

US ENVIRONMENTAL PROTECTION AGENCY
 OFFICE OF PESTICIDES PROGRAMS
 REGISTRATION DIVISION (75-767)
 WASHINGTON, DC 20460

NOTICE OF PESTICIDE

REGISTRATION OF PESTICIDES
 (Under the Federal Insecticide, Fungicide, and Rodenticide Act)

EPA REGISTRATION NO. _____ DATE OF ISSUANCE 1 11 89

TERM OF ISSUANCE _____

NAME OF PESTICIDE PRODUCT _____

NAME AND ADDRESS OF REGISTRANT (Include ZIP Code)

246514 | 161
 | 18

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 endorsement 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.

Comments on this registration should be sent to the Administrator, Office of Pesticides Programs, U.S. Environmental Protection Agency, Washington, DC 20460.

The Administrator hereby certifies that the above named pesticide is registered under the Federal Insecticide, Fungicide, and Rodenticide Act, and that the labeling accepted in connection with this registration is in accordance with the Act.

It is the policy of the Agency to release the product to the public as soon as possible after registration.

- a. Add the phrase "EPA Registration No. 246514-161-18."
 - b. Under early maturity label on container, if Oregon, change "Orange" to "Orange."
- Comments on this registration should be sent to the Administrator, Office of Pesticides Programs, U.S. Environmental Protection Agency, Washington, DC 20460.

ATTACHMENT IS APPLICABLE

SIGNATURE OF APPROVING OFFICIAL _____ DATE 1-12-89

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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.

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Susan Lewis
Acting Product Manager (21)
Fungicide-Herbicide Branch
Registration Division (H7505C)

Enclosure

ida, inc.

PHUME 1

PHUME

ACCEPTED
with COMMENTS
in EPA Letter Dated:

SEP 12 1989

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

45115-83

Soil Fumigant Solution For All Crops

ACTIVE INGREDIENT:

Sodium methylthiocarbamate (active) 32.7%

INERT INGREDIENTS: 67.3%

Total 100.0%

*Contains 3.18 lbs active ingredient per gallon

Keep Out of Reach of Children

WARNING

Statement of Practical Treatment

First Aid

Immediately start the procedures given below and CONTACT A POISON CENTER, A PHYSICIAN OR THE NEAREST HOSPITAL. Describe the type and extent of exposure, the victim's symptoms, and follow the advice given.

For skin contact: Flush affected areas with large amounts of running water for 15 minutes and get medical attention. Remove and clean contaminated clothing and shoes.

For eye contact: Immediately flush eyes with large amounts of running water for 15 minutes. Hold the eyelids apart during the flushing to ensure rinsing of the entire surface of the eye and lids with water. Get medical attention immediately.

If inhaled: Remove to fresh air. If breathing is difficult, oxygen may be given with a physician's advice. If not breathing, clear victim's airway, start mouth-to-mouth artificial respiration, and get medical attention.

If swallowed: Immediately give several glasses of water but do not induce vomiting. If vomiting occurs, give fluids again. Have a physician determine if condition of patient will permit induction of vomiting or evacuation of stomach. Do not give anything by mouth to an unconscious or convulsing person.

REGISTRATION NUMBER: 45115
ESTABLISHMENT NUMBER:
CONTENTS: 1 GAL/12.5 L

DOT DESCRIPTION: Corrosive L, Non-Flammable, Toxic (HA) 1.2, 6.1
DOT HAZARD CLASSIFICATION:
DOT HAZARD LABELS: C, T, XN

Manufactured For: Ida, Inc.

2215 West Street, 2nd Floor

Cermantown, TN 38118

(601) 578-0566

Telex: 811019

PRECAUTIONARY STATEMENTS

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Hazards to Humans and Domestic Animals

WARNING

Harmful if inhaled or swallowed. Irritating to eyes, nose, throat and skin. Avoid breathing vapor or spray mist. Do not get in eyes, on skin, or clothing. Causes skin irritation. Prolonged contact may cause severe skin irritation. May be fatal if absorbed through skin. In case of contact immediately remove contaminated clothing. Wash and dry clothing before reuse. Where adequate ventilation is not available, use NIOSH-approved full-face pesticide canister respirators to reduce exposure. Where exposure potential under the use conditions necessitates a higher level of protection, use a full-face positive-pressure air-supplied respirator.

Environmental Hazards. This product is toxic to fish. Do not apply directly to water. Do not apply where runoff is likely to occur. Do not contaminate water when disposing of equipment washwaters. Apply this product only as specified on the label.

PRODUCT INFORMATION

PHUME is a water soluble liquid. When applied to properly prepared soil, the liquid is converted into a gaseous fumigant. After sufficient interval of time, the gas dissipates leaving the soil ready for planting. **PHUME** is recommended for the control of the following soilborne pests that attack ornamental, food and fibre crops: Weeds and germinating weed seeds (Annual Bluegrass, Bermudagrass, Chickweed, Dandelion, Ragweed, Henbit, Lambsquarters, Amaranthus sp. (Pigweed, Careless weed) Watergrass, Johnsongrass, Nutgrass, Wild morningglory and Purslane); Nematodes, Symphylids, (Garden centipede); and soilborne diseases (Rhizoctonia, Pythium, Phytophthora, Verticillium, Sclerotinia, Oat root fungus and Club root of crucifers).

USE PRECAUTIONS

Keep children and pets out of treated area until dry. Keep off desirable lawns and plants. Do not apply within 3 feet of the drip line of desirable plants, shrubs or trees. Do not use in confined areas without adequate ventilation OR where fumes may enter nearby houses containing growing plants. Do not use in green houses where desirable plants are present. Keep container tightly closed when not in use. Do not store near feed or food.

BEST AVAILABLE COPY

DIRECTIONS FOR USE

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

Before applying **PHUME** always cultivate thoroughly area to be treated, breaking up clods and loosening soil deeply and thoroughly. A week before treatment, moisten soil after cultivation to the desired depth, sprinkle or flood irrigate. This step is essential for all methods of use. Immediately before application, cultivate lightly if the soil has crusted.

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To prevent loss from evaporation, use only at times when air temperature is moderate and there is little wind movement. Soil temperature must be in the range of 40°-90° F at a 3 inch depth. For other conditions, see section, "Cultivation & Planting After Application." Do not apply to the soil surface, as in the sprinkler method, when air temperature is over 90° F or when low humidity or high winds would cause loss of **PHUME** before it can be drenched into the soil with additional water. If fumes become unpleasant during treatment, apply more water to seal the fumes into the soil where they should be confined to achieve maximum fumigant benefit.

Where rate ranges for **PHUME** are given, use the higher rate if pests (insects, nematodes, etc.) are present in high numbers or if the area to be treated has a history of pest problems.

The activity of **PHUME** is increased by the use of a tarp (plastic, paper or fabric) spread loosely over the treated area and secured to prevent removal by wind. Keep covered for a minimum period of 48 hours. Seven days after treatment cultivate area to depth of 2 inches to aerate the soil. Do not seed earlier than 21 days after application when tarping method is used.

USE PROMPTLY AFTER MIXING WITH WATER. DO NOT ALLOW SOLUTION TO STAND. Flush all equipment with water after each day's use. Disassemble valves and clean carefully.

Use Precautions for Irrigation Systems

- A. Apply this product only through sprinkler including center pivot, lateral move, end tow, side (wheel) roll, traveler, solid set, or hand move; flood (basin); furrow; border irrigation systems. Do not apply this product through any other type of irrigation system.
- B. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from nonuniform distribution of treated water.
- C. If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.
- D. Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.
- E. A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

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Use Precautions for Flood (Basin), Furrow and Border Irrigation

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1. Systems using a gravity flow pesticide dispensing system must meter the pesticide into the water at the head of the field and downstream of a hydraulic discontinuity such as a drop structure or weir box to decrease potential for water source contamination from backflow if water flow stops.
2. Systems utilizing a pressurized water and pesticide injection system must meet the following requirements:
 - a. The system must contain a functional check valve, vacuum-relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
 - b. The pesticide injection pipeline must contain a functional, automatic, quick-closing valve to prevent the flow of fluid back toward the injection pump.
 - c. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
 - d. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
 - e. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
 - f. Systems must use a metering pump, such as a positive displacement injection pump (e.g. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Use Precautions for Sprinkler Irrigation

1. The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
2. The pesticide pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
3. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
4. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
5. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

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- 6. Systems must use a metering pump, such as a positive displacement injection pump (e.g. diaphragm pump) effective, designed and constructed of materials that are compatible with pesticide and capable of being fitted with a system interlock.
- 7. Application of more than recommended quantities of PHUME water may result in decreased product performance by reducing the amount of PHUME available to the target.
- 8. Do not apply PHUME to seedling plants, or to newly established plants, for treatment.

Cultivation and Planting After Application

On well drained soils of light to medium texture which are not excessively wet or cold following application, planting can take place immediately after treatment. If soils are heavy or especially high in organic matter or remain wet and cold below 50°F following application of **PHUME**, a minimum interval of 30 days should be observed. Where dosages are greater than 100 gal. per acre, wait at least 60 days. On heavy wet soils light surface cultivation to break up crusting and promote drying of the soil should be done 5 to 7 days after application. This cultivation may be repeated as necessary. To avoid recontaminating treated soils, cultural practices should be such that untreated soils are not mixed with treated soils.

SPECIAL INSTRUCTIONS: When treating peatling soils or heavier loam soils, and/or soils high in clay or organic matter, it is especially important that the soils be allowed to aerate and dry thoroughly after using **PHUME**. During cold and or wet weather, frequent shallow cultivations may aid the escape of **PHUME** from the soil. If in doubt transplant a seedling plant and examine for injury before planting crop.

Uses, Application Methods & Rates

For Shallow Pest In Seed Beds, Plant Beds, Lawns and Other Limited Areas:

SPRINKLING CAN METHOD: Place 1 pt **PHUME** (1 1/2 pt. on very heavy soils or for deep-rooted weeds) in a sprinkling can, fill with water and sprinkle uniformly over 50 sq. ft. of well-prepared soil. Sprinkle immediately with water until soil is sealed, or tarp for 48 hours.

COMMERCIAL MIXER PROPORTIONER METHOD: Add 1 qt **PHUME** to 3 qt. water in a bucket or other container and apply through the mixer proportioner to an area of 100 sq. ft. Sprinkle with water until soil is sealed, or tarp for 48 hours.

SOIL INJECTION: Space injection shanks 5 in. apart and inject **PHUME** 4 in. into well prepared soil. Follow immediately with a roller to smooth and compact the soil surface. Light watering or a tarp after rolling helps prevent gas escape. For seedbeds a dosage of 75 to 100 gal. per acre (1 1/2 pt. to 2 pt. per 100 sq. ft.) is recommended.

ROTARY TILLER: Spray or sprinkle diluted **PHUME** immediately in front of tiller. Use 1 qt **PHUME** in 2 1/2 gal. water per each 100 sq. ft. Follow immediately with a roller to smooth and compact the soil surface. Light watering or a tarp after rolling will help prevent gas escape.

Field Application—Where Entire Area Is Being Treated:

Apply **PHUME** to the entire area to be treated. Use the following rates:

PHUME 100 to 200 gal. per acre. Apply **PHUME** with a sprayer or pump. Apply **PHUME** to the entire area to be treated. Use the following rates:

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Field Application to Beds or Rows:

Apply **PHUME** to the entire area to be treated. Use the following rates:

Apply **PHUME** to the entire area to be treated. Use the following rates:

SOIL COVERING METHOD: Apply **PHUME** to the entire area to be treated. Use the following rates:

Apply **PHUME** to the entire area to be treated. Use the following rates:

TREATMENT OF TREE REMOVAL SITES: After removing a tree, use the following rates:

Apply **PHUME** to the entire area to be treated. Use the following rates:

Treatment of Potting Soil:

A. Soilless Media (100)

1. **PRE-TREATMENT:** Pre-treat potting soil with a fungicide registered for use on potting soil.
2. **PHUME:** Apply 1.0 to 1.5 gallons of **PHUME** per 100 sq. yd. of media.
3. **TARP METHOD:** Prepare the bed 5 to 7 days before application to insure best conditions for weed seed germination and fumigant action of **PHUME**. The bed should be free of clods, level and in good tillth. Apply 1 to 1 1/2 gal. of **PHUME** in a minimum of 40 gal. of water per 100 sq. yd. Apply uniformly over the entire bed. Cover the bed immediately with a plastic cover. Keep covered no less than one day but no more than two days. The cover need not be tented, but should be secured to prevent wind from uncovering the treated area. Seven days after date of **PHUME** application, loosen the treated soil to a depth of 2 in. Do not seed tobacco earlier than 21 days after **PHUME** application.
4. **EMERGENT METHOD:**
5. **ADD-ON METHOD:** Apply 1.0 to 1.5 gallons of **PHUME** per 100 sq. yd. of media.
6. **POST-TREATMENT:** After **PHUME** application, avoid watering the media for 7 to 10 days. Do not water with any pesticide or fertilizer.
7. **SPREEDER:**
8. **PHUME:** Apply 1.0 to 1.5 gallons of **PHUME** per 100 sq. yd. of media.
9. **PHUME:** Apply 1.0 to 1.5 gallons of **PHUME** per 100 sq. yd. of media.

POTATO PLANT BEDS: Applications of **PHUME** are recommended for the control of Early Blight, Late Blight, and Maturity Disease in potatoes. Use 50 to 100 gallons of **PHUME** per 100 sq. yd. of bed. Apply to the pre-plant system (for tobacco) or to the **PHUME** per 100 sq. yd. of bed. **DIRECTIONS FOR IRRIGATION SYSTEMS:** Part A of the **PHUME** label for the area covered and apply in a minimum of 40 gallons of water per 100 sq. yd. of bed. **PHUME** may be applied where crop stubble or vegetation exist without prior tillage, provided there is adequate soil penetration of **PHUME**.

*Not registered for use in California

TOBACCO PLANT BEDS: Fall applications are recommended wherever possible. Read and follow **DIRECTIONS FOR USE** carefully. In the South should generally be made before November 30.

A. TARP METHOD: Prepare the bed 5 to 7 days before application to insure best conditions for weed seed germination and fumigant action of **PHUME**. The bed should be free of clods, level and in good tillth. Apply 1 to 1 1/2 gal. of **PHUME** in a minimum of 40 gal. of water per 100 sq. yd. Apply uniformly over the entire bed. Cover the bed immediately with a plastic cover. Keep covered no less than one day but no more than two days. The cover need not be tented, but should be secured to prevent wind from uncovering the treated area. Seven days after date of **PHUME** application, loosen the treated soil to a depth of 2 in. Do not seed tobacco earlier than 21 days after **PHUME** application.

... of **PHUME** ... 15 to 200 gal of water per acre. Application may be made with backpack sprayers with the use of suitable equipment. Follow directions on label for use of equipment.

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Make the use of treatment sufficiently long to kill a portion of the two adjacent trees that are likely to be root-grafted. Apply the chemical slowly and carefully so avoid overflowing the drilled holes. This will reduce grass kill. Tamp each hole closed with the foot. Allow at least two weeks after treatment before removing the diseased tree.

STORAGE AND DISPOSAL

PROHIBITIONS: Do not contaminate water bodies by 10% strength spillage.

STORAGE: Store in original container. Do not store at higher temperatures and do not store in areas where children can see uniformly before use.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product should be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL:

METAL—Insecticide equipment: These affect the recycling of metal. Recycle and dispose of insecticide equipment by other means as indicated by State and local authorities.

PLASTIC—Insecticide equipment: Pipe type and type of plastic used in the construction of equipment by State and local authorities may vary; returned day out of stock.

Notice to Buyer and User: Seller warrants that this product conforms to the description on the label and is reasonably fit for the purpose stated on the label when used in accordance with directions and instructions on the label. This warranty does not extend to the use of this product contrary to label instructions, or under abnormal use conditions, or under conditions not reasonably foreseeable to Seller and Buyer and their agents at the time of any such use. SELLER DISCLAIMS ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED INCLUDING ANY WARRANTY OF MERCHANTABILITY. SELLER SHALL NOT BE LIABLE FOR ANY SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT AND SELLER'S LIABILITY AND BUYER'S AND USER'S LIABILITY SHALL BE LIMITED TO THE REPAIR OF THE PRODUCT ONLY.

This product is not for use as stated on its label. No express or implied license is granted to use or sell this product under any patent in any country except as specified. Country: United States of America.