

SHAKE WELL BEFORE USING
NOT FOR USE IN CALIFORNIA

MANEB PLUS ZINC F4

Fungicide

ACTIVE INGREDIENT:

Maneb (Manganese Ethylenebisdithiocarbamate)	37%
(Total Manganese as metallic)	7.6%
INERT INGREDIENTS:	63%
TOTAL	100%

This product contains 4 pounds Maneb per gallon

KEEP OUT OF REACH OF CHILDREN

CAUTION

STATEMENT OF PRACTICAL TREATMENT

IF SWALLOWED, call a physician or Poison Control Center. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger. Do not induce vomiting or give anything by mouth to an unconscious person.

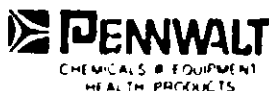
IF IN EYES, flush eyes with plenty of water. Call a physician if irritation persists.

IF ON SKIN, wash with plenty of soap and water. Get medical attention if irritation persists.

See Back Panel for Additional Precautionary Statements

See Brochure for General Information, Directions for Use and Chemical Instructions

Do not apply this product through any irrigation system unless these instructions are followed



EPA Registration No. 4581-359

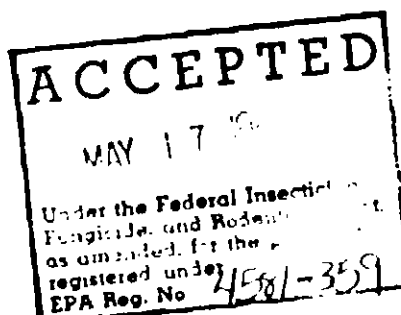
EPA Establishment No. 4581-TX-1

Net Contents 2.5 U.S. Gallon/9.46 Liters

Sold by:

AGCHEM DIVISION—PENNWALT CORPORATION

Philadelphia, PA 19102



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 mist. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse. Wear protective clothing (long pants, long sleeved shirt, impermeable gloves, hat and boots) during mixing and loading.

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. Do not apply to water. Do not apply where runoff is likely to occur. Do not contaminate water when disposing of equipment washwaters.

PHYSICAL AND CHEMICAL HAZARDS

Keep away from fire and sparks. Store in a cool dry place.

STORAGE AND DISPOSAL

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

Storage Instructions: Store in the original container. Keep away from fire and sparks. Store in a cool place, but not below 32°F. Do not allow product to become overheated in storage as this may bring on chemical changes which will impair the fungicide effectiveness of MANEB-PLUS ZINC F4 Fungicide. Keep container closed when not in use. Do not store in a manner where cross-contamination with other pesticides, fertilizers, food or feed could occur. If spilled during storage or handling, absorb with sand or other inert material and dispose of absorbant 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: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

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 risks 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.

Made and Printed in U.S.A.

NOT FOR USE IN CALIFORNIA

MANEB PLUS ZINC F4**Fungicide**

EPA Registration No. 4581-359

GENERAL INFORMATION**DIRECTIONS FOR USE**

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

Do not use 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.

Do not enter treated areas without protective clothing until spray has dried. 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 PLUS ZINC F4 Fungicide on (date of application). Do not enter without protective clothing until spray has dried."

DIRECTIONS FOR USE AS A SPRAY

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

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

CHEMIGATION
NOT FOR THIS USE IN CALIFORNIA
GENERAL INSTRUCTIONS

Apply this product only through sprinkler irrigation systems including center pivot, lateral move, end row side (wheel) roll traveler, big gun, solid set or hand move. Do not apply this product through any other type of irrigation system.

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

If you have any questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

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.

Do not connect chemigation system to any public water system. Public water system means a system for the provision 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.

SYSTEM REQUIREMENTS

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, 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 PLUS ZINC F4 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 ensure 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 point injection unit to prevent spray being applied to this area.

Where sprinkler distribution patterns do not overlap sufficiently, unacceptable dry spot control may result.

Allow sufficient time for pesticide to be flushed through all lines and all nozzles before turning off irrigation water.

MANEB PLUS ZINC F4 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 materials from the mix tank and entire injector system. Flush with clean water.

Prepare a suspension of MANEB PLUS ZINC F4 in a mix tank. Fill the tank with 1/2 or 3/4 the desired amount of water. Start mechanical or hydraulic agitation. Slowly add the recommended amount of MANEB PLUS ZINC F4 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 PLUS ZINC F4 into the irrigation water line so as to deliver the desired rate per acre. The suspension of MANEB PLUS ZINC F4 should be injected with a positive displacement pump into the main line ahead of a right angle turn to ensure adequate mixing.

NOTE: When treatment with MANEB PLUS ZINC F4 has been completed, do not irrigate the treated area for 24 to 48 hours to prevent washing the chemical off the crop.

MANEB + ZINC F4

CROP	DISEASES	RATE PT/ACRE	REMARKS
Almonds	Brown Rot Blossom and Twig Blight Scab Shot-hole Fungus (Leaf Blight)	9 1/2 - 12 3/4	Apply at popco petal fall or bloom is stagge spray if only If applied aft feed hulls to animals being Use the higher disease pressu than 5 weeks a
Apples	Black Rot Bitter Rot <u>Botryosphaeria</u> (White Rot) Bullseye Rot Cedar-Apple Rust Flyspeck Scab Sooty Blotch	12 - 16 PLUS suitable spreader/ sticker	Begin in prebl cover stages. day intervals higher rate un pressure. Do in treated are in 15 days of Delaware, Illi Kentucky, Mary Jersey, North sylvania, Sour Virginia and W apply within 3 other states.
Grapes	Black Rot	2 1/2 - 6 1/2	Apply by air o new shoots are (pre-bloom). bloom and 7 to fruit is prese 1 1/2 qts. per rate under sev Do not apply w vest.

MANEB + ZINC F4

Beans (Lima)	Anthracnose Downy Mildew	3 1/4	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	3 1/4	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	2 1/2 - 3 1/4	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	2 1/2 - 3 1/4	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.

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MANEB + ZINC F4

Melons, including Cantaloupe, Cassabas, Crenshaws, Honeydew Melons, Honey Balls, Muskmelons, Persian Melons, Watermelons	Anthracnose Cercospora Leaf Spot Downy Mildew Gummy Stem Blight	3 1/4	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	2 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 Anthracnose Pythium Fruit Rot (South Carolina)	3 1/4	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	Anthracnose Early Blight (Alternaria) Phomopsis Blight Fruit Rot	2 1/2 - 3 1/4	Begin when fruit starts to form. Repeat at 7 to 10 day intervals. Use higher rate under severe disease pressure.

MANEB + ZINC P4

Lettuce, Endive	Downy Mildew	3 1/4	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	Anthracnose Cercospora Leaf Spot (Frogeye Spot) Ripe Rot	2 1/2 - 3 1/4	Begin when disease threatens. Repeat at 7 to 10 day intervals. Use higher rate under severe disease pressure.
Potatoes	Early and Late Blights	2 1/2 - 3 1/4	Begin when plants are 2 to 6 inches high. Repeat at 5 to 10 day intervals, more often and using higher rate under severe disease pressure.
Potatoes (Seed Pieces)	Fusarium Seed Piece Decay	2 pts/ 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	4 3/4	Begin when disease threatens. Repeat at 7 to 10 day intervals.
Spinach	Downy Mildew (Blue Mold) White Rust	2 1/2 - 3 1/4	Begin when disease appears. Repeat at 7 to 10 day intervals. Do not apply within 10 days of harvest. Use the higher rate under severe disease pressure. Remove excess residues by washing.

MANEB + ZINC F4

Squash
(Summer and
Winter)

Anthrachnose
Downy Mildew

2 1/2 - 3 1/4 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
(Stemphylium)
Septoria Leaf Spot

2 1/2 - 3 1/4 Begin at first fruit cluster and
repeat at 7 to 10 day intervals.
Do not apply within 5 days of har-
vest. Use the higher rate under
under severe disease pressure.

Anthrachnose

4 3/4 Begin when first fruit forms. Re-
peat at 7 to 10 day intervals. Do
not apply within 5 days of harvest.

Grasses
(Ornamentals-
Grown for
Replanting Seed
Purposes Only)

Leaf, Stem and Stripe
Rust

3 1/2 - 4 3/4 Begin when rust pustules are first
seen. Repeat at 7 to 14 day inter-
vals. Use the higher rate under
severe disease pressure. Do not
feed treated grass to livestock.

Sugar Beets

Leaf Spot
(Cercospora)

4 3/4 Begin when disease threatens. Re-
peat 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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