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29 APR 1986

Van Waters & Rogers
Division of UNIVAR
2256 Junction Avenue
San Jose, CA 95131

BEST AVAILABLE COPY

Gentlemen:

Subject: NAMCO Pintofume
EPA Registration No. 550-123
Your Amendment Application Dated March 15, 1986

The amendment referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), is acceptable provided that you:

- Submit five (5) copies of your final printed labeling before you release the product for shipment. Refer to the A-79 Enclosure for a further description of final printed labeling.

If this condition is not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). Your release for shipment of the product bearing the amended labeling constitutes acceptable of this condition.

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

Sincerely yours,



Jeff Kempter
Acting Product Manager (32)
Disinfectants Branch
Registration Division (TS-767C)

Enclosures

86930-Jenkins-C- KENCO:4/ 5/86.5/5/86-dej:VO

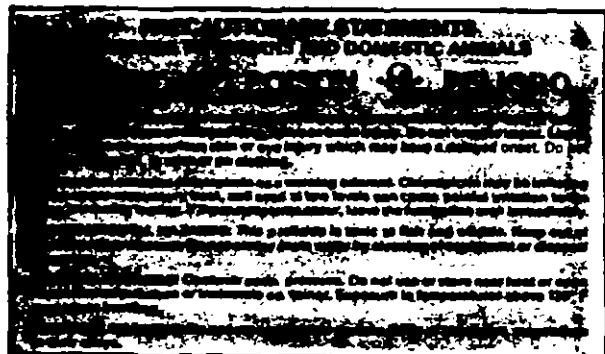
CONCURRENCES

OFFICIAL FILE COPY

AGRICULTURAL CHEMICAL

Do not ship or store with food, feeds, drugs or clothing.

05549225



DIRECTIONS FOR USE

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

To be applied only by or under the supervision of pest control operators or other trained personnel responsible for pest control programs.

NOTICE TO BUYER/USER: State and/or local laws and regulations restrict the use of the material in many localities. Consult local pesticide authorities for regulations restricting your proposed usage. Comply with laws and regulations.

STORAGE & DISPOSAL

STORAGE AND HANDLING: Store in a dry, cool, well-ventilated area under lock and key. Post as a pesticide storage area. Do not contaminate water, food, or feed by storage.

Store cylinders upright, secured to avoid tipping. Cylinders should not be subjected to rough handling, mechanical stress such as dropping, bumping, dragging, or sliding. Do not use rope rings, hooks, lugs, or other devices to unload cylinders. Transport cylinders using hand trucks, fork trucks, or other devices which the cylinder can be firmly secured.

Do not remove valve or vent until a safety cap is immediately before use. Replace safety cap and have protection in place before use.

When cylinders are empty, the valve must be closed, the safety cap removed, and the cylinder must be inverted and shaken to remove any residue. The cylinder must be inverted and shaken to remove any residue. The cylinder must be inverted and shaken to remove any residue.

DISPOSAL: Do not dump or pour into water, soil, or other areas. Do not dump or pour into water, soil, or other areas. Do not dump or pour into water, soil, or other areas.

SPILL AND LEAK PROCEDURES: Evaluate immediate area of spill or leak. Applying water to spills of this product complicates detection of spilled material and increases evaporation. Use SCBA or combination air supply and SCBA respirator for entry into affected area. Do not use water. More leaks may be caused by water. Do not use water. More leaks may be caused by water.

Contaminated soil may be removed by digging and disposing of the material in a safe manner. Contaminated soil may be removed by digging and disposing of the material in a safe manner.

See attached pamphlet for additional directions and precautions.

SELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED, CONCERNING THIS MATERIAL OR THE USE OF THIS PRODUCT OTHER THAN INDICATED ON THE LABEL. BUYER ASSUMES ALL RISK OF USE AND OR HANDLING OF THIS MATERIAL. WHEN SUCH USE OR HANDLING IS CONTRARY TO LABEL INSTRUCTIONS.

RESTRICTED USE PESTICIDE

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

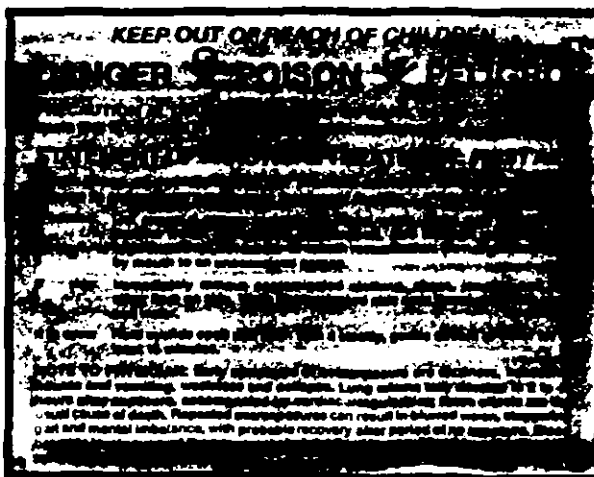


NAMCO®

Pintofume® (METHYL BROMIDE ODORIZED WITH 2% CHLOROPICRIN)

For use as a pre-plant soil treatment.

ACTIVE INGREDIENTS: Methyl Bromide 98%
Chloropicrin 2%



© EPA Letter 15106



APR 29 1986

Manufactured By
Van Waters & Rogers

division of Univar

San Mateo, CA 94403

550-123
(Rev. 3-86) JP

EPA Reg. No. 550-123-AA
EPA Est. No. 550-CA-1

PRECAUTION AL USUARIO: Si usted no lee Inglés, no use este producto hasta que la etiqueta le haya sido explicada ampliamente.

STATEMENT OF PRACTICAL TREATMENT: FIRST AID

In all cases of overexposure, get medical attention immediately. Take person to a doctor or emergency treatment facility.

If inhaled: Get exposed person to fresh air. Keep warm. Make sure person can breathe freely. If breathing has stopped, give artificial respiration by arm lift method, not mouth-to-mouth resuscitation. Do not give anything by mouth to an unconscious person.

If on skin: Immediately remove contaminated clothing, shoes, jewelry, and any other item on skin. Wash contaminated skin area thoroughly with soap and water.

If in eyes: Hold eyelids open and flush with a steady, gentle stream of water for at least 15 minutes.

NOTE TO PHYSICIAN: Early symptoms of overexposure are dizziness, headache, nausea and vomiting, weakness and collapse. Lung edema may develop in 2 to 48 hours after exposure, accompanied by cardiac irregularities; these effects are the usual cause of death. Repeated overexposures can result in blurred vision, staggering gait and mental imbalance, with probable recovery after period of no exposure. Blood bromide levels suggest the occurrence, but not the degree, of exposure. Treatment is symptomatic.

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Extremely hazardous liquid and vapor under pressure. Inhalation may be fatal or cause serious acute illness or delayed lung, nerve or brain injury. Do not breathe vapor. Liquid or vapor can cause serious skin or eye injury which may have a delayed onset. Do not get liquid on skin, in eyes or on clothing.

This product contains chloropicrin as a warning odorant. Chloropicrin may be irritating to the upper respiratory tract, and even at low levels can cause painful irritation to the eyes, producing tearing. If these symptoms occur, leave the fumigation area immediately.

ENVIRONMENTAL HAZARDS: This pesticide is toxic to fish and wildlife. Keep out of lakes, ponds or streams. Do not contaminate water by cleaning of equipment or disposal of wastes.

PHYSICAL HAZARDS: Contents under pressure. Do not use or store near heat or open flame. Do not puncture or incinerate container. Exposure to temperatures above 130° F may cause bursting.

CHEMICAL HAZARDS: Do not use application devices made of aluminum, magnesium or their alloys.



Manufactured By
Van Waters & Rogers
division of Univar

San Mateo, CA 94401

DIRECTIONS FOR USE

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To be applied only by or under the supervision of pest control operators or other trained personnel responsible for pest control programs.

NOTICE TO BUYER/USER: State and/or local laws and regulations restrict the use of the material in many localities. Consult local pesticide authorities for regulations restricting your proposed usage. Comply with laws and regulations.

STORAGE & DISPOSAL

STORAGE AND HANDLING: Store in a dry, cool, well ventilated area under lock and key. Post as a pesticide storage area. Do not contaminate water, food, or feed by storage.

Store cylinders upright, secured to a rack or wall to prevent tipping. Cylinders should not be subjected to rough handling or mechanical shock such as dropping, bumping, dragging, or sliding. Do not use rope slings, hooks, tongs or similar devices to unload cylinders. Transport cylinders using hand truck, fork truck or other device to which the cylinder can be firmly secured.

Do not remove valve protection bonnet and safety cap until immediately before use. Replace safety cap and valve protection bonnet when cylinder is not in use.

When cylinder is empty, close valve, screw safety cap onto valve outlet, and replace protection bonnet before returning to shipper. Only the registrant is authorized to refill cylinders. Do not use cylinders for any other purpose. Follow registrant's instructions for return of empty or partially empty cylinders.

DISPOSAL: Do not contaminate water, food, or feed by disposal.

Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot 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.

SPILL AND LEAK PROCEDURES: Evacuate immediate area of spill or leak. Applying water to spills of this product complicates detection of spilled material and increases evaporation time.

Use SCBA or combination air-supplied/SCBA respirator for entry into affected area to correct problems. Move leaking or damaged cylinders outdoors or to an isolated location, observing strict safety precautions. Work upwind if possible. Allow spill to evaporate. Do not permit entry into spill area by unprotected persons until concentration of methyl bromide is determined to be less than 5 ppm.

Contaminated soil, water, and other clean-up debris is a toxic hazardous waste. Report spill to the National Response Center (800-424-8802) if the reportable quantity is exceeded.

Conditions of Sale and Warranty

The Directions for Use of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and should be followed carefully. However, it is impossible to eliminate all risks inherently associated with use of this product. Crop injury, ineffectiveness, or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Van Waters & Rogers. All such risks shall be assumed by the Buyer.

SELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED, CONCERNING THIS MATERIAL OR THE USE OF THIS PRODUCT OTHER THAN INDICATED ON THE LABEL. BUYER ASSUMES ALL RISK OF USE AND/OR HANDLING OF THIS MATERIAL WHEN SUCH USE/ OR HANDLING IS CONTRARY TO LABEL INSTRUCTIONS.

GENERAL PRECAUTIONS

This product is a fumigant and is extremely toxic. It is a gas and should be used in a well-ventilated area. It is a gas and should be used in a well-ventilated area.

Always wear a respirator when using this product. It is a gas and should be used in a well-ventilated area. It is a gas and should be used in a well-ventilated area.

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BEST AVAILABLE

Protective Clothing

When using this product, always wear a respirator. It is a gas and should be used in a well-ventilated area. It is a gas and should be used in a well-ventilated area.

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The app also has a "post a rant" button, which allows users to express their frustration.

- 1 The words "DANGER PELIGRO" and the skull and crossbones symbol
2 The statement "Area under fumigation DO NOT ENTER NO ENTREE"
3 The date of fumigation
4 The name of the fumigator and the name of the person in charge
5 The name of the fumigation company and the address

As a result, the model must assume that the AWS is a good friend of the community.

1. *Journal of the American Medical Association*, 1990; 263: 2533-2536.

Aeration and Re-Entry

After a 20-min rest, the subjects performed the test at the level of the 10th percentile of the population. The test was performed in a laboratory that had been previously certified for the test. The subjects wore a respiratory protection device (SCBA) and an oxygenator.

— continued on reverse —

ORCHARD & VINEYARD PLANTING SITE FUMIGATION

This product may be used as an aid in controlling nematodes, citrus burrowing and root knot nematodes, fungus diseases (*Armillaria mellea*), Oak Root Fungus, *Phytophthora* root and crown rot, and other soil borne organisms and weeds in land to be planted or replanted to deciduous fruits and nuts, citrus and vineyards, WHERE THE FRUITS WILL NOT BE HARVESTED FOR A PERIOD OF AT LEAST 24 MONTHS.

RATES & PRECAUTIONS:

FOR CITRUS, BURROWING AND ROOT KNOT NEMATODE: Apply 1 to 1 1/2 pounds per 100 square feet.

PHYTOPHTHORA ROOT ROT: Apply 1 to 2 pounds per 100 square feet and a 4 day exposure using tarping.

OAK ROOT FUNGUS (*Armillaria mellea*): To facilitate fungicide penetration to the fumigant, the subsurface should be as dry as possible. This may be accomplished by allowing weeds to grow either without irrigation or by planting a crop of Sudan grass in the spring and withholding moisture throughout the summer. In the fall the soil should be further prepared as described elsewhere. Rates vary from 1 to 1 1/2 pounds in sandy soils to 2 pounds per 100 square feet in clay loam soils. Peat and soils high in organic matter should not be fumigated for *Armillaria*. NOTE: Complete eradication of *Armillaria* is difficult and rarely achieved. Retreatment of localized areas should be made as necessary.

APPLICATION METHODS:

BACKHOEING AND ALIGERING: Remove soil to a depth of 12 inches as desired, backfill hole with 2 feet insert applicator tube or free site injector tube and release entire dose of fumigant in 100 square feet trees. After removal of applicator prevent too rapid escape of fumigant by tamping or compacting soil.

THE SITE INJECTOR: Insert the injector as far as possible into the soil. Tamp soil tightly around injector to minimize escape of fumigant from the hole. Release entire dose of fumigant for 100 square feet free site and move away from the injector until fumigant is completely released. Remove injector and seal hole with soil.

TARPING: Work up a circular area 10 feet to a depth of 12 inches. Place one end of the applicator into an evaporating container in the center of the site. Run the other end of the applicator tube beyond the area to be tarped. The tarp should be supported above the soil surface with the site and sealed securely around the edges with soil. Attach the applicator tube to container, release fumigant from the applicator tube and seal edge. Leave the tarp in place for 48 hours. For *Phytophthora* the cover should be left in place for 4 days.

TRACTOR DRAWN INJECTION EQUIPMENT: For *Armillaria* and citrus the soil should be tilled as deeply as possible, 30 inches minimum, and 100 to 150 pounds per acre of fertilizer applied. After the material is not less than 20 inches deep from the surface, the fumigant should be applied in the center of the area. The area should be well packed and permitted in Oak formal covered with a gas tight tarpaulin which should be sealed around the edges. The tarpaulin should be allowed to remain in place for at least 7 days. Strip fumigant in 500 square feet.

STRIP FUMIGATION: To aid in the evaluation of fumigant penetration, and to kill weed populations and nematodes, apply the fumigant at the rate of 10 to 15 pounds per acre in a strip 5 to 6 feet wide. The area treated centering on the future stake line. Inject the fumigant using tractor drawn equipment. The holes are deep and cover immediately with a gas tight tarpaulin. Note: This method is most effective when the soil is moist and well tilled seed bed condition prior to treatment.

FUMIGATION OF SOIL USING TRACTOR DRAWN EQUIPMENT

Treated land may be planted to Strawberries and for other manner as. Rural crops and fruit trees. Vegetables and field crops which will be transplanted and grown from seeds.

Soil Preparation: To facilitate fumigant penetration, the soil should be worked in the soil and time allowed to decompose before treating. Soil must be in good workable seed bed condition in warm, preferably in the R.R. at a depth of 5 inches. Do not treat if the soil temperature is below 45 F at the 5 inch level.

Irrigation requirement: Land to be fumigated should be well irrigated prior to fumigation and worked to seed bed condition just prior to treatment. To insure uniform fumigant penetration to depth with minimum errors desired.

Application: Apply this product by means of a tractor drawn machine 10 to 15 inches up and at a depth of 4 to 6 inches below the soil surface. Seal the fumigant in the soil by covering the treated area with a gas tight tarpaulin using a 70 gauge polyethylene film if an automatic tarpaulin is not available. The tarpaulin should be sealed around the edges and then covered with a gas tight tarpaulin within 48 hours. Remove the tarpaulin after 7 to 10 days before planting. NOTE: To avoid possible damage to the soil, an additional 10 to 15 days should be allowed when the tarpaulin is removed. Strawberries and tomatoes for crop production are set in fumigated fields. For other manner of this product, indicated in the soil by odor or eye irritation upon close examination.

Caution: Containers of this product have adequate pressure within to force the product out of the valve, however, it is usually necessary to use a pump to force the product out of the valve.

Dosage: Use 1 to 2 pounds of this product per acre in sandy soils, 2 to 3 pounds per acre in heavy soils. When soil temperatures are low and in heavy soils.

Planting Area:

Seed or transplant buds and nurseries:
Ornamentals in general
Forest shade and fruit trees
Strawberries and vegetables
Field plants of agricultural crops
Tomatoes and strawberries
Permanent and field plantings
Ornamentals in general and fruit

Pounds of Fumigant
Per Acre

200-600

240

250-600

APR 29 1986

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

550-623

Use Precautions

Every grower should use methods to defend against plant and animal pests under his growing conditions for at least a full growing season before extensive use of this material. It has given excellent results with a wide variety of soils and plant materials. However, it is not a substitute for good agricultural practices. Following treatment for example, the following has been observed: (a) In citrus, various arthropods, carnations, multi-flora roses, holly, as well as other ornamentals and field crops, should be observed for diseases. It is to be expected.

1. Fumigation with methyl bromide and phosphine gas can cause soil to become so dry that the concentration of nitrates from air in a dry soil can be as high as 100 ppm. These materials can give excellent results with a wide variety of soils and plant materials. However, it is not a substitute for good agricultural practices. Following treatment for example, the following has been observed: (a) In citrus, various arthropods, carnations, multi-flora roses, holly, as well as other ornamentals and field crops, should be observed for diseases. It is to be expected.

2. Application should be made in a way that the fumigant is not applied to the soil surface. It is not a substitute for good agricultural practices. Following treatment for example, the following has been observed: (a) In citrus, various arthropods, carnations, multi-flora roses, holly, as well as other ornamentals and field crops, should be observed for diseases. It is to be expected.

TREATMENT OF PLANT STAKES FOR "CLEAN-UP" PRIOR TO USE. Treat with 3 pounds of this product per 1,000 cubic feet under tarp. Minimum exposure time should not be less than 48 hours. Consult County Agricultural Commissioner for additional directions and instructions.

Preplant treatment of soil or other planting media with this product will aid in the control of the following soil-borne pests: insects (wireworms), nematodes, meadow orleson root knot disease, damping-off, root rot, dagger, cyst-formers, soil diseases (*Fusarium* and *Fusarium* wilt), damping-off, some broadleaf and grass, weeds and other seeds.

PREPARE SEED OR PLANT BED AS YOU WOULD FOR PLANTING. The soil or sand to be treated should be worked into a fine loose condition just prior to treatment. Soil should be free of clods and undispersed lumps of sod except in sandy soils. The fumigant will effectively penetrate only as deep as the soil is properly worked, except in some soils.

After the soil has been prepared, make a trench a trench along the margin. This is a simple, easy, and effective way of sealing the disposal cover by building its edge. The trench will be made using the tumbler.

Decomposed compost and manure can be heated to the optimum temperature for 30 days at a temperature above 60 °F, be loose and have a moisture content of 50-60% (permanently). Piles of these materials should be located on wet ground or a concrete floor and covered with a plastic sheet. The plastic sheet should be applied about 10-15 cm (4-6 in.) and also be fumigated if pre-treated with formalin. The plastic sheet can be applied above the pile to allow for the diffusion of the gas. These materials should be kept in a well-ventilated area. The plastic sheet should be applied about 10-15 cm (4-6 in.) and also be fumigated if pre-treated with formalin. The plastic sheet can be applied above the pile to allow for the diffusion of the gas. These materials should be kept in a well-ventilated area or outdoors.

PLACE COVER SUPPORTS AT REGULAR INTERVALS The cover and its gas must circulate freely under the gasproof plastic cover to give satisfactory control of the cover. Do not support the evaporator directly on the floor. Do not place the cover to be heated on the surface of the material to be treated during treatment.

PLACE EVAPORATING CONTAINERS ON PREPARED BED. INSERT APPLICATOR TUBING IN CONTAINERS. Evaporating containers are essential for the volatilization and uniform dispersion of the fumigant. These may be tin pans or basins made of plastic covering. Evaporators should be placed at intervals of approximately 10 feet. **NOTE:** Evaporating containers are not needed if vaporized fumigant is used.

Anchor one end of each length of polyethylene tubing into a heavy-duty container with a short length of pipe, rock or other suitable weights so that the liquid directed into the container will be free ends of the polyethylene tubes should extend no more than 10 cm from the cover so that they should be able to lean against them to the cylinders containing the luminescent

PLACE GASPROOF PLASTIC COVER CAREFULLY OVER AREA TO BE TREATED. SEAL EDGES OF THE COVER WITH DMT. After the supports and tubing are in place the gasproof cover should be laid with its edges in the furrow and sealed with earth. Enough earth should be used to cover the edges to a width of 6 to 10 inches, after which it should be tamped down firmly. Exercise care in preventing damage to cover, which would place a shovelful of dirt on the edge of the cover every few feet as it is being laid, to keep the wind from blowing it under. The sides and other end are then sealed tightly with earth.

APPLYING THE FUMIGANT. The fumigant may be applied as either a liquid or a gas. If a gas results from heating of the fumigant using a coil of copper tubing placed in heated water, the amount of fumigant minimizes the need for the evaporating container. In either case the cylinder should be filled with the proper amount of fumigant. The gas to be released is drawn through the barbed

REMOVE COVER AFTER RECOMMENDED EXPOSURE PERIOD. AERATE, PREPARE SEED OR PLANT BED FOR PLANTING. The minimum exposure period is 24 hours if the soil temperature is below 60 °F. A 48 hour exposure period is necessary.

WHEN TO PLANT AFTER TREATMENT The treated soil must be aerated before planting. Some seeds, such as tobacco, can be planted 48 hours after the removal of the cover. A longer germination period may be required before planting certain flower seeds. Usually a period of several days is necessary for proper aeration. Set living plants in treated soil after it has been aerated for a week to ten days. It is advisable to work the soil "thoroughly" one day after the removal of cover to accelerate the aeration of the soil.

* Suggestions for establishing weed free turf. Lawn grass (seed or sprigs) may be planted following treatment with this product in order to establish a weed free lawn. Treat the soil according to the above directions. Where an old lawn is to be renovated the turf is usually worked up before fumigating. Recent experiments have shown that the undisturbed turf may be killed by fumigation and the dead turf stripped or seeded after removal of the cover. Frequent spraying after seeding will insure uniform stand.

* Suggestions for fumigating mulching materials. Straw or hay should be thoroughly soaked several days prior to treatment since seeds must be moist at time of fumigation for best results. At the time of treatment the bales are merely dried up and covered with a plastic cover with edges sealed in the same manner as recommended for soil.

* Exposure and aeration times should be doubled if soil temperature is between 50 °F and 60 °F. This product should not be used if temperature is below 50 °F.

Seeds of certain species of plants, such as clover, found in a million-year-old layer and other plants.