

7-0506-236

07-13-2010

Transferred to 70506-236 → Aug 24  
1285 July 13, 2010

1/22



U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs  
Registration Division (7504P)  
Ariel Rios Building  
1200 Pennsylvania Ave., NW  
Washington, D.C. 20460

EPA Reg. Number:  
352-706

Date of Issuance:

JUL 13 2010

NOTICE OF PESTICIDE:  
 Registration  
 Reregistration  
(under FIFRA, as amended)

Term of Issuance:

Name of Pesticide Product:

DuPont Manzate Flowable  
Fungicide

Name and Address of Registrant (include ZIP Code):

E.I. Dupont de Nemours and Co. Inc.  
Stine-Haskell Research Center  
P.O. Box 30  
Newark, DE 19714

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act. Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is reregistered in accordance with FIFRA provided that you:

- 1) Submit and/or cite all data required for registration/reregistration review of your product when the Agency requires all registrants of similar products to submit data.

Signature of Approving Official:

Mary Waller  
Product Manager 21  
Fungicide Branch  
Registration Division (7504P)

Date:

JUL 13 2010

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2) Based on toxicity ranking per the acute toxicity review, the First Aid statements should be placed on the label in the following order:

“IF ON SKIN OR CLOTHING:...

IF IN EYES:...

IF INHALED:...

IF SWALLOWED:...”

3) Per the acute toxicity review, the Hazards to Humans and Domestic Animals must be revised to read:

“CAUTION

Harmful if absorbed through skin. Causes moderate eye irritation. Avoid contact with eyes, skin or clothing.”

4) The following revisions are needed to the handler PPE:

-The first sentence of the handler PPE section must be revised to read:

“Some materials that are chemical-resistant to this product are made of any waterproof material.”

-Although gloves are specified for all handlers per the acute toxicity review, the Agency finds that gloves are not needed for pilots and for seed-treatment handlers who are bagging treated seed or sewing bags containing treated seed. The handler glove statement must read:

“Chemical-resistant gloves (except pilots and seed-treatment handlers who are bagging treated seed or sewing bags containing treated seed).”

5) The text “Commercial seed treatments and professional applications to lawn grasses, golf courses, industrial (office park) and municipal lawns are not within the scope of the Worker Protection Standard” must be deleted from the Non-Agricultural Use Requirements box.

6) Per the RED, the label must clearly state that use on turfgrass in residential settings and in athletic fields is prohibited.

7) The text “...a dye must be added to the Manzate Pro-Stick treating slurry” must be revised to read “...a dye must be added to the DuPont Manzate Flowable treating slurry.”

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8) On page 2, add "to the extent consistent with applicable law" in front of "Dupont will not be responsible for losses or damages" and "User assumes all risks associated". Delete "recommended" from "recommended for use as a spray". Change "specific recommendations" to "specific directions".

9) On page 9, change "Not intended for use on fruit trees by homeowners" to "Intended for use on fruit trees only by professional applicators". On page 14, change "this product is not recommended for the treatment of marigolds" to "do not treat marigolds". On page 15, delete "and other similar nonresidential areas". Delete "not for homeowner use". On page 8, change "recommended on the copper" to "as directed on the copper".

A stamped copy of the label is enclosed for your records. You must submit one copy of the final printed label before you release the product for shipment. Products shipped after 12 months from the date of this letter or the next round of printing must bear the new revised label. If these EPA conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA. Your release for shipment of the product constitutes acceptance of these conditions. This label supersedes all other previously accepted labels. If you have any questions please call Erik Kraft at 703-308-9358 or email at Kraft.Erik@epa.gov.

Enclosure:   Product Chemistry Review  
                  Acute Toxicology Review



# DuPont™ Manzate® Flowable

fungicide

ACCEPTED  
with COMMENTS  
In EPA Letter Dated:

JUL 13 2010  
Under the Federal Insecticide,  
Fungicide, and Rodenticide Act  
as amended, for the pesticide  
registered under EPA Reg. No.

352-706

## DRAFT LABEL



# DuPont™ Manzate® Flowable fungicide

Flowable

Active Ingredients	By Weight
A coordination product of zinc ion and manganese ethylenebisdithiocarbamate in which the ingredients are	37.0%
Manganese <sup>++</sup>	7.4%
Zinc <sup>++</sup>	0.9%
Ethylenebisdithiocarbamate ion (C <sub>4</sub> H <sub>6</sub> N <sub>2</sub> S <sub>4</sub> ) <sup>-</sup>	28.7%

Inert Ingredients	ACCEPTED %
TOTAL	with COMMENTS
Contains 4.0 Pounds Active Ingredient	Per EPA Letter Dated:
EPA Reg. No. 352-706	JUL 13 2010
EPA Est. No. _____	Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No.
Net Contents: _____	

352-706

## KEEP OUT OF REACH OF CHILDREN

### CAUTION FIRST AID

**IF INHALED:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

**IF ON SKIN OR CLOTHING:** 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.

**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 eye. Call a poison control center or doctor for treatment advice.

**IF SWALLOWED:** Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For medical emergencies involving this product, call toll free 1-800-441-3637. See Label for Additional Precautions and Directions for Use.

## PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if swallowed, inhaled or absorbed through the skin. Avoid contact with skin, eyes or clothing. Avoid breathing spray mist. Remove contaminated clothing and wash clothing before reuse. Causes moderate eye irritation.

## PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical resistant to this product are nitrile rubber, natural rubber, or butyl rubber. If you want more options, follow the instructions for Category A on an EPA chemical resistance category selection chart.

**Mixers, loaders, applicators, and other handlers must wear:**

- Long-sleeved shirt
- Long pants
- Shoes and socks
- Chemical-resistant gloves made of any waterproof material (except pilots, groundboom applicators, airblast applicators and seed-treatment handlers who are bagging treated seed or sewing bags containing treated seed)

In addition, mixers/loaders supporting chemigation applications to turf on sod farms must wear a NIOSH-approved respirator with a dust/mist filter with MSHA/NIOSH approval number prefix TC-21C or any R, P, or HE filter.

See engineering controls for additional requirements.

Follow the manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. Discard clothing or other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

## ENGINEERING CONTROL STATEMENTS:

Pilots must use an enclosed cockpit that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(6)].

Human flagging is prohibited. Flagging to support aerial application is limited to use of the Global Positioning System (GPS) or mechanical flaggers.

When handlers use enclosed cabs or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR part 170.240 (d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

## USER SAFETY RECOMMENDATIONS

**USERS SHOULD:** Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing/ PPE immediately if pesticide gets inside, then wash thoroughly and put on clean clothing. 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 aquatic organisms. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment washwater or rinsate. Cover or incorporate spilled treated seed.

### 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 24 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
- Shoes and socks
- Chemical resistant gloves made of any waterproof material

### NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard 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.

Commercial seed treatments and professional applications to lawn grasses, golf courses, industrial (office park), and municipal lawns are not within the scope of the Worker Protection Standard.

Do not enter or allow others to enter treated areas until sprays have dried.

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

DuPont™ MANZATE® Flowable, containing mancozeb, is recommended for use as a spray for the control of many important plant diseases.

### APPLICATION INSTRUCTIONS

**AS A SPRAY** (Ground or Aerial Equipment) - Apply MANZATE® Flowable at the rate shown; use sufficient water to provide thorough coverage, use 20 to 100 gallons per acre for ground equipment and no less than 2 gallons per acre for aircraft. Add MANZATE® Flowable slowly to water in the spray tank with agitation, or premix thoroughly in separate holding tank for concentrate or aircraft sprayers. Continuous agitation is required to keep the product in suspension. A spreader-sticker spray adjuvant may be used with this product if needed; contact your local product distributor or DuPont representative for specific recommendations.

### RESTRICTIONS

#### Foliar Applications

#### Where EBDC Products Used Allow the Same Maximum Poundage of Active Ingredient Per Acre Per Season

If more than one product containing an EBDC active ingredient (maneb, mancozeb or metiram) is used on a crop during the same growing season and the EBDC products used allow the same maximum poundage of active ingredient per acre per season, then the total poundage of all such EBDC products used must not exceed any one of the specified individual EBDC product maximum seasonal poundage of active ingredient allowed per acre.

#### Where EBDC Products Used Allow Different Maximum Poundage of Active Ingredient Per Acre Per Season

If more than one product containing an EBDC active ingredient is used on a crop during the same growing season and the EBDC products used allow different maximum poundage of active ingredient per acre per season, then the total poundage of all such EBDC products used must not exceed the lowest specified individual EBDC product maximum seasonal poundage of active ingredient allowed per acre.

### SEED TREATMENT

In addition to the maximum number of foliar applications permitted by the formula stated above, a single application for seed treatment may be made on crops which have registered seed treatment uses.

### CHEMIGATION

Apply MANZATE® Flowable Fungicide only through sprinkler including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set or hand move irrigation systems. Do not apply MANZATE® Flowable 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.

**Specific Instructions for Public Water Systems:**

1. 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.
2. 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.
3. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
4. The pesticide injection pipeline must 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.
5. 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.
6. 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.
7. Do not apply when wind speed favors drift beyond the area intended for treatment.
8. Good agitation is required in the injection tank.
9. In moving systems, apply specified dosage of DuPont™ MANZATE® Flowable as a continuous injection. In non-moving systems inject MANZATE® Flowable for 15 to 30 minutes at end of cycle. Use the least amount of water possible consistent with uniform coverage.
10. Mix the amount of MANZATE® Flowable needed for acreage to be treated into the quantity of water

determined during prior calibration. For moving systems inject into the system continuously for one complete revolution of the field. For non-moving systems inject into system for the time established during calibration.

11. Stop injection equipment after treatment is completed and continue to operate irrigation equipment until all MANZATE® Flowable is flushed from system.

**Specific Instructions for Sprinkler Irrigation Systems:**

1. 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.
2. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
3. 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.
4. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
5. 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.
6. 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.
7. Do not apply when wind speed favors drift beyond the area intended for treatment.
8. Good agitation is required in the injection tank.
9. In moving systems, apply specified dosage of MANZATE® Flowable as a continuous injection. In non-moving systems inject MANZATE® Flowable for 15 to 30 minutes at end of cycle. Use the least amount of water possible consistent with uniform coverage.
10. Mix the amount of MANZATE® Flowable needed for acreage to be treated into the quantity of water determined during prior calibration. For moving systems inject into the system continuously for one complete revolution of the field. For non-moving systems inject into system for the time established during calibration.
11. Stop injection equipment after treatment is completed and continue to operate irrigation equipment until all MANZATE® Flowable is flushed from system.

## SPRAY DRIFT MANAGEMENT

A variety of factors including weather conditions (e.g., wind direction, wind speed, temperature, relative humidity) and method of application (e.g., ground, aerial, airblast, chemigation) can influence pesticide drift. The applicator must evaluate all factors and make appropriate adjustments when applying this product.”

### Wind Speed

Do not apply at wind speeds greater than 15 mph.

### Temperature Inversions

If applying at wind speeds less than 3 mph, the applicator must determine if a) conditions of temperature inversion exist, or b) stable atmospheric conditions exist at or below nozzle height. Do not make applications into areas of temperature inversions or stable atmospheric conditions.

### Other State and Local Requirements

Applicators must follow all state and local pesticide drift requirements regarding application of mancozeb. Where states have more stringent regulations, they must be observed.

### Equipment

All aerial and ground application equipment must be properly maintained and calibrated using appropriate carriers or surrogates.

#### *Additional requirements for aerial applications:*

1. The boom length must not exceed 75% of the wingspan or 90% of the rotor blade diameter.
2. Release spray at the lowest height consistent with efficacy and flight safety. Do not release spray at a height greater than 10 feet above the crop canopy unless a greater height is required for aircraft safety.
3. When applications are made with a crosswind, the swath must be displaced downwind. The applicator must compensate for this displacement at the up and downwind edge of the application area by adjusting the path of the aircraft upwind.

#### *Additional requirements for ground boom application:*

1. Do not apply with a nozzle height greater than 4 feet above the crop canopy.



CROP	DISEASES CONTROLLED	RATE OF DUPONT™ MANZATE® FLOWABLE PER APPLICATION QTS/ACRE	TIMING/INTERVALS (Also refer to Directions for Use)	RESTRICTIONS/COMMENTS
Apple	(See Pomefruit)			
Asparagus	Cercospora Leaf Spot, Rust	1.6	Start applications when rust first appears and repeat at 10-day intervals. Four applications are usually sufficient.	Apply only on asparagus ferns after spears have been harvested. Do not apply within 180 days of harvest in all states except CA and AZ (120 days). Do not apply more than 6.4 qts (6.4 lbs active) per acre per season.
Asparagus (Planting Stock)	Crown Rot	0.8/100 gals	Dip clean, loosely packed crowns into continuously agitated fungicide suspension for 5 minutes. Drain and plant as soon as possible.	Wash dirty crowns before dip treatment. Replace suspension in clean tank when discolored by soil.
Banana (Including Plantain)	Sigatoka	1.6-2.4	Apply when leaves first appear and repeat every 14 to 21 days or as required. Use sufficient water to provide adequate coverage.	Do not apply more than 24 qts (24 lbs active) per acre per growing cycle. Minimum preharvest interval 0 days.
Barley, Oat, Rye, Wheat (Including Triticale)	Helminthosporium Leaf Spot, Leaf Rust, Septoria Glume Blotch, Septoria Leaf Spot, Tan Spot	1.6	Start application at onset of disease or when plants are in the tillering to jointing stage and repeat at 7- to 10-day intervals.	Do not make more than three applications during the season. Do not apply more than 4.8 qts (4.8 lbs active) per acre per crop. Do not apply within 26 days of harvest. PHI for barley, rye, and wheat is Feekes Growth Stage 10.5 (typically 35-45 days), but no less than 26 days. Do not graze livestock in treated areas prior to harvest.
Caprifig (Non-Food Use)	Endosepsis (Fusarium), Mold	3.2/100 gals	Prepare mamme figs by making a shallow cut through the eye and then hand dividing to avoid wasp injury. Submerge mamme figs in the continuously agitated suspension for at least 15 minutes. Drain before placement in trees.	Use fresh dipping suspension after treating 4 to 5 batches of figs.
Corn (Sweet Corn for Fresh Use or Processing; Popcorn; and Sweet Corn for Seed Production, including Hybrid Seed) (Field and Field Corn for Hybrid Seed Production)	Common Rust, Helminthosporium Leaf Blight, Gray Leaf Spot	1.2	Use sufficient water for thorough coverage. Start applications when disease first appears and repeat at 4- to 7-day intervals.	Do not apply within 7 days of harvest. Do not apply more than 18 qts (18 lbs active) per acre per crop east of the Mississippi and AR and LA. Do not apply more than 6 qts (6 lbs active) per acre per crop west of the Mississippi except AR and LA.
				Deleted "Do not feed treated forage to livestock." 
Cranberry	Fruit Rot	2.4-4.8	Start applications at mid-bloom and repeat at 7- to 10-day intervals.	Do not apply within 30 days of harvest. Do not apply more than 14.4 qts (14.4 lbs active) per acre per season.
Cucumber	Anthrachnose, Cercospora Leaf Spot, Downy Mildew, Gummy Stem Blight, Scab	1.6-2.4	Start applications when plants are in the two-leaf stage and repeat at 7- to 10-day intervals. Use sufficient water and direct spray to provide thorough coverage of both upper and lower leaf surfaces.	Do not apply within 5 days of harvest. Do not apply more than 19.2 qts (19.2 lbs active) per acre per crop.

CROP	DISEASES CONTROLLED	RATE OF DUPONT™ MANZATE® FLOWABLE PER APPLICATION QTS/ACRE	TIMING/INTERVALS (Also refer to Directions for Use)	RESTRICTIONS/COMMENTS
Fennel	Early Blight, Late Blight	1.6	Begin in plant beds at emergence. Repeat at 7- to 10-day intervals.	Do not apply within 14 days of harvest. Do not apply more than 12.8 qts (12.8 lbs active) per acre per crop. Do not graze livestock in treated areas.
Grape (East of the Rocky Mountains)	Black Rot, Bunch Rot, Deadarm, Downy Mildew	1.2-3.2	Apply in sufficient water to provide thorough coverage starting when new shoots are 1/2 to 1 1/2 inches long. Repeat when shoots are 3 to 5 inches long, when shoots are 8 to 10 inches long, and then at 7- to 10-day intervals until fruit is set. For late season control of black rot, deadarm and downy mildew, the use of other approved and recommended fungicides is suggested.	Do not apply within 66 days of harvest. Do not apply more than 19.2 qts (19.2 lbs active) per acre per season.
Grape (West of the Rocky Mountains)	Black Rot, Bunch Rot, Deadarm, Downy Mildew	1.2-2	Apply in sufficient water to provide thorough coverage starting when new shoots are 1/2 to 1 1/2 inches long. Repeat when shoots are 3 to 5 inches long, when shoots are 8 to 10 inches long, and then at 7- to 10-day intervals until fruit is set. For late season control of black rot, deadarm and downy mildew, the use of other approved and recommended fungicides is suggested.	Do not apply within 66 days of harvest except in CA where no application can be made after bloom. Do not apply more than 6 qts (6 lbs active) per acre per season.
Melon Cantaloupe, Casaba, Crenshaw, Honeydew, Watermelon	Alternaria Leaf Spot, Anthracnose, Downy Mildew, Gummy Stem Blight, Cercospora Leaf Spot	1.6-2.4	Start applications when plants are in the two-leaf stage and repeat at 7- to 10-day intervals. Use sufficient water and direct spray to provide thorough coverage of both upper and lower leaf surfaces. Some varieties are sensitive to MANZATE® Flowable fungicide. Consult State Cooperative Extension Service Specialist prior to use.	Do not apply within 5 days of harvest. Do not apply more than 19.2 qts (19.2 lbs active) per acre per season.
Oat	(See Barley)			
Onion (Dry Bulb), Garlic, Shallot	Botrytis Leaf Blight, Downy Mildew, Neck Rot, Purple Blotch	2.4	Follow a protective spray schedule starting when diseases are first reported in the area and repeat at 7-day intervals throughout the season.	Do not apply within 7 days of harvest. Do not apply to exposed bulbs. Do not apply more than 24 qts (24 lbs active) per acre per crop.
	Smut	2.4	Apply 2.4 qts per acre as a furrow drench at time of planting onion seeds. Use 75 to 125 gallons of water per acre.	Do not use more than 2.4 qts active per acre (29,000 linear feet of furrow) with an 18 inch row spacing.
Papaya	Anthracnose (Colletotricum), Phytophthora Fruit Rot, Black Spot (Cercospora)	1.6-2.0 (minimum 50 gals per acre)	Begin at flowering; treat central column crown, blossom area and developing fruit. Repeat at 14- to 21-day intervals.	Do not use more than 28 qts (28 lbs active) per acre per year, i.e., do not make more than 14 applications at the maximum use rate per year. Minimum pre-harvest interval 0 days.
Peanut	Ascochyta Web Blotch Cercospora Leaf Spot, Rust	0.8-1.6	Start application when disease first appears or is reported in area. Repeat sprays at 7- to 14-day intervals. Reduce sprays to a 7-day interval during humid weather.	Do not apply within 14 days of harvest. Do not use more than 12.8 qts (12.8 lbs active) per acre per crop. Do not feed treated vines to livestock.

CROP	DISEASES CONTROLLED	RATE OF DUPONT™ MANZATE® FLOWABLE PER APPLICATION QTS/ACRE	TIMING/INTERVALS (Also refer to Directions for Use)	RESTRICTIONS/COMMENTS
Pear	(See Pomefruit)			
Pome Fruit Apple, Pear, Crabapple, Quince	Rusts, Scab, Fabrea Leaf Spot	<p>4.8 Maximum per acre use rate based on thorough coverage dilute sprays.</p> <p>Use 50 gal minimum per acre.</p> <p>Consult State Extension Service if necessary to adjust for variable tree size.</p>	<p><b>Pre-Bloom/Bloom Use:</b> Begin application at 1/4 to 1/2 inch green tip and continue on a 7- to 10-day schedule through bloom. Use either the "Pre-Bloom/Bloom" or "Extended Application" schedule. <b>DO NOT COMBINE OR INTEGRATE THE TWO TREATMENT SCHEDULES</b></p> <p><b>Extended Application Schedule or for Use in Tank Mixtures:</b> For implementation of IPM programs, applications based on tree-row volume, or for use as a resistance management tool; begin applications at 1/4 to 1/2 inch green tip and continue applications on a 7- to 10-day schedule through the second cover spray. Use either the "Pre-Bloom/Bloom" or "Extended Application" schedule. <b>DO NOT COMBINE OR INTEGRATE THE TWO TREATMENT SCHEDULES</b></p>	<p>Do not apply more than 4.8 qts (4.8 lbs active) per acre per application. Do not apply after bloom. Do not apply more than 19.2 qts (19.2 lbs active) per acre per year. Do not graze livestock in treated areas. It is recommended that this product be used in an Integrated Pest Management Program.</p> <p>Do not apply more than 2.4 qts (2.4 lbs active) per acre per application. Do not apply within 77 days of harvest. Do not apply more than 16.8 qts (16.8 lbs active) per acre per year. Do not graze livestock in treated areas. It is recommended that this product be used in an Integrated Pest Management Program.</p>
Potato	Early Blight, Late Blight, Black Dot  Disease Suppression: Botrytis	0.4-1.6	Begin applications when plants are 4 to 6 inches high by applying 1 qt (1 lb active) per acre. As the vines increase in size, apply 1 to 1.6 qts per acre at intervals of 5- to 10-days or 0.4 qt per acre at 3 to 5 day intervals.	Do not apply more than 11.2 qts (11.2 lbs active) per acre per crop. Do not use within 3 days of harvest in CT, DE, FL, MA, ME, MI, NH, NY, OH, PA, RI, VT, WI, and within 14 days elsewhere. Vine-kill should occur 14 days before harvest. It is recommended that this product be used in an Integrated Pest Management Program.
Potato (Seedpiece Treatment)	Fusarium Decay, Seedborne Common Scab	1 per 50 gal	Dip whole or cut potato tubers in 1 qt MANZATE® Flowable fungicide per 50 gallons of water. Place treated tubers in a clean container following treatment and plant as soon as possible. Spread treated seedpieces in a cool place if held before planting.	Do not use treated seed potatoes for food or feed purposes. Seed-pieces that have been treated with this product that are then packaged or bagged for future use must contain the following labeling on the outside of the seed-piece package or bag: "When opening this bag or loading/pouring the treated seed-pieces, wear long-sleeved shirt, long pants, shoes, socks, chemical resistant gloves, and a NIOSH-approved respirator with a dust/mist filter with MSHA/NIOSH approval number prefix TC-21C or any R, P, or HE filter. Treated Seed-Pieces - Do Not Use for Food, Feed, or Oil Purposes." After the seed pieces have been planted, do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 24 hours. Exception: Once the seed pieces are planted in soil or other planting media, the Worker Protection Standard allows workers to enter the treated area without restriction if there will be no worker contact with the soil/media subsurface.
Squash (Summer Squash, Including Edible Gourd)	Downy Mildew	1.6-2.4	Start applications when plants are in the two-leaf stage and repeat at 7- to 10-day intervals. Use sufficient water and direct spray to provide thorough coverage of both upper and lower leaf surfaces.	Do not apply within 5 days of harvest. Do not apply more than 19.2 qts (19.2 lbs active) per acre per crop.

CROP	DISEASES CONTROLLED	RATE OF DUPONT™ MANZATE® FLOWABLE PER APPLICATION QTS/ACRE	TIMING/INTERVALS (Also refer to Directions for Use)	RESTRICTIONS/COMMENTS
Sugar Beet	Cercospora Leaf Spot	1.2-1.6	Begin when disease first threatens. Repeat at 7- to 10-day intervals.	Do not apply within 14 days of harvest. Do not apply more than 11.2 qts (11.2 lbs active) per acre per crop. Do not feed treated sugar beet tops to livestock.
Tomato (East of the Mississippi River)	Anthracnose, Early Blight, Gray Leaf Spot, Late Blight, Leaf Mold, Septoria Leaf Spot	0.6-1.2	Start application when seedlings emerge or transplants are set. Repeat at 3- to 7-day intervals throughout the season.	Do not apply within 5 days of harvest. Do not apply more than 16.8 qts (16.8 lbs active) per acre per crop.
		1.2-2.4	Start application when seedlings emerge or transplants are set. Repeat at 7- to 10-day intervals throughout the season.	
	Bacterial Speck and Spot	1.2-2.4	Start application when seedlings emerge or transplants are set. Repeat at 7- to 10-day intervals throughout the season.	Do not apply within 5 days of harvest. Do not apply more than 16.8 qts (16.8 lbs active) per acre per crop. Use a full rate of a fixed copper fungicide in a tank mix combination with a half to full rate of MANZATE® Flowable. Follow the application interval recommended on the copper fungicide label.
Tomato (West of the Mississippi River)	Anthracnose, Early Blight, Gray Leaf Spot, Late Blight, Leaf Mold, Septoria Leaf Spot	0.6-0.8	Start application when seedlings emerge or transplants are set. Repeat at 3- to 7-day intervals throughout the season.	Do not apply within 5 days of harvest. Do not apply more than 6.4 qts (6.4 lbs active) per acre per crop.
		1.2-1.6	Start application when seedlings emerge or transplants are set. Repeat at 7- to 10-day intervals throughout the season.	
	Bacterial Speck and Spot	1.2-1.6	Start application when seedlings emerge or transplants are set. Repeat at 7- to 10-day intervals throughout the season.	Do not apply within 5 days of harvest. Do not apply more than 6.4 qts (6.4 lbs active) per acre per crop. Use a full rate of a fixed copper fungicide in a tank mix combination with a half to full rate of MANZATE® Flowable. Follow the application interval recommended on the copper fungicide label.
Watermelon	(See Melon)			
Wheat (Including Triticale)	(See Barley)			

**FLOWERS, FOLIAGE PLANTS, AND ORNAMENTALS**

**NOT INTENDED FOR USE ON FRUIT TREES BY HOMEOWNERS.  
TREATED PLANTS MUST NOT BE USED FOR FOOD OR FEED PURPOSES.**

Plant sensitivities to DuPont™ MANZATE® Flowable have been found to be acceptable in specific genera and species listed on this label, however, phototoxicity may occur. Due to the large number of species and varieties of ornamentals and nursery plants, it is impossible to test each one for sensitivity to MANZATE® Flowable. Neither the manufacturer or seller has determined whether or not MANZATE® Flowable can be safely used on ornamental or nursery plants not listed on this label. The user should determine if MANZATE® Flowable can be used safely prior to commercial use. In a small area, apply the recommended rates to the plants in question, i.e. bedding plants, foliage, etc., and observe for 7 to 10 days for symptoms of phytotoxicity prior to commercial use. Use MANZATE® Flowable in commercial greenhouses and nurseries for control of fungal diseases of flowers, foliage and ornamentals. Do not make more than 20 applications per year.

**Aerial Application:** For aerial applications made to field-planted ornamentals, apply 0.8 to 1.6 quarts per acre; a minimum rate of 5 gals of spray per acre should be used during aerial applications.

**Application of Dilute Sprays:** Apply as thorough coverage spray using 0.8 quarts to 1.6 quarts per acre (0.8 to 1.6 lbs active ingredient) per 100 gals of water or per acre (see table below). Begin application at first sign of disease and repeat at 7- to 10-day intervals or as needed; use shorter interval during periods of frequent rains or when severe disease conditions persist. MANZATE® Flowable may be used alone or in combination with other fungicides as a maintenance spray. Use higher rate and shorter intervals during periods of excessive wetness and rapid plant growth.

Label Use Rate quarts per acre or quarts per 100 gals	Fluid ounces (fl. oz.) of MANZATE® Flowable required to make the following spray volume:			
	10 gal	5 gal	2 gal	1 gal
0.8	2.6	1.3	0.5	0.3
1.0	3.2	1.6	0.6	0.3
1.6	5.1	2.6	1.0	0.5

MANZATE® Flowable is recommended for use on certain flower, foliage and ornamental plants listed in the table below for control of the following diseases and pathogens:

PLANT	PATHOGEN CONTROLLED:
Abutilon	Alternaria, Cercospora, Cladosporium, Colletotrichum, Puccinia
African violet	Alternaria, Botrytis
Ageratum	Alternaria, Puccinia, Rhizoctonia, Sclerotium
Aglaonema	Alternaria
Almond, ornamental	Botrytis, Cladosporium, Coryneum, Gloeosporium, Monilinia
Alyssum	Microsphaera alni
Andromeda	Exobasidium, Rhytisma, Venturia
Anthurium	Colletotrichum, Gloeosporium
Apple	Alternaria, Cephalosporium, Colletotrichum, Coryneum, Elsinoe, Fusarium, Gloeosporium, Gymnosporangium, Helminthosporium, Leptosphaeria, Monilinia, Monochaetia, Mycosphaerella, Pestalotia, Venturia
Arborvitae	Alternaria, Botrytis, Cercospora, Coryneum, Lophodermium, Mycosphaerella, Pestalotia
Ash	Cercospora, Cyindrosporium, Gloeosporium, Puccinia, Rhizoctonia, Sphaeropsis
Ash, Mountain	Gymnosporangium
Aster	Alternaria, Ascochyta, Botrytis, Colletotrichum, Fusarium, Phomopsis, Phyllosticta, Puccinia, Ramularia, Rhizoctonia, Septoria, Uromyces
Aucuba japonica	Alternaria, Cercospora, Gloeosporium, Phomopsis, Phyllosticta
Azalea	Alternaria, Botrytis, Cladosporium, Colletotrichum, Cyindrocladium, Ovinia
Baby's Breath	Botrytis, Rhizoctonia
Basswood	Cercospora, Phyllosticta
Begonia	Botrytis, Cercospora, Gloeosporium, Rhizoctonia

Birch	Cylindrosporium, Gloeosporium, Glomerella, Melampsoridium, Taphrina
Bougainvillea	Colletotrichum
Boxwood	Fusarium, Volutella
Buckeye	Cercospora, Glomerella, Guignardia, Monchaetia, Phyllosticta, Septoria, Taphrina
Buffalo berry	Cylindrosporium, Puccinia, Rhizoctonia, Septoria
Catalpa	Alternaria, Cercospora, Gloeosporium, Phomopsis, Rhizoctonia
Camellia	Botrytis, Cercospora, Elsinoe, Exobasidium, Glomerella, Pestalotia, Phomopsis, Phyllosticta
Carnation	Alternaria, Botrytis, Cladosporium, Colletotrichum, Fusarium, Helminthosporium, Septoria, Stemphylium, Uromyces
Cedar	Lophodermium, Gymnosporangium
Cherry, ornamental	Alternaria, Cercospora, Cladosporium, Coccomyces, Coryneum, Fusicladium, Monilinia, Phomopsis, Phyllosticta, Taphrina
Chinese evergreen	Colletotrichum, Gloeosporium
Christmas cactus	Alternaria, Cercospora, Colletotrichum, Fusarium, Phomopsis
Chrysanthemum	Alternaria, Ascochyta, Bipolaris, Botrytis, Cercospora, Cylindrosporium, Helminthosporium, Phyllosticta, Septoria, Stemphylium
Cockscomb (Celosia)	Alternaria, Cercospora
Coleus	Alternaria, Botrytis, Phyllosticta
Columbine	Ascochyta, Botrytis, Cercospora, Puccinia, Rhizoctonia, Septoria
Coryline	Cercospora
Cotoneaster	Cercospora, Phyllosticta, Venturia
Crabapple	Gymnosporangium, Marssonina, Phyllosticta, Septoria, Venturia
Crape myrtle	Cercospora, Phomopsis, Phyllosticta
Croton	Gloeosporium
Cuphea (Mexican heather)	Gloeosporium, Rhizoctonia
Cyclamen	Botrytis, Cladosporium, Fusarium, Glomerella, Phyllosticta, Ramularia
Cypress	Coryneum, Fusarium, Gymnosporangium, Lophodermium, Monchaetia, Pestalotia, Phomopsis
Dahlia	Alternaria, Botrytis, Fusarium, Rhizoctonia
Daisy	Botrytis, Cercospora, Whetzelia
Daisy, Shasta	Cylindrosporium, Septoria, Fusarium
Daisy, Transvall	Alternaria, Botrytis, Gloeosporium
Daylily	Alternaria, Botrytis, Cercospora, Colletotrichum, Phomopsis, Phyllosticta, Puccinia
Delphinium	Ascochyta, Botrytis, Cercospora, Diaporthe, Fusarium, Phyllosticta, Puccinia, Ramularia, Septoria, Volutella
Dieffenbachia	Cephalosporium, Colletotrichum, Gloeosporium, Glomerella, Leptosphaeria
Dogwood	Ascochyta, Botrytis, Cercospora, Colletotrichum, Elsinoe, Phyllosticta, Septoria
Dracaena	Alternaria, Cercospora, Colletotrichum, Fusarium, Phyllosticta
Dusty Miller	Fusarium, Puccinia
Elm	Botryosphaeria, Cephalosporium, Cercospora, Coryneum, Cylindrosporium, Fusarium, Gloeosporium, Monochaetia, Mycosphaerella, Phomopsis, Phyllosticta, Rhizoctonia, Sphaeropsis, Taphrina
Euonymus	Cercospora, Colletotrichum, Gloeosporium, Marssonina, Ramularia, Septoria, Whetzelinia
Fatsia	Alternaria, Cercospora, Colletotrichum, Phyllosticta
Fern	Botrytis, Cercospora, Curvularia, Cylindrosporium, Glomerella, Phyllosticta, Taphrina
Ficus	Alternaria, Ascochyta, Cephalosporium, Cercospora, Cladosporium, Colletotrichum, Fusarium, Gloeosporium, Glomerella, Mycosphaerella, Phomopsis, Stemphylium

Fir (Abies)	Cephalosporium, Lophodermium, Melampsora, Phomopsis, Sphaeropsis
Fir, Douglas	Phaeocryptopus
Fir, Frasier	Phaeocryptopus
Firethorn	Fusarium, Fusicladium, Rhizoctonia
Fittonia	Rhizoctonia
Four-o'clock	Cercospora, Rhizoctonia
Fuchsia	Botrytis, Phomopsis, Septoria
Garden Balsam	Alternaria, Botrytis, Cercospora
Gardenia	Alternaria, Botrytis, Diaporthe, Mycosphaerella, Pestalotia, Phomopsis, Phyllosticta, Rhizoctonia
Geranium	Alternaria, Ascochyta, Bipolaris, Botrytis, Cercospora, Cylindrosporium, Helminthosporium, Puccinia, Ramularia, Rhizoctonia, Septoria, Uromyces, Venturia
Gladiolus*	Alternaria, Botrytis, Cladosporium, Curvularia, Rhizoctonia, Septoria, Stemphylium
Gloxinia	Botrytis, Colletotrichum
Gold Dust Tree	Gloeosporium, Glomerella, Pestalotia, Phyllosticta
Gomphrena	Cercospora
Gypsophila	Botrytis, Rhizoctonia
Hawthorn	Cercospora, Cylindrosporium, Gloeosporium, Gymnosporangium, Monilinia, Mycosphaerella, Phyllosticta, Septoria, Venturia
Hemlock, Eastern (Tsuga)	Botrytis, Cylindrosporium, Melampsora, Rhizoctonia
Hibiscus	Alternaria, Cercospora, Colletotrichum, Fusarium, Phyllosticta
Hickory	Cercospora, Cladosporium, Elsinoe, Fusarium, Gnomonia, Mycosphaerella, Pestalotia, Phyllosticta, Septoria
Holly	Phyllosticta
Hollyhock	Alternaria, Ascochyta, Cercospora, Colletotrichum, Puccinia, Septoria
Honeysuckle	Alternaria, Cercospora, Gloeosporium, Herpobasidium, Phyllosticta
Horse Chestnut	See Buckeye
Hydrangea	Ascochyta, Botrytis, Cercospora, Colletotrichum, Phyllosticta, Rhizoctonia, Septoria
Impatiens	Cercospora, Phyllosticta, Rhizoctonia, Septoria
Indian Hawthorn	Entomosporium
Iris	Ascochyta, Botrytis, Cladosporium, Fusarium, Kabatiella, Phyllosticta, Puccinia, Rhizoctonia
Ivy	Cladosporium, Colletotrichum, Glomerella, Phyllosticta, Ramularia, Rhizoctonia, Sphaeropsis
Jade plant	Gloeosporium, Phomopsis
Juniper	Cercospora, Coryneum, Gymnosporangium, Lophodermium, Pestalotia, Phomopsis, Stigmata
Kalanchoe	Cercospora, Stemphylium
Larkspur	See Delphinium
Laurel, Cherry	Alternaria, Cercospora, Coccoomyces, Monilinia, Phyllosticta, Septoria
Laurel, Mountain	Cercospora, Mycosphaerella, Pestalotia, Phomopsis, Rhytisma, Septoria
Lavender, Cotton	Septoria
Lilac	Botrytis, Cercospora, Cladosporium, Cylindrocladium, Gloeosporium
Lily	Botrytis, Cercospora, Cladosporium, Colletotrichum, Fusarium, Puccinia, Ramularia, Rhizoctonia
Lirope	Alternaria, Cercospora, Colletotrichum, Leptothyrium
Lobelia	Botrytis, Cercospora, Puccinia, Rhizoctonia, Septoria
Loquat	Colletotrichum, Fusicladium, Pestalotia, Phyllosticta, Septoria
Magnolia	Alternaria, Cercospora, Cladosporium, Colletotrichum, Glomerella, Rhizoctonia

Mahonia	Cercospora, Cylindrocladium, Gloeosporium, Leptosphaeria, Phomopsis, Phyllosticta, Puccinia
Maple	Alternaria, Cercospora, Ciborinia, Fusarium, Marssonina, Monochaetia, Phomopsis, Phyllosticta, Rhizoctonia, Rhytisma, Septoria, Sphaeropsis, Taphrina, Venturia
Myrtle	Cercospora, Glomerella, Pestalotia
Narcissus	Botrytis, Sclerotinia
Nasturtium	Botrytis, Cercospora, Puccinia
Nannyberry	Botrytis, Cercospora, Cladosporium, Helminthosporium, Monochaetia, Phomopsis, Phyllosticta, Ramularia
Nephathytis	Cephalosporium
Nicotiana	Alternaria
Nierembergia	Botrytis
Oak	Cephalosporium, Cercospora, Cladosporium, Cronartium, Elsinoe, Fusarium, Gloeosporium, Gnomonia, Marssonina, Phyllosticta, Septoria, Taphrina, Venturia
Orchid	Cercospora, Fusicladium, Mycosphaerella, Phyllosticta, Puccinia, Septoria
Osmanthus	Alternaria, Cercospora, Colletotrichum, Phyllosticta
Palm, Areca	Alternaria, Cercospora, Colletotrichum, Phomopsis, Phyllosticta, Septoria
Palm, Arenga	Cercospora, Colletotrichum, Cylindrocladium, Pestalotia, Phoma, Stigmia
Palm, Cabbage	Fusarium, Gloeosporium, Pestalotia, Stigmia
Palm, Coconut	Pestalotia
Palm, Date	Alternaria, Fusarium, Helminthosporium, Pestalotia
Palm, King	Alternaria, Fusarium, Helminthosporium, Pestalotia, Phomopsis
Palm, Phoenix	Alternaria, Cercospora, Fusarium, Gloeosporium, Pestalotia, Phomopsis, Stigmia
Palm, Queen	Glomerella, Septoria
Palm, Royal	Alternaria, Cercospora, Colletotrichum, Helminthosporium
Palm, Washington	Cercospora, Colletotrichum, Cylindrocladium, Pestalotia, Phoma, Stigmia
Pansy	Alternaria, Botrytis, Cercospora, Colletotrichum, Peronospora, Phyllosticta, Ramularia, Rhizoctonia
Peach	Cercospora, Cladosporium, Coryneum, Fusarium, Glomerella, Monilinia, Mycosphaerella, Phomopsis, Phyllosticta, Taphrina
Pear	Alternaria, Botrytis, Cercospora, Cladosporium, Coryneum, Elsinoe, Fusarium, Glomerella, Gymnosporangium, Helminthosporium, Monilinia, Mycosphaerella, Phomopsis, Phyllosticta, Venturia
Peony	Alternaria, Botrytis, Cercospora, Cladosporium, Gloeosporium, Phyllosticta, Septoria
Peperomia	Colletotrichum, Gloeosporium, Rhizoctonia
Periwinkle	Alternaria, Botrytis, Cladosporium, Colletotrichum, Phomopsis, Phyllosticta, Puccinia, Rhizoctonia, Septoria
Petunia	Cercospora, Puccinia, Rhizoctonia, Stemphylium
Philodendron	Gloeosporium, Colletotrichum
Phlox	Ascochyta, Botrytis, Cercospora, Colletotrichum, Phyllosticta, Puccinia, Ramularia, Septoria, Stemphylium, Volutella
Photinia	Cercospora, Gloeosporium, Gymnosporangium, Lophodermium, Pestalotia, Phyllosticta, Septoria
Pieris	Alternaria, Pestalotia, Phyllosticta, Rhytisma
Pilea	Alternaria, Botrytis, Cercospora, Colletotrichum, Helminthosporium, Phyllosticta
Pine, Norfolk Island	Botrytis, Colletotrichum, Cronartium, Cylindrocladium, Fusarium, Lophodermium, Pestalotia, Rhizoctonia, Septoria, Sirococcus
Pine	Alternaria, Botrytis, Cronartium, Fusarium, Lophodermium, Monochaetia, Rhizoctonia, Septoria, Sirococcus



Pittosporium	Alternaria, Cercospora, Gnomonia, Mycosphaerella, Phyllosticta, Rhizoctonia, Septoria
Plane tree	Cercospora, Gnomonia, Phyllosticta, Septoria
Plum, ornamental	Botrytis, Cercospora, Cladosporium, Cocomyces, Coryneum, Monilinia, Phyllosticta, Taphrina
Poinsettia**	Botrytis, Cercospora, Fusarium, Uromyces
Poplar	Cercospora, Ciborinia, Colletotrichum, Cylindrocladium, Fusarium, Marssonina, Melampsora, Mycosphaerella, Phyllosticta, Septoria, Stigmata, Taphrina, Venturia
Portulaca	Rhizoctonia
Pothos	Rhizoctonia
Prayer plant	Alternaria, Drechslera, Glomerella, Puccinia
Primrose	Alternaria, Botrytis, Colletotrichum, Mycosphaerella, Puccinia, Ramularia, Uromyces
Privet	Cercospora, Glomerella, Phomopsis, Phyllosticta, Ramularia
Protea	Botrytis
Pyracantha	Botrytis, Cercospora, Diplodia, Phomopsis, Phyllosticta, Sphaeropsis
Quince, flowering	Cercospora, Fabraea, Gymnosporangium, Septobasidium
Red cedar, western (Thuja)	Keithia (or Didymascella)
Red tip	See Photinia
Redwood, Sequoia	Botrytis, Cercospora, Mycosphaerella, Pestalotia, Phomopsis
Rhododendron	Alternaria, Cercospora, Coryneum, Gloeosporium, Glomerella, Guignardia, Lophodermium, Mycosphaerella, Pestalotia, Phomopsis, Rhizoctonia, Septoria, Venturia
Rose	Alternaria, Bipolaris, Botryosphaeria, Botrytis, Cercospora, Cladosporium, Cylindrocladium, Diplocarpon, Elsinoe, Gloeosporium, Helminthosporium, Leptosphaeria, Monochaetia, Mycosphaerella, Peronospora, Phyllosticta, Septoria
Rosemary	Rhizoctonia
Russian olive	Cercospora, Colletotrichum
Sage	Cercospora, Peronospora, Puccinia, Ramularia, Rhizoctonia
Salvia	Cercospora, Puccinia
Santolina	Botrytis
Senecio	Cercospora, Gloeosporium, Phyllosticta, Puccinia, Ramularia, Septoria
Schefflera	Alternaria
Snakeplant	Fusarium, Gloeosporium
Snaptadragon	Alternaria, Bipolaris, Botrytis, Cercospora, Colletotrichum, Drechslera, Fusarium, Helminthosporium, Peronospora, Phyllosticta, Puccinia, Rhizoctonia
Spathiphyllum	Alternaria
Spindle tree	See Euonymus
Spirea	Cylindrosporium
Spruce	Ascochyta, Botrytis, Cladosporium, Lophodermium, Rhizoctonia
Spurge	Cercospora, Melampsora, Puccinia
Statice	Alternaria, Ascochyta, Botrytis, Cercospora, Colletotrichum, Rhizoctonia, Uromyces
Strawflower	Fusarium
Sumac	Cercospora, Cladosporium, Fusarium, Phyllosticta, Septoria, Taphrina
Sunflower, ornamental	Alternaria, Puccinia
Syngonium	Cephalosporium, Erwinia, Fusarium
Tulip	Botrytis
Venus flytrap	Colletotrichum
Verbena	Alternaria, Ascochyta, Botrytis, Cercospora, Phyllosticta, Puccinia, Rhizoctonia, Septoria, Stemphylium

Viburnum	Botrytis, Cercospora, Cladosporium, Helminthosporium, Monochaetia, Phomopsis, Ramularia
Walnut	Cercospora, Cladosporium, Cyllindrocladium, Cyllindrosporium, Gnomonia
Willow	Ascochyta, Cercospora, Ciborinia, Cyllindrosporium, Fusicladium, Gloeosporium, Marssonina, Melampsora, Phomopsis, Phyllosticta, Ramularia, Rhytisma, Septoria, Taphrina, Venturia
Wisteria	Alternaria, Cercospora, Colletotrichum, Gloeosporium, Pestalotia
Yucca	Cercospora, Cyllindrosporium, Gloeosporium, Puccinia
Zebra plant	Alternaria, Cercospora, Colletotrichum
Zinnia	Alternaria, Botrytis, Cercospora, Rhizoctonia

\*Do not exceed 0.6 quarts per 100 gallons on flower spikes.

\*\*Do not exceed 1.2 quarts per 100 gallons.

This product is not recommended for the treatment of marigolds due to highly variable plant responses.

### GRASSES: SODFARMS, TURF AND LAWN USE

For use on sod farms, golf courses, industrial and commercial lawns, and other similar nonresidential areas. Applications must be done by a professional applicator. Not for homeowner use. Do not apply by air to sod farms or golf courses. Do not apply by chemigation to golf courses.

**Sod Farm Turf:**

Harvesting of treated turf is prohibited until 120 hours following application.

- Do not apply more than 4 applications per year at a maximum application rate of 17.4 lb ai/A per application.
- Do not allow less than a 10-day interval between applications

**Golf Courses:**

For cool season grasses; greens, tees and aprons - do not apply more than 5 applications per year at a maximum application rate of 17.4 lb ai/A per application

For cool season grasses; fairways - do not apply more than 4 applications per year at a maximum application rate of 17.4 lb ai/A per application

For warm season grasses; greens, tees and aprons - do not apply more than 4 applications per year at a maximum application rate of 17.4 lb ai/A per application

For warm season grasses; fairways - do not apply more than 3 applications per year at a maximum application rate of 17.4 lb ai/A per application

Do not allow less than a 10-day interval between applications

**All Other Turf:**

- Do not apply more than 4 applications per year at a maximum application rate of 17.4 lb ai/A per application
- Do not allow less than a 10-day interval between applications

CROP	DISEASE/ PEST	APPLICATION RATE	APPLICATION TIMING/ INTERVAL	COMMENTS
Sod farm (WPS use): see Agricultural Use Requirements Box	Algae	10 fl. oz./1000 sq. ft.	Begin when algae begins to appear/10 days.	Do not use on grasses grown for seed.
	Copper Spot, Fusarium Blight, ( <i>F. roseum</i> ), Red Thread, Slime Molds,	7-10 fl. oz./1000 sq. ft.	Begin when grass greens up in spring/10-14 days.	Do not use on grasses intended for grazing, such as range or pasture grasses.
10-14 fl. oz./1000 sq. ft.		Use during favorable disease conditions/10 days.	Do not graze treated areas or feed clippings to livestock.	
Lawn Grasses (Non-WPS uses): see Non-Agricultural Use Requirements Box  Examples include golf courses and professional application to industrial (office park) and municipal lawns	Gray Leaf Spot* ( <i>Pyricularia grisea</i> )	9-14 fl. oz./1000 sq. ft.	Begin at first sign of disease; apply at 10 day intervals or more often during favorable disease conditions.	
	Dollar Spot ( <i>Sclerotinia</i> )	10-14 fl. oz./1000 sq. ft.	Begin when grass greens up in spring/10-14 days.	
		14 fl. oz./1000 sq. ft.	Use during favorable disease conditions/10 days.	
	Pink (Fusarium) Snow Mold	10-14 fl. oz./1000 sq. ft.	During winter / 14-42 days. Apply before first snowfall.	
	Leaf Spot ( <i>Helminthosporium spp.</i> ) Rhizoctonia Brown Patch	5-7 fl. oz./1000 sq. ft.	Begin when disease appears.	
		10-14 fl. oz./1000 sq. ft.	Use during favorable disease conditions/10 days.	
	Pythium Blight	14 fl. oz./1000 sq. ft.	Begin at first sign of disease/10 days during favorable disease conditions.	
	Leaf Rust, Stem Rust, Stripe Rust	5-7 fl. oz./1000 sq. ft.	Begin when disease first appears/10 days.	

\*Except CA

## SEED TREATMENTS

### For Commercial Seed Treatment Only

A single application for commercial seed treatment may be made on crops which have registered EBDC seed treatment uses.

For best results, the seed must be completely and uniformly covered with fungicide. For seed treatment, a dye must be added to the Manzate Pro-Stick treating slurry which will impart an unnatural color to the seed

For commercial seed treatments, seeds should be clean and well-cured prior to treatment. Apply to dry seed with conventional slurry or mist seed treating equipment. Refer to the Non-Agricultural Use Requirements box for commercial treatments.

Seeds that have been treated with this product that are then packaged or bagged for future use must contain the following labeling on the outside of the seed package or bag:

“When opening this bag or loading/pouring the treated seed/seed-pieces, wear long-sleeved shirt, long pants, shoes, socks, chemical resistant gloves, and a NIOSH-approved respirator with a dust/mist filter with MSHA/NIOSH approval number prefix TC-21C or any R, P, or HE filter.

Treated Seed - Do Not Use for Food, Feed, or Oil Purposes.”

After the seeds have been planted, do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 24 hours. Exception: Once the seeds are planted in soil or other planting media, the Worker Protection Standard allows workers to enter the treated area without restriction if there will be no worker contact with the soil/media subsurface.

CROP	DISEASES	SEED TREATMENT RATE- APPLY AS A SLURRY			
		FLUID OZ./BU.		FLUID OZS./100 LBS.	
		CA	All States Except CA	CA	All states except CA
Barley	Bunt, Covered Smut, Damping-Off, Fake Loose Smut, Seed Decay, Seedling Blights	2.2	2-3.2	4.5	4.3-6.7
Corn	Damping-Off, Seed Rot, Seedling Blights	2.5	2.4-4.8	4.5	4.3-8.6
Cotton Acid Delinted	Damping-Off, Seedling Blights	Do Not Use	Do Not Use	5.1	4.8-5.1
Cotton Reginned	Damping-Off, Seedling Blights	Do Not Use	Do Not Use	10.1	9.5-10.1
Flax	Seed Decay, Seedling Blights, Damping-Off	3.4	3.2-6.4	6.1	5.7-11.3
Oat	Damping-Off, Seedling Blights, Seed Decay, Smuts	2.2	2-3.2	6.7	6.4-10
Peanut (Shelled)	Damping-Off, Seed Rots, Seedling Blights	Do Not Use	3.2-6.4	Do Not Use	12.8-25.6
Rice	Achyla, Other Soil and Seedborne Fungi Causing Seed Rot and Reduced Seedling Vigor	Do Not Use	Do Not Use	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	Bunt, Covered Smut, Damping-Off, Seed Decay, Seedling Blights	2.2	2-3.2	4.0	3.7-5.7
Safflower	<i>Puccinia carthami</i> (Which Causes Foot-and-Rot Disease and Foliage Rust Disease)	Do Not Use	Do Not Use	3.4	3.2-3.4
Sorghum	Covered Kernel Smut, Damping-Off, Seedling Blights, Seed Rots	2.5	2.4-4	5.1	4.3-7.2
Tomato	Damping-Off, Seedling Blights, Seed Rots	Do Not Use	Do Not Use	13.5	12.8-13.5
Wheat (including Triticale)	Bunt, Covered Smut, Damping-Off, Seed Decay, Seedling Blights	2.2	2-3.2	3.7	3.5-5.2

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## STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Important--Keep in a cool place but not below 32° F. Temperature extremes will affect quality of DuPont™ MANZATE® Flowable. Store product in original container only, away from other pesticides, fertilizer, food or feed.

**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:** Triple rinse (or equivalent) the container. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

### CONTAINER DISPOSAL DIRECTIONS FOR LARGE CONTAINERS:

**CONTAINER REFILLING AND DISPOSAL (For containers up to 250 gal.):** This is a refillable container. If the container is to be refilled, do not rinse with any material or introduce any pesticide other than MANZATE® Flowable. Reseal and return the container to any authorized DuPont refilling facility. If the container is not to be refilled, triple rinse (or equivalent) and offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or by open burning, if allowed by state and local authorities. If burned, keep out of smoke. For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes. In the event of a major spill, fire or other emergency, call 1-800-441-3637 day or night.

### CONTAINER DISPOSAL FOR BULK

**CONTAINERS:** When this container is empty, replace the cap and seal all openings that have been opened during use; and return the container to the point of purchase or to a designated location named at time of purchase of this product. The container must only be refilled with this pesticide product. **DO NOT REUSE THE CONTAINER FOR ANY OTHER PURPOSE.** Prior to refilling, inspect carefully for damage such as cracks, punctures, abrasions, worn-out threads and closure devices. Check for leaks after refilling and before transporting. Do not transport if this container is damaged or leaking. If the container is damaged, leaking or obsolete, contact DuPont at 1-800-441-3637. If not returned to the point of purchase or to a designated location, triple rinse emptied container and offer for recycling. Disposal of this container must be in compliance with state and local regulations. For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes. In the event of a major spill, fire or other emergency, call 1-800-441-3637 day or night.

**ATTENTION:** This product contains mancozeb and ETU, chemicals known to the State of California to cause cancer in laboratory animals. ETU is also known to the State of California to cause birth defects or other reproductive harm in laboratory animals.

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**LIMITATION OF WARRANTY AND LIABILITY**

**NOTICE:** Read this Limitation of Warranty and Liability Before Buying or Using This Product. If the Terms Are Not Acceptable, Return the Product at Once, Unopened, and the Purchase Price Will Be Refunded.

It is impossible to eliminate all risks associated with the use of this product. Such risks arise from weather conditions, soil factors, off target movement, unconventional farming techniques, presence of other materials, the manner of use or application, or other unknown factors, all of which are beyond the control of DuPont. These risks can cause: ineffectiveness of the product, crop injury, or injury to non-target crops or plants. **WHEN YOU BUY OR USE THIS PRODUCT, YOU AGREE TO ACCEPT THESE RISKS.**

DuPont warrants that this product conforms to the chemical description on the label thereof and is reasonably fit for the purpose stated in the Directions for Use, subject to the inherent risks described above, when used in accordance with the Directions for Use under normal conditions.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, DUPONT MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR OF MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, IN NO EVENT SHALL DUPONT OR SELLER BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT. BUYER'S OR USER'S BARGAINED-FOR EXPECTATION IS CROP PROTECTION. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER AND THE EXCLUSIVE LIABILITY OF DUPONT OR SELLER, FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY OR CONTRACT, NEGLIGENCE, TORT OR STRICT LIABILITY), WHETHER FROM FAILURE TO PERFORM OR INJURY TO CROPS OR OTHER PLANTS, AND RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT, OR AT THE ELECTION OF DUPONT OR SELLER, THE REPLACEMENT OF THE PRODUCT.

To the extent consistent with applicable law that allows such requirement, DuPont or its Ag Retailer must have prompt notice of any claim so that an immediate inspection of buyer's or user's growing crops can be made. Buyer and all users shall promptly notify DuPont or a DuPont Ag Retailer of any claims, whether based on contract, negligence, strict liability, other tort or otherwise, or be barred from any remedy.

This Limitation of Warranty and Liability may not be amended by any oral or written agreement.

For product information call: 1-888-6-DUPONT

Internet address: [www.cropprotection.dupont.com](http://www.cropprotection.dupont.com)

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