352-341

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# MANZATE® 200

NOV 181996

**FUNGICIDE** 

**ACTIVE INGREDIENT** 

A coordination product of

Under the Federal Insecticide Fungicide, and Recenticide Act. as amended, for the posticide registered under zinc ion and manganese ethylene bisdithiocarbamate in which the angle of this arc. 352

WETTABLE POWDER BY WEIGHT

Ethylene bisdithiocarbamate ion (C4H6N2S4)=.....

INERT INGREDIENTS.....

TOTAL ......100%

EPA Reg No. 352-341

# 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 protectiva. 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 epilled 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 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, a wettable powder 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 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 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 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 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:

- 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 pesticida 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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- 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.
- 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.
- Do not apply when wind speed favors drift beyond the area intended for treatment.

#### Specific Instructions for Sprinkler Irrigation Systems:

- 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.
- The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- 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.
- 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
- Do not apply when wind speed favors drift beyond the area intended for treatment.
- 8. Good agitation is required in the injection tank.
- In moving systems, apply specified dosage of "Manzate" 200
  as a continuous injection. In nonmoving systems inject
  "Manzate" 200 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 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.
- Stop injection equipment after treatment is completed and continue to operate irrigation equipment until all "Manzate" 200 is flushed from system.

CROP	DISEASES CONTROLLED	RATE OF MANZATE 200 PER APPLICATION LBS/ACRE	TIMING/INTERVALS (Also refer to Directions for Use)	RESTRICTIONS/COMMENTS
Apples (See Pomefruit)				
Asparagus	Cercospora leaf spot	2	Start applications when rust first appears and repeat at 10 day intervals. Four applications are	Apply only on asparagus ferns after spears have been harvested.
	Rust	; 	usually sufficient.	Do not apply within 180 days of harvest in all states except CA and AZ (120 days).
				Do not apply more than E lbs (6.4 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.	Wash dirty crowns before dip treatment. Replace suspension in clean tank when discolored by soil.
			Drain and plant as soon as possible.	, ·
Bananas	Sigatoka	2 to 3	Apply when leaves first appear and repeat every 14 to 21 days or as required. Use sufficient water to	Do not apply more than 30 lbs (24 lbs active) per acre per growing cycle.
			provide adequate coverage.  The addition of a surfactant to spray solutions will improve performance.	Minimum preharvest interval (0 days).

	.` CROP	DISEASES CONTROLLED	RATE OF MANZATE 200 PER APPLICATION LBS/ACRE	TIMING/INTERVALS (Also refer to Directions for Use)	RESTRICTIONS/COMMENTS
	arley, Oats, Rye, heat	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 (4.8 lbs active) per acre per crop.  Do not apply after Feekes growth stage 10.5 or heading, nor within 26 days of harvest.  Do not graze livestock in treated areas prior to harvest.
	aprifig on-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 afte treating 4 to 5 batches of figs.
(sv po col pro	weet corn, pcorn and sweet rn for hybrid seed oduction), eld and field corn hybrid seed oduction)	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 (18 lbs active) per acre per crop east of Mississippi and AR and LA.  Do not apply more than 7.5 lbs (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 (12 lbs active) per acre per crop.
Co	otton outhwest only)	Rust	1 1/4 to 2	Begin when rust first appears in the area. Repeat at 10 to 14 day intervals.	Do not feed treated forage to livestock.  Do not apply after bolls open.  Do not apply more than 3 its (6.4 lbs active) per acre per crup.
		_		P.	Do not apply within 45 days of harvest.  Do not feed treated forage to livestock.  Do not graze livestock in treated areas.  Do not feed gin trash to livestock.

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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 (14.4 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 (19.2 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 (12.8 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 (19.2 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 (6 lbs active) per acre per season.

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Melons Alternaria leaf spot Anthracnose Cantaloupes Cantaloupes Casaba Crenshaw Honeydew Watermelon  Douny mildew Gummy stem blight Cercospora leaf spot  Onions (dry bulb)  Onions (dry bulb) Purple blotch  Alternaria leaf spot Anthracnose Downy mildew Gummy stem blight Cercospora leaf spot  State 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 fungicide. Consult State Cooperative Extension Service Specialist prior to use.  Follow a protective spray schedule starting when diseases are first reported in the areas and repeat at 7 day intervals throughout the season.  Purple blotch  The addition of a surfactant to spray solutions will improve performance.  (furrow drench)  Smut  Alternaria leaf spot  Staty applications when plants are in the two-leaf stage and repeat at 7 to 10 day intervals.  Do not apply within 5 days of harvest.  Do not apply within 7 days of harvest.  Do not apply to exposed bulbs.  Do not apply to exposed bulbs.  Do not apply more than 30 lbs (lbs active) per acre per crop.	-			. <u> </u>
Anthracnose Downy mildew Gurmmy stem blight Cercospora Ieaf spot  Oats (See barley)  Onions (dry bulb)  Botrytis leaf blight Downy mildew Neck rot Purple blotch  (furrrow drench)  Anthracnose Downy mildew Gurmmy stem blight Cercospora Ieaf spot  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 fungicide. Consult State Cooperative Extension Service Specialist prior to use.  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.  (furrow drench)  Smut  Anthracnose Do not apply more than 24 lbs	CROP C	PER TIMING/INTERVALS	MANZATE 200 PER APPLICATION	RESTRICTIONS/COMMENTS
Manzate 200 fungicide. Consult State Cooperative Extension Service Specialist prior to use.  Oats (See barley)  Onions (dry bulb)  Botrytis leaf blight Downy mildew Neck rot Purple blotch  The addition of a surfactant to spray solutions will improve performance.  Manzate 200 fungicide. Consult State Cooperative Extension Service Specialist prior to use.  Do not apply within 7 days of harvest. Do not apply to exposed bulbs. Do not apply more than 30 lbs (lbs active) per acre per crop.	oupes Ant Gur Cer	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.	nose niidew stem blight ora	harvest.
(See barley)  Onions (dry bulb)  Botrytis leaf blight Downy mildew  Neck rot Purple blotch  Purple blotch  The addition of a surfactant to spray solutions will improve performance.  (furrow drench)  Smut  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 to exposed bulbs (lbs active) per acre per crop.	SEAA.	Manzate 200 fungicide. Consult State Cooperative Extension	N	
Downy mildew  Neck rot  Purple blotch  The addition of a surfactant to spray solutions will improve performance.  Smut  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.  Smut  Apply 3 lbs per acre as a furrow  Do not use more than 2.4 lbs	ırley)			
(furrow drench) Smut performance.  Apply 3 lbs per acre as a furrow Do not use more than 2.4 lbs	(dry bulb) Bot Dov Nec	starting when diseases are first reported in the areas and repeat at 7 day intervals throughout the season.  The addition of a surfactant to	nildew	harvest.  Do not apply to exposed bulbs.  Do not apply more than 30 lbs (24
drench at time of planting onion active per acre (29,000 linear for seeds. Use 75 to 125 gallons of of furrow) with an 18 inch row water per acre. spacing.	drench) Sm	performance.  Apply 3 lbs per acre as a furrow drench at time of planting onion seeds. Use 75 to 125 gaflons of control of the seeds.		active per acre (29,000 linear feet of furrow) with an 18 inch row
(Colletotricum) (minimum 50 gals column crown, blossom area and lbs active) per acre per crop.	(C Phy fru Bla	um 50 gals column crown, blossom area and developing fruit. Repeat at 14 to	otricum) (minimum 50 gals thora per acre) ot	Minimum pre-harvest interval (0
Peanuts Cercospora 1 to 2 Start application when disease first Do not apply within 14 days of appears or is reported in area. Do not apply within 14 days of harvest.	ts Cer	appears or is reported in area. Repeat sprays at 7 to 14 day intervals. Reduce sprays to a 7 day interval during humid weather.	ora 1 to 2	harvest.  Do not use more than 16 lbs (12.8 lbs active) per acre per crop.  Do not feed treated vines to
Peanuts (Tank mix with "Benlate" Fungicide)  Ascochyta web blotch Cercospora leaf spot Rust  Ascochyta web blotch Cercospora leaf spot Rust  Ascochyta web blotch Cercospora leaf spot Rust  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 day's of harvest. Do not use more than 12 lb's Manzate 200 (9.6 lbs, active) p acre per crop. Do not feed treated vines io	enlate" w de) Cei	enlate" or when disease threatens. It Repeat at 7 to 14 day intervals (7 to 10 days for rust).	otch "Benlate" ora	harvest.  Do not use more than 12 lbs Manzate 200 (9.6 lbs active) per acre per crop.  Do not feed treated vines 6
Pears (See Pomefruit)	omefruit)			

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CROP Pineapple (Seed-Piece Treatment Only)	DISEASES CONTROLLED Phytophthora heart rot	RATE OF MANZATE 200 PER APPLICATION LBS/ACRE  3.2 lbs/10 gals Use up to 100 gals of suspension to treat clean propagation material for one acre.	TIMING/INTERVALS (Also refer to Directions for Use)  Dip planting material in fungicide suspension prior to planting. Stir frequently to prevent settling.	RESTRICTIONS/COMMENTS  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	Tell Tell Tell Tell Tell Tell Tell Tell	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 (4.8 lbs active) per acre per application.  Do not apply after bloom.  Do not apply more than 24 lbs (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.
Pomefruits  Apples Pears Crabapples Quince	Rusts Scab Fabrea leaf spot	tree size.  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 (2.4 lbs active) per acre per application. Do not apply within 77 days of harvest. Do not apply more than 21 lbs (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.

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,` CROP	DISEASES CONTROLLED	RATE OF MANZATE 200 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 (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.
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 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 (19.2 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. (11.2 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	3/4 to 1 1/2	Start application when seedlings emerge or transplants are set. Repeat at 3 to 7 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 (16.8 lbs active) per acre per crop.
		1 1/2 to 3	Start application when seedlings emerge or transplants are set. Repeat at 7 to 10 day intervals throughout the season. The addition of a surfactant to spray solutions will improve performance.	
Tomatoes (West of the Mississippi River)	Anthracnose Early blight Gray leaf spot Late blight Leaf mold Septoria leaf spot	3/4 to 1	Start application when seedlings emerge or transplants are set. Repeat at 3 to 7 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 their 3 ibs (6.4 lbs active) per acre per crop,
		1 1/2 to 2	Start application when seedlings emerge or transplants are set. Repeat at 7 to 10 day intervals throughout the season. The addition of a surfactant to spray solutions will improve performance.	

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CROP	DISEASES CONTROLLED	RATE OF MANZATE 200 PER APPLICATION LBS/ACRE	TIMING/INTERVALS (Also refer to Directions for Use)	RESTRICTIONS/COMMENTS
Watermelon				
(See Melons)				
Wheat				
(See Barley)	<u></u>			

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

DISEASE/ PEST	RATE	TIMING INTERVAL	LAST APPLICATION TO HARVEST	LIVESTOCK GRAZING/ FEEDING	COMMENTS
Aigae	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 leed 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 (Helminthospodum 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 lavorable for disease, use 6-8 ozs/1000 sq ft (16-22/bs/acre) and reduce intervals to 3 to 5 days.
	PEST  Algae  Leaf stem, strip rust  Leaf spot (Helminthosporlum spp.) Rhizoctonia solani	PEST RATE  Algae 6 ozs in 3 to 5 gals/1000 sq ft (16 lbs in 130-220 gals/acre).  Leaf stem, 3-4 ozs in 3 to 5 gals/1000 sq ft (8-11 lbs in 130-220 gals/acre).  Leaf spot (Helminthospodum spo.) Rhizoctonia solani (8-11 lbs in 130-24 lbs in 130-25 gals/1000 sq ft (8-11 lbs in 130-25	PEST RATE INTERVAL  Algae 6 ozs in 3 to 5 gals/1000 sq ft (16 libs in 130-220 cals/acre).  Leaf stem, 3-4 ozs in 3 to 5 gals/1000 sq ft (8-11 libs in 130-220 cals/acre).  Leaf stem, 3-4 ozs in 3 to 5 gals/1000 sq ft (8-11 libs in 130-220 gals/acre).  Leaf spot (Helminthospodium spp.) Rhizoctonia solani (8-11 libs in 130-120 libs in	DISEASE/ PEST  RATE  TIMING INTERVAL  Algae  6 ozs in 3 to 5 gals/1000 sq ft (16 lbs in 130-220 cals/acre).  Leaf stem, strip rust  Leaf spot (Helminthosporlum spp.) Rhizoctonia solani  RATE  Timing APPLICATION TO HARVEST  Begin when algae first appears. Repeat at 7-day intervals as long as condition persists.  Begin when disease threatens, Repeat at 7 to 10-day intervals as long as disease persists.  Begin when disease threatens, Repeat at 7 to 10-day intervals as long as disease persists.  Begin when disease threatens.	DISEASE/ PEST RATE INTERVAL TO HARVEST FEEDING  Algae  Algae  Algae  Algae  Begin when algae first appears. Repeat at 7-day intervals as long as condition persists.  Leaf stem, 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.  Leaf spot (Heltminthosporlum spp.) Rhizoctonia solani  APPLICATION GRAZING/ FEEDING  Do not graze treated areas or feed clippings to livestock.  Do not graze treated areas or feed clippings to livestock.  Do not graze treated areas or feed clippings to livestock.  Do not graze treated areas or feed clippings to livestock.  Do not graze treated areas or feed clippings to livestock.

#### 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 trearments 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

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

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

		SEED TREATMENT RATE APPLY AS A SLURRY	
CROP	DISEASES	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, Smuls	1.3 to 2.0	4.0 to 6.3
Peanuts (shelled)	Damping-off, Seed rots, Seedling blights	2.0 to 4.0	8.0 to 16.0
Rice	Achlya, other soil and seedborne lungi causing seed rot and reduced seedling vigor.	-	2.0 to 4.0 Apply before, during, or a ler 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	<u> </u>	8.0
Wheat	Bunt, Covered smut, Damping-off, Seed decay, Seedling blights	1.3 to 2.0	2.2 to 3.3

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# STORAGE AND DISPOSAL

STORAGE: Important—Never allow "Manzate" 200 to become wet during storage. This may lead to certain chemical changes which will reduce the effectiveness of "Manzate" 200 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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