



**ACTIVE INGREDIENT:**

|                            |       |
|----------------------------|-------|
| ethylenebisdithiocarbamate | 35.0% |
|----------------------------|-------|

in which the ingredients are

**Manganese**..... 70%

|                    |      |
|--------------------|------|
| Zinc <sup>2+</sup> | 0.9% |
|--------------------|------|

Ethylenebis(dithiocarbamate) ion ( $C_2H_4N_2S_4$ )<sup>-</sup> 271

### INERT INGREDIENTS

650

E. I. DU PONT DE NEMOURS &amp; CO (INC) BIOCHEMICALS DEPARTMENT WILMINGTON DELAWARE

ACCEPTED  
DIRECTIONS  
FOR USE

**JUN 17 1982**

**Under the Federal Insecticide,**

Fungicide, and Rodenticide Act.

as outlined, for the purpose  
of the study.

registered under  
EPA Reg. No. 35-328

U: Fat LPA

EPA REG. NO. 352 358

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

## PRECAUTIONARY STATEMENTS

## HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**WARNING!** CAUSES EYE IRRITATION.  
MAY IRRITATE NOSE, THROAT, AND SKIN.  
MAY BE HARMFUL IF INHALED OR SWALLOWED.

**Do not get in eyes. Avoid contact with skin and clothing. Avoid breathing spray mist.**

**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. Do not apply directly to lakes, streams, or ponds. Do not apply where runoff is likely to occur. Do not apply when weather conditions favor drift from areas treated. Do not contaminate water by cleaning of equipment or disposal of wastes.**

**IMPORTANT:** Keep in a cool place but not below 32°F. Temperature extremes will affect the quality of "Manzate" 200 Flowable.

## STORAGE AND DISPOSAL

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

**PESTICIDE DISPOSAL:** Pesticide, spray mixture, or rinse water that cannot be used according to label instructions must be disposed of according to applicable Federal, state, or local procedures.

**CONTAINER DISPOSAL:** Triple rinse (or equivalent) and offer for recycling or reconditioning, or dispose of in a sanitary landfill or by incineration if permitted by state or local authorities.

## NOTICE OF WARRANTY

Du Pont warrants that this product conforms to the chemical description on the label thereof and is reasonably fit for purposes stated on such label only when used in accordance with the directions under normal use conditions. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Du Pont. In no case shall Du Pont be liable for consequential, special or indirect damages resulting from the use or handling of this product. All such risks shall be assumed by the Buyer. DU PONT MAKES NO WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

### DIRECTIONS FOR USE

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

"Manzate" 200 FLOWABLE should be used only in accordance with recommendations on this label, or in separate published Du Pont recommendations available through local dealers.

Du Pont will not be responsible for losses or damages resulting from use of this product in any manner not specifically recommended by Du Pont. User assumes all risks associated with such nonrecommended use.

**"Manzate" 200 FLOWABLE**, containing a coordination product of zinc ion and maneb, is recommended for use as a spray for the control of many important plant diseases.

**As a Spray (Ground or Aerial Equipment).—**Apply "Manzate" 200 FLOWABLE at the rate shown, use sufficient water to provide thorough coverage, usually 20 to 100 gals. per acre for ground equipment and 5 to 8 gals. per acre for aircraft. Under severe disease conditions, use the higher rate and shorter interval specified for each crop. Add "Manzate" 200 FLOWABLE slowly to water in the spray tank with agitation or premix thoroughly in separate holding tank for concentrate or

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| CROPS   | DISEASES  | APPLICATION   |   | LAST APPLICATION DAYS   |  |
|---|---|---|---|---|--|
|   |   | QUARTS PER ACRE   | TIMING/INTERVAL   | TO HARVEST  | TO LIVESTOCK, GRAZING/FEEDING  |
| Apples, Crabapples, Quince  | Scab  | 0.8—1.7 per 100 gals. up to 8.4 qts./acre   | Begin at green tip or delayed dormant/7-14 days   | 15 (30 for apples)  | Do not graze or feed. Note: add spreader-sticker during last 3 cover sprays. |
|   | Cedar Apple Rust  | "   | Begin at blossom time/7-14 days   |   |  |
|   | Bitter Rot, Black Rot, Brown Rot, Fly Speck, Sooty Blotch   | "   | Begin at first cover/7-14 days  |   |  |
| Apples<br>Tank mix with BENLATE® Fungicide ("Benlate" Du Pont registered trademark) | Scab, Powdery Mildew, Sooty Blotch, Flyspeck, Cedar Apple Rust, Quince Rust, Bitter Rot, Black Rot, Brown Rot | 20 oz. plus 2 to 3 oz. "Benlate"† per 100 gals. May be used with or without spray oil | Apply at ½" green tip/7-14 days (or as needed through cover sprays)                                     | 30  | Do not graze livestock in treated orchards.                                  |
| Asparagus   | Rust  | 1.7   | Begin when rust appears. Apply as long as rust persists—usually 4 applications/10 days                  | Apply only on ferns after spears have been harvested  |  |
| Crown (planting stock)  | Crown Rot   | 0.8 per 100 gals.   | Dip Treat for 5 min.  |   |  |
| Bananas   | Sigatoka  | 1.7—3.4   | Begin when leaves first appear/14—21 days   |   |  |
| Caprifig  | Endosepsis (Fusarium Fungus), Mold  | 3.3 per 100 gals.   | Cut figs open and dip treat for at least 15 min.  |   |  |
| Carrots   | Alternaria And Cercospora Leaf Spot   | 1.3—1.7   | Begin when diseases first appear/7-10 days  | 7   | Do not use treated tops for food or feed                                     |
| Cereal Grains:<br>—Barley<br>—Oats<br>—Rye<br>—Wheat                                | Helminthosporium Leaf Blight, Septoria Leaf Spot  | 1.7   | Begin at tillering-to-jointing stage/7-10 days. Maximum of 3 applications                               | 26  | Do not graze livestock in treated areas within 26 days after application     |
| Celery, Fennel  | Early Blight, Late Blight   | 1.7   | Begin at emergence/3-5 days in plant bed, 7 days in field   | 14 Celery, 7 Fennel<br>Remove excess residues remaining at harvest by stripping, trimming and washing |  |
| Conifers  | Lophodermium Fungi  | 3.3 per 100 gals.*  | Nursery plantings and newly transplanted stock/21 days during sprinkler irrigation 28 days rest of year |   |  |
| Corn:<br>—popcorn, sweet<br>—field, hybrid<br>seed production                       | Helminthosporium Leaf Blight  | 1.3   | Begin when disease appears/4-7 days   | 7 Sweet 40-field popcorn & seed prod.   | Do not graze or feed sweet corn, forage, or fodder                           |
| Cotton (Southwest only)   | Rust  | 1—1.7   | Start when rust appears/10-14 days  | Do not apply after bolls open   | Do not graze or feed gin trash   |
| Cranberries   | Fruit Rot   | 2.5—5*  | Begin at mid-bloom/7-10 days  | 30  |  |
| Cucumbers   | Alternaria Leaf Spot, Anthracnose, Cercospora Leaf Spot, Downy Mildew, Gummy Blight, Scab                     | 1.7—2.5   | Begin at 2-leaf stage/5-7 days  | 5   |  |

\*Add spreader-sticker

†Use 3 oz. rate of "Benlate" and add spray oil for varieties more susceptible to powdery mildew and for scab if an application is missed during an infection period in order to reach these scab and prevent further infection.

CONTINUED ON OTHER SIDE

CONTINUED FROM OTHER SIDE

| CROPS                             | DISEASES   | APPLICATION  |  | LAST APPLICATION DAYS                               |   |
|-----------------------------------|--|--|--|---|---|
|                                   |  | QUARTS PER ACRE  | TIMING/INTERVAL  | TO HARVEST  | TO LIVESTOCK, GRAZING/FEEDING   |
| Grapes                            | Black Rot, Bunch Rot, Dead Arm, Downy Mildew   | 13-34  | Apply when shoots are 1/4-1 1/2 inches long, 3-5 inches long, 8-10 inches long. Continue at 10-14 days | 66<br>(CA—do not apply after fruit set)             |   |
| Melons                            | Alternaria Leaf Spot, Anthracnose, Cercospora Leaf Spot, Downy Mildew, Gummy Stem Blight, Scab | 1.7-2.5  | Begin at 2 leaf stage/5-7 days   | 5   |   |
| Onions (Dry Bulb)                 | Blast (Botrytis Leaf Blight), Downy Mildew, Purple Blotch (Blight), Neck Rot                   | 1.7-2.5  | Begin when diseases are reported in area/7 days  | 7<br>(Do not apply to exposed bulbs)                |   |
| Seed—(NY only)                    | Onion Smut (on emerging seedlings in muck soil)  | 2.5  | Furrow Drench at planting  |   |   |
| Papaya                            | Anthracnose, Phytophthora Fruit Rot  | 1.7-2.1*   | Begin at flowering. Treat central column, crown, blossom area, and developing fruit of tree/7-14 days  |   |   |
| Peanuts                           | Cercospora Leaf Spot, Rust   | 0.8-1.7  | Begin when disease appears/10-14 days (Normal Condition) 7 (Humid conditions)                          | 14  | Do not feed treated vines to livestock                                |
| Peanuts (Tank mix with "Benlate") | Cercospora Leafspot  | 1.3 plus 4 oz. "Benlate"                                   | Begin 35-40 days after planting, or when disease appears/10-14 days                                    | 14  | Do not graze or feed treated vines, hay or hulls to livestock         |
|                                   | Ascochyta Web Blotch   | 1.3 plus 4 oz. "Benlate"                                   | Begin 35-40 days after planting, or when disease first appears/7-14 days                               |   |   |
|                                   | Rust   | 1.3 plus 4 oz. "Benlate"                                   | Begin 35-40 days after planting, or when disease first appears/7-10 days                               |   |   |
| Pears                             | Scab   | 0.8-1.7 per 100 gals. up to 8.4 qts/acre                   | Begin at green tip or delayed dormant/7-14 days  | 15  | Do not graze<br>Note: Add spreader-sticker during last 3 cover sprays |
|                                   | Cedar Apple Rust   |  | Begin at blossom time/7-14 days  |   |   |
|                                   | Bitter Rot, Black Rot, Brown Rot, Fly Speck, Sooty Blotch                                      |  | Begin at first cover/7-14 days   | 15  | Do not graze  |
|                                   | Bear Psylla Nymphs (Pacific Northwest)   | 1.3-1.7 per 100 gals. up to 8.4 qts/acre                   | Begin at petal fall—thru post-harvest. Use as 2-3 sprays when high populations occur/14-28 days        |   |   |
| Pineapple Propagation Stock       | Phytophthora Heart Rot   | 27 per 100 gals.   | Preplant Dip   |   |   |
| Potatoes                          | Early Blight, Late Blight  | 0.8-1.7  | Begin when plants are 4-6 inches high/7-10 days  |   |   |
| Potato seed pieces                | Fusarium Seed Piece Decay, Common Scab   | 2.1 per 100 gals.  | Dip treat. Plant as soon as possible following treatment   | Do not use treated pieces for food or feed purposes |   |
| Squash (summer)                   | Alternaria Leaf Spot, Anthracnose, Cercospora Leaf Spot, Downy Mildew, Gummy Stem Blight, Scab | 1.7-2.5  | Begin when plants are in 2-leaf stage/5-7 days   | 5   |   |
| Sugar Beets                       | Cercospora Leaf Spot   | 1.3-1.7  | Begin when disease first threatens/7-10 days   | 14  | Do not feed treated tops to livestock                                 |
| Tobacco                           | — Plant Bed  | 0.4 per 100 gals. apply 3.5 gals./100 sq. yd. of plant bed | Begin when plants are about the size of a dime or when blue mold appears/3-14 days thru transplanting  |   |   |
|                                   | — Field  | 0.8-1.3 per 100 gals.                                      | Begin when blue mold is reported in the area/3-7 days  |   |   |

|              |   |  |   |    |   |
|--------------|---|--|---|----|---|
| Sugar Beets  | Cercospora Leaf Spot  | 1.3—1.7  | Begin when disease first threatens/7-10 days  | 14 | Do not feed treated tops to livestock                     |
| Tobacco      |   |  |   |    |   |
| —Plant Bed   | Anthrachnose, Blue Mold   | 0.4 per 100 gals. apply 3-5 gals / 100 sq. yd. of plant bed. | Begin when plants are about the size of a dime or when blue mold appears/3-14 days thru transplanting |    |   |
| —Field       | Blue Mold   | 0.8—1.3 per 100 gals.  | Begin when blue mold is reported in the area/3-7 days   |    |   |
| Tomatoes     | Anthrachnose, Early Blight, Gray Leaf Mold, Gray Leaf Spot (Stemphylium), Late Blight | 1.3—2.5  | Begin when seedlings emerge/7 days  | 5  |   |
|              | Bacterial Spot  | 1.3 plus 4 lbs. tribasic copper sulphate                     | Begin when seedlings emerge/3-4 days  | 5  |   |
| Turf Grasses | Algae   | 10 fl. oz. / 1000 sq. ft.                                    | Begin when algae begins to appear/7 days  |    |   |
|              | Copper Spot, Fusarium Blight (F. Roseum), Red Thread, Slime Molds                     | 7-10 fl. oz. / 1000 sq. ft.                                  | Begin when grass greens-up in spring/7-14 days  |    |   |
|              |   | 10-14 fl. oz. / 1000 sq. ft.                                 | Use during favorable disease conditions/7 days  |    |   |
|              | Bollar Spot (Sclerotinia)   | 10-14 fl. oz. / 1000 sq. ft.                                 | Begin when grass greens-up in spring/7-14 days  |    |   |
|              |   | 14 fl. oz. / 1000 sq. ft.                                    | Use during favorable disease conditions/7 days  |    |   |
|              | Pink (Fusarium) Snow Mold   | 10-14 fl. oz. / 1000 sq. ft.                                 | During winter/14-42 days  |    |   |
|              | Leaf Spot (Helminthosporium spp.) Rhizoctonia Brown Patch                             | 5-7 fl. oz. / 1000 sq. ft.                                   | Begin when disease appears/7-10 days, tees & greens—7-14 days, lawns—14-21 days, home lawns           |    |   |
|              |   | 10-14 fl. oz. / 1000 sq. ft.                                 | Use during favorable disease conditions/3-5 days  |    |   |
|              | Pythium Blight  | 14 fl. oz. / 1000 sq. ft.                                    | Begin at first sign of disease/5 days or more often during favorable disease conditions               |    |   |
|              | Leaf, Stem and Stripe Rust  | 5-7 fl. oz. / 1000 sq. ft.                                   | Begin when disease appears/7-10 days  |    | Do not graze treated areas or feed clippings to livestock |

| SEED TREATMENT | DISEASES  | SEED TREATMENT RATE—APPLY AS A SLURRY |  |   |
|----------------|---|---------------------------------------|--|---|
|                |   | FLUID OZ./BU.                         | FLUID OZ./CWT.   |   |
| Barley         | Seed Decay, Seedling Blights, Covered Smut, Bunt                                    | 2.2                                   | 4.5  | LABEL TREATED SEED—"Do not use for food, feed or oil purposes. This seed treated with Manzate™ 200 Flowable Fungicide." |
| Corn           | Damping Off, Seed Rots, Seedling Blights  | 2.5                                   | 4.5  |   |
| Cotton         |   |                                       |  |   |
| Acid delinted  | Damping Off, Seedling Blights   | —                                     | 5.1  |   |
| Reginned       |   | —                                     | 10.1   |   |
| Flax           | Seed Decay, Seedling Blight   | 3.4                                   | 6.1  | Note: The incorporation of a dye into the treating slurry is recommended  |
| Oats           | Seed Decay, Seedling Blights, Loose Smut  | 2.2                                   | 6.7  |   |
| Rice           | Achlya, Other Soil and Seed Borne Fungi Causing Seed Rot and Reduced Seedling Vigor | —                                     | 3.4—6.7 (of dry rice seed) (2.1—4.2 qts./ton of seed). Apply before, during, or after soaking in water |   |
| Rye            | Seed Decay, Seedling Blights, Covered Smut, Bunt                                    | 2.2                                   | 4.0  |   |
| Safflower      | Puccinia Carthami Cda (which causes foot-and-rot disease and foliage rust disease)  | —                                     | 3.4  |   |
| Sorghum        | Damping Off, Seedling Blights   | 2.5                                   | 5.1  |   |
| Tomatoes       | Damping Off, Seedling Blights   | —                                     | 13.5   |   |
| Wheat          | Seed Decay, Seedling Blights, Covered Smut, Bunt                                    | 2.2                                   | 3.7  |   |

\*Add spreader-sticker