

MANCOZEB

FLOWABLE with Zinc

Concentrate



Fungicide

Early blight, Late blight

ACTIVE INGREDIENTS:

MANCOZEB†

A coordination product of zinc ion and manganese ethylene bisdithiocarbamate..... 37.0%

In which the ingredients are:

Manganese++..... 7.4%

Zinc++..... 0.9%

Ethylene bisdithiocarbamate ion (C₄H₆N₂S₄).... 28.7%

OTHER INGREDIENTS:..... 63.0%

TOTAL..... 100.00%

†Equivalent to 4 lbs. active ingredient per gallon.

EPA Est. No. 4-NY-1 EPA Reg. No. 62719-396-4

Keep Out Of Reach Of Children

CAUTION (See Back Panel for Additional Precautionary Statements)

TRUSTED SINCE 1926

BONIDE®



Potato

Tomato

MANCOZEB

FLOWABLE with Zinc Concentrate

SHAKE WELL BEFORE USE: Grasp container by handle and mix contents with a twisting motion followed by inverting. Repeat this action 5 to 10 times to ensure product is resuspended

Notice: Read the entire label. Use only according to label directions. **Before using this product, read Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies at end of label booklet. If terms are unacceptable, return at once unopened**

In case of emergency endangering health or the environment involving this product, call 1-800-992-5994.

Agricultural Chemical: Do not ship or store with food, feeds, drugs OR clothing

EPA Reg. No. 62719-396-4 EPA Est. No. 4-NY-1

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Distributed by:

Bonide Products, LLC

6301 Sutliff Road

Oriskany, NY 13424

BN

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Mixers, loaders, applicators and other handlers must wear:

- Long sleeved shirt
- Long pants
- 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)
- Shoes and socks

USER SAFETY REQUIREMENTS

Follow 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 and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

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 pesticide 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, or to areas where surface water is present, or to intertidal areas below the high water mark. Do not contaminate water when cleaning equipment or disposing of equipment washwaters or rinsate.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Read all Directions for Use carefully before applying.

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.

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 golf courses, industrial (office park), and municipal lawns are not within the scope of the Worker Protection Standard.

- Keep unprotected persons out of treated area until sprays have dried.

STORAGE AND DISPOSAL

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

Pesticide Storage: Keep from freezing. Store in a cool, well-ventilated area, but not below 32°F. Do not allow to become overheated in storage. This may bring on chemical changes that will impair the fungicidal effectiveness of this product. Keep container closed when not in use.

Pesticide Disposal: Wastes, resulting from the use of this product may be disposed of on-site or at an approved waste disposal facility.

STORAGE AND DISPOSAL (cont)

Nonrefillable rigid containers 5 gallons or less:

Container Handling: Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

Triple rinse or pressure rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

PRODUCT USE INFORMATION

This product is a broad-spectrum protectant fungicide labeled for outdoor crops, for turf and ornamental uses or greenhouse grown ornamentals. Optimum disease control is achieved when the fungicide is applied in a regularly scheduled preventative spray program. The addition of an agricultural surfactant will improve fungicide performance by providing a more uniform spray deposit, increased foliar redistribution, and improved fungicide retention during periods of wet weather.

SHAKE WELL BEFORE USE: Grasp container by handle and mix contents with a twisting motion followed by inverting. Repeat this action 5 to 10 times to ensure product is completely resuspended.

USE RATE DETERMINATION

Carefully read, understand, and follow label use rates and restrictions. Under low disease conditions, minimum label rates per application can be used while maximum label rates and the minimum interval may be used for severe or threatening disease conditions.

ORNAMENTAL APPLICATIONS

When treating ornamentals, determine that required fungicide use rate and the spray gallonage required to provide thorough coverage. Careful calibration of spray equipment is recommended prior to use. Prepare only the amount of spray solution to treat the desired area.

RESTRICTIONS

Users must carefully read, understand, and follow all use restrictions prior to using this product.

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.

POME FRUITS

Use either the Pre-Bloom/Bloom Use or Extended Application schedule. **Do not combine or integrate the two treatment schedules.** It is recommended that this product be used in an integrated pest Management Program (IPM).

Crop	Diseases Controlled	Product Rates per Application (qt/acre)	Application Directions (Also Refer to Directions for Use)	Restrictions
apples crabapples pears quince	fabrea leaf spot, rusts, scab	4.8 (3.5 fl oz/1,000 ft ²)	Pre-Bloom/Use: Begin applications at 1/4 to 1/2 inch green tip and continue on a 7-10 day schedule through bloom.	Do not apply more than 4.8 qt (4.8 lb mancozeb) per acre per application. Do not apply after bloom. Do not apply more than 19.2 qt (19.2 lb mancozeb) per acre per year. 14 fl oz/1,000 ft ² . Do not graze livestock in treated areas.

Crop	Diseases Controlled	Product Rates per Application (qt/acre)	Application Directions (Also Refer to Directions for Use)	Restrictions
apples crab-apples pears quince (cont.)	Fire blight	2.4 (1.69 fl oz/1,000 ft ²)	Extended Application Schedule for Use in Tank Mixtures with systemic fungicides: For implementation of IPM programs, applications based on tree-row volume, or for use as a resistance management tool. Apply after petal fall. The addition of product to copper fungicides will suppress the disease incidence in orchards where the fire blight (<i>Erwinia amylovora</i>) has become resistant to streptomycin. Use the full label rate of copper and follow the application instructions on the copper fungicide label.	Do not not apply more than 2.4 qt (2.4 lb. Mancozeb per acre per year. 12.3 fl oz/1,000ft ² . Do not gaze livestock in treated areas. Maximum number of applications on pomes per season is 4.
bananas	sigatoka	1.6 to 2.4	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 Latron surfactant to spray solutions will improve performance.	Do not apply more than 24 qt (24 lb. mancozeb) per growing cycle. Applications can be made up day of harvest. Maximum number of applications per season is 10.

FRUITS

Crop	Diseases Controlled	Product Rates per Application (qt/acre)	Application Directions (Also Refer to Directions for Use)	Restrictions
Cranberries	fruit rot	2.4 to 4.8 (1.76 to 3.52 fl oz/1000 ft ²)	Starts applications at early bloom and repeat at 7- to 10 - day intervals as required.	Do not apply within 30 days of harvest. Do not apply more than 14.4 qt (14.4lb mancozeb per acre per season. Maximum number of applications on cranberries per season is 3.
grapes	black rot bunch rot phomopsis downy mildew	1.2 to 2 West of the Rocky Mountains (0.88 to 1.6 fl oz/ 1,000 ft ² .) 1.2 to 3.2 East of the Rocky Mountains (0.88 to 2.35 fl oz/ 1,000 ft ² .)	Apply in sufficient water to provide thorough coverage starting when new shoots are ½ to 1½ inches long. Repeat when shoots are 3 to 5 inches long, when shoots are 8 to 10 inches long, and then at 7-10 days intervals	In California, do not apply after bloom. In other areas, do not apply within 66 days of harvest. West of the Rocky Mountains, do not apply more than 6 qt (6 lb mancozeb) per acre per season. West of the Rocky Mountains, the maximum number of applications is 3. East of the Rocky Mountains, the maximum number of applications per season is 6.

Crop	Diseases Controlled	Product Rates per Application (qt/acre)	Application Directions (Also Refer to Directions for Use)	Restrictions
grapes cont...			until fruit is set or 66 days before harvest. For late season control of black rot, deadarm and downy mildew, the use of other approved and approved and recommended fungicides is suggested.	
asparagus	cercospora leaf spot rust	1.6 (1.17 fl oz/ 1,000 ft ²)	Start applications when rust first appears and repeat at 10-day intervals.	Apply only on asparagus ferns after spears have been harvested. Do not apply more than 6.4 qt per acre per season (4.7 fl oz/100 ft ² .) Do not apply within 120 days of harvest in California and Arizona, or within 180 days in all other states. Maximum number of applications per season is 4.

VEGETABLES (cont.)

Crop	Diseases Controlled	Product Rates per Application (qt/acre)	Application Directions (Also Refer to Directions for Use)	Restrictions
corn (sweet corn for processing popcorn; and sweet corn for seed production, including hybrid seed)	common rust helminthosporium leaf blight	1.2 (0.88 fl oz/ 1,000 ft 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 Latron surfactant to spray solutions will improve performance.	Do not apply within 7 days of harvest. East of the Mississippi River, Arkansas and Louisiana, do not apply more than 18 qt (18 lb mancozeb) per acre per crop. East of the Mississippi River, Arkansas and Louisiana, the maximum number of applications per season is 15. West of the Mississippi River, (except Arkansas and Louisiana), do not apply more than 6 qt (6 lb mancozeb) per acre per crop. West of the Mississippi River, (except Arkansas and Louisiana), the maximum number of applications per season is 5. Do not feed treated forage to livestock.

VEGETABLES (cont.)

Crop	Diseases Controlled	Product Rates per Application (qt/acre)	Application Directions (Also Refer to Directions for Use)	Restrictions
cucumbers	anthracnose cercospora leaf spot, downy mildew, gummy stem, blight, microdochium blight scab	1.6 to 2.4 (1.17 to 1.76 fl oz/ 1,000 ft ²)	Start applications when plants are in the two-leaf stage and repeat at 7-10 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 qt (19.2 lb mancozeb) per acre per crop. Maximum number of applications per season is 8.
melons; cantaloupe casaba crenshaw honeydew muskmelon	alternaria leaf spot, anthracnose, downy mildew, gummy stem blight, microdochium blight	1.6 to 2.4 1.17 to 1.76 fl oz/1,000 ft ² .	Start applications when plants are in the two-leaf stage and repeat at 7-10 day intervals. Use sufficient water and direct spray to provide thorough coverage of both upper and lower leaf surfaces. Some cantaloupe varieties (i.e.: Harvest Queen, Gold Star, Super Star, Sweet	Do not apply within 5 days of harvest. Do not apply more than 19.2 qt (19.2 lb mancozeb) per acre per crop. Maximum number of applications per season is 8.

VEGETABLES (cont.)

Crop	Diseases Controlled	Product Rates per Application (qt/acre)	Application Directions (Also Refer to Directions for Use)	Restrictions
melons; cantaloupe casaba crenshaw honeydew muskmelon (cont...)			and Early, and Salicoy) are sensitive to Product. Consult State Cooperative Extension Service Specialist prior to use.	
onions (dry bulb) garlic shallots	botrytis leaf blight, downy mildew, neck rot, purple blotch, rust	2.4 (1.76 fl oz/ 1,000 ft ²)	Follow a protective spray schedule starting when diseases are first reported in the area and repeat at 7-day intervals throughout the season. The addition of a Latron surfactant to spray solutions will improve performance. Do not allow spray or drift to contact bulbs after lifting from soil.	Do not apply within 7 days of harvest. Do not apply more than 24 qt (24 lb mancozeb) per acre per crop. Do not apply to exposed bulbs.

VEGETABLES (cont.)

Crop	Diseases Controlled	Product Rates per Application (qt/acre)	Application Directions (Also Refer to Directions for Use)	Restrictions
potatoes	early blight late blight	0.4 to 1.6 (1.17 fl oz/ 1,000 ft ²)	Begin applications when plants are 4 to 6 inches high by applying 0.4 to 0.8 qt/acre. As the vines increase in size, apply 1.2 to 1.6 qt/acre at 5-10 day intervals or 0.6 to 0.8 qt/acre at 3-5 day intervals. The addition of a Latron surfactant to spray solutions will improve performance. It is recommended that this product be used within an Integrated Pest Management Program. Also, vine-kill should occur 14 days before harvest.	Do not apply more than 11.2 qt (11.2 lb mancozeb) per acre per crop. Do not apply within 3 days of harvest in Connecticut, Delaware, Florida, Maine, Massachusetts, Michigan, New Hampshire, New York, Ohio, Pennsylvania, Rhode Island, Vermont and Wisconsin and at least 14 days elsewhere.
squash summer	anthracnose downy mildew, microdochium blight	1.6 to 2.4 (1.17 to 1.76 fl oz/ 1,000 ft ²)	Start applications when plants are in 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 qt (19.2 lb mancozeb) per acre per crop. The maximum number of applications per season is 8.

VEGETABLES (cont.)

Crop	Diseases Controlled	Product Rates per Application (qt/acre)	Application Directions (Also Refer to Directions for Use)	Restrictions
toma-toes	anthracnose, early blight, gray leaf spot, late blight, leaf mold, septoria leaf spot	1.2 to 1.6 West of the Mississippi River (0.88 to 1.17 fl oz/ 1,000 ft ²)	Start applications when seedlings emerge or transplants are set and repeat at 7-10 day intervals throughout the season. The addition of a Latron surfactant to spray solutions will improve performance.	Do not apply within 5 days of harvest. West of the Mississippi River, do not apply more than 6.4 qt (6.4 lb mancozeb) per acre per crop. East of the Mississippi River, do not apply more than 16.8 qt (16.8 lb mancozeb) per acre per crop.
	bacterial speck and spot	1.2 to 2.4 East of the Mississippi River (0.88 to 1.76 fl oz/ 1,000 ft ²)	Use a full rate of a fixed copper fungicide in tank mix combination with a half to full rate Product. Follow the application intervals required on the copper fungicide label.	
water-melons	alternaria leaf spot, anthracnose, cercospora leaf spot, downy mildew, gummy stem blight, microdochium blight, scab	1.6 to 2.4 (1.17 to 1.76 fl oz/ 1,000 ft ²)	Start applications when plants are in 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 qt (19.2 lb mancozeb) per acre per crop. The maximum number of applications per season is 8.

Restrictions:

- Cut flowers and greenhouse grown ornamentals; Limit to 20 applications per year
- Do not use for food or feed purposes
- Not for use in residential greenhouses

Neither the manufacturer nor the seller has determined the effects of using this product on ornamentals not specified on this label. Prior to any large-scale applications on such plants, the user should determine the effects of the product by testing a small section of the type of plants treated. The Conditions of Sale and Warranty apply to all uses.

For outdoor or greenhouse use, apply the equivalent of 1.2 qt of this product per 100 gal dilute spray (1.2 quarts of this product per acre). The addition of Latron B-1956 to spray solutions will improve performance.

Begin spraying when plants are well leafed out or at first sign of disease, in a full coverage spray at 7-10 day intervals throughout season.

Crop	Diseases Controlled	Crop Specific Instructions
almond (ornamental)	leaf spot	
apple (ornamental)	fabraea leaf spot, rust, scab	
arborvitae	cercospora blight	
ash, mountain	entomosporium leaf spot, guignardia leaf blotch	
ash, white	anthracnose, cylindrosporium leaf spot	
azalea	cylindrocladium rot, petal blight, phytophthora twig and bud blight	Apply in a full coverage spray, 2 to 3 times a week, while flowers are opening. Direct spray into flowers and thoroughly spray ground under bushes.
begonia	botrytis blight	
boxwood	leaf spot	
cedar, red (juniper)	cercospora blight, phomopsis blight	
chrysanthemum	ascochyta blight, botrytis petal spot, rust	Apply twice weekly during blooming period.
conifers (Christmas Trees)	lophodermium needle cast, pine gall rust, scirrhia brown spot	Begin application in spring or early summer before infection occurs. Repeat after heavy rains and at two-week intervals as long as needed.
crabapple (ornamental)	cedar apple rust, scab, sphaeropsis leaf spot	

Crop	Diseases Controlled	Crop Specific Instructions
cypress, Arizona (Cupressus spp.)	cercospora blight, monochaetia canker	
dogwood, flowering	anthracnose, elsinoe leaf spot, septoria leaf spot	Apply when buds begin to open, when bracts have fallen, 4 weeks later and again in late summer after flower buds have formed.
elm	black leaf spot	
euonymus	anthracnose	
firethorn (pyracantha)	fusicladium scab	
fir, Douglas	Swiss needle cast	The preharvest interval is 14 days.
fir, fraser	Swiss needle cast	The preharvest interval is 14 days.
geranium	rust	
hawthorn	cedar-apple rust, fabraea leaf spot, frog-eye leaf spot, hawthorn rust, scab	
hickory	gnomonium leaf spot	
horsechestnut, buckeye	alternaria leaf spot, guignardia leaf blotch	
hydrangea	botrytis blight, cercospora leaf spot	
impatiens	botrytis blight	

Crop	Diseases Controlled	Crop Specific Instructions
iris	didymellina leaf spot, mycosphaerella leaf spot, mystrosporium ink spot	(formerly didymellina)
laurel, mountain	cercospora leaf spot, petal blight	Apply in a full coverage spray, 2 to 3 times a week, while flowers are opening. Direct spray into flowers and thoroughly spray ground under bushes.
lily	botrytis blight	
magnolia	gloeosporium leaf spot	
maple	alternaria leaf spot, phyllosticta leaf spot	
oak	actinopelte leaf spot, taphrina leaf blister	
pears (ornamental)	fabraea leaf spot, rust, scab	
peony	botrytis blossom blight, phytophthora blight	Apply in early spring and early fall, drenching soil around plants as well as the foliage. Promptly destroy all infected plant parts.
petunia	botrytis blight	
photinia	entomosporium leaf spot	
pine, Australia	cyclaneusma needle cast	
pine, Scotch	cyclaneusma needle cast, gall rust	
poplar	rust	
quince (ornamental)	fabraea leaf spot, rust scab	

	Crop Diseases Controlled	Crop Specific Instructions
rhododendron	cercospora leaf spot, discosia leaf spot, petal blight	Apply in a full coverage spray, 2 to 3 times a week, while flowers are opening. Direct spray into flowers and thoroughly spray ground under bushes.
rose	black spot, cercospora leaf spot, rust	
Scotts pine	needle cast	
skunkbush, sumac	cylindrosporium leaf spot	
thorn apple	rust	
viburnum	downy mildew, ramularia leaf spot	
walnut	anthracnose	

TERMS AND CONDITIONS OF USE

If terms of the following Warranty Disclaimer, Inherent Risks of Use and Limitation of Remedies are not acceptable, return unopened package at once to the seller for a full refund of purchase price paid. To the extent permitted by law, otherwise, use by the buyer or any other use constitutes acceptance of the terms under Warranty Disclaimer, Inherent Risks of Use and Limitation of Remedies.

WARRANTY DISCLAIMER

Bonide warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth below. TO THE EXTENT PERMITTED BY LAW, BONIDE MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

INHERENT RISKS OF USE

It is impossible to eliminate all risks associated with use of this product. Crop injury, lack of performance, or other unintended consequences may result because of such factors as use of the product contrary to label instructions (including conditions noted on the label, such as unfavorable temperatures, soil conditions, etc.) abnormal conditions (such as excessive rainfall, drought, tornadoes, hurricanes), presence of other materials, the manner of application, or other factors, all of which are beyond the control of Bonide or the seller. To the extent permitted by law, all such risks shall be assumed by buyer.

LIMITATIONS OF REMEDIES

To the extent permitted by law, the exclusive remedy for losses or damages resulting from this product (including claims based on contract, negligence, strict liability, or other legal theories), shall be limited to, at Bonides' election, one of the following:

1. Refund of purchase price by buyer or user for product bought, or
2. Replacement of amount of product used.

To the extent permitted by law, Bonide shall not be liable for losses or damages resulting from handling or use of this product unless Bonide is promptly notified of such loss or damage in writing. To the extent permitted by law, in no case shall Bonide be liable for consequential or incidental damages or losses.

The terms of the Warranty Disclaimer, Inherent Risks of Use and Limitation of Remedies cannot be varied by any written or verbal statements or agreements. No employee or sales agenda of Bonide or the seller is authorized to vary or exceed the terms of the Warranty Disclaimer or Limitation of Remedies in any manner.