

PM 21 1812-360

7-25-97

10/18

Please read instructions on reverse before completing form.

Form Approved, OMB No. 2070-0080, Approval expires 05-31-98



United States  
Environmental Protection Agency  
Washington, DC 20460

Registration  
 Amendment  
 Other

OPP Identifier Number  
255644

Application for Pesticide - Section I

1. Company/Product Number 1812-360	2. EPA Product Manager Ms. Mary Waller	3. Proposed Classification <input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company/Product (Name) ManKocide	PM# 21	
5. Name and Address of Applicant (Include ZIP Code) Griffin Corporation P.O. Box 1847 Valdosta, GA 31603-1847 <input type="checkbox"/> Check if this is a new address	6. Expedited Review. In accordance with FIFRA Section 3(c)(3) (b)(i), my product is similar or identical in composition and labeling to: EPA Reg. No. _____ Product Name _____	

Section - II

<input type="checkbox"/> Amendment - Explain below.	<input type="checkbox"/> Final printed labels in response to Agency letter dated _____
<input type="checkbox"/> Resubmission in response to Agency letter dated _____	<input type="checkbox"/> "Me Too" Application. <b>NOTIFICATION</b>
<input checked="" type="checkbox"/> Notification - Explain below.	<input type="checkbox"/> Other - Explain below. <b>JUL 25 1997</b>

**Explanation:** Use additional page(s) if necessary. (For section I and Section II.)  
 Notification of additional pest for site already on label, as well as minor advisory statement modifications, per PR Notice 95-2.  
 This notification is consistent with the provisions of PR Notice 95-2 and EPA regulations at 40 CFR 152.46, and no other changes have been made to the labeling or the confidential statement of formula of this product. I understand that it is a violation of 18 U.S.C. Sec. 1001 to willfully make any false statement to EPA. I further understand that if this notification is not consistent with the terms of PR Notice 95-2 and 40 CFR 152.46, this product may be in violation of FIFRA and I may be subject to enforcement action and penalties under sections 12 and 14 of FIFRA.

Section - III

1. Material This Product Will Be Packaged In:				2. Type of Container	
Child-Resistant Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Unit Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Water Soluble Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<input type="checkbox"/> Metal	<input type="checkbox"/> Plastic
* Certification must be submitted	If "Yes" Unit Packaging wgt.	No. per container	If "Yes" Package wgt.	<input checked="" type="checkbox"/> Glass	<input type="checkbox"/> Paper
				<input type="checkbox"/> Other (Specify) _____	
3. Location of Net Contents Information <input checked="" type="checkbox"/> Label <input type="checkbox"/> Container		4. Size(s) Retail Container 10 & 30 lb.		5. Location of Label Directions <input checked="" type="checkbox"/> On Label <input type="checkbox"/> On Labeling accompanying product	
6. Manner in Which Label is Affixed to Product <input checked="" type="checkbox"/> Lithograph <input type="checkbox"/> Paper glued <input type="checkbox"/> Stenciled				<input type="checkbox"/> Other _____	

Section - IV

1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)					
Name Darryl E. Brock		Title Registration Specialist		Telephone No. (Include Area Code) 912/249-5286	
Certification I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.					6. Date Application Received (Stamped)
2. Signature <i>Darryl E. Brock</i>			3. Title Registration Specialist		
4. Typed Name Darryl E. Brock			5. Date June 18, 1997		

2018

**ManKocide®**  
DRY FLOWABLE  
FUNGICIDE/BACTERICIDE

ACTIVE INGREDIENTS

Mancozeb, a coordination product of zinc ion and manganese ethylenebisdithiocarbamate.....	15.0%
in which the ingredients are	
Manganese.....	3.0%
Zinc.....	0.4%
Ethylenebisdithiocarbamate ion(C <sub>4</sub> H <sub>6</sub> N <sub>2</sub> S <sub>4</sub> ).....	11.6%
Copper Hydroxide (Metallic Copper Equivalent - 30%) .....	46.1%
INERT INGREDIENTS.....	38.9%
TOTAL.....	100.0%

**NOTIFICATION**

JUL 25 1997

**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.)

**STATEMENT OF PRACTICAL TREATMENT**

**IF IN EYES:** Hold eyelids open and flush with water for 15 minutes. Get medical attention.

**IF ON SKIN:** Wash with plenty of soap and water. Get medical attention if irritation persists.

**IF SWALLOWED:** Drink promptly a large quantity of milk, egg white, gelatin solution, or if these are not available, large quantities of water. Avoid alcohol. Get medical attention.

**IF INHALED:** Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Get medical attention.

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

See label for additional Precautions and Directions for Use.

GRIFFIN CORPORATION  
VALDOSTA, GEORGIA 31601

EPA Reg. No. 1812-360  
EPA Est. No.  
NET CONTENTS

**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. Wear goggles or face shield. Avoid inhaling dust or spray mist. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse. Prolonged and repeated dermal contact may cause allergic reactions in some individuals.

**PERSONAL PROTECTIVE EQUIPMENT (PPE)**

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical resistant apron during mixing and loading
- Waterproof gloves
- Shoes plus socks
- Protective eyewear

Discard clothing and other absorbent materials that have been heavily contaminated with this product's concentrate. Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

**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.

**ENVIRONMENTAL HAZARDS**

This pesticide is toxic to fish and aquatic organisms. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift and runoff from treated areas may be hazardous to fish and aquatic organisms in adjacent aquatic sites. Do not allow rinsate from cleaning of equipment or disposed material to enter surface or ground water.

**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 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 without recommended PPE.

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
- Waterproof gloves
- Shoes plus socks
- Protective eyewear

### NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are not within the scope of the Worker Protection Standard for agricultural pesticides 40 CFR part 170. The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries or greenhouses.

- Keep unprotected persons out of the treated areas until sprays have dried.

### STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal. 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 DISPOSAL:** Completely empty bag into application equipment. Then dispose of empty bag in sanitary landfill, or by incineration, or if allowed by State and local authorities, by burning. If burned, stay out of smoke.

### GENERAL INSTRUCTIONS

**GROUND or AERIAL APPLICATIONS:** - Apply ManKocide 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, typically 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 should 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 required 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. During aerial application, human flaggers are prohibited unless in totally enclosed vehicles.

### SPECIAL PRECAUTIONS

- \* ManKocide **should not be applied** in a spray solution having a pH of less than 6.5 as 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 on this label or by a state/local expert, or the user has small scale direct experience, tank mixing should not be undertaken.
- \* - Do not apply this product through any irrigation (chemigation) system using aluminum parts or components as damage to the system may occur. Such application is prohibited regardless of whether the irrigation system is flushed with water after use of this product.

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) which contain no aluminum parts or components. Do not apply this product through any other type of irrigation system.

- \* 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.

- \* ManKocide should be used only in accordance with recommendations on this label.
- \* GRIFFIN will not be responsible for losses or damages resulting from use of this product in any manner not specifically recommended by GRIFFIN. User assumes all risks associated with such non-recommended use.

### 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.

CROPS	DISEASES PRODUCT/ ACRE	RATE (lb./Acre)	MAXIMUM RATE (lb./Acre/ Season)	USE INSTRUCTIONS
Apples	Fireblight (suppression)	10.66 - 21.33 lb.	Single Application	Make a single application between silver tip and green tip as a full cover spray. Crop injury may occur from late application; discontinue use when green tip

				reaches ½ inch. It is recommended that this product be used in an Integrated Pest Management Program.
Bananas	Sigatoka	2.5 lb.	160 lb. (per growing cycle)	Apply when leaves first appear and repeat every 14 to 21 days or as required. 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 pre-harvest interval is 0 days.
Barley, Oats, and Wheat	Helminthosporium Leaf Spot, Septoria Leaf Spot, and Glume Blotch	2 - 2.5 lb.	32 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. Use higher rates when conditions favor disease. Do not graze livestock in treated areas prior to harvest.
Cranberries	Fruit Rot	10.5 lb.	96 lb. (per season)	Start applications at mid-bloom and repeat at 7 to 10 day intervals as required. Do not apply within 30 days of harvest.
Cucumbers	Angular Leaf Spot, Downy Mildew, Gummy Stem Blight, Anthracnose	2 - 2.5 lb.	128 lb. (per crop)	Start applications when plants begin to vine and repeat weekly. Use sufficient water and direct spray to provide thorough coverage of both upper and lower leaf surfaces. Do not apply within 5 days of harvest.
Grapes	Black Rot, Downy Mildew, Powdery Mildew, Phomopsis	2.5 lb.	128 lb. (per season East of the Rocky Mountains)  40 lb.	Apply in sufficient water to provide thorough coverage starting at late dormant or bud break. Repeat when shoots are ½ to 1½ inches long, 3 to 5 and 8 to 10 inches long and then at 7 to 10 day intervals until fruit is set. For late season control of black rot.

(per season  
West of the  
Rocky  
Mountains)

powdery, and downy mildew the use  
of other approved and recommended  
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.

Melons (Cantaloupes Casaba Crenshaw Honeydew Muskmelon Watermelon)	Alternaria Leaf Spot. Anthracnose, Cercospora Leaf Spot. Downy Mildew. Gummy Stem Blight. Bacterial Fruit Blotch. Watermelon Fruit Blotch	2.5 lb.	128 lb. (per crop)	Start applications when plants are in the two-leaf stage and repeat at approximately 7 day intervals. Use sufficient water and direct spray to provide thorough coverage of both upper and lower leaf surfaces. Do not apply within 5 days of harvest. <b>Note:</b> ManKocide helps suppress the incidence of watermelon fruit blotch.
Onions (dry bulb)	Botrytis Leaf Blight, Downy Mildew, Purple Blotch,  Bacterial Blight	2.5 lb.	160 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.
Papaya	Anthracnose	5.5 - 13 lb.	186.6 lb. (per crop)	Apply in a minimum of 50 gallons of spray solution per acre. Apply before disease appears. Apply at 14- 21 day intervals under light disease pressure and at 5-7 day intervals under heavy disease pressure. The addition of an approved spreader is



desirable.  
Minimum pre-harvest interval is 0 days.

Peanuts	Cercospora Leaf Spot	2 - 4 lb.	85.3 lb. (per crop)	Start applications when disease first appears or is reported in the area. Repeat sprays at 7 to 14 day intervals. Reduce sprays to a 7 day interval during humid weather. Do not apply within 14 days of harvest. Use higher rate when disease conditions favor disease. Do not feed treated vines to livestock.
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Pear	Fireblight	1.5 lb.	128 lb. (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. <b>NOTE:</b> Russitting may occur in copper sensitive varieties. Excessive dosages may cause fruit russet.
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Potatoes	Early/Late Blight	1.5 - 5.0 lb.	74.66 lb. (per crop)	Apply 1.5 - 2.0 lbs. per acre at 7-10 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. It is recommended that this product be used in an Integrated Pest Management Program. 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.
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Squash (Summer squash)	Anthracnose Downy Mildew, Powdery	2 - 4 lb.	128 lb. (per crop)	Apply weekly when plants begin to vine or when disease symptoms first appear. Use sufficient water and direct spray to provide thorough
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	Mildew			coverage of both upper and lower leaf surfaces. Do not apply within 5 days of harvest.
Sugar Beets	Cercospora Leaf Spot	2.5 - 6.5 lb.	74.66 lb. (per crop)	Begin when disease first threatens. Repeat at 7 to 10 day intervals. Do not apply within 14 days of harvest. Do not feed treated sugar beet tops to livestock. Use higher rates when conditions favor disease.
Tomatoes	Anthracnose, Early Blight, Gray leaf Spot, Late Blight, Leaf Mold, Septoria Leaf Spot, Bacterial Spot, Bacterial Speck	2.5 - 5.0 lb.	112 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 as needed. Use higher rates when conditions favor disease. Do not apply within 5 days of harvest. ManKocide is a specially formulated product to provide control of copper tolerant bacteria <del>and should not be mixed with a maneb or mancozeb product. Therefore, the addition of a maneb or mancozeb product is not necessary to provide control of copper tolerant bacteria.</del> ; 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.

## ORNAMENTALS

For outdoor or greenhouse use, apply as a thorough coverage spray using 1.5 lb. ManKocide per 100 gals. dilute spray. One-half tablespoon of ManKocide per gallon of water is equivalent to 1.5 lb. per 100 gallons. Begin application at first sign of disease and repeat at 7 - 14 day intervals as needed. Use shorter intervals when severe disease conditions exist.

**Note:** Plant sensitivities to ManKocide have been found to be acceptable in specific genera and species listed on this label, however, phytotoxicity may occur. Due to the large number of species and varieties of ornamentals and nursery plants, it is impossible to test every one for sensitivity to ManKocide. Neither the manufacturer or the seller has determined whether or not ManKocide can be safely used on ornamental or nursery plants not listed on this label. The user should determine if ManKocide can be used safely prior to commercial use. In a small area, apply the recommended rates to the plants in question, i.e. bedding plants, foliage, etc., and observe for 7 - 10 days for symptoms of phytotoxicity.

Not intended for use on fruit trees by homeowners. Do not use for food or feed purposes.

CROP	DISEASES	REMARKS
Apples	Fireblight (suppression)	Make a single application between silver tip and green tip as a full cover spray. Injury may occur from late application; discontinue use when green tip reaches ½ inch.
Bananas	Sigatoka	Apply when leaves first appear and repeat every 14 to 21 days or as required. Use sufficient water to provide adequate coverage. The addition of a surfactant to spray solutions will improve performance.
Arborvitae	Cercospora Blight. Alternaria Twig Blight	
Azalea	Cercospora Leaf Spot, Botrytis Blight, Phytophthora Twig and Bud Blight, Powdery Mildew	Discoloration of foliage and/or blooms has been noted on some varieties. To prevent residues on commercial plants, do not spray just before selling season.

Begonia	Botrytis Blight, Bacterial Leaf Spot	
Camelia	Anthracnose, Bacterial Leaf Spot, Petal Blight	
Carnations	Alternaria Blight, Pseudomonas Leaf Spot, Botrytis Blight, Septoria Leaf Spot	Discoloration of foliage and/or blooms has been noted on some varieties. To prevent residues on commercial plants, do not spray just before selling season.
Chrysanthemums	Septoria Leaf Spot, Botrytis Blight	Discoloration of foliage and/or blooms has been noted on some varieties. To prevent residues on commercial plants, do not spray just before selling season.
Dahlias	Alternaria Leaf Spot, Cercospora Leaf Spot, Botrytis Blight	
Dogwood	Anthracnose	
Easter Lily	Botrytis Blight	Use 4.0 - 6.5 lbs. in 20 to 100 gallons of water per acre.
Elm	Xanthomonas Leaf Spot	
Euonymus	Anthracnose, Botrytis Blight	
Geranium	Alternaria Leaf Spot, Botrytis Gray Mold, Cercospora Leaf Spot	
Gladiolus	Alternaria Leaf Spot, Botrytis	

	Gray Mold, Bacterial Leaf Blight	
India Hawthorn	Anthrachnose, Entomosporium Leaf Spot	Use 2.5 - 5.0 lb. per 100 gallons water.
Juniper (Eastern Red Cedar)	Anthrachnose	
Magnolia	Gleosporium Leaf Spot, Algal Leaf Spot, Anthrachnose, Bacterial Leaf Spot	
Marigold	Botrytis Leaf and Blossom Blight. Alternaria Leaf Spot. Cercospora Leaf Spot	Not recommended for use on French Marigold as phytotoxicity may occur.
Oak, Laurel	Algal Leaf Spot ( <u>Cephaluros virescens</u> )	
Pachysandra	Volutella Leaf Blight	
Pansies	Anthrachnose, Downy Mildew	
Pear	Fireblight	Apply at 5 day intervals throughout the bloom period. Do not apply after bloom.
Peonies	Alternaria Leaf Spot, Botrytis Blight	

Photinia	Anthracnose, Entomosporium Leaf Spot	
Pyracantha	Fireblight, Scab	
Rhododendron	Alternaria Flower Spot, Cercospora Leaf Spot	
Rose	Black Spot, Cercospora Leaf Spot, Powdery Mildew	Discoloration of foliage and/or blooms has been noted on some varieties. To prevent residues on commercial plants, do not spray just before selling season.
Tulip	Botrytis Blight, Anthracnose	
Viburnum	Downy Mildew, Anthracnose	
Walnut	Bacterial Blight, Anthracnose	Do not use for food or feed.
Zinnias	Alternaria Leaf Blight, Botrytis Blight	

### TURF

For golf courses, sod farms, industrial or municipal turf areas and professional applications to residential lawns. Not for use by homeowners.

Start applications when grass greens-up in spring or when disease threatens. Repeat at 7 to 14 day intervals as needed. Use the shorter interval and maximum rate when disease is severe or expected to be so. Apply in sufficient water to provide adequate coverage.

Do not graze treated areas. Do not use on grasses intended for grazing, such as range or pasture grasses. Do not feed clippings to livestock. Do not use for grasses grown for seed.

**Note:** Phytotoxicity may occur depending upon varietal differences. Apply recommended rate to small area and observe for 7 - 10 days for signs of injury. If phytotoxicity occurs, discontinue use. Do not apply in spray

solutions with a pH of less than 6.5.

DISEASES	RATE/1000 Sq. Ft.	REMARKS
Helminthosporium Melting-out Rusts (leaf, stem, stripe)	1.3 lb.	
Copper Spot, Fusarium Blight, Powdery Mildew, Red Thread, Slime Mold	1.3 - 2.5 lb.	
Algae	2 lb.	
Dollar Spot	2 - 2.5 lb.	
Rhizoctonia Brown Patch	1.3 lb.	Apply on a 7 day schedule.
Pythium Blight	2.5 lb.	Apply at 5 day intervals, or more frequently, if conditions are especially favorable for disease development.
Fusarium Snow Mold	2 - 2.5 lb.	Apply at 2 to 6 week intervals during winter.

### GENERAL CHEMIGATION INSTRUCTIONS

(for crops, turf and sod)

Apply ManKocide only through sprinkler including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set or hand move irrigation systems. Do not apply ManKocide 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 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 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 or hand moved 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.

~~Good agitation is required in the injection tank.~~

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 or hand moved irrigation systems.

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

#### WARRANTY STATEMENT

GRIFFIN warrants that this product conforms to the chemical description on the label thereof and is reasonably fit for purposes stated on such label only when used in accordance with directions under normal use conditions. It is impossible to eliminate all risks inherently associated with use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of GRIFFIN. In no case shall GRIFFIN be liable for consequential, special or indirect damages resulting from the use or handling of this product. All such risks shall be assumed by the Buyer. The exclusive remedy of any buyer or user of this product for any and all losses, injuries, or damages resulting from or in any way arising from the use, handling, or application of this product, whether in contract, warranty, tort, negligence, strict liability, or otherwise, shall not exceed the purchase price paid for this product or at Griffin Corporation's election, the replacement of this product. GRIFFIN MAKES NO WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

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