

MANEB 80

FUNGICIDE

ACTIVE INGREDIENT

Maneb (Manganese ethylenebisdimiocarbamate)
(Manganese equivalent as metallic, 18.5%)

80.0%

INERT INGREDIENTS

20.0%

TOTAL

100.0%

KEEP OUT OF REACH OF CHILDREN

CAUTION

STATEMENT OF PRACTICAL TREATMENT

IF SWALLOWED, induce vomiting immediately by giving two glasses of water and sticking finger down throat. Call a physician. Never give anything by mouth to an unconscious person.

IF IN EYES, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation persists.

IF ON SKIN, immediately flush skin with plenty of water. Get medical attention if irritation persists.

See Back Panel for Additional Precautionary Statements



EPA Registration No. 4581-255
EPA Establishment No. 33910-JL-01

Net Weight 50 Lbs. (22.68 kg)

Sold by

AGCHEM DIVISION—PENNWALT CORPORATION
Philadelphia, PA 19102

ACCEPTED

MAY 17 1968

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Under the Federal Insecticide,
Fungicide, and Rodenticide Act
EPA Reg. No. 4581-255

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PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS (AND DOMESTIC ANIMALS)

CAUTION

HARMFUL IF SWALLOWED, ABSORBED THROUGH SKIN, OR INHALED. CAUSES MODERATE EYE IRRITATION. Avoid contact with skin, eyes, or clothing. Avoid breathing spray mist or dust. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

Do not apply this product in such a manner as to directly or through drift expose workers or other persons. The area being treated must be vacated by unprotected persons.

ENVIRONMENTAL HAZARDS

This product is toxic to fish. Keep out of any body of water. Do not apply where runoff is likely to occur. Do not contaminate water when disposing of equipment washwaters.

GENERAL INFORMATION

MANEB 80 may be used as a spray or dust for the control of many fungus plant diseases. It mixes readily with water, suspends well, and adheres to sprayed surfaces with a minimum of runoff.

DIRECTIONS FOR USE

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

Do not enter treated areas without protective clothing until spray has dried or dust has settled. Because certain states may require more restrictive reentry intervals for various crops treated with this product, consult your State Department of Agriculture for further information.

Written or oral warnings must be given to workers who are expected to be in a treated area or in an area about to be treated with this product. When oral warnings are given, such warnings shall be given in a language customarily understood by the workers. Oral warnings must be given if there is reason to believe that written warnings cannot be understood by the workers. Written warnings must include the

following information: "CAUTION. Area treated with MANEB 80 Fungicide on (date of application). Do not enter without protective clothing until spray has dried."

MANEB 80 is recommended for control of the diseases on the crops listed below.

SPRAYS

Place MANEB 80 into suspension prior to adding an adjuvant to the spray mixture. Read and carefully observe the precautionary statements and all other information appearing on product labels prior to spray preparation.

FOR GROUND APPLICATIONS use at the rate indicated in sufficient water for thorough coverage, minimum 10 gallons. Increased volume of water may be necessary as foliage density increases.

To prepare mixture, sift in the required amount of product when the agitator paddles or the jet or recirculating pipe from pump are covered. Fill the tank with water when the product is thoroughly mixed. Three to four level teaspoonfuls of MANEB 80 per one gallon of water is equivalent to 1 1/2 to 2 pounds per 100 gallons.

FOR AIR APPLICATION use at the rate indicated in sufficient water for thorough coverage, at least 3 gallons for field crops. Increased volume of water may be necessary as foliage density increases.

DUST

MANEB 80 may be used at concentrations of 6% to 8% (4.8 to 6.4% active) unless otherwise stated by diluting and thoroughly mixing with pyrophyllite or some other neutral diluent. Use dust mixtures as soon as possible after preparation. Compatible insecticides may displace an equivalent amount of diluent in preparing the dust mixtures.

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CROP	DISEASES	RATE LBS/A	REMARKS
Almonds	Brown Rot Blossom and Twig Blight Scab Shot-hole Fungus (Leaf Blight)	6 - 8	Apply at popcorn, full petal fall or every 7 bloom is staggered. Do spray if only brown rot present. Use higher rate severe disease pressure after petal fall, do not hulls to dairy animals being finished for sale. not apply later than petal fall.
Apples	Black Rot Bitter Rot <u>Botryosphaeria</u> (White Rot) Bullseye Rot Cedar-Apple Rust Flyspeck Scab Sooty Blotch	7 1/2 - 10 PLUS suitable spreader/ sticker	Begin in prebloom, cover cover stages. Repeat day intervals as needed higher rate under severe pressure. Do not graze treated areas. Do not days of harvest in Ar ware, Illinois, Indiana Kentucky, Maryland, M Jersey, North Carolina sylvania, South Carol Virginia and West Vir apply within 30 days other states.
Grapes	Black Rot	1 1/2 - 4	Apply by air or ground new shoots are 8-10 in (pre-bloom). Repeat bloom and 7 to 10 days fruit is present, use 1.8 lbs per acre. Do in 7 days of harvest. rate under severe disease

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Beans (Lima)	Anthracnose Downy Mildew	2	Begin at first sign of disease. Repeat at 4 to 7 day intervals. Do not apply within 4 days of harvest of succulent beans.
Beans (Snap and Dry)	Anthracnose Downy Mildew Rust	2	Begin when plants are small. Repeat at 5 to 7 day intervals. Do not apply within 4 days of harvest of succulent beans.
Broccoli	Alternaria Leaf Spot Downy Mildew	1 1/2 - 2	Begin when disease threatens. For Downy Mildew begin in plant bed and repeat at 3-day intervals. In the field, repeat at 7 to 14 day intervals. Use higher rate under severe disease pressure. If applied within 3 days of harvest, remove residues by washing or trimming.
Cabbage	Alternaria Leaf Spot Downy Mildew	1 1/2 - 2	Plant beds and direct seeded fields: apply 7 to 10 days after planting or earlier if diseases are present. Repeat at 3 day intervals until plants are set in the field or until field seeded plants are thinned. Fields: apply when disease threatens; repeat weekly as needed. Shorten interval to 3 to 5 days under severe conditions. Do not apply later than 7 days before harvest. Use higher rate under severe disease pressure.

Melons, including
Cantaloupe,
Cassabas,
Crenshaws,
Honeydew Melons,
Honey Balls,
Muskmelons,
Persian Melons,
Watermelons

Anthrachnose
Cercospora Leaf Spot
Downy Mildew
Gummy Stem Blight

2

Begin at late bunching when vines begin to run or when disease first appears. Repeat at 7 to 10 day intervals. Do not apply within 5 days of harvest.

Corn (Sweet)

Helminthosporium Blight

1 1/2

Begin application when first signs of disease appear and apply every 7 to 10 days while the disease is present (under severe conditions, shorten intervals to 4 to 5 days). Add a recommended surfactant or spreader/sticker to the spray tank. Do not feed treated forage to livestock.

Cucumbers

Downy Mildew
Anthrachnose
Pythium Fruit Rot
(South Carolina)

2

Apply as soon as plants begin to run or when disease threatens; repeat at 7 to 10 day intervals as needed. Under severe conditions, shorten interval to 3 to 5 days. Do not apply within 5 days of harvest.

Eggplant

Anthrachnose
Early Blight
(Alternaria)
Phomopsis Blight
Fruit Rot

1 1/2 - 2

Begin when fruit starts to form. Repeat at 7 to 10 day intervals. Use higher rate under severe disease pressure.

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Lettuce, Endive	Downy Mildew	2	Apply when disease appears; repeat at 7 to 10 day intervals under average conditions, 3 to 5 days when disease conditions are severe. Do not apply within 10 days of harvest. Remove residues from head lettuce and endive by stripping and trimming and from leaf lettuce by washing or other effective means.
Peppers	Anthrachnose Cercospora Leaf Spot (Frogeye Spot) Ripe Rot	1 1/2 - 2	Begin when disease threatens. Repeat at 7 to 10 day intervals. Use higher rate under severe disease pressure.
Potatoes	Early and Late Blights	1 1/2 - 2	Begin when plants are 2 to 6 inches high. Repeat at 5 to 10 day intervals, more often and using the higher rate under severe disease pressure.
Potatoes (Seed Pieces)	Fusarium Seed Piece Decay	1 1/4 lb/ 10 gal	Seed piece treatment only. Dip whole or cut tubers. Spread in cool place if held before planting. Do not use excess seed pieces for food or feed.
Pumpkins	Angular Leaf Spot Downy Mildew	3	Begin when disease threatens. Repeat at 7 to 10 day intervals.

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Spinach	Downy Mildew (Blue Mold) White Rust	1 1/2 - 2	Begin when disease appears. Repeat at 7 to 10 day intervals. Use the higher rate under severe disease pressure. Do not apply within 10 days of harvest. Remove excess residues by washing.
Squash (Summer and Winter)	Anthrachnose Downy Mildew	1 1/2 - 2	Begin when plants start to run. Repeat at 7 to 10 day intervals. Do not apply within 5 days of harvest. Use the higher rate under severe disease pressure.
Tomatoes (Greenhouse and Field)	Cladosporium Leaf Mold Early and Late Blights Gray Leaf Spot (<u>Stemphylium</u>) Septoria Leaf Spot Anthrachnose	1 1/2 - 2	Begin at first fruit cluster and repeat at 7 to 10 day intervals. Do not apply within 5 days of harvest. Use the higher rate under severe disease pressure.
Grasses (Ornamentals- Grown for Replanting Seed Purposes Only)	Leaf, Stem and Stripe Rust	3	Begin when first fruit forms. Repeat at 7 to 10 day intervals. Do not apply within 5 days of harvest.
		2 - 3	Begin when rust pustules are first seen. Repeat at 7 to 14 day intervals. Use the higher rate under severe disease pressure.
Sugar Beets	Leaf Spot (<u>Cercospora</u>)	3	Begin when disease threatens. Repeat at 7 to 10 day intervals for 3 to 5 applications. Do not apply within 14 days of harvest. Do not feed treated tops to livestock.

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Systems utilizing a pressurized water and pesticide injection system must meet the following requirements:

- 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.
- 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.
- 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.

INSTRUCTIONS FOR SPRINKLER (OVERHEAD) IRRIGATION:

Observe the requirements in the System Requirements section above.

- Do not apply when wind speed favors drift beyond the area intended for treatment.
- Apply MANEB 80 only through systems containing anti-siphon and check valves designed to prevent water source contamination or overflow of the mix tank and containing interlocking controls between the metering device and the water pump to insure simultaneous shut-off.
- Maintain a gentle continuous agitation in mix tank during mixing and application to assure a uniform suspension.
- Greater accuracy in calibration and distribution will be achieved by injecting a larger volume of a more dilute suspension per unit time.
- Application of more than recommended quantities of irrigation water per acre may result in decreased product performance.
- Do not apply when wind speed favors drift, when system connections or fittings leak, when nozzles do not provide uniform distribution or when lines containing the product cannot be flushed and must be dismantled and drained. In a center pivot system, block the nozzle set nearest the well pivot injection unit to prevent spray being applied to this area.
- Where sprinkler distribution patterns do not overlap sufficiently, unacceptable disease control may result.
- Allow sufficient time for pesticide to be flushed through all lines and all nozzles before turning off irrigation water.
- MANEB 80 may be applied in conjunction with chemically neutral liquid fertilizers. Application in conjunction with highly alkaline fertilizers, such as aqueous ammonia, may cause a degradation of the pesticide, resulting in reduced performance and should be avoided.
- Check local restrictions and requirements regarding sprinkler irrigation applications, as they may vary from state to state.

SPRAY PREPARATION

Remove scale, pesticide residues, and other foreign matter from the chemical tank and entire injector system. Flush with clean water.

Prepare a suspension of MANEB 80 in a mix tank. Fill the tank with $\frac{1}{2}$ or $\frac{3}{4}$ the desired amount of water. Start mechanical or hydraulic agitation. Slowly add the required amount of MANEB 80 and then the remaining volume of water.

APPLICATION INSTRUCTIONS

Set sprinkler system to deliver 0.1 to 1.25 inches of water per acre. Volumes of water higher than this may reduce efficacy. Start sprinkler and then uniformly inject the suspension of MANEB 80 into the irrigation water line so as to deliver the desired rate per acre. The suspension of MANEB 80 should be injected with a positive displacement pump into the main line ahead of a right angle turn to insure adequate mixing.

NOTE: When treatment with MANEB 80 has been completed, do not irrigate the treated area for 24 to 48 hours to prevent washing the chemical off the crop.

STORAGE AND DISPOSAL

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

Storage Instructions: Store in the original container in a dry area. If allowed to become wet the product will deteriorate and represent a fire hazard. Keep away from sources of ignition (e.g., sparks and open flame). Close bag when not in use. Do not store in manner where cross-contamination with other pesticides, fertilizers, food or feed could occur. If spilled during storage or handling, sweep up spillage and dispose of in accordance with the Pesticide Disposal Instructions listed below.

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

Container Disposal Instructions: Completely empty bag into application equipment. Then dispose of empty bag in a soil pit, landfill, or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

WARRANTY AND DISCLAIMER

Pennwalt Corporation warrants that this material conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the Directions for Use, subject to the uses referred to therein. PENNWALT MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY. IN NO CASE SHALL PENNWALT OR SELLER BE LIABLE FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT INCLUDING, BUT NOT LIMITED TO, LOSS OF PROFITS, BUSINESS REPUTATION, OR CUSTOMERS, LABOR COST, OR OTHER EXPENSES INCURRED IN PLANTING OR HARVESTING.

Pennwalt and seller offer this product and the buyer and user accept it subject to the foregoing conditions of sale and warranty which may be varied only by agreement in writing signed by a duly authorized representative of Pennwalt.

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