



# MANZATE D<sup>®</sup>

FUNGICIDE

WITH A ZINC SALT ADDED

**ACTIVE INGREDIENT:**

Maneb (Manganese ethylenebisdithiocarbamate) 80%  
(Manganese equivalent as metallic 16.5%)

**INERT INGREDIENTS** 20%

U.S. Pat. 3,379,610

EPA Reg. No. 352-291

Keep out of reach of children

**PRECAUTIONARY STATEMENTS**

**HAZARDS TO HUMANS**

**CAUTION!** MAY IRRITATE EYES, NOSE, THROAT AND SKIN  
MAY BE HARMFUL IF INHALED OR SWALLOWED

Avoid breathing dust or spray mist. Avoid contact with skin, eyes, and clothing. Keep away from fire or sparks.

Wear protective clothing including long pants, long sleeve shirt, gloves, hat and boots during mixing and loading operations.

**FIRST AID:** In case of contact, flush skin or eyes with plenty of water. For eyes, get medical attention.

**ENVIRONMENTAL HAZARDS**

This product is toxic to fish. Keep out of lakes, streams or ponds. Do not apply where runoff is likely to occur. Do not apply when weather conditions favor drift from areas treated.

**IMPORTANT**—Never allow "Manzate" D to become wet during storage. This may lead to certain chemical changes which will reduce the effectiveness of "Manzate" D as a fungicide and create vapors which may be flammable. Keep container closed when not in use.

**NET 3 LBS.**

MADE BY DU PONT IN COLOMBIA

E. I. DU PONT DE NEMOURS & COMPANY (INC.)  
BIOCHEMICALS DEPARTMENT, WILMINGTON, DELAWARE

11.1.11

MAR 25 1983

**GENERAL INFORMATION**

Manzate D is a fungicide used for the control of various fungi on a wide range of crops. It is effective against a wide range of fungi, including those which cause leaf spot, blight, and other diseases. It is also effective against some of the most common soil-borne fungi. Manzate D is available in a dry powder form, which is easy to mix and apply. It is highly effective and long-lasting, and it is safe for use on a wide range of crops. It is also safe for use in the home and on lawns. Manzate D is a registered fungicide under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA).

**NOTICE OF WARRANTY**

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**DIRECTIONS FOR USE**

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**SPRAYS**

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**DUSTS**

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**ALMONDS**

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ONION (2) IN HALF PANE

SPECIAL LABEL

ACTUAL SIZE

#### ◀ DIRECTIONS CONTINUED FROM SIDE PANEL

**TOMATOES:** Early blight, late blight, Septoria leaf spot, gray leaf spot (Stemphylium) and anthracnose—Apply when fruit of first clusters is well formed; repeat at 7- to 10-day intervals. (Do not use on young seedlings in greenhouses as injury may occur.) When weather conditions favor disease, more frequent applications may be necessary starting when plants are set in fields. Tomato plants treated with Manzate D tend to develop heavy foliage and spray gallonage should be increased accordingly to assure complete coverage. In areas where anthracnose is a serious problem on canning tomatoes, apply 3 lbs. Manzate D per acre. Do not apply within 5 days of harvest.

**POTATOES:** Early and late blights—Use 1 to 2 lbs. per acre. Apply as soon as plants are 2 to 6 inches high; repeat at 5- to 10-day intervals as long as blights threaten. Under severe disease conditions, use the shorter interval or the higher dosage.

**APPLES:** Scab, cedar apple rust, black rot (fruit and foliage), fly speck, sooty blotch, bitter rot, and white rot (Botryosphera)—Use 1 to 1½ lbs. per 100 gals. and apply up to 10 pounds product per acre per application (for low volume sprays, adjust accordingly). Add a spreader sticker. Apply at 7- to 14-day intervals throughout the season. For scab, begin at green tip or delayed dormant stage; for cedar apple rust, at bloom time; for other diseases, at first cover. Do not apply within 30 days of harvest; do not graze livestock in treated areas.

**CABBAGE:** Alternaria leaf spot and downy mildew—Use 1½ lbs. per 100 gals. and apply up to 150 gals. per acre. Add a spreader sticker. As a dust, use up to 40 lbs. per acre. Plant beds and direct-seeded fields—Apply 7 to 10 days after planting, or earlier if disease is present. Repeat at 3-day intervals until plants are set in the field or until field-seeded plants are thinned. Fields—Apply when the disease threatens; repeat weekly as needed. Shorten intervals to 3 to 5 days under severe conditions. Do not apply within 7 days of harvest.

**CELERY:** Early blight (Cercospora) and late blight (Septoria)—Apply when plants are established in the field; repeat as frequently as required (weekly under average conditions, every 3 to 5 days under severe disease conditions). Do not apply within 14 days of harvest. Remove residues by stripping, trimming and washing.

**CARROTS:** Leaf spot diseases—Apply when plants are 6 weeks old (or when disease threatens); repeat every 7 to 10 days.

**WATERMELONS:** Downy mildew, anthracnose, Cercospora leaf spot, and gummy stem blight. **CUCUMBERS:** Downy mildew, anthracnose (also Pythium fruit rot in South Carolina)—Use 2 to 3 lbs. per acre. Apply as soon as plants begin to run or when disease threatens; repeat at 7- to 10-day intervals as needed. Under severe conditions, shorten intervals to 3 to 5 days. Do not apply within 5 days of harvest.

**CANTALOUPEs and SQUASH (In Texas):** Downy mildew—Apply as soon as plants begin to run or when disease threatens; repeat at 7- to 10-day intervals as needed. Do not apply within 5 days of harvest.

**LETTUCE and ENDIVE:** Downy mildew—As a spray, use up to 150 gals. per acre and as a dust, up to 50 lbs. per acre. Apply when disease appears; repeat at 7- to 10-day intervals under average conditions, 3 to 5 days when disease conditions are severe. Do not apply within 10 days of harvest. Remove residues from head lettuce by stripping and trimming, and from leaf lettuce and endive by washing or other effective means.

**LIMA BEANS:** Downy mildew and anthracnose—Use up to 200 gals. spray or 30 lbs. dust per acre. Start applications during early blooming stage, or when disease first appears; repeat at 4- to 7-day intervals as needed. Do not apply within 4 days of harvest. Do not feed treated lima bean forage or hay to livestock.

**ONIONS:** Downy mildew, purple blotch (blight) and blast (Botrytis leaf blight)—Apply when first spots appear; repeat weekly as needed. Add a spreader sticker.

**SPINACH:** Downy mildew (blue mold) and white rust—Apply when disease first appears in area; repeat at 7- to 10-day intervals. Do not apply within 10 days of harvest. Remove residues by washing or other effective means.

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CONTINUED ON SIDE PANEL ▶

#### DIRECTIONS CONTINUED FROM BACK PANEL

**PEACHES (Pacific States) and NECTARINES (California):** Shot hole (fungus) and peach leaf curl (California only), apply dormant and popcorn sprays. For brown rot blossom blight, apply at pink bud and 25% to 75% of full-bloom (in Pacific Northwest add a petal-fall spray). Use 1½ to 2 lbs. per 100 gals. (6 to 8 lbs. per acre). For fruit brown rot (California only), apply 2 lbs. per 100 gals. (about 10 lbs. per acre) 4 weeks before harvest, or earlier if rot is easily found on green fruit, and repeat at 7- to 14-day intervals as needed. Add a spreader sticker. Do not apply to nectarines later than 14 days before harvest. If applied to peaches within 14 days of harvest, remove residues by brushing; do not apply later than 2 days before harvest.

**APRICOTS (in California):** Brown rot and shot hole (fungus), apply at red bud, early bloom, and full bloom; for green or jacket rot, apply at full bloom and petal fall. Use 2 lbs. per 100 gals. (6 to 8 lbs. per acre).

**GRAPES (in Great Lakes Area):** Black rot—Spray just before bloom, just after bloom and 7 to 10 days later.

**ROSES:** Cercospora leaf spot (Texas), Rust (California), Black spot—Use 1½ lbs.; spray when first leaves unfold; repeat weekly as needed. Add a spreader sticker.

**SEED TREATMENT—WHEAT, BARLEY, RYE, FLAX:** Seed decay and seedling blights from many seed- and soil-borne organisms; covered smuts or bunt of wheat, barley, rye—use "Manzate" D as an undiluted dust at rate of 2 oz. per bu.; for flax, use 3 to 4 oz. per bu. Apply with any suitable dust treader, or mix directly with seed in planter box by thorough stirring.

**LABEL TREATED SEED—**This seed treated with maneb fungicide (Manzate D). Do not use for food, feed, or oil purposes.

**NOTICE TO BUYER:** Purchase of this material does not confer any rights under patents of countries outside of the United States.

#### STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal. Do not reuse container. Bury empty container, or product that cannot be used, in a safe place away from water supplies, or dispose of by alternative procedures recommended by federal, state or local authorities. Open dumping is prohibited.

Printed in U.S.A.

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E.I. duPont de Nemours & Co.  
Legal Dept.  
Wilmington, DE 19898

Gentlemen:

Attention J.J. Trexel

Subject: DuPont Manzate D Fungicide  
EPA Registration No. 352-251  
Your letter dated February 24, 1983

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, is acceptable subject to the comments listed below. Five copies of the finished labeling must be submitted.

1. Add the signal word in 16 point type directly under "Keep out .... Children."
2. In the Environmental Hazard Statement, change "Keep ponds" to "Do not apply directly to water."

A stamped copy of the label is enclosed for your records. Submit 5 copies of the finished printed label.

Sincerely yours,



Henry M. Jacoby  
Product Manager (21)  
Fungicide-Herbicide Branch  
Registration Division (TS-767)

Enclosure

TS-767:H.JACOBY:DCR-03242:WANG-3074C:vgz:Raven:479-2013:3/15/83

E.I. duPont de Nemours & Co.							
Legal Dept.							
SYMBOL ▶							
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