

5481-443

2/25/2004

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

FEB 25 2004

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

Mr. Darryl E. Brock
Arvac Chemical Corporation
4695 MacArthur Court, Suite 1250
Newport Beach, CA 92660

Subject: PCNB 2 Flowable
EPA Reg. Number 5481-443
Your Amendment Dated August 15, 2003

Dear Mr. Brock:

The amendment referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is accepted provided the following change is made:

1. On page 1, under "First Aid/ If swallowed" remove the word "a" from the second statement.
2. On page 5, revise the foot note "Do not use in California." to read "Do not use in California to control these diseases."
3. Since the product is toxicity category III for acute dermal exposure, revise the precautionary labeling as follows:

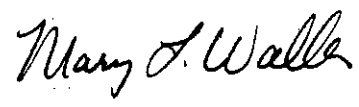
Harmful if absorbed through skin. Avoid contact with skin, eyes or clothing.
4. On page 5, under Storage and Disposal, change subheading from "Storage" to "Pesticide Storage".

For future submissions, please use a larger font for draft labeling. Larger font facilitates label review and helps ensure that labels stamped accepted are of sufficient quality for posting on the Agency website and are suitable for photocopying and faxing.

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A stamped copy of the label is enclosed for your files. You must submit one copy of the final printed label prior to releasing the product for shipment. If you have questions, please contact Summer Gardner-Jenkins at (703) 308-9353.

Sincerely,



Mary L. Waller
Product Manager 21
Fungicide Branch
Registration Division (7505C)

Enclosure: stamped label

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PCNB 2 Flowable

Turf & Ornamental Soil Fungicide

FOR CONTROL OF SOIL-BORNE DISEASES ON
TURFGRASS AND ORNAMENTALS

ACTIVE INGREDIENT:

Pentachloronitrobenzene (PCNB)..... 21.6%

INERT INGREDIENTS:..... 78.4%

TOTAL: 100.0%

Contains 2 lbs. of PCNB per gallon.

KEEP OUT OF REACH OF CHILDREN

CAUTION

FIRST AID	
If swallowed:	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Have a person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give anything by mouth to an unconscious person.
If in eyes:	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
If on skin or clothing:	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
If inhaled:	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. • Call a poison control center or doctor for further treatment advice.
EMERGENCY INFORMATION	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. FOR THE FOLLOWING EMERGENCIES, PHONE 24 HOURS A DAY:	
Transportation: CHEMTREC.....	1-800-424-9300
Other: AMVAC.....	1-323-264-3910

SEE SIDE/BACK PANEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS AND DIRECTIONS FOR USE

EPA Reg. No. 5481-443
EPA Est. No. 5481-CA-1

Net Weight:
As Marked on Container

ACCEPTED
WITH COMMENTS
In EPA Letter Dated
FEB 25 2004



4100 E. Washington Blvd.
Los Angeles, CA 90023 U.S.A

1-323-264-3910 • www.amvac-chemical.com

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION: Harmful if swallowed. Avoid inhaling dust. This may cause skin irritation. Use with adequate ventilation. Do not contaminate feed or foodstuffs.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category (C) on an EPA chemical-resistance category selection chart.

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants,
- Chemical-resistant gloves such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, polyvinyl chloride or Viton
- Shoes plus socks.
- **For exposures outdoors:** Dust/Mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C), or a NIOSH approved respirator with any N, R, P or HE filter.
- **For exposures in enclosed areas:** A respirator with either an organic vapor-removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G), or a NIOSH approved respirator with an organic vapor (OV) cartridge or canister with any N, R, P or HE prefilter.

USER SAFETY REQUIREMENTS

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

This product is toxic to fish. 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 cleaning equipment or disposing of equipment washwaters. Do not apply where run-off is likely to occur. Apply this product only as specified on this label. Do not apply directly adjacent to potable water supplies.

PHYSICAL OR CHEMICAL HAZARDS

Do not allow product to freeze.

DIRECTIONS FOR USE

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

Do not apply this product through any type of irrigation system. Slight agitation may be required to mix the material. Do not use treated seed for feed, food or oil purposes. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

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AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 12 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls
- Chemical-resistant gloves such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, polyvinyl chloride or Viton
- Shoes plus socks.

Non-Agricultural Use Requirements

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries or greenhouses. Turf and Landscape Uses: Do not enter or allow entry into treated areas until sprays have dried unless wearing the personal protective equipment listed on this label.

FOR ORNAMENTALS

Mixtures of this product and water must be mixed with the soil as a drench treatment for protection against the listed diseases on nursery, greenhouse, field-grown and established plants. A preliminary trial is suggested first before a full treatment is given to any plant species not listed in these directions.

Diseases Controlled

Common Name

- Root/Stem Rot
- Ovulinia Petal Blight
- Botrytis Blight or Storage Rot
- Gray Bulb Rot
- Stem Rot
- Stromatinia Dry Rot
- Flower Blight
- Sclerotinia Neck Rot
- Bulb/Crown Rot
- Needle Blight
- Bulb and Stem Rot

Fungi Name

- Rhizoctonia solani*
- Ovulinia azaleae*
- Botrytis sp.*
- Rhizoctonia tuliparum*
- Sclerotinia sclerotiorum*
- Stromatinia gladioli*
- Ciborinia camelliae*
- Sclerotinia sp.*
- Sclerotium rolfsii*
- Dothistroma szeptospora*
- Sclerotinia sclerotiorum*

NURSERY & GREENHOUSE

For Rhizoctonia control, apply as a soil drench at time of seeding and/or transplanting.

Tropical Foliage Plants

Ajuga, Aphelandra, Dieffenbachia, Dracaena, Ficus, Fittonia, Gynura, Hoya, Peperomia, Pothos, Schefflera, Syngonium, Tradescantia and similar tropical foliage plants. Mix 3/4 to 1-1/2 pints in 100 gallons of water and apply to 400 to 800 sq. ft. of bed or bench area.

Coverage: For soil depths of 4 inches or less, apply 100 gallons to 800 sq. ft. For soil depths of more than 4 inches, apply 100 gallons to 400 sq. ft. One repeat application can be made 4 to 6 weeks later if necessary. Do not apply to Philodendron or Pilea since injury may occur.

Bedding and Flowering Plants

Carnations, Chrysanthemum, Dahlia, Geranium, Marigold, Petunia, Poinsettia, Portulaca, Salvia, Vinca, Zinnia and similar plants: Use 3/4 pint with 100 gallons of water and apply to 800 sq. ft. of flat or bench area. Apply at seeding or transplanting time.

Herbaceous and Woody Plants

Herbaceous Plants: Kalanchoe, Lily and similar plants. Woody Plants: Azalea, Boxwood, English Ivy, Holly, Juniper, Pine, Rhododendron and similar plants: Use 3/4 to 1-1/2 pints with 100 gallons of water and apply to 400 to 800 sq. ft. of bed or bench area.

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DIP TREATMENT FOR BULBS AND DORMANT ROSES

Use before planting or storing. It is important to maintain continuous circulation of dip solution to assure uniform application of fungicide. Add 1% "sticker" to solution. Utilize wire mesh for dipping and drain boards to return excess solution to dip tank. Dispose of unused dip solution according to "Storage and Disposal" and observe use of protective clothing as listed under "Personal Protective Equipment (PPE)"; both sections found on this label.

For control of Bulb/Crown Rot (*Sclerotium rolfsii*) and Bulb and Stem Rot (*Sclerotinia sclerotiorum*) on Iris, Hyacinth, Narcissus and Tulips, dip bulbs for 5 minutes in a solution containing 3/4 gallon of this product in 3.2 gallons of water.

For Root/Stem Rot (*Rhizoctonia solani*) on Easter Lilies, dip in a solution containing 1-1/2 to 2-1/4 gallons PCNB 2 FLOWABLE TURF & ORNAMENTAL in 100 gallons of water for a period of 5 to 15 minutes.

For Botrytis Blight or Storage Rot (*Botrytis sp.*) on Roses, dip or spray dormant plants before packaging or storage with a solution of 1 gallon PCNB 2 FLOWABLE TURF & ORNAMENTAL in 100 gallons of water.

FIELD-GROWN ORNAMENTAL CROPS

How To Mix and Apply

Mix the following amounts of PCNB 2 FLOWABLE TURF & ORNAMENTAL in sufficient water and apply before planting to give uniform ground coverage. Incorporate the spray/drench solution to a depth of soil as indicated.

As a Pre-Plant Broadcast Treatment

For Root/Stem Rot (*Rhizoctonia solani*) on Easter Lilies and for Bulb/Crown Rot (*Sclerotium rolfsii*) and Bulb and Stem Rot (*Sclerotinia sclerotiorum*) on Iris, Hyacinth, Narcissus and Tulips, use 1-1/5 to 2-1/3 gals per 1,000 sq. ft. Thoroughly incorporate to a depth of 6 to 7 inches. Use the lower rate for light soils; the higher rate for heavy soils.

For Gray Bulb Rot (*Rhizoctonia tuliparum*) and Stem Rot (*Sclerotinia sclerotiorum*) on Dutch Iris, use 1-1/5 to 1-2/3 gallons per 1,000 sq. ft. Apply prior to planting. Thoroughly incorporate to a depth of 2 to 3 inches.

For Stromatinia Dry Rot (*Stromatinia gladioli*) or Sclerotinia Neck Rot (*Sclerotinia sp.*) on Gladiolus, use 1-1/3 gallons per 1,000 sq. ft. Apply prior to planting. Thoroughly incorporate to a depth of 4 to 6 inches. Bulbs may be planted immediately after solution is incorporated.

For Rhizoctonia Stem Rot (*Rhizoctonia spp.*) on Calendula, Larkspur, Snapdragon and Sweet Pea, use 1-1/3 gallons per 1,000 sq. ft. Apply prior to planting. Thoroughly incorporate to a depth of 4 inches.

For Needle Blight (*Dothistroma septospora*) on Southern Pine Seedlings, use 18-3/4 gallons per acre. Mix and apply in 100 gallons of water to give uniform ground coverage. An additional 1-1/2 inches of water per acre should be applied by irrigation prior to planting. Seed may be planted immediately after irrigation or within one week of this date.

As a Band Treatment

For Stromatinia Dry Rot (*Stromatinia gladioli*) or Sclerotinia Neck Rot (*Sclerotinia sp.*) on Gladiolus, apply 2-1/8 gallons per 1,000 linear feet of row as a 12-inch band centered on the row at planting time. Incorporate to depth of 4 inches. Bulbs may be planted immediately after incorporation.

For Gray Bulb Rot (*Rhizoctonia tuliparum*) and Stem Rot (*Sclerotinia sclerotiorum*) on Dutch Iris, use 1 qt. per 1,000 linear feet of row as a 12-inch band centered on the row at planting time. Follow with 3 additional applications at the same rate at 15-day intervals.

As an In-Furrow Treatment at Planting Time

For control of Root/Stem Rot (*Rhizoctonia*) on Easter Lilies and for Bulb/Crown Rot (*Sclerotium rolfsii*) and Bulb and Stem Rot (*Sclerotinia sclerotiorum*) on Iris, Hyacinth, Narcissus and Tulips, mix 1-3/4 to 2-1/4 gallons in 5 to 10 gallons of water and apply per 1,000 linear feet of row. Direct the spray into open furrow to thoroughly cover entire furrow and bulbs. Close furrow in normal manner. Use lower rate for lighter soils and higher rate for heavier soils. For Bulb and Stem Rot control, use higher rate.

SPRAY FOR ESTABLISHED AZALEAS & CAMELLIAS

For Ovulinia Petal Blight (*Ovulinia azaleae*) on Azaleas and Flower Blight (*Ciborinia camelliae*) on Camellia, use 3 pints per 150 sq. ft. Mix and apply in sufficient water (5 to 10 gallons per 100 sq. ft.) to give uniform coverage to soil beneath bushes and in plant bed. Begin application prior to opening of buds and repeat every 3 to 4 weeks during bloom season.

FOR TURFGRASS

Use as a fungicide in the prevention and control of the listed soil-borne diseases which attack turfgrass on golf courses, sod farms, home lawns, institutional, ornamental, and recreational areas where fine turf is under a maintenance program. Do not use for turf-Leaf Spot or Dollar Spot in California.

DISEASES CONTROLLED

Common Name

Brown Patch or Rhizoctonia Blight
 Leaf Spot
 Dollar Spot
 Gray Snow Mold
 Pink Snow Mold

Fungi Name

Rhizoctonia solani
*Drechslera poae**
*Sclerotinia homeocarpa, Moellerodiscus sp., Lanzia sp.**
Typhula sp.
Microdochium nivale

*Do not use in California

For best results, use as a preventive application before diseases appear or apply at the first sign of the infection. If heavy rainfall or flooding occurs after treatment or if disease is severe or reappears, treat area again. Follow the rates and comments as listed below for control of turfgrass diseases. NOTE: Apply the high rate when disease is severe and use low rate when disease pressure is light. Treated area should be watered lightly as soon as possible after the application to wash the fungicide down to the soil level.

Disease/Host	Amt/Gals of water per 1,000 sq. ft.	How and When to Apply
Brown Patch or Rhizoctonia Blight (<i>Rhizoctonia solani</i>) St. Augustine, Bermudagrass & similar warm season grasses	32-48 fl. oz/ 1-5 gallons of water	Apply once in Spring or Fall or when disease appears. If it reappears, retreat 3-4 weeks later.
Dichondra	32-48 fl. oz/ 5-10 gallons of water	Treat as above.
Bluegrass, Rye, Fescue, Bent & similar cool season grasses	10-12 fl. oz/ 1-5 gallons of water	Apply at first sign of disease. Repeat every 7-10 days during warm, damp weather.
Leaf Spot* (<i>Drechslera poae</i>) Dollar Spot* (<i>Sclerotinia homeocarpa, Moellerodiscus sp., Lanzia sp.</i>) *Do not use in California	22-32 fl. oz/ 1-5 gallons of water	For preventative, apply in Spring or Fall of each year. If disease is present, apply at 32 fl. oz. rate as soon as possible. If disease is severe or reappears, retreat area 3-4 weeks later.
Gray Snow Mold (<i>Typhula sp.</i>) Pink Snow Mold (<i>Microdochium nivale</i>)	24-32 fl. oz/ 1-5 gallons of water	First treatment should be made prior to first snowfall.

Do not graze treated areas or feed grass clippings to livestock. Under certain growing conditions, a temporary discoloration of the grass may occasionally occur. This causes no harm and will disappear in a short time.

STORAGE AND DISPOSAL

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

STORAGE: Store product in its original container in a cool, dry, locked place out of reach of children. Protect from temperatures below 20°F.

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

CONTAINER DISPOSAL: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities.

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LIMITED WARRANTY AND DISCLAIMER

The manufacturer warrants (a) that this product conforms to the chemical description on the label; (b) that this product is reasonably fit for the purposes set forth in the directions for use, subject to the inherent risks referred to herein, when it is used in accordance with such directions, and (c) that the directions, warnings, and other statements on this label are based upon responsible experts' evaluations of reasonable tests of effectiveness, of toxicity to laboratory animals and to plants and residues on food crops, and upon reports of field experience. Tests have not been made on all varieties of food crops and plants, or in all states or under all conditions.

THERE ARE NO EXPRESS WARRANTIES OTHER THAN THOSE SET FORTH HEREIN. THE MANUFACTURER NEITHER MAKES NOR INTENDS, NOR DOES IT AUTHORIZE ANY AGENT OR REPRESENTATIVE, TO MAKE ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, AND IT EXPRESSLY EXCLUDES AND DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY OF FITNESS FOR A PARTICULAR PURPOSE, OR ANY WARRANTY OF QUALITY OR PERFORMANCE. THIS WARRANTY DOES NOT EXTEND TO, AND THE BUYER SHALL BE SOLELY RESPONSIBLE FOR, ANY AND ALL LOSS OR DAMAGE WHICH RESULTS FROM THE USE OF THIS PRODUCT IN ANY MANNER WHICH IS INCONSISTENT WITH THE LABEL DIRECTIONS, WARNINGS OR CAUTIONS.

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AMVAC offers this product, and Buyer accepts it, subject to the foregoing Limited Warranty which may be varied only by agreement in writing signed by an authorized representative of AMVAC.

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