 shoveled off planted areas immediately rather than washing off with water.

USE PRECAUTIONS

High concentrations of these chemicals in waste water may adversely affect the biological sewage breakdown process in waste water treatment plants. Large scale applications to sewage collection systems in proximity to a sewage 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 waste water treatment plant officials prior to use so they may check for any unusual rotten egg or sulfur-like odor of metam-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.

PHYSICAL OR CHEMICALS HAZARDS

Do not use or store near heat or open flames.

DIRECTIONS FOR USE

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

Refer to the protective clothing and equipment information under PRECAUTIONARY STATEMENTS and use all required protective clothing and equipment. The metam-sodium and dichlobenil may be used only in combination and with a foaming agent to control roots in sewer systems according to the directions for use. They may be used only where wastewater from root control is processed through a wastewater treatment facility.

ROUT PRODUCT INFORMATION

1. The active ingredients in ROUT destroy tree roots that invade sewers, and deter their re-growth.
2. ROUT-M LIQUID METAM SODIUM is a water-soluble liquid. When properly applied, the liquid is converted into a gaseous fumigant, and absorbed by muck in root masses and line openings. After a sufficient waiting period, the gas dissipates from the sewer system.
3. ROUT-D POWDER DICHLOBENIL is a wettable powder. When properly applied, the dichlobenil attaches to roots and organic deposits in the line, providing residual control of root growth.

- 4. ROUT's foaming surfactant, ROUT FOAMALOT, cuts through greases and muck typically found in sanitary sewers, and delivers the active ingredients to the root tissues by producing a uniform foam THROUGHOUT the treated sewer section. ROUT FOAMALOT is specifically designed for use in sewers, and may be bought separately. ROUT SEWER ROOT CONTROL PRODUCTS MUST ONLY BE USED WITH ROUT FOAMALOT.
- 5. ROUT is non-systemic and when properly applied, should not harm trees. Only the roots and organic deposits in the lines are effected.

Equipment must be of a type approved by Florida Petrochemicals, Inc. Consult Florida Petrochemicals, Inc. regarding special applications. Do not apply directly to water or through any type of irrigation system. Do not apply to storm drain lines unless the waste water is treated and controlled. Evaluate all field conditions prior to use. Consider pipe size, sewer flow, lateral connections, line obstructions, and severity of root intrusion in selecting proper application technique. Begin at downstream sections of the area to be treated. For main-line sewers, insert foam discharge hose through entire length of section to be treated. Do not enter treated manholes. Chemical should be applied evenly throughout the entire section of treated sewer.

TOTAL VOLUME TREATMENTS: In small diameter pipe with low volume sewer flow, discharge hose retrieval rates may be calibrated to fill pipe to capacity with foam. Monitor tank solution level and solution flow rate to calibrate discharge hose retrieval rates.

GALLONS SOLUTION	GALLONS FOAM	FOOTAGE FOR PIPE DIAMETER				
		4"	6"	8"	10"	12"
1	20	29 FT	13 FT	8 FT	5 FT	3.5 FT
2	40	58 FT	26 FT	16 FT	10 FT	7 FT

Example: To fill 10" diameter pipe, calibrate hose retrieval rate at 5 feet per gallon of tank solution used. (With equipment operating at 5 gallons per minute, this would be 5 feet per 12 seconds.) Compensate for treatment of lateral connections and manhole wall surfaces accordingly.

IMPORTANT: ALWAYS USE CAUTION TO ASSURE THAT FOAM DOES NOT ENTER BUILDINGS. FOAM WILL FOLLOW THE PATH OF LEAST RESISTANCE IN PIPELINES AND LATERAL CONNECTIONS. FOAM CAN ENTER BUILDINGS WHEN RETRIEVAL RATES ARE TOO SLOW OR WHEN AN EXCESS AMOUNT OF FOAM IS PUMPED INTO THE LINE. LINE OBSTRUCTIONS AND SURCHARGING CONDITIONS CAN ALSO FORCE FOAM INTO BUILDINGS. DO NOT EXCEED RECOMMENDED DOSAGE RATES. DO NOT RETRIEVE DISCHARGE HOSE AT RATES SLOWER THAN THOSE GIVEN IN THE CHART ABOVE.

FOR TREATMENT OF ODD SIZE PIPES OR PIPES LARGER THAN 15", CONTACT FLORIDA PETROCHEMICALS, INC.

BUILDING LATERALS: For building laterals, foam may be injected via flow through inflatable cleanout plugs. Cap or plug all drain lines, cleanouts, and fixtures that tie into the line being treated. Determine lateral size and length and operate equipment for the time it takes to produce the required amount of foam. Caution must be used to prevent plug blow out.

MIXING INSTRUCTIONS

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Use solution promptly after mixing.

Use clear, fresh water for mixing.

Assure that foam generating equipment is properly functioning and of a type APPROVED BY FLORIDA PETROCHEMICALS, INC. BEFORE MIXING.

Put on chemical resistant gauntlet-type gloves and all protective devices required by law before mixing. See precautionary statements on container label. Determine scope of work and assess field conditions before mixing. Mix only what is required for one day's operation, or to fill solution tank, whichever is less.

WHEN TOTAL VOLUME TREATMENTS ARE DESIRED. Determine pipe sizes and overall lineal footages. Use the chart below to determine gallons of total solution required.

TOTAL GALLONS PREPARED SOLUTION	GALLONS FOAM GENERATED	CUBIC FT OF FOAM	TREATMENT AREA (LINEAL FEET) PER PIPE SIZE					
			4"	6"	8"	10"	12"	15"
10	200	27	300	140	80	50	35	20
100	2000	267	3050	1350	800	500	350	200
200	4000	535	6150	2700	1600	1000	700	450
300	6000	802	9200	4100	2400	1500	1050	650

Mixing required for odd pipe sizes may also be extrapolated using the chart above.

For every 100 gallons of solution required (see table above), add 95 gallons of fresh water, 4 gallons of ROUT-M LIQUID METAM SODIUM, 30 ounces of ROUT-D POWDER DICHLOBENIL, and one gallon of ROUT FOAMALOT. Add water first to avoid excessive foaming in tank.

For example: To treat 1,000 feet of 10 inch diameter pipe would require approximately 200 gallons of solution (see table above). To prepare 200 gallons of solution, start by adding 190 gallons of water to equipment tank. Then add 8 gallons of ROUT-M LIQUID METAM SODIUM, 60 ounces of ROUT-D POWDER DICHLOBENIL, and 2 gallons of ROUT FOAMALOT. Stir solution until thoroughly mixed.

Add water to tank first. Allow for container rinsate. Rinse containers after use and add rinsate to solution tank. Dispose of containers in accordance with disposal instructions. Use leftover solution according to label instructions, or dispose of in accordance with state and local laws. Do not store the diluted product. ROUT will lose effectiveness when stored in dilute solution.

STORAGE AND DISPOSAL

GENERAL

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

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 well ventilated area. Keep containers tightly closed when not in use.

PESTICIDE DISPOSAL

Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal Law. If these wastes cannot be disposed of according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL

Plastic pail: Triple rinse (or equivalent). Then offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

WARRANTY STATEMENT

Seller warrants that this product conforms to its chemical description and is reasonably fit for the purposes stated on the label when used in accordance with the directions and instructions specified on the label 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.

PH 21 64898-11

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ROUT™

ROUT-D POWDER DICHLOBENIL (SUBPACK)

A NONSYSTEMIC, SURFACE ACTIVE FORMULATION FOAMING FUNGICIDE FOR SEWER ROOT CONTROL

Only for use as a combination of metax-sodium, dichlobenil and foaming agent as directed.

This product contains:

ROUT-D POWDER DICHLOBENIL	% by weight
Active Ingredient: Dichlobenil (2,6-dichlorobenzonitrile)	50.0%
Inert Ingredients	<u>50.0%</u>
Total	100.0%

This product contains 0.5 pounds of active ingredient per pound of product.

KEEP OUT OF REACH OF CHILDREN

WARNING

PLEASE SEE PRECAUTIONARY STATEMENTS, STATEMENT OF PRACTICAL TREATMENT, AND STORAGE AND DISPOSAL STATEMENTS ON SIDE PANEL

EMERGENCY INFORMATION

For spill, leak, fire, exposure, or accident call CHEMTREC 1 800-424-9300.

Net Contents

ROUT-D Powder Dichlobenil: _____ lbs./Kg.; EPA ESTABLISHMENT NUMBER: _____

FLORIDA PETROCHEMICALS, INC.
1020 HIAWATHA BOULEVARD, WEST
SYRACUSE, NY 13204

EPA REGISTRATION NUMBER: 64898-__

FPCI REV: 920904

ACCEPTED
with COMMENTS
in EPA Letter Dated:

OCT 30 1992

Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the product registered under LPA No. 64898-4

STATEMENT OF PRACTICAL TREATMENT

- IF ON SKIN:** Wash with plenty of soap and water. Get medical attention.
- IF INHALED:** Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Get medical attention.
- IF SWALLOWED:** Call a physician or poison control center. Drink one or two glasses of water and induce vomiting by touching back of throat with finger. Do not induce vomiting or give anything by mouth to an unconscious person.

PRECAUTIONARY STATEMENTS

WARNING

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

May be fatal if absorbed through skin or inhaled. Harmful if swallowed. 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.

PROTECTIVE CLOTHING AND EQUIPMENT REQUIREMENTS

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 metam-sodium including mixing, loading, equipment calibrations or adjustments, clean and repair of application equipment, entering into treated areas, sampling, clean up spills, rinsate 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 metam-sodium.
 - A. Splash resistant eye protection.
 - B. 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.
 - C. 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.
 - A. Chemical resistant footwear.
 - B. 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. 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 of emergencies or leaks when the pungent, rotten egg or sulfur-like odor of metam-sodium is detected.
 - B. Chemical resistant 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 housed and sewer to be treated, depth of sewers compared to drains in buildings, line obstructions, broken and empty traps and drains with no traps that would allow foam to easily emerge. Building drains may be plugged to protect against backup and flooding. Follow the directions for measurement and use carefully to avoid using excess foam that may be forced up lateral lines to building drains. Lateral lines may be treated, but do not force excessive foam into service lines which may cause it to be forced up lateral lines into building drains. Do not use in storm, field or other drains unless effluent is treated in a sanitary sewer system. Building occupants should exit structures if the rotten egg or sulfur-like odor of metam-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 in an open drain or manhole. After removal of foam and liquid, wash area of spill or backup with water and detergent and flush down drain. If rugs or cloth are contacted, take outside and dry before laundering separately.

ENVIRONMENTAL HAZARDS

Keep out of lakes, ponds or streams. 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 washwaters. Equipment washwaters and wastes resulting from the use of this product may be disposed of on site according to label directions for use or at an approved waste disposal facility. Do not use in potable water systems or storm, field or other drains from which untreated water is discharged.

USE PRECAUTIONS

High concentrations of these chemicals in waste water may adversely affect the biological sewage breakdown process in waste water treatment plants. Large scale applications to sewage collection systems in proximity to a sewage 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 waste water treatment plant officials prior to use so they may check for any unusual rotten egg or sulfur-like odor of metam-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.

PHYSICAL OR CHEMICALS HAZARDS

Do not use or store near heat or open flames.

DIRECTIONS FOR USE

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

Refer to the protective clothing and equipment information under PRECAUTIONARY STATEMENTS and use all required clothing and equipment. This dichlobenil may be used only in combination with the metam-sodium and with a foaming agent to control roots in sewer systems according to the directions for use. They may be used only where wastewater from root control is processed through a wastewater treatment facility. Refer to specific mixing and use directions and associated calculations on the outer package labeling and/or inner package labeling. Do not use this product without these specific directions and full precautionary labeling. They may be used only where wastewater from root control is process through a wastewater treatment facility.

ROUT PRODUCT INFORMATION

1. The active ingredients in ROUT destroy tree roots that invade sewers, and deter their re-growth.
2. ROUT-M LIQUID METAM SODIUM is a water-soluble liquid. When properly applied, the liquid is converted into a gaseous fumigant, and absorbed by muck in root masses and line openings. After a sufficient waiting period, the gas dissipates from the sewer system.
3. ROUT-D POWDER DICHLOROBENIL is a wetttable powder. When properly applied, t.e dichlobenil attaches to roots and organic deposits in the line, providing residual control of root growth.
4. ROUT's foaming surfactant, ROUT FOAMALOT, cuts through greases and muck typically found in sanitary sewers, and delivers the active ingredients to the root tissues by producing a uniform foam THROUGHOUT the treated sewer section. ROUT FOAMALOT is specifically designed for use in sewers, and may be bought separately. ROUT SEWER ROOT CONTROL PRODUCTS MUST ONLY BE USED WITH ROUT FOAMALOT.
5. ROUT is non-systemic and when properly applied, should not harm trees. Only the roots and organic deposits in the lines are effected.

Equipment must be of a type approved by Florida Petrochemicals, Inc. Consult Florida Petrochemicals, Inc. regarding special applications.

Do not apply directly to water or through any type of irrigation system. Do not apply to storm drain lines unless the waste water is treated and controlled. Evaluate all field conditions prior to use. Consider pipe size, sewer flow, lateral connections, line obstructions, and severity of root intrusion in selecting proper application technique.

Begin at downstream sections of the area to be treated. For main-line sewers, insert foam discharge hose through entire length of section to be treated. Do not enter treated manholes.

Chemical should be applied evenly throughout the entire section of treated sewer.

TOTAL VOLUME TREATMENTS: In small diameter pipe with low volume sewer flow, discharge hose retrieval rates may be calibrated to fill pipe to capacity with foam. Monitor tank solution level and solution flow rate to calibrate discharge hose retrieval rates.

GALLONS SOLUTION	GALLONS FOAM	FOOTAGE FOR PIPE DIAMETER				
		4"	6"	8"	10"	12"
1	20	29 FT	13 FT	8 FT	5 FT	3.5 FT
2	40	58 FT	26 FT	16 FT	10 FT	7 FT

Example: To fill 10" diameter pipe, calibrate hose retrieval rate at 5 feet per gallon of tank solution used. (With equipment operating at 5 gallons per minute, this would be 5 feet per 12 seconds.)

Compensate for treatment of lateral connections and manhole wall surfaces accordingly.

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IMPORTANT: ALWAYS USE CAUTION TO ASSURE THAT FOAM DOES NOT ENTER BUILDINGS. FOAM WILL FOLLOW THE PATH OF LEAST RESISTANCE IN PIPELINES AND LATERAL CONNECTIONS. FOAM CAN ENTER BUILDINGS WHEN RETRIEVAL RATES ARE TOO SLOW OR WHEN AN EXCESS AMOUNT OF FOAM IS PUMPED INTO THE LINE. LINE OBSTRUCTIONS AND SURCHARGING CONDITIONS CAN ALSO FORCE FOAM INTO BUILDINGS. DO NOT EXCEED RECOMMENDED DOSAGE RATES. DO NOT RETRIEVE DISCHARGE HOSE AT RATES SLOWER THAN THOSE GIVEN IN THE CHART ABOVE. FOR TREATMENT OF ODD SIZE PIPES OR PIPES LARGER THAN 15", CONTACT FLORIDA PETROCHEMICALS, INC.

BUILDING LATERALS: For building laterals, foam may be injected via flow through inflatable cleanout plugs. Cap or plug all drain lines, cleanouts, and fixtures that tie into the line being treated. Determine lateral size and length and operate equipment for the time it takes to produce the required amount of foam. Caution must be used to prevent plug blow out.

MIXING INSTRUCTIONS

Use solution promptly after mixing.

Use clear, fresh water for mixing.

Assure that foam generating equipment is properly functioning and of a type APPROVED BY FLORIDA PETROCHEMICALS, INC. BEFORE MIXING.

Put on chemical resistant gauntlet-type gloves and all protective devices required by law before mixing. See precautionary statements on container label. Determine scope of work and assess field conditions before mixing. Mix only what is required for one day's operation, or to fill solution tank, whichever is less.

WHEN TOTAL VOLUME TREATMENTS ARE DESIRED. Determine pipe sizes and overall lineal footages. Use the chart below to determine gallons of total solution required.

TOTAL GALLONS PREPARED SOLUTION	GALLONS FOAM GENERATED	CUBIC FT OF FOAM	TREATMENT AREA (LINEAL FEET) PER PIPE SIZE					
			4"	6"	8"	10"	12"	15"
10	200	27	300	140	80	50	35	20
100	2000	267	3050	1350	800	500	350	200
200	4000	535	6150	2700	1600	1000	700	450
300	6000	802	9200	4100	2400	1500	1050	650

Mixing required for odd pipe sizes may also be extrapolated using the chart above.

For every 100 gallons of solution required (see table above), add 95 gallons of fresh water, 4 gallons of ROUT-M LIQUID METAM SODIUM, 30 ounces of ROUT-D POWDER DICHLOBENIL, and one gallon of ROUT FOAMALOT. Add water first to avoid excessive foaming in tank.

For example: To treat 1,000 feet of 10 inch diameter pipe would require approximately 200 gallons of solution (see table above). To prepare 200 gallons of solution, start by adding 190 gallons of water to equipment tank. Then add 8 gallons of ROUT-M LIQUID METAM SODIUM, 60 ounces of ROUT-D POWDER DICHLOBENIL, and 2 gallons of ROUT FOAMALOT. Stir solution until thoroughly mixed.

Add water to tank first. Allow for container rinsate. Rinse containers after use and add rinsate to solution tank. Dispose of containers in accordance with disposal instructions. Use leftover solution according to label instructions, or dispose of in accordance with state and local laws. Do not store the diluted product. ROUT will lose effectiveness when stored in dilute solution.

STORAGE AND DISPOSAL

GENERAL

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

STORAGE

Do not store near food or feed, seeds, bulbs, tubers, nursery stock or other vegetative matter. Keep containers tightly closed when not in use. Store in a dry place.

PESTICIDE DISPOSAL

Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal Law. If these wastes cannot be disposed of according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL

Plastic bag: Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

WARRANTY STATEMENT

Seller warrants that this product conforms to its chemical description and is reasonably fit for the purposes stated on the label when used in accordance with the directions and instructions specified on the label 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.