

PM 21 4581-255 1047  
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

JUN 1 1993

Gary R. Sandberg  
Senior Registration Specialist  
Agrichemicals Division  
Elf Atochem North America, Inc.  
Three Parkway  
Philadelphia, PA 19102

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Subject: Labeling Amendment

Maneb 80

EPA Reg. No. 4581-255

Your Application Dated December 14, 1992

Dear Mr. Sandberg:

Thank you for your submission, in which you proposed to amend the cited product labeling to include instructions for the aerial application of the product to roses; and to add Delaware, Michigan, Ohio, and Rhode Island to the list of states allowed a minimum three-day pre-harvest interval for potatoes.

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable subject to the comment listed below. A stamped copy of the labeling is enclosed for your records. Five copies of the finished labeling must be submitted prior to releasing the product for shipment.

Note that this acceptance of your label does not relieve you of your obligation to comply with the Worker Protection Standard (WPS). If any of your products are covered by this standard, you are required to submit, and receive the Agency's approval by April 21, 1994, a revised label reflecting the required label statements of 40 CFR 156, published in the FEDERAL REGISTER on August 21, 1992 (57 FR 38102). Further guidance will be issued. According to 40 CFR 156, subpart K, specifically § 156.200(c)(3): "No product to which this subpart applies shall be distributed or sold without amended labeling by any registrant after April 21, 1994." Please call 1-(800) 777-2185 if you have any labeling questions regarding the Worker Protection Standard.

CONCURRENCES

SYMBOL	H7505C	H7505C						
SURNAME	D Greenway	C. K. M.						
DATE	5/27/93	6/1/93						

20/17

Please contact Julie Fairfax, of my staff, should you have any questions regarding this letter. Ms. Fairfax may be reached by calling (703) 305-7390.

Sincerely yours,



Clarence O. Lewis, III  
Acting Product Manager (21)  
Fungicide-Herbicide Branch  
Registration Division (H7505C)

Enclosure

**elf atochem**

**ATO**

PROPOSED LABEL

302  
ACCEPTED  
with COMMENTS  
in EPA Letter Dated:

EBN 1 1993

Under the Fungicide, and Pesticide Act as amended, for the pesticide registered under EPA Reg. No.

4581-255

# MANEB 80

## FUNGICIDE

**ACTIVE INGREDIENT:**

Maneb (Manganese ethylenebisdithiocarbamate) ..... 80.0%  
(Equivalent to manganese metallic 16.5%)

**INERT INGREDIENTS:** ..... 20.0%

**TOTAL** ..... 100%

**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**, 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 Inside Panel for Additional Precautionary Statements

See following pages for General Information, Directions for Use, and Chemigation Instructions. Do not apply this product through any irrigation system unless these instructions are followed.

EPA Registration No. 4581-255

EPA Establishment No. 33910-HL-01

Net Weight 50 Lbs. (22.68 kg)

**BEST AVAILABLE COPY**

Sold by:

**ELF ATOCHEM NORTH AMERICA, INC.—AGCHEM DIVISION**  
Philadelphia, PA

## 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.

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. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not apply directly to water, except as specified for the labeled use on cranberries to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters.

### GENERAL INFORMATION

MANEB 80 may be used as a spray 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.

### WORKER SAFETY RULES

Keep all unprotected persons, children, livestock, and pets away from treated area or where there is danger of drift.

Do not rub eyes or mouth with hands. See Statement of Practical Treatment.

### PERSONAL PROTECTIVE EQUIPMENT

HANDLERS (MIXERS, LOADERS, AND APPLICATORS) AND EARLY REENTRY WORKERS MUST WEAR THE FOLLOWING PROTECTIVE CLOTHING AND EQUIPMENT: coveralls over long-sleeved shirt and long pants, shoes, socks, and chemical-resistant gloves. During mixing and loading, a chemical-resistant apron and goggles or a face shield must also be worn. For agricultural workers, where completely enclosed cabs with positive pressure filtration or an enclosed cockpit for aerial application are used, a long-sleeved shirt and long pants may be worn in place of the protective clothing described above. Chemical-resistant gloves must be available in the cab or cockpit and worn upon exiting. The gloves must be kept in an enclosed container in the cab or cockpit to prevent contamination of the inside of the cab or cockpit.

IMPORTANT! Before removing gloves, wash them with soap and water. Always wash hands, face, and arms with soap and water before eating, smoking, or drinking. Always wash hands and arms with soap and water before using the toilet.

After work take off all clothes and shoes. Shower using soap and water. Wear only clean clothes. Do not use contaminated clothing. Wash protective clothing and protective equipment with soap and water after each use. Personal clothing worn during use must be laundered separately from household articles. Clothing and protective equipment drenched with maneb must be destroyed according to state and local regulations.

### DRENCHED CLOTHING CANNOT BE ADEQUATELY DECONTAMINATED.

During aerial application, human flaggers are prohibited unless in totally enclosed vehicles.

### REENTRY STATEMENT

Do not enter treated areas within 24 hours after application unless wearing the protective clothing listed on this label. 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.

After sprays have dried, do not enter or allow entry into treated areas or areas where there is a danger of drift until the 24-hour reentry interval has expired unless wearing the personal protective equipment listed on this label.

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 within 24 hours after application."

### INSTRUCTIONS FOR APPLICATION

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 a minimum 3 gallons per acre for field crops and 10 gallons per acre for orchard crops.

When dosage ranges are given, use the higher rate and shorter intervals under severe disease pressure, but do not exceed the maximum rate or apply more frequently than the minimum interval given in the directions for that crop.

If this product is used on a crop, no other product containing a different EBDC active ingredient may be used on the same crop during the same growing season.

### VEGETABLE CROP USES

CROPS	DISEASES	RATE LBS/ACRE	DIRECTIONS
Beans (Dry)	Anthraxnose Downy Mildew Rust	1.5-2.0	Begin when plants are small. Spray on a 5-7 day interval. Do not apply more than 9.6 lbs. active ingredient (12 lbs. product) per acre per season. Do not apply within 30 days of harvest.
Broccoli Brussels Sprouts Cauliflower	Alternaria Leaf Spot Downy Mildew	1.5-2.0	Begin when disease threatens. Spray on a 7-10 day interval. Do not apply more than 9.6 lbs. active ingredient (12 lbs. product) per acre per season. Do not apply within 7 days of harvest.
Cabbage Kohlrabi Chinese Cabbage (light-headed only)	Alternaria Leaf Spot Downy Mildew	1.5-2.0	Plant beds and direct seeded fields. Apply when disease threatens. Spray on a 7-10 day interval. Do not apply more than 9.6 lbs. active ingredient (12 lbs. product) per acre per season. Do not apply later than 7 days before harvest.
Chinese Cabbage (loose head) Cauliflower and Headed Orbs	Alternaria Leaf Spot Downy Mildew	1.5-2.0	Plant beds and direct seeded fields. Apply when disease threatens. Spray on a 7-10 day interval. Do not apply more than 7.2 lbs. active ingredient (9 lbs. product) per acre per season. Do not apply later than 7 days before harvest or Cauliflower and 10 days before harvest.
Sweet Corn Popcorn Sweet Corn (seed for seed production)	Common Rust Helminthosporium Blight	1.5	East of the Mississippi (including Arkansas & Louisiana) Use sufficient water for thorough coverage. Start applications when disease first appears and repeat at 3-10 day intervals. Add a recommended surfactant or spreader/sticker if needed for better coverage. Do not apply within 7 days of harvest. Do not apply more than 18 lbs. active ingredient (22.5 lbs. product) per acre per season. Do not feed treated forage to livestock.
		1.5	West of the Mississippi (except Arkansas & Louisiana) Use sufficient water for thorough coverage. Start applications when disease first appears at 3-10 day intervals. Add a recommended surfactant or spreader/sticker if needed for better coverage. Do not apply within 7 days of harvest. Do not apply more than 6.8 lbs. active ingredient (7.5 lbs. product) per acre per season. Do not feed treated forage to livestock.
Cucumbers	Alternaria (Blightspot) Leaf Spot Angular Leaf Spot Anthraxnose Downy Mildew Pythium Fruit Rot	1.5-2.0	Begin when disease threatens or plants begin to rot. Spray on a 7-10 day interval. Do not apply more than 12.8 lbs. active ingredient (16 lbs. product) per acre per season. Do not apply within 5 days of harvest.
Eggplant	Anthraxnose Septoria Leaf Spot Cladosporium Leaf Blight Early Blight Late Blight Gray Leaf Spot (Phoma)	1.5-2.0	Begin at first fruit cluster and repeat at 7-10 day intervals. Do not apply more than 11.2 lbs. active ingredient (14 lbs. product) per acre per crop. Do not apply within 5 days of harvest.
Kale	Alternaria Leaf Spot Downy Mildew	1.5-2.0	Begin when disease threatens and apply on a 7-10 day interval. Do not use more than 3.2 lbs. active ingredient (4 lbs. product) per cutting. Do not apply within 10 days of harvest.

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VEGETABLE CROP USES continued

CROPS	DISEASES	RATE LBS/ACRE	DIRECTIONS
Lettuce (Head and Leaf) Endive	Downy Mildew	1.5-2.0	Apply when disease appears. Spray on a 7-10 day interval. Do not apply more than 9.6 lbs. active ingredient (12 lbs. product) per acre per season. Do not apply within 10 days of harvest. Remove residues from head lettuce by stripping and trimming.  California—Spray on a 7-10 day interval. Do not apply more than 6.4 lbs. active ingredient maximum (8.0 lbs. product) per acre per season. Do not apply within 14 days of harvest.
Melons including: cantaloupes, cassabas, cushmums, honeydews, watermelons	Alternaria Leaf Spot Anthracnose Cercospora Leaf Spot Downy Mildew Gummy Stem Blight	1.0-2.0	Apply as soon as plants begin to run or when disease threatens. Spray on a 7-10 day interval. Do not apply more than 12.8 lbs. active ingredient (16 lbs. product) per acre per season. Do not apply within 5 days of harvest.
Onions (Dry Bulb)	Botrytis Leaf Blight Downy Mildew Neck Rot Purple Blotch	2.0-3.0	Begin applications when diseases are first reported in the area at 7-day intervals throughout the season. Do not apply within 7 days of harvest. Do not apply more than 24 lbs. active ingredient (30 lbs. product) per acre per season. Do not apply to exposed bulbs.
Onions (Green)	Botrytis Leaf Blight Downy Mildew Neck Rot Purple Blotch	2.0-3.0	Begin applications when diseases are first reported in the area at 7-day intervals throughout the season. Do not apply within 7 days of harvest. Do not apply more than 16.8 lbs. active ingredient (21 lbs. product) per acre per season. Do not apply to exposed bulbs.
(Furrow Drain)	Smut	3	Apply as a furrow dranch at base of planting onion seeds. Use 75 to 125 gallons of water per acre. Do not use more than 2.4 lbs. active ingredient (3.0 lbs. product) per 29,000 linear feet of row (18 inch spacing). Do not use in California.
Peppers	Anthracnose Cercospora Leaf Spot (Phytophthora) Phytophthora Blight Rope Rot	1.5-3.0	East of the Mississippi Begin when disease threatens. Spray on a 7-10 day interval. Do not apply more than 14.4 lbs. active ingredient (18 lbs. product) per acre per season. Do not apply within 7 days of harvest.
Potatoes	Early Blight Late Blight	1.5-2.0	West of the Mississippi Begin when disease threatens. Spray on a 7-10 day interval. Do not apply more than 9.6 lbs. active ingredient (12 lbs. product) per acre per season. Do not apply within 7 days of harvest.

Begin when plants are 2 to 6 inches high. Apply on a 5-10 day interval. Do not apply more than 11.2 lbs. active ingredient (14 lbs. product) per acre per season. Do not apply within 14 days of harvest except for: Connecticut, Delaware, Florida, Maine, Massachusetts, Michigan, New Hampshire, New York, Ohio, Pennsylvania, Rhode Island, Vermont, Wisconsin where the PHI is 3 days. It is recommended that this product be used with an Integrated Pest Management Program. Vine kill should occur 14 days before harvest.

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Potatoes (Seed Pieces)	Fusarium Seed Piece Decay	1.0 lb. per 10 gal	Seed piece treatment only. Dip whole or cut tubers. Spread in cool place if held before planting. Do not use treated seed piece for food, feed, or oil purposes.
Pumpkins	Angular Leaf Spot Downy Mildew	1.5-2.0	Begin when disease threatens. Spray on a 7-10 day interval. Do not apply more than 12.8 lbs. active ingredient (16 lbs. product) per acre per season. Do not apply within 5 days of harvest.
Squash (Summer and Winter)	Anthracnose Downy Mildew	1.5-2.0	Begin when plants start to run. Spray on a 7-10 day interval. Do not apply more than 12.8 lbs. active ingredient (16 lbs. product) per acre per season. Do not apply within 5 days of harvest.
Tomatoes (Greenhouse and Field)	Anthracnose Early Blight Late Blight Gray Leaf Spot (Tommyblight)	1.5-3.0  1.5-2.0	East of the Mississippi Begin at first fruit cluster and repeat on a 7-10 day interval. Do not apply more than 16.8 lbs. active ingredient (21 lbs. product) per acre per crop.  West of the Mississippi Spray on a 7-10 day interval. Do not apply more than 6.4 lbs. active ingredient (8 lbs. product) per acre per season. Do not apply within 5 days of harvest.

FIELD CROPS

CROPS	DISEASES	RATE LBS/ACRE	DIRECTIONS
Sugarbeets	Cercospora Leaf Spot	1.5-2.0	Apply when disease appears. Spray on a 7-10 day interval. Do not apply more than 11.2 lbs. active ingredient (14 lbs. product) per season. Do not apply within 14 days of harvest.

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FRUIT AND NUT CROPS

CROPS	DISEASES	RATE LBS/ACRE	DIRECTIONS
<b>FOR POME FRUITS</b> Use either the "Pre-Bloom" or "Extended Application" schedules <b>DO NOT COMBINE OR INTEGRATE THE TWO TREATMENT SCHEDULES</b>			
Apples	Rusts (including Cedar apple) Fabrea Leaf Spot Flyspeck Scab Sooty Blotch	6.0 or (1.5 lbs per 100 gal in dilute spray)	<b>PRE-BLOOM:</b> Begin applications at 1/4 to 1/2 inch green tip and continue on a 7- to 10-day application schedule through bloom. Do not apply more than 19.2 lbs. active ingredient (24 lbs. product) per acre per year. Do not graze livestock in treated areas.
		3.0 or (.75 lbs per 100 gal in dilute spray)	<b>EXTENDED APPLICATION OR TANK MIX:</b> 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 or to within 77 days of harvest. Do not apply within 77 days of harvest. Do not apply more than 16.8 lbs. active ingredient (21 lbs. product) 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.  Add spreader/sticker to spray mixture for cover sprays and tank mix with an effective systemic protectant/cuticular fungicide for more effective control of diseases.
Almonds	Brown Rot Blossom and Twig Blight Scab Shot-hole Fungus (Leaf Blight)	6.0-8.0 or (1.5-2.0 lbs. per 100 gal in a dilute spray)	Apply at petiole, full bloom, and petal fall or every 7 to 10 days if bloom is staggered. Omit petal fall spray if only brown rot is present. Do not apply later than 5 weeks after petal fall or within 145 days of harvest. Do not apply more than 25.6 lbs. active ingredient (32 lbs. product) per acre per season. Do not allow livestock to graze in almond orchards.
Bananas	Sigatoka	2.0-3.0	Apply when leaves first appear and repeat as needed on a 14-21 day interval. Do not apply more than 24 lbs. active ingredient (30 lbs. product) per acre per season. May be applied up to the day of harvest.
Cranberries	Fruit Rot	4.0-6.0	Begin applications at mid-bloom and repeat at 7-10 day interval. Do not apply more than 14.4 lbs. (18 lbs. product) per season. Do not apply within 30 days of harvest.
Grapes	Black Rot Bunch Rot Deadarm Downy Mildew	1.5-4.0 or (0.375-1.0 lbs. per 100 gal in a dilute spray)	<b>East of the Rocky Mountains</b> Apply in sufficient water to provide thorough coverage starting when shoots are 1/4 to 1 1/2 inches long and continue at 7-10 day intervals until fruit is set. Do not apply within 66 days of harvest. Do not apply more than 19.2 lbs. active ingredient (24 lbs. product) per acre per season.
		1.5-2.5 or (0.375- 0.63 lbs per 100 gal in a dilute spray)	<b>West of the Rocky Mountains</b> Apply when shoots are 1/4 to 1 1/2 inches long and continue at 7-10 day intervals. Do not apply more than 6.0 lbs. active ingredient (7.5 lbs. product) per acre per season. Do not apply within 66 days of harvest except in California.  <b>Coliforms</b> —Do not apply after bloom.
Kadota figs	Surface Mold (Cladosporium) Surface Rot (Alternaria)	0.75 lbs / 100 gal	Apply when disease threatens in 100-400 gallons of water acre. Do not apply more than 2.4 lbs. active ingredient (3.0 lbs. product) per acre per season. Do not apply within 10 days of harvest.
Papayas	Anthracnose Phytophthora Fruit Rot Cercospora Black Spot	2.0-2.5 or (0.5- 0.625 lbs per 100 gal in a dilute spray)	Apply when disease first threatens and 14-21 day intervals. Do not apply more than 20 lbs. active ingredient per season (35 lbs. product). May be applied up to the day of harvest.

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**COMMERCIAL ORNAMENTAL CROP USES  
(NOT FOR HOME GARDEN USE)  
DO NOT USE ANY OF THESE CROPS FOR FOOD OR FEED PURPOSES**

CROP	DISEASES	RATE LBS/100 GAL	DIRECTIONS
Carnations	Alternaria Leaf Spot Anthracnose Botrytis Blight	1.0-1.5	Begin when new growth starts Repeat weekly
Chrysanthemums	Ascochyta Ray Blight Botrytis Petiole Spot Septoria Leaf Spot	0.5 lbs or 227 grams	Apply twice weekly during the blooming season for Petiole Spot and Ray Blight. For Septoria Leaf Spot apply weekly throughout the season
Dahlias	Alternaria Leaf Spot Botrytis Blight	1.0-1.5	Begin when new growth starts Repeat weekly
Deerweed	Anthracnose	1.0-1.5	Begin when buds open. Repeat when bracts fall 4 weeks later and in later summer
Gladiolus	Botrytis Blight Curvatures and Stemphylium Leaf Spots	1.5	Begin when flower spikes are developing. Repeat 2 to 3 times at weekly intervals
Grasses Do not use on pasture or range grasses. Do not feed clippings to livestock. Do not use if grass is grown for seed	Brown Patch	0.2 lbs or 90 grams	Begin at first sign of disease. Repeat at 7- to 14-day intervals
	Dollar Spot	0.4-0.5 lbs or 170-227 grams	Apply as for Brown Patch, above
	Melting-Out	0.2-0.3 lbs or 85-113 grams	Apply as for Brown Patch, above
	Leaf, Stem and Sheath Rusts	3.0	Begin when rust pustules are first seen. Repeat at 7- to 14-day intervals. Do not graze treated areas. Do not feed clippings to livestock
Lilies	Botrytis Blight	1.0-1.5	Begin with new growth. Repeat weekly
Pansies	Anthracnose	1.0-1.5	Begin with new growth. Repeat weekly
Peonies	Alternaria Leaf Spot Botrytis Blight Phytophthora Blight	1.0-1.5	Apply to foliage and soil in early spring and early fall and 7- to 10-day intervals during the growing season
Roses	Black Spot Cercospora Leaf Spot (Texas) Rust (California)	1.0-1.5	Begin when first leaves unfold Repeat at 7- to 10-day intervals

**For Aerial Application,  
use 1.0 to 1.5 lbs.  
product in a minimum of  
3 gallons spray solution  
per acre.**

Snagdragons	Rust	1.0-1.5	Begin with emergence. Repeat weekly
Zinnias	Alternaria Blight Leaf Spot Botrytis Blight	1.0-1.5	Begin with emergence. Repeat weekly

**CHEMIGATION  
NOT FOR THIS USE IN CALIFORNIA  
GENERAL INSTRUCTIONS**

Apply this product only through sprinkler irrigation systems including center pivot, lateral move, end tow, side (wheel) roll, traveler, bag 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 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 1/4 or 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 a 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 sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

**WARRANTY AND DISCLAIMER**

Elf Atochem North America 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. ELF ATOCHEM MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY. IN NO CASE SHALL ELF ATOCHEM 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.

Elf Atochem 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 Elf Atochem.

Made and Printed in Holland

5-N311S-02 C2 (3/92)

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