#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Mr. Luis Castro
Product Registrations
Cerexagri, Inc.,
630 Freedom Business Center
King of Prussia, PA 19406

MAY 2 8 2004

Dear Mr. Castro:

SUBJECT: Maneb Plus Zinc F4 Fungicide

EPA Registration Number 4581-359 Your Submission of February 11, 2004

The label referred to above, submitted in connection with registration under section (3) of the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) is acceptable provided you make the following change:

### **Precautionary Statements:**

Change "Avoid breathing mist." to "Avoid breathing vapor or spray mist."

If you have any questions, please contact Lisa Jones of my staff by phone at (703) 308-9424 or by e-mail at jones.lisa@epa.gov.

Sincerely,

disa Jones FOR

Mary L. Waller Product Manager (21) Fungicide Branch Registration Division (7505C)

Enclosure: Stamped Label

CONCURRENCES							
SYMBOL .	7505C		***************************************			***************************************	
SURNAME >	Lisa Jones						
DATE >	May 31, 2004						

EPA Form 1320-1 (12-70)

OFFICIAL FILE COPY

## ACCEPTED with COMMENTS In EPA Letter Dated:

MAY 2 8 2004

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

4581-394

# MANEB PLUS ZINC F4 FUNGICIDE

**ACTIVE INGREDIENT:** 

Maneb (Manganese ethylenebisdithiocarbamate) .......37.0% (Equivalent to manganese metallic 7.6%)
OTHER INGREDIENTS:.....63.0%

TOTAL ......100.0%

This product contains 4 pounds maneb per gallon.

EPA Registration No. 4581-359

EPA Establishment No. 4581-FRA-001

SHAKE WELL BEFORE USING

### KEEP OUT OF REACH OF CHILDREN CAUTION

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

### **FIRST AID**

### If inhaled

- Move person to fresh air.
- If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.
- Call a poison control center or doctor for treatment advice.

### If on skin or clothing

- Take off contaminated clothing.
- Rinse skin immediately with plenty of water for 15-20 minutes.

• Call a poison control center or doctor for treatment advice.

### If in eyes

- Hold eye open and rinse slowly and gently with water for 15-20 minutes.
- Remove contact lenses, if present, after the first 5 minutes, then continue rinsing the eye.
- Call a poison control center or doctor for treatment advice.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

Net	<b>Contents</b>	

Cerexagri, Inc. 630 Freedom Business Center, Suite 402 King of Prussia, PA 19406

# PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS (AND DOMESTIC ANIMALS) CAUTION

HARMFUL IF ABSORBED THROUGH SKIN OR INHALED. CAUSES MODERATE EYE IRRITATION. Avoid contact with skin, eyes, or clothing. Avoid breathing mist. Remove contaminated clothing before reuse. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

### PERSONAL PROTECTIVE EQUIPMENT

All workers/handlers (i.e. mixers, loaders and applicators) must wear:

- Coveralls over long-sleeved shirt and long pants
- Shoes and socks
- Chemical-resistant gloves made of any waterproof material

#### Mixers and loaders must wear:

- chemical-resistant apron
- goggles and a face shield

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.

#### ENGINEERING CONTROLS STATEMENTS

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

Human flaggers must be in enclosed cabs

The enclosed cabs must be used in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 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 clothing 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 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, except as specified for the labeled use on cranberries. Do not contaminate water when disposing of equipment washwaters.

### **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
- Chemical-resistant gloves made of any waterproof material.
- Shoes plus socks

#### INSTRUCTIONS FOR USE AS A SPRAY

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.

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.

### Maximum Seasonal Poundage When Used In Conjunction With One or More Other EBDC Products

### **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.

### **VEGETABLE CROP USES**

CROPS	DISEASES	RATE QTS/ACRE	DIRECTIONS
Beans (Dry)	Anthracnose Downy Mildew Rust	1.2-1.6	Begin when plants are small. Spray on a 5-7 day interval. Do not apply more than 9.6 lbs. active ingredient (9.6 qts. product) per acre per season. Do not apply within 30 days of harvest
Broccoli, Brussels Sprouts, Cauliflower	Alternaria Leaf Spot Downy Mildew	1.2-1.6	Begin when disease threatens. Spray on a 7-10 day interval. Do not apply more than 9.6 lbs. active ingredient (9.6 qts. product) per acre per season. Do not apply within 7 days of harvest.
Cabbage, Kohlrabi, Chinese Cabbage (tight- headed only)	Alternaria Leaf Spot Downy Mildew	1.2-1.6	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 (9.6 qts. product) per acre per season. Do not apply later than 7 days before harvest.
Chinese Cabbage (loose head) (California and Hawaii Only)	Alternaria Leaf Spot Downy Mildew	0.8-1.2	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 (7.2 qts. product) per acre per season. Do not apply later than 7 days before harvest in California and 10 days before in Hawaii.
Collards (Georgia	Alternaria Leaf Spot Cercospora Leaf	1.2	Begin when disease threatens and apply on a 14

and Tennessee only)	Spot Downy Mildew		day interval. Do not use more than 3.6 qts (3.6 lbs a.i.) per cutting. Do not apply within 14 days of harvest.
Sweet Corn, Popcorn, Sweet Corn used for seed production	Common Rust Helminthosporium Blight	1.2	East of the Mississippi: (including Arkansas and 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 (18 qts. product) per acre per season. Do not feed treated forage to livestock. West of the Mississippi: (except Arkansas and 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 6.0 lbs. active ingredient (6.0 qts. product) per acre per season. Do not feed treated forage to livestock.
Cucumbers	Alternaria (Macrosporium) Leaf Spot	1.2-1.6	Begin when disease threatens or plants begin to run. Spray on a 7-10 day

	Angular Leaf Spot Anthracnose Downy Mildew Pythium Fruit Rot		interval. Do not apply more than 12.8 lbs. active ingredient (12.8 qts. product) per acre per season. Do not apply within 5 days of harvest.
Eggplant	Anthracnose Septoria Leaf Spot Cladosporium Leaf Mold Early Blight Late Blight Gray Leaf Spot (Stemphylium)	1.2-1.6	Begin at first fruit cluster and repeat at 7-10 day intervals. Do not apply more than 11.2 lbs. active ingredient (11.2 qts. product) per acre per crop. Do not apply within 5 days of harvest.
Kale (NOT FOR USE IN CALIFORNIA)	Alternaria Leaf Spot Downy Mildew	1.2-1.6	Begin when disease threatens and apply on a 7-10 day interval. Do not use more than 3.2 lbs. active ingredient (3.2 qts. product) per cutting. Do not apply within 10 days of harvest.
Lettuce (Head and Leaf), Endive	Downy Mildew Anthracnose	1.2-1.6	Apply when disease appears. Spray on a 7-10 day interval. Do not apply more than 9.6 lbs. active ingredient (9.6 qts. product) per acre per season. Do not apply within 10 days of harvest. Remove residues from head lettuce by stripping and trimming.  CaliforniaSpray on a 7-10 day interval. Do not apply more than 6.4 lbs. active ingredient maximum (6.4 qts. product) per acre per season. Do not apply within
			14 days of harvest.
Melons including: cantaloupe	Alternaria Leaf Spot Anthracnose Cercospora Leaf	1.2-1.6	Apply as soon as plants begin to run or when disease threatens. Spray on

s, casabas, crenshaws, honeydews, watermelon s	Spot Downy Mildew Gummy Stem Blight		a 7-10 day interval. Do not apply more than 12.8 lbs. active ingredient (12.8 qts. product) per acre per season. Do not apply within 5 days of harvest.
Mustard Greens (Georgia and Tennessee only)	Alternaria Leaf Spot Cercospora Leaf Spot Downy Mildew	1.2	Begin when disease threatens and apply on a 14 day interval. Do not use more than 2.4 qts (2.4 lbs a.i.) per cutting. Do not apply within 14 days of harvest.
Onions (Dry Bulb) including garlic	Botrytis Leaf Blight Downy Mildew Neck Rot Purple Blotch Rust	1.6-2.4	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 (24 qts. product) per acre per season. Do not apply to exposed bulbs.
Onions (Green)	Botrytis Leaf Blight Downy Mildew Neck Rot Purple Blotch	1.6-2.4	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 (16.8 qts. product) per acre per season. Do not apply to exposed bulbs.
Onions (Furrow Drench)	Smut	2.4	Apply as a furrow drench at time of planting onion seeds. Use 75 to 125 gallons of water per acre. Do not use more than 2.4 lbs. active ingredient (2.4 qts. product) per 29,000 linear feet of row (18 inch

			spacing). Do not use in California.
Peppers	Anthracnose Cercospora Leaf Spot (Frogeye spot) Phytophthora Blight Ripe Rot	1.2-2.4	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 (14.4 qts. product) per acre per season. Do not apply within 7 days of harvest.
		1.2-1.6	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 (9.6 qts. product) per acre per season. Do not apply within 7 days of harvest.
Potatoes	Early Blight Late Blight	1.2-1.6	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 (11.2 qts. 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.
Potatoes	Fusarium Seed	0.8 qt. per	Seed piece treatment only.

(Seed Pieces)	Piece Decay	10 gal.	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	1.2-1.6	Begin when disease threatens. Spray on a 7-10 day interval. Do not apply more than 12.8 lbs. active ingredient (12.8 qts. product) per acre per season. Do not apply within 5 days of harvest.
Squash (Summer and Winter)	Anthracnose Downy Mildew	1.2-1.6	Begin when plants start to run. Spray on a 7-10 day interval. Do not apply more than 12.8 lbs. active ingredient (12.8 qts. product) per acre per season. Do not apply within 5 days of harvest.
Tomatoes (Green- house and Field)	Anthracnose Septoria Leaf Spot Cladosporium Leaf Mold Early Blight Late Blight Gray Leaf Spot (Stemphylium)	1.2-2.4	East of the Mississippi: Begin at first fruit cluster and repeat on a 7-10 day interval. Do not apply within 5 days of harvest. Do not apply more than 16.8 lbs. active ingredient (16.8 qts. product) per acre per crop.
		1.2-1.6	West of the Mississippi: Spray on a 7-10 day interval. Do not apply more than 6.4 Ibs. active ingredient (6.4 qts. product) per acre per season. Do not apply within 5 days of harvest.
Turnip Tops (Georgia and Tennessee	Alternaria Leaf Spot Cercospora Leaf Spot Downy Mildew	1.2	Apply when disease threatens. Do not use more than 1.2 qts (1.2 lbs a.i.) per cutting. Do not apply within 14 days of harvest.

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### FIELD CROPS

CROPS	DISEASES	RATE QTS/ACRE	DIRECTIONS
Sugarbeets	Cercospora Leaf Spot	1.2-1.6	Apply when disease appears. Spray on a 7-10 day interval. Do not apply more than 11.2 lbs. active ingredient (11.2 qts. product) per season. Do not apply within 14 days of harvest.

### FRUIT AND NUT CROPS

CROPS	DISEASES	RATE QTS/ACRE	DIRECTIONS
	JITS ler the "Pre-Bloom" or "Ext COMBINE OR INTEGRATI		
Apples	Rusts (including Cedar apple) Fabraea Leaf Spot Flyspeck Scab Sooty Blotch	4.8 or (1.2 qts, per 100 gal. in a dilute spray)	PRE-BLOOM: 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 (19.2 qts. product) per acre per year. Do not graze livestock in treated areas.
		2.4 or (0.6 qts. per 100 gal. in a dilute spray)	EXTENDED APPLICATION OR TANK MIX: 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 (16.8 qts. 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/curative fungicide for more effective control of diseases.
Almonds	Almond Leaf Rust Brown Rot Blossom and Twig Blight Scab Shot-hole Fungus (Leaf Blight) Anthracnose	4.8-6.4	Apply at popcorn, 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 (25.6 qts. product) per acre per season. Do not allow livestock to graze in almond orchards.
Bananas	Sigatoka	1.6-2.4	Apply when leaves first appear and repeat as needed on a 14-21 day interval. Do not apply more than 24 lbs. active ingredient (24 qts. product) per acre per season. May be applied up to the day of

			harvest.
Cranberries	Fruit Rot	3.8-4.8	Begin applications at mid-bloom and repeat at 7-10 day interval. Do not apply more than 14.4 lbs. active ingredient (14.4 qts. product) per season. Do not apply within 30 days of harvest
Grapes	Black Rot Bunch Rot Phomopsis (Deadarm) Downy Mildew	1.2-3.2 or (0.3-0.8 qts. per 100 gal. in a dilute spray)	East of the Rocky Mountains: Apply in sufficient water to provide thorough coverage starting when shoots are ½to 1 ½ 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 (19.2 qts. product) per acre per season.
		1.2-2.0 or (0.3-0.5 qts. per 100 gal. in a dilute spray)	West of the Rocky Mountains: Apply when shoots are ½ to 1½ inches long and continue at 7-10 day intervals. Do not apply more than 6.0 lbs. active ingredient (6.0 qts. product) per acre per season. Do not apply within 66 days of harvest except in California. CaliforniaDo not apply after bloom.
Kadota figs (NOT FOR USE IN CALIFORNIA)	Surface Mold (Cladosporium) Surface Rot (Alternaria)	0.6 qts./100 gal.	Apply when disease threatens in 100-400 gallons of water acre. Do not apply more than 2.4 lbs. active ingredient (2.4 qts. product) per acre per season. Do not apply within 10 days of harvest.

Papayas	Anthracnose Phytophthora Fruit Rot Cercospora Black Spot	1.6-2.0 or (0.4-0.5 qts. per 100 gal. in a dilute spray)	Apply when disease first threatens and 14-21 day intervals. Do not apply more than 28 lbs. active ingredient per season (28 qts. product). May be applied up to the day of harvest.
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### **COMMERCIAL ORNAMENTAL CROP USES**

(NOT FOR HOMEGARDEN USE)
DO NOT USE ANY OF THESE CROPS FOR FOOD OR FEED PURPOSES

CROPS	DISEASES	RATE QTS/100 GAL	DIRECTIONS
Carnations	Alternaria Leaf Spot Anthracnose Botrytis Blight	0.8-1.2	Begin when new growth starts. Repeat weekly.
Chrysanthe - mums	Ascochyta Ray Blight Botrytis Petal Spot Septoria Leaf Spot	12.8 fl. oz. PLUS Captan 50W ¾ lbs. per 100 gal water	Apply twice weekly during the blooming season for Petal Spot and Ray Blight. For Septoria Leaf Spot apply weekly throughout the season.
Dahlias	Alternaria Leaf Spot Botrytis Blight	0.8-1.2	Begin when new growth starts. Repeat weekly.
Dogwood	Anthracnose	0.8-1.2	Begin when buds open. Repeat when bracts fall 4 weeks later and in late summer.
Gladiolus	Botrytis Blight Curvularia and Stemphylium Leaf Spots	1.2	Begin when flower spikes are developing. Repeat 2 to 3 times at weekly intervals.
Grasses Do not use on pasture or range	Brown Patch	4.8 fl. oz. in sufficient water/1000 sq. ft.	Begin at first sign of disease. Repeat at 7-to 14-day intervals.

grasses. Do not feed clippings to livestock. Do not use if grass is grown for seed.	Dollar Spot	9.6-12.8 fl. oz. in sufficient water/ 1000 sq. ft.	Apply as for Brown Patch, above.
	Melting-Out	4.8-6.4 fl. oz. in sufficient water/ 1000 sq. ft.	Apply as for Brown Patch, above.
	Leaf, Stem and Stripe Rusts	2.4	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	0.8-1.2	Begin with new growth. Repeat weekly.
Pansies	Anthracnose	0.8-1.2	Begin with new growth. Repeat weekly.
Peonies	Alternaria Leaf Spot Botrytis Blight Phytophthora Blight	0.8-1.2	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 Rust	0.8-1.2	Begin when first leaves unfold. Repeat at 7- to 10-day intervals. For Aerial Application: use 0.8 to 1.2 qts. product in a minimum of 3 gallons spray solution per acre.
Snap- dragons	Rust	0.8-1.2	Begin with emergence. Repeat weekly.
Zinnias	Alternaria Blight Leaf Spot Botrytis Blight	0.8-1.2	Begin with emergence. Repeat weekly.

### **CHEMIGATION**

### **GENERAL INSTRUCTIONS**

Apply this product only through sprinkler irrigation systems including center pivot, lateral move, end tow, 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

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.

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

Apply MANEB PLUS ZINC F4 only through systems containing anti-syphon 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 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 foreign matter from the chemical 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 required 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 insure 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.

### STORAGE AND DISPOSAL

Do not contaminate water, food of feed by storage and disposal.

Pesticide Storage: 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: 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 bag in a sanitary landfill, by incineration, or if allowed by State and local authorities, by burning. If burned, stay out of smoke.

### WARRANTY AND DISCLAIMER

Cerexagri, Inc. 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. CEREXAGRI MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY. IN NO CASE SHALL CEREXAGRI 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.

Cerexagri 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 Cerexagri.