John S. Thornton Miles Inc. P.O. Box 4913 Kansas City, MO 64120

Dear Mr. Thornton:

Subject: Revised Labeling

Bayleton 25 Wettable Powder Nursery and Greer House

Fungicide

EPA Registration No. 3125-436

Your Submission Dated July 14, 1994

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

- 1. Make the labeling changes listed below before you release the product for shipment bearing the amended labeling:
  - Add a Groundwater Advisory Statement. See our letter dated May 12, 1994.
- 2. Submit one (1) copy of your final printed labeling before you release the product for shipment.

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

S.ncerely yours,

Cynthia Giles-Parker Product Manger (22)

Fungicide Herbicide Branch Registration Division (7505C)

Enclosure

U. S. LABEL

Reason to Issue: To add use on poinsettia and hydrangea, add control of zoysia patch, revise name for bermudagrass decline and take all patch, and revise ornamental plant disease control table.

Date of Draft: 06/08/94(Pre-Reg)(T)

Jacket

# BAYLETON® 25

### **Wettable Powder Nursery and Greenhouse Systemic Fungicide**

For control of certain diseases on flowers, foliage plants, shrubs, turf and shade trees in commercial nurseries, garden centers, greenhouses and sod farms.

#### **ACTIVE INGREDIENT:**

1-(4-Chlorophenoxy)-3,3-dimethyl-1-(1 <i>H</i> -1,2,4-triazol-1-yl)-2-butanone	25%
INERT INGREDIENTS	75%
	100%

U.S. Patent No. 3,912,752 EPA Reg. No. 3125-436 EPA Est. 3125-MO-1

Net Weight: **Pounds** 

### Stop - Read the Label Before Use KEEP OUT OF THE REACH OF CHILDREN

### CAUTION

See Rear Panel for Statements of Practical Treatment and Other Precautionary Statements

PRECAUCION AL USUARIO: Si usted no puede leer o entender ingles, no use este producto hasta que la etiqueta le haya sido explicada ampliamente.

(TO THE USER: If you cannot read or understand English, do not use this product until the label has been fully explained to you.)

> ACCEPTED with COMMENTS In EPA Letter Dated:

> > JÚL **2.9** 1994

MILES //

ader the Federal Insecticide Corde, and Rodenticide Act mended, for perticide a fered und. PA Reg. No.

## PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

### **CAUTION**

Harmful if swallowed, inhaled, or absorbed through the skin. Causes eye irritation. Avoid breathing dust. Avoid contact with eyes, skin, or clothing.

Personal Protective Equipment
Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks

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:**

User 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.

### STATEMENTS OF PRACTICAL TREATMENT

If swallowed: Call a physician or Poison Control Center. Vomiting should be induced. Administer water freely and induce vomiting by giving one dose (1/2 oz or 15 mL) of syrup of ipecac. If vomiting does not occur within 10 to 20 minutes, administer second dose. If syrup of ipecac is not available, drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger. Repeat until vomit fluid is clear. Do not induce vomiting or give anything by mouth to an unconscious person. Professional medical assistance should be secured immediately.

If in eyes: Flush with plenty of water. Call a physician if irritation persists.

If on skin: Wash with plenty of soap and water. Get medical attention.

SYMPTOMS OF POISONING: The compound does not cause any definite sy nptoms that would be diagnostic. Poisoning is accompanied by hyperactivity followed by sedation.

**NOTE TO PHYSICIAN:** No specific antidote. Treat symptomatically.

### **ENVIRONMENTAL HAZARDS**

Do not use on crops grown for food or forage. Do not apply directly to water, or 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.

Apply this product only as specified on this label.

Do not make applications when weather conditions favor drift from target area.



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### **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 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.

#### **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
- Waterproof gloves
- Shoes plus socks

IMPORTANT: Read these entire Directions and Conditions of Sale before using BAYLETON 25 Nursery and Greenhouse Fungicide Systemic Fungicide.

CONDITIONS OF SALE: THE DIRECTIONS ON THIS LABEL WERE DETERMINED THROUGH RESEARCH TO BE APPROPRIATE FOR THE CORRECT USE OF THIS PRODUCT. THIS PRODUCT HAS BEEN TESTED UNDER DIFFERENT ENVIRONMENTAL CONDITIONS BOTH INDOORS AND OUTDOORS UNDER CONDITIONS SIMILAR TO THOSE THAT ARE ORDINARY AND CUSTOMARY WHERE THE PRODUCT IS TO BE USED. INSUFFICIENT CONTROL OF PESTS OR PLANT INJURY MAY RESULT FROM THE OCCURRENCE OF **EXTRAORDINARY OR UNUSUAL CONDITIONS, OR FROM** FAILURE TO FOLLOW LABEL DIRECTIONS. IN ADDITION, FAILURE TO FOLLOW LABEL DIRECTIONS MAY CAUSE INJURY TO ANIMALS, MAN, AND DAMAGE TO THE ENVIRONMENT. MILES OFFERS, AND THE BUYER ACCEPTS AND USES, THIS PRODUCT SUBJECT TO THE CONDITIONS THAT EXTRAORDINARY OR UNUSUAL ENVIRONMENTAL CONDITIONS, OR FAILURE TO FOLLOW LABEL DIRECTIONS ARE BEYOND THE CONTROL OF MILES AND ARE, THEREFORE, THE RESPONSIBILITY OF THE BUYER.

APPLICATION: BAYLETON fungicide is absorbed rapidly and works systemically from within the plant. Good coverage and wetting of the foliage are necessary. Rainfall or sprinkler irrigation, within 30 minutes after application does not decrease effectiveness. Control may be less effective on plants suffering from drought stress. Therefore, in order to achieve maximum control, plants should be maintained in a vigorously growing state through good cultural practices.

Apply in all cases when plants are fully established and actively growing. Applications should be applied at recommended intervals to maintain disease control.

Do not use on crops grown for food or forage.

USE IN CHEMIGATION SYSTEMS ON TURF ONLY: Apply BAYLETON 25 Nursery and Greenhouse Systemic Fungicide only through solid set irrigation systems. Do not apply this product through any other type of irrigation system.

The system must contain a functional check valve, a vacuum relief valve and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back towards the injection pump.

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.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

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 the pesticide distribution is adversely affected.

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.

Do not apply when wind speed favors drift beyond the areas intended for treatment.

Crop injury or lack of effectiveness can result from non-uniform distribution of treated water.



If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

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.

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.

Pre-mix the required amount of BAYLETON 25 Nursery and Greenhouse Systemic Fungicide, as determined under "Recommended Applications", in sufficient water to uniformly inject the entire mixture during the last 5 minutes of the irrigation cycle using a positive pressure pumping system. Continuous agitation of the mixture in the holding tank is required to maintain suspension of the product. The injection must occur during the last 5 minutes of the irrigation cycle.

RECOMMENDED APPLICATIONS - TURF GRASS DISEASE CONTROL			
DISEASE	OZS OF BAYLETON 25 WP PER 1,000 SQUARE FEET*		REMARKS
Dollar Spot (Sclerotinia homoeocarpc)	Preventive 1	Curative	PREVENTIVE RATE: Apply recommended rate on 30- day intervals. Protective activity of BAYLETON may extend for as long as 60 days dependent upon environmental conditions.
	0.5		PREVENTIVE RATE: (Except California): Apply recommended rate on 14-day intervals. Protective activity of BAYLETON may extend for as long as 30 days dependent upon environmental conditions.
		2	CURATIVE RATE: To control existing infections, apply the curative rate. Subsequent applications should be applied on a preventive schedule and rate.
Copper Spot (Gloeocercospore sorghi) Powdery Mildew (Epysiphe graminis) Corticium Red Thread (Leetisaria fuciformis) Rusts (Puccinia spp.) Brown Patch/ Rhizoctonia Solani) (Suppression)	1	2	PREVENTIVE RATE: Apply at 15- to 30-day intervals. When environmental conditions favor light to moderate disease development, use a longer interval. Protective activity of BAYLETON can be greater than 30 days depending on environmental conditions.  CURATIVE RATE: To control existing infections, apply the curative rate. Subsequent applications should be applied on a preventive schedule and rate.

	TOED AFFEIGATIO	140 - 1000	GRASS DISEASE CONTROL
DISEASE	OZS OF BAYLETON 25 WP PER 1,000 SQUARE FEET*		REMARKS
Anthracnose (Colletotrichum graminicola)	Preventive 2	Curative	PREVENTIVE RATE: Apply at 30-day intervals and repeat as necessary for seasonal control. Dependent upon environmental conditions, residual control may be extended to 45 days.
	1		PREVENTIVE RATE: (Except California) Apply at 21-day intervals and repeat as necessary for seasonal control. Dependent upon environmental conditions, residual control may be extended to 30 days.
	-	2	CURATIVE RATE: To control existing infections, apply the curative rate. Subsequent applications should be applied on a preventive schedule and rate.
Southern Blight (Sclerotium rolfsii)	Preventive 1 to 4	Curative 4	PREVENTIVE: Begin applications prior to the appearance of disease symptoms. Depending or anticipated disease severity, apply 2 to 4 oz rates a 14-day intervals for the initial 2 to 3 treatments. Apply subsequent treatments of 1 to 2 oz at 14- to 28-day intervals.  CURATIVE: To control existing infections, apply 4 o.
		<u></u>	at 14-day intervals for the initial 2 to 3 treatments followed by 1 to 2 oz at 14- to 28-day intervals.
Stripe Smut ( <i>Ustilago striiformis</i> )	Preventive Rates Only		Make a single application in spring as grass growth begins.
Fusarium Blight (Fusarium culmorum) (Fusarium poae) Summer Patch (Phialophora graminicola) (Magnaporthe poae)	2 to 4		Apply first application in the Spring 30 to 60 day before initial symptoms normally appear. Repea applications at 30-day intervals as needed.
Zoyela patch Large patch of Soyela (finizoctoria exhibit	210.4		Make first application in early fell (rikd-September to mid-October) prior to development of disease symptoms: A second application in early appling me be necessary in areas where thesese pressure is know to be heavy.

RECOMMENDED APPLICATIONS - TURF GRASS DISEASE CONTROL				
DISEASE	OZS OF BAYLETON 25 WP PER 1,000 SQUARE FEET*	REMARKS		
Bermudegrass decline (Gaeumannomyces graminis var. graminis)  Take all patch (Gaeumannomyces graminis var. evense)	Preventive Curative 2 4	Immediately after the fungicide is applied, the area should be thoroughly irrigated to move the active ingredient down into the crown and root zone of the turf. The amount of water is dependent on the depth of the root zone. The objective is to water the fungicide into the crown and root zone.		
(Except Celifornie)		PREVENTIVE RATE: Begin applications 2 to 4 weeks prior to the appearance of disease symptoms. Initiate cultural control practices at the same time the fungicide is applied. Refer to your local County Extension Service for this information. Apply subsequent applications at 21- to 28- day intervals.		
		CURATIVE RATE: To control existing infections, apply 4 oz at 14- to 21-day intervals for the initial 1 or 2 treatments followed by 2 oz at 21-to 28-day intervals. Cultural control practices such as aerification, topdressing, reseeding, and fertilization must be implemented prior to or at the same time the fungicide is applied. Refer to your local County Extension Service for this information.		
Gray Snow Mold/Typhula Blight (Typhula incamata) (Except California)	Preventive Rates Only 4	Apply in the fall, 30 days prior to turf dormancy. If turf breaks dormancy during winter months a second application should be made. Do not apply over snow cover, or when turf is dormant.		
Pink Snow Mold/Fusarium Patch ( <i>Microdochium nivalis</i> ) (Except California)	2 to 4	Apply before conditions favorable for infection occur. Re-application should be made as needed at a 60- to 90-day interval. Do not apply over snowcover, or when turf is dormant. Use higher rate in areas with a history of severe disease damage.		
Gray Snow Mold/Typhula Blight ( <i>Typhula incarnata</i> ) Pink Snow Mold/Fusarium Patch ( <i>Microdochium nivalis</i> ) (California only)	Single Application 5 to 8	Apply in late fall before first snow cover. Do not apply over snow cover. Use the high rate in areas with a history of severe snowmold damage.		

Note: "Apply the specified amount of BAYLETON 25 Nursery and Greenhouse Systemic Fungicide in 2 to 4 gallons of spray per 1,000 sq ft. For equivalent rates per scre see Conversion Table below. Make all applications after mowing and allow foliage to dry thoroughly before irrigation. Do not use clippings for animal feed.

	Conversion Table for BAYLETON 25 Nursery and Greenhous	e Systemic Fungicide
t		Lb per Acre

0.5	<b>=</b>	1.4
1	=	2.75
2	=	5.5
4	=	11.0 13.75
5	<b>z</b>	13.75

Oz per 1000 eq ft

	olled. Referen Application Rates sec ants marked with an asterisk may be	ction for instructions detailing use for each treated.	
P	ANTS	DISEASES	
Flowering & Foliage Plants (Outdoor) Ageratum (2b, 3, 4) Aster (4) Begonia* (3) Canna (4) Carnation (3, 4) Chrysanthemum (3, 4) Dahlia (3) Delphinium (3) Dendrobium (1c) (Hawaii Only) Dianthus (4) Four O'Clock (4) Geranium* (3, 4) Holiyhock* (3, 4) Histrangea (3) Iris* (2c) Marigold (2b, 4) Nephthytis* (2a) Pansy (3, 4) Petunia (3, 4) Phlox (2b, 3, 4) Poursettia (3) Rose* (3) Salvia (3, 4) Sedum (3) Snapdragon* (3, 4) Sunflowers (3, 4) (ornamental only) Sweet peas* (3) Zinnia* (2b, 3) Shade Trees Ash (3) Aspen (3, 4) Birch (3, 4) Birch (3, 4) Birch (3, 4) Buckeye (3)	Ornamental Shrubs & Trees Amelanchier (3) Azalea* (1a, 2f, 3) Barberry (3, 4) Buckthorn (4) Camellia (suppression of 1b) Cedar* (2d) Crabapple (flowering) (3, 4) Crape myrtle* (3) Dogwood L.) Euonymus* (3) Gardenia (3) Hawthorn (3, 4) Hemlock (4e) Holly (3) Juniper (4) Leucothoe (2b) Lilac (3) Mock-Orange (3, 4) Mountain Leurel (1a, 2b, 3) Ninebark (3) Paulownia (3) (Empress Tree) Pear (Flowering) (3) Photinia (2e, 3, 4) Potentilla (4) (Cinquefoil) Privet (2b, 3) Pyracantha (3) Rhododendron (1a, 2b, 3) Spirea (3) Viburnum* (3, 4) Vitex (2b) (Chaste Tree)  Flowering & Foliage Plants (Greenhouse (D)) African Violet* (3)		
Chestnut (3) Cottonwood (3, 4) Elm (3) Fir (4) Locust (3) Maple (3) Oek* (3) Pine* (4, 5) Poplar (3, 4) Russian Olive (2b, 4) Sycamore* (3) Walnut (3) Willow* (3, 4)	Azalea (1a, 2f, 3) Calendula (3, 4) Carnation* (3, 4) Chrysanthemum* (3, 4) Cineraria (3) Crassula (3) Daisy (3, 4) Fern, Boston (4) Desmella spp. Geranium* (3, 4) Gerbera (3) Grape Leaf Ivy* (3) Hutranges (3) Kalanchoe (3) Poinsettia (3)	(5) Tip Blight Sirococcus strobilinus (B)	

#### ORNAMENTAL PLANT DISEASE CONTROL (Continued)

APPLICATION RATES: Except as noted for specific diseases, mix 1 to 2 ounces of BAYLETON 25 Nursery and Greenhouse Systemic Fungicide in 50 gallons of water and apply as a full coverage foliage spray to the point of drip as needed.

- [A] Mix 4 to 8 ounces of BAYLETON 25 Nursery and Greenhouse Systemic Fungicide in 50 gallons of water and apply as a full-coverage foliar spray to the point of drip. Applications should begin at the expanded bud stage (color showing). Use multiple applications at 7- to 14-day intervals as needed dependent upon bloom periods.
- [8] Mix 8 ounces of BAYLETON 25 Nursery and Greenhouse Systemic Fungicide plus sufficient spreader sticker for good coverage in 50 gallons of water. Apply in a spray application to the point of run-off on an as needed basis during the early part of the season. Excessive rates or excessive applications may result in a shortening of the flower stalk on iris.
- [C] Mix 4 to 8 ounces of BAYLETON 25 Nursery and Greenhouse Systemic Fungicide in 50 gallons of water and apply as a full coverage foliar spray to point of run-off. Apply in early spring as growth starts and re-apply on a 14- to 21-day interval until new growth is fully expanded. Protect new growth that develops in late summer or fall as temp\* res begin to drop.
- [D] Greenhouse Applications

Winter Use - 1 oz of BAYLETON 25 Nursery and Greenhouse Systemic Fungicide Summer Use - 2 oz of BAYLETON 25 Nursery and Greenhouse Systemic Fungicide

Mix specified amount of BAYLETON 25 Nursery and Greenhouse Systemic Fungicide in 50 gallons of water and apply in a spray application to the point of drip. Intervals between applications should be no shorter than 30 days to avoid flower stalk length reduction. Excessive rates or applications may result in a shortening of the flower stalk.

- [E] For control of Exobasidium flower and leaf gall, apply 2 oz of BAYLETON 25 Nursery and Greenhouse Systemic Fungicide in 50 gallons of water. Begin application at bud break and apply at 10-day intervals through infestation period.
- [F] For control of *Melampsora pinitorqua* (Pine Twisting Rust), apply a single application in spring during periods favorable for infection. Mix 16 o/ in 50 gallons of water and apply to shoots in the upper whorl of suspectable pine species. Make a single application per year as a full coverage application sprayed to runoff.
- [G] For control of *Didymascella thujina*, Cedar Leaf Blight, apply 1 lb per acre in sufficient water to provide full coverage in nurseries, or 0.5 lb/100 gallons applied as a full coverage spray to ornamentals. Begin applications before disease appears in spring, and repeat at 60-day intervals through early fall.

COMPATIBILITY: BAYLETON is compatible with many registered inserticides and fungicides. To determine the compatibility of BAYLETON with specific products, the following procedure should be conducted. Pour the recommended proportions of the products into a suitable container of water, mix thoroughly and allow to stand at least 5 minutes. If the combination remains mixed or can be re-mixed readily, the mixture is considered physically compatible.

SPRAY ADDITIVES: Use of various spray additives such as spreaders, extenders, trace elements or fertilizers should be evaluated prior to use. The label directions given here are based on data obtained with no additives; use of any product with BAYLETON may affect the result. Contact local university extension personnel prior to use of spray mix additives.

**RESTRICTIONS:** Edible portions of treated trees, such as nuts and syrup, should not be used for feed or food.

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#### STORAGE AND DISPOSAL

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

Household: Do not reuse empty container. Securely wrap original container in several layers of newspaper and put in trash collection.

Pesticide Disposal (Except Household): Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

Container Disposal (Except Household): Completely empty carton into application equipment. Then dispose of empty carton in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage

Handle and open container in a manner as to prevent spillage. If the container is leaking or material spilled for any reason or cause, carefully sweep material into a pile. Refer to Precautionary Statements on label for hazards associated with the handling of this material. Do not walk through spilled material. Material that cannot be used as directed should be disposed of as directed above. In spill or leak incidents, keep unauthorized people away. You may contact the Miles Emergency Response Team for decontamination procedures or any other assistance that may be necessary. The Miles Kansas City Emergency Response Telephone No. is 816-242-2582, or contact Chemtrec at 800-424-9300.

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Miles Inc. Specialty Products Box 4913, Kansas City, Mo 64120-0013