



MANZATE® 200 DF

ACCEPTED

FUNGICIDE

DISPERSIBLE GRANULES

BY WEIGHT

ACTIVE INGREDIENT

A coordination product of

zinc ion and manganese ethylene-bisdithiocarbamate in which the ingredients are: 75%

Manganese* 15.0%

Zinc** 1.9%

Ethylene bisdithiocarbamate ion (C₄H₆N₂S₄)= 58.1%

INERT INGREDIENTS

25%

This product contains the toxic inert ingredient paraformaldehyde.

TOTAL 100%

EPA Reg No. 352-449

KEEP OUT OF REACH OF CHILDREN

CAUTION

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION! MAY IRRITATE EYES, NOSE, THROAT AND SKIN. MAY BE HARMFUL IF ABSORBED THROUGH SKIN, INHALED OR SWALLOWED. Avoid breathing dust or spray mist. Avoid contact with skin, eyes and clothing. Keep away from fire or sparks.

STATEMENT OF PRACTICAL TREATMENT

IF SWALLOWED: Dilute by giving two glasses of water to drink and call a physician. Never give anything by mouth to an unconscious person.

IF INHALED: Move subject to fresh air. Consult a physician.

IF IN EYES: Flush eyes with large amounts of water for at least 15 minutes. Consult a physician if irritation persists.

IF ON SKIN: Wash affected skin areas with soap and water. Consult a physician if irritation persists.

For medical emergencies involving this product, call toll free 1-800-441-3637.

PERSONAL PROTECTIVE EQUIPMENT

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 mixing or loading.

Discard clothing or 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.

During aerial application, human flaggers must be in enclosed cabs.

ENGINEERING CONTROL STATEMENTS

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 personal protective equipment 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 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. Cover or incorporate spilled treated seed. Do not contaminate water by disposing of equipment washwaters.

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

"Manzate" 200 DF should be used only in accordance with recommendations on this folder 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 DF, a dispersible granule 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" 200 DF at the rate shown, use sufficient water to provide thorough coverage, use 20 to 100 gals per acre for ground equipment and no less than 2 gals per acre for aircraft. Add "Manzate" 200 DF 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. Add a spreader-sticker spray adjuvant if needed.

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" 200 DF Fungicide only through sprinkler including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set or hand move irrigation systems only on crops specifically designated in the "Directions For Use" for that particular crop. Do not apply "Manzate" 200 DF through any other type of irrigation system or on any other crops.

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from nonuniform 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.

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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.

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" 200 DF as a continuous injection. In nonmoving systems inject "Manzate" 200 DF 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" 200 DF 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 nonmoving 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" 200 DF is flushed from system.

CROP	DISEASES CONTROLLED	RATE OF MANZATE 200 DF PER APPLICATION LBS/ACRE	TIMING/INTERVALS (Also refer to Directions for Use)	RESTRICTIONS/COMMENTS
Apples	(See Pomefruit)			
Asparagus	Cercospora leaf spot Rust	2	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 8 lbs (6 lbs active) per acre per season.
Asparagus Crown (planting stock)	Crown rot	1 lb per 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
Bananas	Sigatoka	2 to 3	Apply when leaves first appear and repeat every 14 to 21 days or as required. Use sufficient water to provide adequate coverage. The addition of a surfactant to spray solutions will improve performance.	Do not apply more than 30 lbs (22.5 lbs active) per acre per growing cycle. Minimum preharvest interval (0 days)

CROP	DISEASES CONTROLLED	RATE OF MANZATE 200 DF PER APPLICATION LBS/ACRE	TIMING/INTERVALS (Also refer to Directions for Use)	RESTRICTIONS/COMMENTS
Barley, Oats, Rye, Wheat	Helminthosporium leaf spot Leaf rust Septoria glume blotch Septoria leaf spot Tan spot	2	Start application at onset of disease or when plants are in the tillering to jointing stage and repeat at 7 to 10 day intervals. The addition of a surfactant to spray solutions will improve performance.	Do not make more than three applications during the season. Do not apply more than 6 lbs (4.5 lbs active) per acre per crop. Do not apply within 26 days of harvest. Do not graze livestock in treated areas prior to harvest.
Caprifig (Non-food use)	Endosepsis (Fusarium) Mold	4 lbs/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, popcorn and sweet corn for hybrid seed production), (field and field corn for hybrid seed production)	Common rust Helminthosporium leaf blight	1 1/2	Use sufficient water for thorough coverage. Start applications when disease first appears and repeat at 4 to 7 day intervals. The addition of a surfactant to spray solutions will improve performance.	Do not apply within 7 days of harvest. Do not apply more than 22.5 lbs (17 lbs active) per acre per crop east of Mississippi and AR and LA. Do not apply more than 7.5 lbs (5.6 lbs active) per acre per crop west of the Mississippi except AR and LA. Do not feed treated forage to livestock. Do not apply within 40 days of harvest. Do not apply more than 15 lbs (11.25 lbs active) per acre per crop. Do not feed treated forage to livestock.
Cotton (Southwest only)	Rust	1 1/4 to 2	Begin when rust first appears in the area. Repeat at 10 to 14 day intervals.	Do not apply after bolls open. Do not apply more than 8 lbs (6 lbs active) per acre per crop. Do not apply within 45 days of harvest. Do not feed treated forage to livestock. Do not feed gin trash to livestock. Do not graze livestock in treated areas.

CROP	DISEASES CONTROLLED	RATE OF MANZATE 200 DF PER APPLICATION LBS/ACRE	TIMING/INTERVALS (Also refer to Directions for Use)	RESTRICTIONS/COMMENTS
Cranberries	Fruit rot	3 to 6	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 18 lbs (13.5 lbs active) per acre per season.
Cucumbers	Anthracnose Cercospora leaf spot Downy mildew Gummy stem blight Scab	2 to 3	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 24 lbs (18 lbs active) per acre per crop.
Fennel	Early & late blights	2	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 16 lbs (12 lbs active) per acre per crop. Do not graze treated area to livestock.
Grapes (East of the Rocky Mountains)	Black rot Bunch rot Deadarm Downy mildew	1 1/2 to 4	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 24 lbs (18 lbs active) per acre per season.
(West of the Rocky Mountains)		1 1/2 to 2 1/2		Do not apply within 66 days of harvest except in CA where no application can be made after bloom. Do not apply more than 7.5 lbs (5.6 lbs active) per acre per season.

CROP	DISEASES CONTROLLED	RATE OF MANZATE 200 DF PER APPLICATION LBS/ACRE	TIMING/INTERVALS (Also refer to Directions for Use)	RESTRICTIONS/COMMENTS
Melons Cantaloupes Casaba Crenshaw Honeydew Watermelon	Alternaria leaf spot Anthracnose Downy mildew Gummy stem blight Cercospora leaf spot	2 to 3	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 200 DF fungicide. Consult State Cooperative Extension Service Specialist prior to use.	Do not apply within 5 days of harvest. Do not apply more than 24 lbs (18 lbs active) per acre per crop.
Oats	(See barley)			
Onions (dry bulb) (furrow drench)	Botrytis leaf blight Downy mildew Neck rot Purple blotch	3	Follow a protective spray schedule starting when diseases are first reported in the areas and repeat at 7 day intervals throughout the season. The addition of a surfactant to spray solutions will improve performance.	Do not apply within 7 days of harvest. Do not apply to exposed bulbs. Do not apply more than 30 lbs (22.5 lbs active) per acre per crop.
	Smut		Apply 3 lbs 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 2.25 lbs active per acre (29,000 linear feet of furrow) with an 18 inch row spacing.
Papaya	Anthracnose (Colletotricum) Phytophthora fruit rot Black spot (Cercospora)	2 to 2.5 (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 35 lbs (26.25 lbs active) per acre per crop. Minimum pre-harvest interval (0 days).
Peanuts	Cercospora leaf spot Rust	1 to 2	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 16 lbs (12 lbs active) per acre per crop. Do not feed treated vines to livestock.
Peanuts (Tank mix with "Benlate" Fungicide)	Ascochyta web blotch Cercospora leaf spot Rust	1 1/2 plus 4 ozs "Benlate"	Begin 35 to 40 days after planting or when disease threatens. Repeat at 7 to 14 day intervals (7 to 10 days for rust).	Do not apply within 14 days of harvest. Do not use more than 12 lbs Manzate 200 DF (9 lbs active) per acre per crop. Do not feed treated vines to livestock.

CROP	DISEASES CONTROLLED	RATE OF MANZATE 200 DF PER APPLICATION LBS/ACRE	TIMING/INTERVALS (Also refer to Directions for Use)	RESTRICTIONS/COMMENTS
Pears	(See Pomefruit)			
Pineapple (Seed-Piece Treatment Only)	Phytophthora heart rot	3.2 lbs/10 gals. Use up to 100 gals of suspension to treat clean propagation material for one acre.	Dip planting material in fungicide suspension prior to planting. Stir frequently to prevent settling.	Prepare new suspension when 2/3 of volume is used or sooner if noticeably discolored by soil from plant material.
Pomefruits Apples Pears Crabapples Quince	Rusts Scab Fabrea leaf spot	6.0 Maximum per acre use rate based on thorough coverage dilute sprays. Use 2 lbs per 100 gal, up to 300 gal per acre Consult State Extension Service if necessary to adjust for variable tree size.	Pre-Bloom Use: 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" or "Extended Application" schedule. DO NOT COMBINE OR INTEGRATE THE TWO TREATMENT SCHEDULES	Do not apply more than 6 lbs (4.5 lbs active) per acre per application. Do not apply after bloom. Do not apply more than 24 lbs (18 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.
Pomefruits Apples Pears Crabapples Quince	Rusts Scab Fabrea leaf spot	3.0 Maximum per acre use rate based on thorough coverage dilute sprays. Use 1 lb per 100 gal, up to 300 gal per acre Consult State Extension Service if necessary to adjust for variable tree size.	Extended Application Schedule or for Use in Tank Mixtures: 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" or "Extended Application" schedule. DO NOT COMBINE OR INTEGRATE THE TWO TREATMENT SCHEDULES	Do not apply more than 3 lbs (2.25 lbs active) per acre per application. Do not apply within 77 days of harvest. Do not apply more than 21 lbs (15.75 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.

CROP	DISEASES CONTROLLED	RATE OF MANZATE 200 DF PER APPLICATION LBS/ACRE	TIMING/INTERVALS (Also refer to Directions for Use)	RESTRICTIONS/COMMENTS
Potatoes	Early blight Late blight	1 to 2	Begin applications when plants are 4 to 6 inches high by applying 1 lb per acre. As the vines increase in size, apply 1 1/2 to 2 lbs per acre at intervals of 5 to 10 days. The addition of a surfactant to spray solutions will improve performance.	Do not apply more than 14 lbs (10.5 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.
Seedpiece (treatment)	Fusarium decay Seedborne common scab	1 1/4 per 50 gal	Dip whole or cut potato tubers in 1 1/4 lbs Manzate 200 DF 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.
Squash (Summer squash)	Downy mildew	2 to 3	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 24 lbs (18 lbs active) per acre per crop.
Sugar Beets	Cercospora leaf spot	1 1/2 to 2	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 14 lbs (10.5 lbs active) per acre per crop. Do not feed treated sugar beet tops to livestock.
Tomatoes (East of the Mississippi River)	Anthracnose Early blight Gray leaf spot Late blight Leaf mold Septoria leaf spot	1 1/2 to 3	Start application when seedlings emerge or transplants are set and repeat at 7 to 10 day intervals throughout the season. The addition of a surfactant to spray solutions will improve performance.	Do not apply within 5 days of harvest. Do not apply more than 21 lbs (15.75 lbs active) per acre per crop.
(West of the Mississippi River)		1 1/2 to 2		Do not apply within 5 days of harvest. Do not apply more than 3 lbs (6 lbs active) per acre per crop.
Watermelon	(See Melons)			
Wheat	(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.

Apply in the field, nursery or greenhouse as a thorough coverage spray, using 1 to 2 lbs "Manzate" 200 DF per 100 gals of water (1-1/2 to 3 tsp per gal). For hard-to-wet plants, add a suitable wetting agent. Begin applications when new growth starts or when disease first threatens and continue at 7 to 10 day intervals between applications. Use higher rate and shorter intervals during periods of excessive wetness and rapid plant growth.

Du Pont "Manzate" 200 DF is recommended for use on certain flower, foliage and ornamental plants listed in the table below for control of the following diseases and pathogens:

Alternaria—leaf spots and flower blights
*Anthracnose—Colletotrichum or Elsinoe or Gloeosporium or Glomerella or Gnomonia Aschochyta
*Blackspot of rose or elm
Blight—Phytophthora
Blister—Taphrina
Botryosphaena
Botrytis blights, gray mold
Brown rot of Prunus spp.—Monilia
Cephalosporium
*Cercospora
*Collectotrichum
*Coryneum
Curvularia
Cylindrocladium

*Cylindrosporium
*Dactylaria
Didymella
*Diplocarpon
Downy mildews—Plasmopara or Peronospora
*Elsinoe
*Entomosporium
Fabraea
Flower blights
Fusarium
Fusicladium
*Gloeosporium
*Gnomonia
Gray mold—Botrytis
Guignardia

*Gymnosporangium
*Leafspots
*Lepidosphaera
Lophodermium
Macrophoma
*Melampsora
*Melamporeidium
Monochaetia
Mycosphaerella
*Pestalotia
Phomopsis—Phragmidium
*Phyllosticta
Phytophthora
Pseudonectria
Puccinia
Ramularia

Rhizoctonia
*Rhytisma
*Rusts—Gymnosporangium, Melampsora, Melamporeidium, Phragmidium, Puccinia, Uromyces
*Scab—Fusicladium or Venturia or Sphaeloma Scirbia
*Septoria
*Shothole—Coryneum
*Sphaeropsis
Stemphylium
Taphrina
Uromyces

*denotes leaf spots

ORNAMENTALS FOR WHICH "MANZATE" 200 DF IS RECOMMENDED

COMMON NAME	LATIN NAME	COMMON NAME	LATIN NAME	COMMON NAME	LATIN NAME
African violet	Saintpaulia ionantha	Ficus	Ficus benjamina	Alea	Pilea spp.
Almond	Prunus amygdalus	Fr. Douglas	Ficus pumila	Pine, Norfolk Island	Araceae
Andromeda, Mountain	Pieris forbunda	Fr. Noble	Pseudotsuga merziesii	Pine, White	Pinus strobus
Anthurium	Anthurium spp.	Fraxion	Abies procera	Pitcosporium	Pitiosporium tobra
Arbutus	Thuja occidentalis	Fritonia	Pyracantha coccinea	Plane Tree	Platanus occidentalis
Areca Palm	Chrysalidocarp lutescens	Geranium	Fittoua argyroleuca	Primrose	Euphorbia pulcherrima
Ash	Fraxinus spp.	Gladolus **	Petargonum hortorum	Prayer Plant	Maranta kerchoveana
Ash, Mountain	Sorbus spp.	Gold Dust Tree	Gladolus spp. **	Primrose	Primula spp.
Aster, China	Callistephus chinensis	Gypsophila	Aucuba japonica	Privet	Ligustrum spp.
Azalea	Rhododendron spp.	Hawthorn	Gypsophila paniculata	Protea	Leucospermum cordatum
Baby's Breath	Gypsophila paniculata	Hemp bowstring	Crataegus spp.	Prune	Prunus spp.
Begonia	Begonia spp.	Holly	Sanseveia trifasciata	Purshyew	Sakii babyronica
Birch	Betula pendula	Holly, Chinese	Ilex spp.	Pyracantha	Pyracantha watsoni
Bonwood	Bursera morphyta	Holly, Japanese	Ilex cornuta	Redwood (seedlings)	Sequoia sempervirens
Buckeye	Buxus sempervirens	Hollyhock	Ilex crenata	Rhododendron	Rhododendron spp.
Buffalo Berry	Arisaema spp.	Horsetchestnut	Athaea rosea	Rose	Rosa spp.
Camelia	Shepherdia argentea	Iris	Alcea spp.	Sand Cherry	Prunus cistena
Carnation	Camelia japonica	Iris	Aesculus hippocastanum	Santolina	Santolina spp.
Cedar, Red	Dianthus caryophyllus	Juniper	Iris spp.	Schefflera	Schefflera arboricola
Christmas Cactus	Juniperus virginiana	Laurel, Mountain	Hendera helix	Sequoia, Giant (seedlings)	Schefflera actinophylla
Chrysanthemum	Zygocactus truncatus	Lavender Cotton	Juniperus chinensis	Shadblow	Sequoia gigantea
Cordylone	Chrysanthemum spp.	Lily	Juniperus horizontalis	Spruce, Alberta (dwarf)	Anthrinum minus
Cornflower	Dracaena spp.	Lily, Easter	Juniperus plumosa	Spruce, Engelmann	Euonymus alatus
Crabapple	Malus ioensis	Madagascar Palm	Kalmia latifolia	Spruce, Norway	Picea glauca conica
Croton	Crassula argentea	Magnolia	Santolina chamaecyparissus	Spurge, Japanese	Picea engelmanni
Cyprus, Arizona	Codiaeum variegatum	Maple	Lilium spp.	Statice	Picea abies
Dahlia	Codiaeum punctatum	Maple, Red	Lilium longiflorum	Strawflower	Pachysandra terminalis
Daisy, Transvaal	Cyperus spp.	Maple, Sugar	Limonium muscan	Sunflower	Limonium sinuatum
Dierffenbachia	Dahlia spp.	Marijuana	Chrysalidocarp lutescens	Sunflower, Shrub	Helichrysum bracteatum
Dogwood	Gerbera spp.	Maple, Norway	Magnolia stellata	Sycamore	Rhus tripartita
Dracaena	Dierffenbachia picta	Manzanita	Mahonia nervosa	Syringium	Platanus spp.
Dracaena	Cornus amomum	Maple, Norway	Acer spp.	Viburnum	Syngonium podophyllum
Dracaena	Cornus Florida	Maple, Norway	Acer rubrum	Velvet plant	Gyrifolia spp.
Dracaena	Cornus racemosa	Maple, Norway	Acer saccharum	Venus Flytrap	Dionaea muscipula
Dracaena	Cornus sericea	Maple, Norway	Viburnum lentago	Vertiera	Vertiera spp.
Dracaena	Cornus stolonifera	Maple, Norway	Nephtytis alata	Viburnum	Viburnum davidi
Dracaena	Dracaena marginata	Maple, Norway	Quercus borealis	Walnut	Viburnum occlusus
Dracaena	Dracaena candelabra	Maple, Norway	Quercus rubra	Walnut, Black	Juglans spp.
Dracaena	Dracaena deremensis	Maple, Norway	Quercus velutina	Walnut, White	Juglans nuya
Dracaena	Dracaena fragrans	Maple, Norway	Quercus heterophylla	Willow	Sakii spp.
Dracaena	Dracaena surculosa	Maple, Norway	Ulmus americana	Willow	Fuchsia americana
Dracaena	Dracaena deremensis	Maple, Norway	Ulmus americana	Willow	Fuchsia venusta
Dracaena	Dracaena deremensis	Maple, Norway	Ulmus americana	Willow	Agave americana
Dracaena	Dracaena deremensis	Maple, Norway	Ulmus americana	Willow	Zinnia elegans

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TURF GRASSES - Applications restricted to lawn grasses by professional applicators. Not for homeowner use.

CROP	DISEASE/ PEST	RATE	TIMING INTERVAL	LAST APPLICATION TO HARVEST	LIVESTOCK GRAZING/ FEEDING	COMMENTS
Sod Farms	Algae	6 ozs in 3 to 5 gals/1000 sq ft (16 lbs in 130-220 gals/acre).	Begin when algae first appears. Repeat at 7-day intervals as long as condition persists.		Do not graze treated areas or feed clippings to livestock.	Do not use on grasses grown for seed.
	Leaf stem, strip rust	3-4 ozs in 3 to 5 gals/1000 sq ft (8-11 lbs in 130-220 gals/acre).	Begin when disease threatens. Repeat at 7 to 10-day intervals as long as disease persists.		Do not graze treated areas or feed clippings to livestock.	Do not use on grasses intended for grazing, such as range or pasture grasses.
	Leaf spot (Helminthosporium spp.) Rhizoctonia solani brown patch	3-4 ozs in 3 to 5 gals/1000 sq ft (8-11 lbs in 130-220 gals/acre)	Begin when disease threatens.		Do not graze treated areas or feed clippings to livestock.	When conditions are unusually favorable for disease, use 6-8 ozs/1000 sq ft (16-22lbs/acre) and reduce intervals to 3 to 5 days.

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.

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

Do not enter treated areas without protective clothing until sprays have dried.

SEED TREATMENTS

LABEL TREATED SEED "Do not use for food, feed or oil purposes. This seed treated with 'Manzate' 200 DF Fungicide."

For seed treatment, a dye must be added to the treating slurry so that an unnatural color will distinguish the seed as treated.

CROP	DISEASES	SEED TREATMENT RATE - APPLY AS A SLURRY	
		Ozs/Bu	Ozs/100 lb
Barley	Bunt, Covered smut, Damping-off, Fake loose smut, Seed decay, Seedling blights	1.3 to 2.0	2.7 to 4.2
Corn	Damping off, seed rot, seedling blight	1.5 to 3.0	2.7 to 5.4
Cotton Acid Delinted	Damping-off, Seedling blights	-	3
Cotton Reginned	Damping-off, Seedling blights	-	6
Flax	Seed decay, Seedling blights, Damping-off	2.0 to 4.0	3.6 to 7.1
Oats	Damping-off, Seedling blights, Seed decay, Smuts	1.3 to 2.0	4.0 to 6.3
Peanuts (shelled)	Damping-off, Seed rots, Seedling blights	2.0 to 4.0	9.0 to 16.0
Rice	Achlya, other soil and seedborne fungi causing seed rot and reduced seedling vigor	-	2.1 to 4.0 Apply before drying, or after soaking in water
Rye	Bunt, Covered smut, Damping-off, Seed decay, Seedling blights	1.3 to 2.0	2.3 to 3.6
Safflower	Puccinia carthami (which causes foot and rot disease and foliage rust disease)		2.0
Sorghum	Covered kernel smut, Damping off, Seedling blights, Seed rots	1.5 to 2.5	2.7 to 4.5
Tomatoes	Damping off, Seedling blights, Seed rots		8.0
Wheat	Bunt, Covered smut, Damping off, Seed decay, Seedling blights	1.3 to 2.0	2.2 to 3.4

11. 11

TURF GRASSES - Applications restricted to lawn grasses by professional applicators. Not for homeowner use.

CROP	DISEASE/ PEST	RATE	TIMING INTERVAL	LAST APPLICATION TO HARVEST	LIVESTOCK GRAZING/ FEEDING	COMMENTS
Lawn grasses Golf Courses, Professional Application to industrial (office park), municipal, and residential lawns	Algae	6 ozs in 3 to 5 gals/1000 sq ft (16 lbs in 130-220 gals/acre)	Begin when algae first appears. Repeat at 7-day intervals as long as condition persists.		Do not graze treated areas or feed clippings to livestock.	Do not use on grasses grown for seed.
	Leaf stem, strip rust	3-4 ozs in 3 to 5 gals/1000 sq ft (8-11 lbs in 130- 220 gals/acre)	Begin when disease threatens. Repeat at 7 to 10-day intervals as long as disease persists.		Do not graze treated areas or feed clippings to livestock.	Do not use on grasses intended for grazing, such as range or pasture grasses.
	Leaf spot (Helminthosporium spp.) Rhizoctonia solani brown patch	3-4 ozs in 3 to 5 gals/1000 sq ft (8-11 lbs in 130- 220 gals/acre)	Begin when disease threatens. Tees and greens: Repeat at 7 to 10- day intervals. Fairways: Repeat at 7 to 14-day intervals. Home lawns: Repeat at 14 to 21-day intervals. Continue as long as disease persists.		Do not graze treated areas or feed clippings to livestock.	When conditions are unusually favorable for disease, use 6-8 ozs/1000 sq ft (16-22lbs/acre) and reduce intervals to 3 to 5 days.

STORAGE AND DISPOSAL

STORAGE: Important— Never allow "Manzate" 200 DF to become wet during storage. This may lead to certain chemical changes which will reduce the effectiveness of "Manzate" 200 DF as a fungicide and create vapors which may be flammable. Keep container closed when not in use. Store product in original container only, away from other pesticides, fertilizer, food or feed.

PRODUCT DISPOSAL: Do not contaminate water, food or feed by storage or 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.

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.

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