

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Ms. Rebecca Lamas, Registration Specialist
Gowan Company
P.O. Box 5569
Yuma, AZ 85366-5569

NOV 18 2003

Dear Ms .Lamas:

SUBJECT: Thiophanate Methyl 80 WDG
EPA File Symbol 10163-249
Your Submission of October 25, 2002

The label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended is acceptable provided you make the following changes:

Directions for Use - Application Directions:

In the second sentence after the "Compatibility" heading change "No Claim" to "No claim".

Directions for Use - Turf Uses:

- Change the first sentence from "Not for homeowner use." to "Not for homeowner use on turf."
- In the sentence in the "Crop" column of the application rate table, change "golf course greens, tees and fairways" to "golf course greens, tees, aprons and fairways".
- In the "Fusarium blight" entry in the "Disease" column of the application rate table, change "triticum" to "triticinum".
- In the "Gray Leaf Spot" entry in the "Comments" column of the application rate table, change "w ith" to "with".
- Take the "Residential and public areas", "Tees/green/aprons" and "Fairways" bullets and text out of the "Turf Uses" table and place them under the new heading "Residential and Public Area Restrictions and Golf Course Restrictions".
- Change the headings "Tees/green/aprons" and "Fairways" to "Golf course tees/green/aprons" and "Golf course fairways"

Directions for Use - Ornamental Uses:

- After the "Directions for use by homeowners" heading delete "For homeowner use on ornamentals only."
- Immediately before the sentence "Begin applications when weather conditions . . ." add the heading "Directions for All Users".
- In the "Diseases" column of the application rate table, correct the following disease names: "Fusiciadium" should be "Fusicladium", "Fusrium" should be "Fusarium", "Mycrothecium" should be "Myrothecium", "Clylindrocladium" should be "Cylindrocladium" and "Pencillium" should be "Penicillium".

Storage and Disposal:

Change the heading "Storage" to "Pesticide Storage".

Submit one (1) copy of your final printed labeling before you release the product for shipment. A stamped copy of the label is enclosed for your records. If you have any questions, please contact Lisa Jones of my staff by phone at (703) 308-9424 or by e-mail at jones.lisa@epa.gov.

Sincerely,



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

Enclosure: Stamped label

CONCURRENCES

SYMBOL ▶	7505C						
SURNAME ▶	Lisa Jones						
DATE ▶	Nov 12, 2003						

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THIOPHANATE-METHYL 80 WDG

TURF AND ORNAMENTAL FUNGICIDE

ACTIVE INGREDIENT:	% BY WT.
Thiophanate-methyl: Dimethyl [(1,2-phenylene)bis(iminoicarbonothioyl)]-bis(carbamate).....	80.0%
OTHER INGREDIENTS.....	20.0%
	TOTAL 100.0%

KEEP OUT OF REACH OF CHILDREN CAUTION

FIRST AID

IF IN EYES: 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. Call a poison control center or doctor for treatment advice.

IF ON SKIN: 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.

Have the product container or label with you when calling a poison control center or doctor or going for treatment.

FOR EMERGENCY MEDICAL RESPONSE AND HAZARD COMMUNICATIONS ONLY, CALL 1-888-478-0798.

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made from any waterproof material.
- 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

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.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish and aquatic invertebrates. Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwaters.

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.

Keep children and pets off treated area until dry or material has washed into the soil.

Do not apply with fixed wing or rotary aircraft

Not for use on turf being grown for sale or other commercial use as sod.

GENERAL INFORMATION

Apply this product with ground equipment, using sufficient volume of spray to provide thorough coverage. Do not tank mix with copper-containing materials or highly alkaline pesticides such as Bordeaux mixture or lime sulfur. No claim of compatibility with other pesticides is implied. Use higher rates under conditions of severe disease pressure or when application intervals exceed 14 days due to persistent rainfall. Also see local State Extension Service recommendations for application schedules.

NET CONTENTS _____ POUNDS

EPA Reg. No. 10163-249
EPA Est. No. 67545-AZ-1



Gowan Company
P. O. Box 5569
Yuma, AZ 85366-5569

IMPORTANT: If treatment is not effective after using this product as recommended, a tolerant strain of fungi may be present. Contact your local Gowan Company representative or your State Agricultural Extension Service for advice on the prompt use of some other suitable fungicide.

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 intervals. 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 over long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material
- Shoes plus socks

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product which are not within the scope of the Worker Protection Standard (WPS) 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. Keep children and pets out of the treated area until sprays have dried.

APPLICATION DIRECTIONS

Mixing Directions: Continuous agitation is required to keep the product in suspension.

Please read and observe the following directions for use:

- Turn on spray tank agitation. Pour recommended amount of this material on the surface of water in a nearly filled spray tank.
- Add balance of water to fill the tank.
- Keep agitator running during filling and spraying operations. Do not allow mixture to stand.

Compatibility: Do not tank mix with copper-containing materials or highly alkaline pesticides such as Bordeaux mixture or lime sulfur. No Claim of compatibility with other pesticides is implied. All possible combinations have not been evaluated before full-scale mixing of this product with other products, test mix small proportionate quantities of each to ensure compatibility.

Spray Volume: Apply this product with ground equipment, using sufficient volume of spray to provide thorough coverage

Important: If treatment is not effective after using this product as recommended, a tolerant strain of fungi may be present. Contact your local Gowan Company representative.

TURF USES

Not for homeowner use. For use by individuals/firms licensed or registered by the state to apply ornamental or turf pest control products. This product is for the prevention and control of listed diseases on all fine turf applications. For best results, use spray mixture the same day it is prepared. Spray uniformly over the area to be treated with properly calibrated power sprayer. Apply after mowing or avoid mowing twelve hours after application. Apply recommended amounts in sufficient water to obtain through coverage (2-4 gallons suggested per 1000 square feet). When treating golf greens, always treat aprons. Use the highest recommended rate under conditions of severe disease pressure.

NOTE: Do not apply to areas likely to be grazed by livestock and do not feed clippings to livestock or poultry.

CROP	DISEASE	RECOMMENDED RATE/ oz./1000 sq. ft.	COMMENTS
All fine turf applications such as commercial and home lawns, athletic fields, cemeteries, parks, golf course greens, tees, and fairways of cool and warm season grasses (such as Bentgrasses, Bluegrasses, Ryegrasses, Bermudagrasses, Fescues, St. Augustine grasses or Zoysia)	Anthrachnose* (Colletotricum graminicola), Dollar Spot (Mollerodiscus spp., Lanzia spp.), Copper Spot (Gloeocerospora sorghi), Large Brown Patch (Rhizoctonia solani), Red Thread (Corticium fuciforme)	1.25	Apply when disease first appears. Continue at 14 day intervals as needed. *NOTE: Use 2.86-5.71 oz./1000 sq. ft. for curative response to Basal Stem Anthrachnose.
	Pink Snow Mold (Microdochium nivale)	1.25	Apply middle-late November before turf has stopped all growth activity. Lightly water this application into root zone for best results. A second application may be used with other products at reduced rates. For best results, use a spreader/sticker. Second spray should dry on leaf surfaces with no "watering in".
	Summer Patch (Magna portha pose)	2.5-5.0	For prevention, apply 3 applications beginning early May using 21-day intervals. Water material into root zone after application. For suppression, apply at 14-day intervals beginning when first disease appears.

TURF USES (Continued)

CROP	DISEASE	RATE oz./1000 sq. ft.	COMMENTS
All fine turf applications such as commercial and home lawns, athletic fields, cemeteries, parks, golf course greens, tees, and fairways of cool and warm season grasses (such as Bentgrasses, Bluegrasses, Ryegrasses, Bermudagrasses, Fescues, St. Augustine grasses or Zoysia) (Continued)	Fusarium Blight (<i>Fusarium roseum</i> and <i>tritici</i>), Necrotic Ring Spot (<i>Leptosphaeria korrea</i>)	2.5-5.0	Apply two applications at 14-day intervals beginning when disease first appears.
	Stripe Smut (<i>Ustilago artiformis</i>)	2.5-5.0	Make two applications at 14-day intervals when disease first appears. Water material into root zone after application. For prevention, apply in spring and fall.
	Leaf Spot (<i>Dreschlera</i> spp.) (<i>Helminthosporium</i> spp.)	2.5-5.0	Make two applications at 14-day intervals when disease first appears. Water material into root zone after application.
	Gray Leaf Spot (<i>Pyricularia grisea</i>)	2.5-5.0	Apply a 14 day intervals. The spray should dry on the leaves with no "watering in".
	<ul style="list-style-type: none"> • Residential and public areas – turf (home lawns, parks, athletic fields, schools, and day care centers): <ul style="list-style-type: none"> • Maximum application rate for residential/public areas – 3.4 lbs per acre per application • Maximum annual application rate – 13.6 lbs per acre • Maximum retreatment interval – 14 days • Tees/greens/aprons: <ul style="list-style-type: none"> • Maximum single application rate – 10.2 lbs per acre • Maximum annual application rate – 27.25 lbs per acre • Minimum retreatment interval – 14 days • Fairways <ul style="list-style-type: none"> • Maximum annual rate – 6.8 lbs per acre, except Florida • Maximum annual rate in Florida – 3.4 lbs per acre 		

ORNAMENTAL USES

Directions for use by individuals/firms licensed or registered by the state to apply ornamental or turf pest control products:

Do not apply to home orchards/fruit trees after fruit set.

Directions for use by homeowners:

For homeowner use on ornamentals only:

Maximum single application rate is 1.8 lbs. ai/acre.

Do not apply to home orchards/fruit trees.

Begin applications when weather conditions conducive to disease development begin or at the first sign of disease. Repeat at 7-10 day intervals, or as otherwise instructed for the prevention or control of listed diseases. Do not use fruit or nuts from treated trees as food or feed.

This product is not recommended for the following plants: *Nephrolepis exaltata*, *Plectranthus australis*, and *Haltoria, gaertneri*.

NOTE This product does not control *Pythium* spp. or *Phytophthora* spp.

CROP	DISEASE	RATE	COMMENTS
Shade Trees Herbaceous, Woody and Flowering Ornamentals Tropical Foliage Backyard Ornamental Nut and Fruit Trees Annual and Perennial Flowers, Ground Covers, plus Deciduous and Evergreen Trees and Shrubs	Oviinia Blight of Azalea and Rhododendron	5.0-10.0 oz/100 gal or 1/2 - 1 teaspoon/gal	Apply as flowers open. Repeat every 7-10 days as needed during disease period.
	Powdery Mildew	5.0-10.0 or 1/2 - 1 teaspoon/gal	Apply mid-summer or at first sign of disease.
	Anthracnose	7.5-10.0 or 3/4 - 1 teaspoon/gal	Apply as buds break. Repeat every 7-10 days as needed during disease period.
	Asochyta Leaf Blight	7.5-10.0 or 3/4 - 1 teaspoon/gal	Repeat every 7-10 days as needed during disease period.
	Black Spot of Rose, Botrytis Blight (Gray Mold), Cercospora Leaf Spot, Corynespora Leaf Spot, Curvularia Leaf Blight, Iris Leaf Spot, Didymellina Leaf Spot, Entomomsporium Leaf Spot	7.5-10.0 or 3/4 - 1 teaspoon/gal	Apply mid-summer or at first sign of disease.
	Rose of Crabapple	7.5-10.0 or 3/4 - 1 teaspoon/gal	Repeat every 10-14 days as needed during disease period.

ORNAMENTAL USES (Continued)

CROP	DISEASE	RATE oz./100 gal	COMMENTS
Shade Trees Herbaceous, Woody and Flowering Ornamentals Tropical Foliage Backyard Ornamental Nut and Fruit Trees Annual and Perennial Flowers, Ground Covers, plus Deciduous and Evergreen Trees and Shrubs	Leaf Scabs of Crabapple, Pyracantha, Hawthorn, Pear, Mountain Ash (Fusicadium and Venturia spp.)	7.5-10.0 or ¾ - 1 teaspoon/gal	Apply mid-summer or at first sign of disease.
	Tip Blight (Diplodea pinea, Sphaeropsis sapinea)	7.5-10.0 or ¾ - 1 teaspoon/gal	Apply with a compatible spreader sticker at recommended rates to entire tree. Thorough coverage is essential for optimal disease control. Begin application in spring when new growth starts. Make a second application just before needles emerge from the sheath and a third application 10 days later.
	Twig Blights of Juniper (Phomopsis and Kabatina spp.)	15.0-20.0 or 1 ½ - 2 teaspoon/gal	For Phomopsis, apply in spring. For Kabatina, apply late summer. Repeat every 7-10 days as needed during disease period.
	Stem Rots, Crown Rots and Root Rots (Botrytis (Gray Mold), Fusium, Gliocladium, Mycrothecium, Ramularia, Rhizoctonia, and Sclerotinia spp.), Black Root Rot (Thielaviopsis spp.), Cylindrocladium Rot	7.5-10.0 or ¾ - 1 teaspoon/gal	Apply as a drench treatment. Apply after transplanting to propagation bed, container, or pot at a rate to thoroughly soak the growing media (usually 1-3 pints per square foot depending on the media type and depth). Repeat every 21-28 days to provide adequate crop protection.
	Bulb, Corm and Rhizome Rots (Fusarium and Pencillium spp.)	7.5-10.0 or ¾ - 1 teaspoon/gal	Apply as a bulb treatment. Soak immediately after digging for 30 minutes in warm dip (80-85 degrees F). Dry well before storing.

GENERAL CHEMIGATION USE INSTRUCTIONS

Apply this product only through sprinkler, including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, or hand move, and drip irrigation systems. Do not apply this product through any other type of irrigation system.

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop 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.

CHEMIGATION SYSTEMS CONNECTED TO PUBLIC WATER SYSTEMS

Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.

Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, backflow preventer (RPZ), or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.

In addition, all directions and requirements specified for SPRINKLER OR DRIP CHEMIGATION SYSTEMS must be followed.

SPRINKLER OR DRIP CHEMIGATION SYSTEMS

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.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward 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, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.

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.

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 area intended for treatment.

This product should be injected at the end of the irrigation cycle or as a separate application. Stop injection equipment after treatment is completed and continue to operate irrigation system until all of this product has been cleared from the last emitter.

Contact your local Gowan Company Representative or your State Agricultural Extension Service for advice on the prompt use of some other suitable fungicide.

OPERATING INSTRUCTIONS

Determine the acreage to be treated by the sprinkler system.
 Measure the appropriate amount of Thiophanate-methyl 80 WDG needed to treat the acreage to be treated. Refer to specific directions for use for the application rate.
 Add the pre-measured Thiophanate-methyl 80 WDG to the chemigation system supply tank and dilute with water if needed. Constant agitation is required to keep the product in solution when Thiophanate-methyl 80 WDG is used alone or tank mixed with other pesticides registered for sprinkler chemigation application.
 Start the irrigation system and bring the system up to full pressure, making certain that all sprinkler heads are functioning properly.
 Engage the chemigation injection or venturi system to add the material to the irrigation lines.
 Continue to run irrigation system for a few minutes after supply tank is empty to allow material in the irrigation lines to reach the sprinkler heads furthest from the chemigation injection point.

STORAGE AND DISPOSAL

DO NOT contaminate water, food or feed by storage or disposal.
STORAGE: Store product in original container only, away from other pesticides, fertilizers, food or feed.
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 by the 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: 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.
FOR HOMEOWNER PRODUCTS:
 If empty: Do not reuse this container. Place in trash or offer for recycling if available.
 If partly filled: Call your local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain.

FOR 24-HOUR EMERGENCY ASSISTANCE (SPILL, LEAK OR FIRE), CALL CHEMTREC® (800) 424-9300.
 For other product information, contact Gowan Company or see Material Safety Data Sheet.

NOTICE ON CONDITIONS OF SALE

Our recommendations for use of this product are based upon tests believed to be reliable. The use of this product being beyond the control of the manufacturer, no guarantee, expressed or implied, is made as to the effects of such or the results to be obtained if not used in accordance with directions or established safe practice. The buyer must assume all responsibility, including injury or damage, resulting from its misuse as such, or in combination with other materials.

EPA Text Pending: Thiophanate Methyl 80 WDG (resent to EPA 10-28-03 for agreement)

ACCEPTED
with COMMENTS
In EPA Letter Dated:

NOV 18 2003

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

10163-249