



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

May 5, 2015

Cheryl Wagner
Agent for Kocide LLC
C/O Wagner Regulatory Associates
PO Box 640
Hockessin, DE 19707

Subject: Notification per PRN 98-10 – Label modifications to reflect product transfer
Product Name: Mankocide Fungicide/Bactericide
EPA Registration Number: 91411-7
Application Date: 4/8/2015
Decision Number: 503610

Dear Ms. Wagner:

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 for the above referenced product. The Registration Division (RD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the action requested falls within the scope of PRN 98-10.

The label submitted with the application has been stamped “Notification” and will be placed in our records.

If you have any questions, you may contact Lindsay Roe at 703-347-0506 or via email at roe.lindsay@epa.gov.

Sincerely,

A handwritten signature in black ink that reads "Tony Kish".

Tony Kish, Product Manager 22
Fungicide Branch
Registration Division (7505P)
Office of Pesticide Programs

NOTIFICATION

91411-7

The applicant has certified that no changes, other than those reported to the Agency have been made to the labeling. The Agency acknowledges this notification by letter dated:

05/05/2015

Mankocide®

FUNGICIDE/BACTERICIDE

Dry Flowable

Active Ingredients

By Weight

Mancozeb, a coordination product of zinc ion and manganese ethylenebisdithiocarbamate in which the ingredients are	15.0%
Manganese	3.0%
Zinc	0.4%
Ethylenebisdithiocarbamate ion (C ₄ H ₆ N ₂ S ₄)	11.6%
Copper Hydroxide (CAS No. 20427-59-2) (Metallic Copper Equivalent - 30%)	46.1%
Other Ingredients	38.9%
TOTAL	100.0%

EPA Reg. No. 91411-7

EPA Est. No. _____

Nonrefillable Container

Net: _____

OR

Refillable Container

Net: _____

KEEP OUT OF REACH OF CHILDREN

DANGER PELIGRO

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

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

IF SWALLOWED: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything to an unconscious person.

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.

NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate use of gastric lavage.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. **For medical emergencies involving this product, call toll free 1-800-255-3924.**

See Label for Additional Precautions and Directions for Use.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER PELIGRO

Corrosive. Causes irreversible eye damage. Harmful if swallowed or inhaled. Do not get in eyes or clothing. Avoid inhaling dust or spray mist. Prolonged or frequently repeated dermal contact may cause allergic reactions in some individuals.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Mixers, loaders, applicators, and other handlers must wear:

- Long-sleeved shirt
- Long pants
- Shoes and socks
- Chemical resistant gloves made of any waterproof material [nitrile rubber, natural rubber, or butyl rubber]
(except pilots, groundboom applicators, airblast applicators and handlers who are bagging treated seed or sewing the bags)
- Protective eyewear

Aerial application of MANKOCIDE® on broccoli, cabbage, lettuce (leaf and head), and peppers requires that occupational handlers performing mixing/loading operations observe the additional mitigation measures of wearing a particulate respirator with an N, R or P filter, NIOSH approval prefix TC 84-A.

See engineering controls for additional requirements. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. Discard clothing or other absorbent materials that have been heavily drenched or contaminated with this product's concentrate. Do not reuse them.

ENGINEERING CONTROL STATEMENTS:

Pilots must use an enclosed cockpit that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(6)].

Human flagging is prohibited. Flagging to support aerial application is limited to use of the Global Positioning System (GPS) or mechanical flaggers.

When handlers use enclosed cabs or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR part 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/PPE immediately if pesticide gets inside, then wash thoroughly and put on clean clothing. Users should 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 and aquatic invertebrates and may contaminate water through runoff. This product has a potential for runoff for several months or more after application. Poorly draining soils and soils with shallow water tables are more prone to produce runoff that contains this product. For terrestrial uses, do not apply directly to water, 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 wash-waters or rinsate.

Drift and runoff may be hazardous to aquatic organisms in waters adjacent to treated areas.

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 State or Tribal 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 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 intervals. 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 48 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
- Shoes and socks
- Chemical resistant gloves made of any waterproof material
- Protective eyewear

PRODUCT INSTRUCTIONS

GROUND or AERIAL APPLICATIONS: - Apply MANKOCIDE® fungicide/bactericide at the rate shown; use sufficient water to provide thorough coverage, with available equipment in either dilute sprays or in concentrate ground or aerial sprays. Use at least 100 gallons per acre for traditional airblast sprayers, 25-50 gallons per acre for low volume airblast sprayers, and 3-10 gallons per acre for aerial application. Rates of product per acre must be the same for dilute and concentrated sprays. Add MANKOCIDE® slowly to water in the spray tank with agitation, or premix thoroughly in separate holding tank for concentrate or aircraft sprayers. Continuous agitation is recommended to keep the product in suspension. If needed, adjuvants of the spreader, sticker, or compatibility agent type that are approved for use on growing crops may be used.

RESTRICTIONS

- Aerial application of MANKOCIDE® on broccoli, cabbage, lettuce (leaf and head), and peppers requires that occupational handlers performing mixing/loading operations observe the additional mitigation measures of wearing a particulate respirator with an N, R or P filter, NIOSH approval prefix TC 84-A.
- Apply this product only through one or more of the following types of systems: sprinkler including center pivot, lateral move, traveler, big gun, and plastic pipe solid set system(s). Do not apply this product through any other type of irrigation system. In California, do not apply in systems which contain aluminum parts or components.
- MANKOCIDE® must be used only in accordance with directions on this label.

SPECIAL PRECAUTIONS

- If MANKOCIDE® is applied in a spray solution having a pH of less than 6.5, phytotoxicity may occur.
- This product may be reactive on masonry and metal surfaces such as galvanized roofing. Avoid contact with metal surfaces. Do not spray on cars, houses, lawn furniture, etc.
- Environmental conditions such as extended periods of wet weather, acid rain, etc. which alter the pH of the leaf surface may affect the performance of MANKOCIDE® resulting in possible phytotoxicity or loss of effectiveness.
- Pesticides may perform in an unpredictable manner when tank mixed, especially where several products are involved. Reduced effect on pests or crop injury may occur. Unless recommended by a state/local expert, or the user has small scale direct experience, tank mixing should not be undertaken. Follow more restrictive labeling of any tank mix partners. Do not tank mix with any product that contains a prohibition on tank mixing.
- Mixing of this product with products containing diazinon, fosetyl-al or other aluminum-containing products, or thiophanate-methyl is not recommended because of physical incompatibility.
- It must be determined in the selection process if proper application equipment is available and if the waste associated with its use can be properly handled. Materials used in the construction of application equipment is also an important factor as pesticides are often reactive with soft metals such as aluminum and even some synthetic materials such as plastics, rubbers, etc. Therefore it is necessary when working with equipment containing these materials that they are thoroughly flushed with clean water after each days use.

FROST INJURY PROTECTION

BACTERIAL ICE NUCLEATION INHIBITOR

When used at the appropriate rate and timing, to all crops listed on this label for disease control, MANKOCIDE® may also afford control of ice-nucleating bacteria (*Pseudomonas syringae*, *Erwinia herbicola*, and *Pseudomonas fluorescens*). If the applications occur at least 24 hours prior to anticipated frost conditions, some protection against light frost may be provided. No reduction in frost damage should be expected in those geographic areas where weather conditions favor severe frost.

APPLICATION INSTRUCTIONS

FOLIAR TREATMENT

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 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 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.

CROP	DISEASES	RATE PRODUCT PER ACRE (lb./Acre)	MAXIMUM SEASONAL RATE (lb. Product/ Acre/Season)	USE INSTRUCTIONS
Apple	Anthracnose, European Canker, Pseudomonas	12-16 lb.	53.3 lb.	Dormant: Apply before fall rains. Use higher specified rates under severe disease conditions. Minimum retreatment interval is 5 days. NOTE: Apply only after harvest. Use on yellow varieties may cause discoloration, therefore, pick before spraying. Do not graze livestock.
	Fireblight (Suppression)	8-16 lb.		Make application between silver tip and green tip as a full cover spray. Minimum retreatment interval is 5 days. Crop injury may occur from late application; discontinue use when green tip reaches 1/2 inch. Minimum pre-harvest interval is 77 days. Do not graze livestock in treated areas.
	Crown Rot, Collar Rot	4 lb.		Mix in 100 gallons of water. Apply 4 gallons of suspension as a drench on the lower trunk area of each tree. Apply either in early spring or in late fall after harvest. Minimum retreatment interval is 5 days. For early spring use, minimum pre-harvest interval is 77 days. NOTE: Do not use if soil pH is below 5.5 since copper toxicity may result. Do not graze livestock in treated areas. It is recommended that this product be used in an Integrated Pest Management Program for all apple uses.
Banana	Sigatoka	2.5 lb.	63 lb. (per growing cycle)	Apply when leaves first appear and repeat every 14 to 21 days if needed. Use sufficient water to provide adequate coverage. The addition of a surfactant to spray solutions will improve performance. May be applied by air in 3 gal. of water combined with 0.5 gal. of agricultural spray oil. Minimum retreatment interval is 14 days. Minimum pre-harvest interval is 0 days.
Barley, Oat, Wheat	Helminthosporium Leaf Spot, Septoria Leaf Spot, and Glume Blotch	1.7 lb.	3.5 lb. (per crop)	Make first application at early heading and follow with second spray 10 days later. Do not apply within 26 days of harvest. PHI for barley and wheat is Feekes Growth Stage 10.5 (typically 35-45 days), but no less than 26 days. Use higher specified rates when conditions favor disease. Do not graze livestock in treated areas prior to harvest.
Broccoli*§	Alternaria Black Rot (<i>Xanthomonas</i> spp.) Downy Mildew	1-3 lb.	8.8 lb. (per season)	Begin applications prior to disease development and when conditions are favorable for disease development. Apply at 7- to 10-day intervals, if needed. Use higher specified rates when conditions favor disease. Do not apply this product with a U-boom device. Minimum preharvest interval is 7 days.
Cabbage*§	Alternaria Black Rot (<i>Xanthomonas</i> spp.) Downy Mildew	1-3 lb.	8.8 lb. (per season)	Begin applications prior to disease development and when conditions are favorable for disease development. Apply at 7- to 10-day intervals, if needed. Use higher specified rates when conditions favor disease. Do not apply this product with a U-boom device. Minimum preharvest interval is 7 days.
Cranberry	Fruit Rot	7 lb.	21 lb. (per season)	Start applications at mid-bloom and repeat at 7 to 10 day intervals if needed. Do not apply within 30 days of harvest.

*Not registered for use in California

§Aerial application of MANKOCIDE® on broccoli, cabbage, lettuce (leaf and head), and peppers requires that occupational handlers performing mixing/loading operations observe the additional mitigation measures of wearing a particulate respirator with an N, R or P filter, NIOSH approval prefix TC 84-A.

CROP	DISEASES	RATE PRODUCT PER ACRE (lb./Acre)	MAXIMUM SEASONAL RATE (lb. Product/ Acre/Season)	USE INSTRUCTIONS
Cucurbit Crop Group Chayote; Chinese wax gourd (Chinese preserving melon); Citron melon; Cucumber; Gherkin; Gourd, edible (includes hyotan, cucuzza, hechima, Chinese okra); Momordica spp. (includes balsam apple, balsam pear, bittermelon, Chinese cucumber); Muskmelon (includes true cantaloupe, cantaloupe, casaba, Santa Claus melon, crenshaw melon, honeydew melon, honey balls, Persian melon, golden pershaw melon, mango melon, pineapple melon, snake melon); Pumpkin; Squash, summer; Squash, winter (includes butternut squash, calabaza, hubbard squash, acorn squash, spaghetti squash); Watermelon	Alternaria Leaf Spot Angular Leaf Spot Anthracnose Bacterial Fruit Blotch Cercospora leaf spot Downy Mildew Gummy Stem Blight Powdery Mildew Scab* Watermelon Fruit Blotch	2.0 - 3.0 lb.	24.0 lb.(per crop)	Start applications when plants are in the two-leaf stage and repeat at 7- to 10-day intervals. Use higher specified rates and apply every 5 to 7 days with moderate to severe disease pressure and when conditions favor disease. Use sufficient water and direct spray to provide thorough coverage of both upper and lower leaf surfaces. The minimum aerial spray volume for cucurbits is 2 gallons. Do not make more than 8 applications per year. Do not apply within 5 days of harvest. Some cantaloupe varieties (i.e. Harvest Queen, Gold Star, Super Star, Sweet and Early, and Saticoy) are sensitive to MANKOCIDE® fungicide/bactericide. Consult State Cooperative Extension Service Specialist prior to use. NOTE: MANKOCIDE® helps suppress the incidence of watermelon fruit blotch.
Ginseng*	Alternaria blight	2.0 lb.	24.0 lb. (per crop)	Start applications when disease first threatens and repeat every 7-10 days as needed. In Wisconsin, apply with ground equipment and a minimum of 80 gallons of water per acre. Do not apply within 30 days of harvest. Do not make more than 12 applications per year.

*Not registered for use in California

CROP	DISEASES	RATE PRODUCT PER ACRE (lb./Acre)	MAXIMUM SEASONAL RATE (lb. Product/ Acre/Season)	USE INSTRUCTIONS
Grape	Black Rot, Downy Mildew, Powdery Mildew, Phomopsis	2.5 lb.	66.7 lb. (per season East of the Rocky Mountains) 40 lb. (per season West of the Rocky Mountains)	Apply in sufficient water to provide thorough coverage starting at late dormant or bud break. Apply every 7 to 10 days with moderate to severe disease pressure and when conditions favor disease. For late season control of black rot, powdery mildew, and downy mildew, the use of another approved fungicide is suggested. Do not apply within 66 days of harvest. California: Do not apply after bloom. NOTE: Foliage injury may occur on copper sensitive varieties such as Concord, Delaware, Niagara, and Rosette. Either test for sensitivity or add 1-3 pounds of hydrated lime per pound of MANKOCIDE® fungicide/bactericide.
Lettuce ^{†§}	Anthracnose Downy Mildew	1-2 lb.	26 lb. (per season)	Begin applications prior to disease development and when conditions are favorable for disease development. Apply at 7- to 10-day intervals, if needed. Use higher specified rates when conditions favor disease. Do not apply this product with a U-boom device. NOTE: Determine if there is varietal sensitivity prior to use. Injury may occur to sensitive lettuce varieties and under adverse weather conditions. Discontinue use if injury occurs. Minimum preharvest interval is 10 days.
Onion (Dry Bulb)	Botrytis Leaf Blight, Downy Mildew, Purple Blotch,	2.5 lb.	20 lb. (per crop)	Follow a protective spray schedule. Start when diseases are first reported in the area and repeat at 7 day intervals throughout the season. Do not apply to exposed bulbs. Do not apply within 7 days of harvest.
	Bacterial Blight	1.5-2.25 lb.		
Papaya*	Anthracnose	5.5-8.7 lb.	70.6 lb. (per crop)	Apply in a minimum of 50 gallons of spray solution per acre. Apply before disease appears. Apply at 14-day intervals if retreatment is needed. The addition of an approved spreader is desirable. Do not make more than 8 applications per year at the maximum application rate. Minimum pre-harvest interval is 0 days.
Peanut	Cercospora Leaf Spot	2-2.6 lb.	15.8 lb. (per crop)	Start applications when disease first appears or is reported in the area. Repeat sprays at 7 to 14 day intervals. Do not apply within 14 days of harvest. Do not feed treated vines to livestock.
Pear	Fireblight	1.5 lb.	53.3 lbs. (per season)	Apply at 5 day intervals throughout the bloom period. Do not apply after bloom. Do not graze livestock in treated areas. It is recommended that this product be used in an Integrated Pest Management Program.
	Pseudomonas Blight	12-16 lb		Dormant: Apply before fall rains and again during dormancy before spring growth starts. Use the higher specified rate when disease pressure is high or when conditions favor disease development. Only one application is permitted during the fall, late dormant season. NOTE: Apply only after harvest. Russetting may occur in copper sensitive varieties. Excessive dosages may cause fruit russet.

*Not registered for use in California.

†Not registered for use in California and Arizona.

§Aerial application of MANKOCIDE® on broccoli, cabbage, lettuce (leaf and head), and peppers requires that occupational handlers performing mixing/loading operations observe the additional mitigation measures of wearing a particulate respirator with an N, R or P filter, NIOSH approval prefix TC 84-A.

CROP	DISEASES	RATE PRODUCT PER ACRE (lb./Acre)	MAXIMUM SEASONAL RATE (lb. Product/ Acre/Season)	USE INSTRUCTIONS
Pepper*§	Anthrachnose Bacterial Spot Cercospora Leaf Spot Phytophthora Blight (Suppression) Ripe Rot	2-3 lb.	39 lb. (per season)	Begin applications prior to disease development and when conditions are favorable for disease development. Apply at 7- to 10-day intervals, if needed. Use higher specified rates when conditions favor disease. Do not apply this product with a U-boom device. Minimum preharvest interval is 7 days.
Potato	Early Blight, Late Blight	1.5-5.0 lb.	74.66 lb. (per crop)	Apply 1.5 - 2.0 lbs. per acre at 5-10 day intervals starting when plants are 6 inches high in locations where disease is light and up to 4.0-5.0 pounds per acre as vine size increases and where disease is more severe. Use higher specified rates and apply every 5 days with moderate to severe disease pressure and when conditions favor disease. Vine-kill should occur 14 days before harvest. Do not use within 3 days of harvest in CT, DE, FL, MA, ME, MI, NH, NY, OH, PA, RI, VT, WI and within 14 days elsewhere. It is recommended that this product be used in an Integrated Pest Management Program.
Sugar Beet	Cercospora Leaf Spot	2.5-4.3 lb.	26.2 lb. (per crop)	Begin when disease first threatens. Repeat at 10 day intervals. Do not apply within 14 days of harvest. Do not feed treated sugar beet tops to livestock. Use higher specified rates when conditions favor disease.
Tomato	Anthrachnose, Early Blight, Gray Leaf Spot, Late Blight, Leaf Mold, Septoria Leaf Spot, Bacterial Spot, Bacterial Speck	1.7 lb. (processing) 1-3 lb. (fresh market)	58 lb. (per crop east of the Mississippi River) 42.66 lb. (per crop west of the Mississippi River)	Begin applications when disease first threatens and repeat at 7 to 10 day intervals if needed. Use higher specified rates and apply every 3 to 7 days with moderate to severe disease pressure and when conditions favor disease. Do not apply within 5 days of harvest. MANKOCIDE® fungicide/bactericide is a specially formulated product to provide control of copper tolerant bacteria; therefore, tank mixing with products containing maneb or mancozeb is not necessary. If copper tolerant bacterial blight is not a concern, these products can be tank mixed if enhanced fungicidal activity is desired.
Sugar apple* Cherimoya* Atemoya* Custard apple* Sweetsop*	Anthrachnose	2.0-2.5 lb.	35.0 lb.	Begin applications at flowering and continue at 7-day intervals. Make applications in a minimum of 10 gallons/acre. Applications made with aerial equipment must be made in a minimum of 5 gallons/acre. Applications may be made up to the day of harvest. Do not make more than 14 applications per year.
Mango* Star apple* (caimito) Canistel* Mamey sapote* Sapodilla* White sapote*	Anthrachnose Phytophthora fruit rot Black spot (Cercospora)	2.0-2.5 lb.	35.0 lb.	Start applications at flowering and continue at 14- to 21-day intervals. Direct spray to crown and blossom area. Use 20 to 100 gallons of water per acre. Applications may be made up to the day of harvest. Do not make more than 14 applications per year.

*Not registered for use in California

§Aerial application of MANKOCIDE® on broccoli, cabbage, lettuce (leaf and head), and peppers requires that occupational handlers performing mixing/loading operations observe the additional mitigation measures of wearing a particulate respirator with an N, R or P filter, NIOSH approval prefix TC 84-A.

SEED TREATMENT

Seeds to be treated should be cleaned and well cured prior to treatment. MANKOCIDE® fungicide/bactericide may be applied to dry seed with conventional slurry or mist seed treating equipment or as a planter-box application. For best results, the seed must be completely and uniformly covered with fungicide. For on-farm planter-box applications, add seed to the box, then add MANKOCIDE®; mix seed and MANKOCIDE®, stirring until the seed is uniformly covered. For seed treatment, a dye must be added to MANKOCIDE® which will impart an unnatural color to the seed.

The Federal Seed Act requires that seed-pieces that have been treated with this product that are then packaged or bagged for future use shall be labeled with the following statements:

- This seed has been treated with MANKOCIDE®, a fungicide containing mancozeb.
- Do not use treated seed for feed, food, or oil purposes.

The U.S. Environmental Protection Agency requires the following statements on containers containing seed treated with mancozeb:

- Store treated seed away from food and feedstuffs.
- Do not allow children, pets or livestock to have access to treated seeds.
- When opening this bag or loading/pouring the treated seed/seed-pieces, wear long-sleeved shirt, long pants, shoes, socks, chemical resistant gloves, and a particulate respirator with an N, R or P filter, NIOSH approval prefix TC 84-A
- Dispose of all excess treated seed by burying seed away from bodies of water.
- Do not contaminate bodies of water when disposing of planting equipment wash water.
- Dispose of seed packaging or containers in accordance with local requirements.
- After the seeds/seed-pieces have been planted, do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 48 hours.

Exception: Once the seeds are planted in the soil or other planting media, the Worker Protection Standard allows workers to enter the treated area without restriction if there will be no worker contact with the soil/media subsurface.

CROP	DISEASE	PRODUCT RATE	USE INSTRUCTIONS
Rice	<i>Achlya</i> spp. <i>Pythium</i> spp.	2-4 ounces per 100 pounds of seed	When using a seed treating machine dilute with an equal amount of water. Consult State Agricultural Experiment Station regarding specific recommendations.
Wheat, Barley	<i>Pseudomonas syringae</i> , <i>Xanthomonas translucens</i> , <i>Tilletia caries</i>	4 ounces per 100 pounds of seed	When using a seed treating machine dilute with an equal amount of water. Consult State Agricultural Experiment regarding specific recommendations.

CHEMIGATION INSTRUCTIONS

Apply **MANKOCIDE®** fungicide/bactericide only through sprinkler systems including center pivot, lateral move, traveler, big gun and plastic pipe solid set system(s). Do not apply MANKOCIDE® through any other type of irrigation system. In California, do not apply in systems which contain aluminum parts or components.

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of chemigation water.

If you have questions about calibration, you should contact State Extension Service Specialists, equipment manufacturers or other experts. Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.

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.

Posting of areas to be chemigated is required when 1) any part of a treated area is within 300 feet of sensitive areas such as residential areas, labor camps, businesses, day care centers, hospitals, in-patient clinics, nursing homes or any public areas such as schools, parks, playgrounds, or other public facilities not including public roads, or 2) when the chemigated area is open to the public such as golf courses or retail greenhouses.

Posting must conform to the following requirements. Treated areas shall be posted with signs at all usual points of entry and along likely routes of approach from the listed sensitive areas. When there are no usual points of entry, signs must be posted in the corners of the treated areas and in any location affording maximum visibility to sensitive areas. The printed side of the sign should face away from the treated area towards the sensitive area. The signs shall be printed in English. Signs must be posted prior to application and must remain until foliage has dried and soil surface water has disappeared. Signs may remain in place indefinitely as long as they are composed of materials to prevent deterioration and maintain legibility for the duration of the posting period.

All words shall consist of letters at least 2 1/2 inches tall, and all letters and the symbol shall be a color which sharply contrasts with their immediate background. At the top of the sign shall be the words KEEP OUT, followed by an octagonal stop sign symbol at least 8 inches in diameter containing the word STOP. Below the symbol shall be the words: "PESTICIDES IN IRRIGATION WATER."

This sign is in addition to any sign posted to comply with the Worker Protection Standard.

CHEMIGATION SYSTEMS CONNECTED TO PUBLIC WATER SYSTEMS

Public water systems means a system for the provision to the public 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.

Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone backflow preventor (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top of the overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.

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 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, or in cases where there is no water pump, 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 injections 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.

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

When mixing, fill nurse tank half full with water. Add MANKOCIDE® slowly to tank while hydraulic or mechanical agitation is operating and continue filling with water. DO NOT PRE-SLURRY MANKOCIDE®. Stickers, spreaders, insecticides, nutrients, etc. should be added last. If compatibility is in question, use the Compatibility Jar Test before mixing a whole tank. Because of the wide variety of possible combinations which can be encountered, observe all cautions and limitations on the label of all products used in mixtures. Good agitation is required in the injection tank.

MANKOCIDE® fungicide/bactericide should be added through a traveling irrigation system continuously or at the last 30 minutes of solid set irrigation systems.

Stop injection equipment after treatment is completed and continue to operate irrigation equipment until all MANKOCIDE® is flushed from the system.

SPRINKLER CHEMIGATION

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 liquid 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.

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

When mixing, fill nurse tank half full with water. Add MANKOCIDE® slowly to tank while hydraulic or mechanical agitation is operating and continue filling with water. **DO NOT PRE-SLURRY MANKOCIDE®**. Stickers, spreaders, insecticides, nutrients, etc. should be added last. If compatibility is in question, use the Compatibility Jar Test before mixing a whole tank. Because of the wide variety of possible combinations which can be encountered, observe all cautions and limitations on the label of all products used in mixtures. Good agitation is required in the injection tank.

MANKOCIDE® should be added through a traveling irrigation system continuously or at the last 30 minutes of solid set irrigation systems.

Stop injection equipment after treatment is completed and continue to operate irrigation equipment until all MANKOCIDE® is flushed from the system.

SPRAY DRIFT MANAGEMENT

A variety of factors including weather conditions (e.g., wind direction, wind speed, temperature, relative humidity) and method of application (e.g., ground, aerial, airblast, chemigation) can influence pesticide drift. The applicator must evaluate all factors and make appropriate adjustments when applying this product.

Droplet Size

Apply only as a medium or coarser spray (ASAE standard 572) or a volume mean diameter of 300 microns or greater for spinning atomizer nozzles.

Wind Speed

Do not apply at wind speeds greater than 15 mph. Only apply this product if the wind direction favors on-target deposition (approximately 3 to 10 mph), and there are no sensitive areas within 250 feet downwind.

Temperature Inversions

If applying at wind speeds less than 3 mph, the applicator must determine if a) conditions of temperature inversion exist, or b) stable atmospheric conditions exist at or below nozzle height. Do not make applications into areas of temperature inversions or stable atmospheric conditions.

Other State and Local Requirements

Applicators must follow all state and local pesticide drift requirements regarding application of mancozeb. Where states have more stringent regulations, they must be observed.

Equipment

All aerial and ground application equipment must be properly maintained and calibrated using appropriate carriers or surrogates.

Additional requirements for aerial applications:

1. The boom length must not exceed 75% of the wingspan or 90% of the rotor blade diameter.

2. Release spray at the lowest height consistent with efficacy and flight safety. Do not release spray at a height greater than 10 feet above the crop canopy unless a greater height is required for aircraft safety.
3. When applications are made with a crosswind, the swath must be displaced downwind. The applicator must compensate for this displacement at the up and downwind edge of the application area by adjusting the path of the aircraft upwind.

Additional requirements for ground boom application:

1. Do not apply with a nozzle height greater than 4 feet above the crop canopy.

ATTENTION: This product contains mancozeb and ETU, chemicals known to the State of California to cause cancer in laboratory animals. ETU is also known to the State of California to cause birth defects or other reproductive harm in laboratory animals.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Store in a cool, dry place.

PESTICIDE DISPOSAL: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER HANDLING: Refer to the Net Contents section of this product's labeling for the applicable "Nonrefillable Container" or "Refillable Container" designation.

Nonrefillable Plastic and Metal Containers (Capacity Equal to or Less Than 50 Pounds): Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then, for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration. Do not burn, unless allowed by state and local ordinances. For Metal Containers, offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Nonrefillable Plastic and Metal Containers (Capacity Greater Than 50 Pounds): Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then, for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration. Do not burn, unless allowed by state and local ordinances. For Metal Containers, offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Nonrefillable Plastic and Metal Containers, e.g., Intermediate Bulk Containers [IBC] (Size or Shape Too Large to be Tipped, Rolled or Turned Upside Down): Nonrefillable container. Do not reuse or refill this container. Clean container promptly after emptying the contents from this container into application equipment or mix tank and before final disposal using the following pressure rinsing procedure. Insert a lance fitted with a suitable tank cleaning nozzle into the container and ensure that the water spray thoroughly covers the top, bottom and all sides inside the container. The nozzle manufacturer generally provides instructions for the appropriate spray pressure, spray duration and/or spray volume. If the manufacturer's instructions are not available, pressure rinse the container for at least 60 seconds using a minimum pressure of 30 PSI with a minimum rinse volume of 10% of the container volume. Drain, pour or pump rinsate into application equipment or rinsate collection system. Repeat this pressure rinsing procedure two more times. Then, for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration. For Metal Containers, offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Nonrefillable Paper or Plastic Bags, Fiber Sacks including Flexible Intermediate Bulk Containers (FIBC) or Fiber Drums With Liners: Nonrefillable container. Do not reuse or refill this container. Completely empty paper or plastic bag, fiber sack or drum liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application or manufacturing equipment. Then offer for recycling if available or dispose of empty paper or plastic bag, fiber sack or fiber drum and liner in a sanitary landfill, or by incineration. Do not burn, unless allowed by state and local ordinances.

Refillable Fiber Drums With Liners: Refillable container (fiber drum only). Refilling Fiber Drum: Refill this fiber drum with MANKOCIDE® fungicide/bactericide containing mancozeb and copper hydroxide only. Do not reuse this fiber drum for any other purpose. Cleaning before refilling is the responsibility of the refiller. Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application or manufacturing equipment. Disposing of Fiber Drum and/or Liner: Do not reuse this fiber drum for any other purpose other than refilling (see preceding). Cleaning the container (liner and/or fiber drum) before final disposal is the responsibility of the person disposing of the container. Offer the liner for recycling if available or dispose of liner in a sanitary landfill, or by incineration. Do not burn, unless allowed by state and local ordinances. If drum is contaminated and cannot be reused, dispose of it in the manner required for its liner. To clean the fiber drum before final disposal, completely empty the fiber drum by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application or manufacturing equipment. Then offer the fiber drum for recycling if available or dispose of in a sanitary landfill, or by incineration. Do not burn, unless allowed by state and local ordinances.

All Other Refillable Containers: Refillable container. Refilling Container: Refill this container with MANKOCIDE® fungicide/bactericide containing mancozeb and copper hydroxide only. Do not reuse this container for any other purpose. Cleaning before refilling is the responsibility of the refiller. Prior to refilling, inspect carefully for damage such as cracks, punctures, abrasions, worn out threads and closure devices. If damage is found, do not use the container, contact ChemTel at the number below for instructions. Check for leaks after refilling and before transporting. If leaks are found, do not reuse or transport container, contact ChemTel at the number below for instructions. Disposing of Container: Do not reuse this container for any other purpose other than refilling (see preceding). Cleaning the container before final disposal is the responsibility of the person disposing of the container. To clean the container before final disposal, use the following pressure rinsing procedure. Insert a lance fitted with a suitable tank cleaning nozzle into the container and ensure that the water spray thoroughly covers the top, bottom and all sides inside the container. The nozzle manufacturer generally provides instructions for the appropriate spray pressure, spray duration and/or spray volume. If the manufacturer's instructions are not available, pressure rinse the container for at least 60 seconds using a minimum pressure of 30 PSI with a minimum rinse volume of 10% of the container volume. Drain, pour or pump rinsate into application equipment or rinsate collection system. Repeat this pressure rinsing procedure two more times. Then, for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration. Do not burn, unless allowed by state and local ordinances. For Metal Containers, offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Do not transport if this container is damaged or leaking. If the container is damaged, leaking or obsolete, or in the event of a major spill, fire or other emergency, contact ChemTel at 1-800-255-3924, day or night.

NOTICE TO BUYER: Purchase of this material does not confer any rights under patents of countries outside of the United States.

MANKOCIDE® is a registered trademark of Kocide LLC.

The MANKOCIDE® logo is a registered trademark of Kocide LLC.

D - 1891MSTR 122214

LIMITATION OF WARRANTY AND LIABILITY

NOTICE: Read this Limitation of Warranty and Liability Before Buying or Using This Product. If the Terms Are Not Acceptable, Return the Product at Once, Unopened, and the Purchase Price Will Be Refunded.

It is impossible to eliminate all risks associated with the use of this product. Such risks arise from weather conditions, soil factors, off target movement, unconventional farming techniques, presence of other materials, the manner of use or application, or other unknown factors, all of which are beyond the control of Kocide. These risks can cause: ineffectiveness of the product, crop injury, or injury to non-target crops or plants. **WHEN YOU BUY OR USE THIS PRODUCT, YOU AGREE TO ACCEPT THESE RISKS.** Kocide warrants that this product conforms to the chemical description on the label thereof and is reasonably fit for the purpose stated in the Directions for Use, subject to the inherent risks described above, when used in accordance with the Directions for Use under normal conditions.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, KOCIDE MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR OF MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, IN NO EVENT SHALL KOCIDE OR SELLER BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT. BUYER'S OR USER'S BARGAINED-FOR EXPECTATION IS CROP PROTECTION. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER AND THE EXCLUSIVE LIABILITY OF KOCIDE OR SELLER, FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY OR CONTRACT, NEGLIGENCE, TORT OR STRICT LIABILITY), WHETHER FROM FAILURE TO PERFORM OR INJURY TO CROPS OR OTHER PLANTS, AND RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT, OR AT THE ELECTION OF KOCIDE OR SELLER, THE REPLACEMENT OF THE PRODUCT. To the extent consistent with applicable law that allows such requirement, Kocide or your Ag Retailer must have prompt notice of any claim so that an immediate inspection of buyer's or user's growing crops can be made. Buyer and all users shall promptly notify Kocide or your Ag Retailer of any claims, whether based on contract, negligence, strict liability, other tort or otherwise, or be barred from any remedy.

This Limitation of Warranty and Liability may not be amended by any oral or written agreement.

Internet address: www.kocide.com

© 2015 Kocide LLC, 9145 Guilford Road, Suite 175, Columbia, MD 21046

All rights reserved.