

[CLICK HERE TO JUMP TO USE DIRECTIONS](#)



# FORMEC® 80

## TURF & ORNAMENTAL FUNGICIDE

Not for use on plants being grown for sale or other commercial use, or for commercial seed production, or for research purposes. For use on plants intended for aesthetic purposes and being grown in ornamental gardens or parks, or on golf courses or lawns and grounds.

**ACTIVE INGREDIENT:**

Mancozeb: A coordination product of zinc ion and manganese ethylene bisdithiocarbamate. . . . . 80%

In which the ingredients are:

Manganese<sup>++</sup> . . . . . 16%

Zinc<sup>++</sup> . . . . . 2%

Ethylene bisdithiocarbamate ion (C<sub>4</sub>H<sub>6</sub>N<sub>2</sub>S<sub>4</sub>) . . . . . 62%

**INERT INGREDIENTS:** . . . . . 20%

TOTAL 100%

### KEEP OUT OF REACH OF CHILDREN

# CAUTION

See below for additional Precautionary Statements, First Aid, and full Directions for Use.



**READ THE ENTIRE LABEL FIRST. OBSERVE ALL PRECAUTIONS AND FOLLOW DIRECTIONS CAREFULLY.**

### PRECAUTIONARY STATEMENTS

**Hazards to Humans & Domestic Animals**

**CAUTION:** Harmful if absorbed through the skin. May cause irritation of nose, throat, eyes, and skin. Do not breathe dust or spray mist.

**Personal Protective Equipment (PPE):**

*Applicators and other handlers (other than mixers and loaders) must wear:*

- Coveralls over long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks

*Mixers and loaders must wear:*

- Coveralls over long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks
- Protective eyewear
- Chemical resistant apron when cleaning equipment, mixing, or loading.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. 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 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. Drift or runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. 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 washwater or disposing of wastes.

### FIRST AID

<b>If inhaled:</b>	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If in eyes:</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If on skin or clothing:</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If swallowed:</b>	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<p>Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact 1-877-800-5556 for emergency medical treatment advice.</p>	

### 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 unprotected persons out of treated areas until sprays have dried.

### STORAGE & DISPOSAL

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

**STORAGE:** Keep away from fire and sparks. Store in a cool, dry, well-ventilated area. Do not allow product to become wet or overheated in storage: decomposition, impaired activity, or fire may result. Keep container closed when not in use. Pallets of containers should not be stacked more than three high. Provide access aisle for each two rows. Decomposition produces a foul odor; if observed, check for hot containers and immediately remove to open areas for disposal.

**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:** 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.

### GENERAL INFORMATION

FORMEC® 80 provides proven control of most common turfgrass diseases and is also effective in controlling major fungal diseases of ornamentals. Diseases of turfgrass and ornamentals can attack suddenly and unexpectedly causing severe damage and may even result in total loss of large areas of valuable turfgrass and ornamental plants. The use of a regular protective spray program will minimize the risk of disease damage and can generally be accomplished with lower rates and less frequent fungicide applications. Once diseases have become established, higher rates of fungicide and more frequent applications are required to bring them under control. Follow a regular preventive spray program for maximum performance of FORMEC® 80

Diseases on ornamentals generally occur under the same conditions favorable to turf diseases. Preventive sprays used during warm humid periods will reduce the risk of diseases. If preventive sprays are not used and disease does develop, three or more applications of FORMEC® 80 should be made at 3 to 5 day intervals to arrest the disease and protect new growth.

**TURFGRASS:** For golf courses, industrial or municipal turf areas and professional applications to residential lawns. Not for use by homeowners.

Start application when grass greens up in spring or when disease first appears and repeat at 7 to 14 day intervals or until disease threat is past. When conditions are especially favorable for disease development, apply maximum fungicide use rate on a 7 day spray schedule. Repeat applications more frequently during periods of high humidity.

**Spray Volumes:** Use sufficient water to provide through coverage. Generally spray volumes of 3 to 5 gallons per 1,000 square feet or 130 to 220 gallons per acre will provide adequate coverage.

The addition of a nonionic surfactant will improve fungicide performance by providing a more uniform spray deposit, increase foliar redistribution, and improve fungicide retention during periods of wet weather.

Diseases Controlled	Amount of Product per Application		Remarks <sup>1</sup>
	(Oz./1,000 Sq. Ft.)	(Lbs./Acre)	
Helminthosporium melting-out Rust (leaf, stem, stripe)	4	10.9	
Copper spot Fusarium blight Powdery mildew Red thread Slime mold	4 to 8	10.9 to 21.8	
Algae	6	16.3	
Dollar spot	6 to 8	16.3 to 21.8	
Rhizoctonia brown patch	4	10.9	Apply on a 7 day spray schedule.
Pythium blight	8	21.8	Apply at 5 day intervals, or more frequently, if conditions are especially favorable for disease development.
Fusarium snow mold	6 to 8	16.3 to 21.8	Apply at 2 to 6 week intervals during winter.

<sup>1</sup>Also refer to Directions For Use.

For small areas with knapsack sprayers, backpack sprayers, cart sprayers, pressure sprayers, or other hand-operated sprays, refer to the spray preparation in Table 2.

Amount of Water, Gallons	Amount of Product Per Application			Area To Treat Sq. Ft.
	4 Oz./1,000 Sq. Ft.	6 Oz./1,000 Sq. Ft.	8 Oz./1,000 Sq. Ft.	
1	5 Tbs.	7½ Tbs.	10 Tbs.	333
2	¾ cup	1 cup	1½ cup	667
3	1 cup	1½ cups	2 cups	1000

Equal Measures: 1 Cup = 15 Tablespoons (Tbs.) = 4 Ounces (Oz.) of product  
All volumes are level measures.

**USE RESTRICTIONS FOR TURFGRASS:**

- Do not graze treated areas.
- Do not use on grasses intended for grazing, such as range or pasture grasses.
- Do not feed clippings to livestock.
- Do not use for grasses grown for seed or on sod farms.
- Do not apply this product through any type of irrigation system.

**OUTDOOR USE ON ORNAMENTALS**

- NOT FOR USE BY HOMEOWNERS.
- NOT FOR USE IN GREENHOUSES.

**RESTRICTIONS: Do not use for food or feed purposes (Applies to all Ornamentals).**

Neither the manufacturer nor the seller has determined the effects of using FORMEC® 80 fungicide on ornamentals not specified on this label.

Prior to any large-scale applications on such plants, the user should determine the effects of FORMEC® 80 fungicide by testing a small section of the type of plants treated.

Do not apply this product through any type of irrigation system.

Optimum disease control is achieved when the fungicide is applied in a regularly scheduled preventive spray program. The addition of a nonionic surfactant will improve fungicide performance by providing a more uniform spray deposit, increased foliar redistribution, and improved fungicide retention during periods of wet weather.

**Spray Volumes:** Apply as a full coverage spray.

**Application Rates:** Apply 1½ pounds of FORMEC® 80 per 100 gallons of spray at 7 to 10 day intervals throughout the season for preventive treatment. For control treatments only, apply 2.0 pounds of FORMEC® 80 per 100 gallons of spray with three applications at 3 to 5 day intervals. See Table 3.

Ornamentals	Diseases Controlled	Remarks <sup>1</sup>
African Violet	Botrytis blight	
Anthurium	Anthracnose, spadix rot	
Arborvitae	Cercospora blight	
Ash, mountain	Entomosporium leaf spot Guignardia leaf blotch	
Ash, white	Anthracnose Cylindrosporium leaf spot	
Aster, perennial	Puccinia rusts	
Aucuba, japonica	Alternaria leaf spot Anthracnose	
Azalea	Cylindrocadium rot Petal blight Phytophthora twig and bud blight	Apply as a full coverage spray, 2 to 3 times a week, while flowers are opening. Direct spray into flowers and thoroughly spray ground under bushes.
Begonia	Botrytis blight	
Buffaloberry	Cylindrosporium leaf spot	
Camellia	Petal blight	Refer to Azalea.
Carnation	Rust Septoria leaf spot	
Cedar, red (Juniper)	Cercospora blight Phomopsis blight	
Chrysanthemum	Ascochyta blight Botrytis petal spot Rust	Apply twice weekly during blooming period.
Conifers	Lophodermium needle cast Pine gall rust Scirrhia brown spot	Begin application in spring or early summer before infection occurs. Repeat after heavy rain and at two week intervals as long as needed.
Cordylone	Cercospora leaf spot	
Crabapple (Ornamental)	Cedar-apple rust Scab Sphaeropsis leaf spot	
Cypress, Arizona (Cupressus sp.)	Cercospora blight Monochaetia canker	
Dahlia	Botrytis blight	
Dieffenbachia	Leptosphaeria brown spot	
Dogwood, flowering	Anthracnose Elsinoe leaf spot Septoria leaf spot	Apply when buds begin to open, when bracts have fallen, 4 weeks later and again in late summer after flower buds for next season have formed.
Dracaena	Fusarium leaf spot	
Elm	Black leaf spot	
Euonymus	Anthracnose	
Fatsia	Anthracnose	
Fern	Rhizoctonia blight	
Ficus	Cercospora leaf spot	
Firethorn (pyracantha)	Fusicladium scab	

Ornamentals	Diseases Controlled	Remarks <sup>1</sup>
Fir, Douglas	Swiss needle cast	
Fuchsia	Botrytis blight Rust	
Geranium	Rust	
Gladiolus	Botrytis blossom blight Curvularia leaf spot	Make regular weekly applications starting before diseases appear and increase to 2 or 3 applications per week during periods of heavy disease and during rainy weather. On flower spikes, reduce spray concentration to ¼ lb. per 100 gallons.
Hawthorn	Cedar-apple rust Fabraea leaf spot Frogeye leaf spot Hawthorn rust Scab	
Holly	Purple spot	
Hollyhock	Anthracnose Cercospora leaf spot Puccinia rust	
Honeysuckle	Herpobasidium blight	
Horsechestnut, Buckeye	Alternaria leaf spot Guignardia leaf blotch	
Hydrangea	Botrytis blight Cercospora leaf spot	
Iris	Didymellina leaf spot Mystrosporium ink spot	
Juniper	Phomopsis blight	
Laurel, mountain	Cercospora leaf spot Petal blight	Refer to Azalea.
Ligustrum	Cercospora leaf spot	
Lilly	Botrytis blight	
Magnolia	Gloeosporium leaf spot	
Maple	Alternaria leaf spot Phyllosticta leaf spot	See Footnote 2.
Marigold	Botrytis blossom blight	Do not use on French dwarf double or Signet type marigold seedlings.
Narcissus	Botrytis blight (fire) Smoulder	
Oak	Actinopelte leaf spot Taphrina leaf blister	
Orchid (Dendrobium)	Botrytis blossom blight	
Pachysandra	Volutella blight	Use a drenching spray of 2 lbs. per 50 gallons of water per 5,000 sq. ft. of bed. Start applications at first sign of disease and apply at least 5 applications at 10 to 14 day intervals.
Pansy	Anthracnose	
Peony	Botrytis blossom blight Phytophthora blight	Apply in early spring and early fall, drenching soil around plants as well as the foliage. Promptly destroy all infected plant parts.
Peperomia	Cercospora leaf spot	
Philodendron	Dactylaria leaf spot Phytophthora leaf spot	
Photinia	Entomosporium leaf spot	
Pleomele	Fusarium leaf spot	
Poinsettia	Sphaceloma scab	
Rhododendron	Cercospora leaf spot Discosia leaf spot Petal blight	Refer to Azalea.

Ornamentals	Diseases Controlled	Remarks <sup>1</sup>
Rose	Black spot Cercospora leaf spot Rust	
Schefflera	Alternaria blight	
Skunkbush, sumac	Cylindrosporium leaf spot	
Snapdragon	Rust	
Statice	Cercospora frogeye	
Syngonium	Cephalosporium leaf spot	
Tulip	Botrytis blight (fire)	
Venus, flytrap	Anthracnose	
Viburnum	Downy mildew Ramularia leaf spot	
Walnut	Anthracnose	See Footnote 3.
Zinnia	Alternaria leaf spot	

<sup>1</sup>Also refer to Directions For Use.  
<sup>2</sup>Do not use on sugar maples intended for the production of maple syrup.  
<sup>3</sup>Do not use treated walnuts for food or feed purposes.

For small areas with knapsack sprayers, backpack sprayers, cart sprayers, pressure sprayers, or other hand-operated sprayers, refer to the spray preparation in Table 4. As a preventive treatment, mix 1½ tablespoons of FORMEC® 80 with 1 gallon of water. As a control treatment, mix 2 tablespoons of FORMEC® 80 with 1 gallon of water.

Amount of Water Gallons	Amount of Product Per Application	
	Preventive Treatment, Tablespoons	Control Treatment, Tablespoons
1	1½	2
2	3	4
3	4½	6

*Equal Measures Preventive Treatment:* 1½ pounds of FORMEC® 80 per 100 gallons of water equals 1½ tablespoons of product per 1.0 gallon of water. All volumes are level measures.  
*Equal Measures Control Treatment:* 2.0 pounds of FORMEC® 80 per 100 gallons of water equals 2 tablespoons of product per 1.0 gallon of water. All volumes are level measures.

**LIMITED WARRANTY AND DISCLAIMER**

The manufacturer warrants only that the chemical composition of this product conforms to the ingredient statement given on the label, and that the product is reasonably suited for the labeled use when applied according to the Directions for Use.

**THE MANUFACTURER NEITHER MAKES NOR INTENDS ANY OTHER EXPRESS OR IMPLIED WARRANTIES, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE EXPRESSLY DISCLAIMED.** This limited warranty does not extend to the use of the product inconsistent with label instructions, warnings or cautions, or to use of the product under abnormal conditions such as drought, excessive rainfall, tornadoes, hurricanes, etc. These factors are beyond the control of the manufacturer or the seller. Any damages arising from a breach of the manufacturer's warranty shall be limited to direct damages, and shall not include indirect or consequential damages such as loss of profits or values, except as otherwise provided by law.

The terms of this Limited Warranty and Disclaimer cannot be varied by any written or verbal statements or agreements. No employee or agent of the seller is authorized to vary or exceed the terms of this Limited Warranty and Disclaimer in any manner.

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 **pbi/GORDON CORPORATION**  
 An Employee-Owned Company  
 1217 West 12th Street  
 Kansas City, Missouri 64101  
[www.pbigordon.com](http://www.pbigordon.com)