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Rohm and Haas  
Independence Mall West  
Philadelphia, PA 19105

Attention: T. Rogerson

AUG 20 1984

Gentlemen:

Subject: Dithane F2 Flowable Fungicide  
EPA Registration 707-170  
Your Letter Dated June 14, 1984

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, is acceptable subject to the comments listed below. Five copies of the finished labeling must be submitted.

1. On page 5, the heading for solid-set and portable (wheel move) irrigation equipment should follow the first entry. The first entry should be included with the center-pivot directions on the previous page.
2. Delete the seed treatment use on rice in page 16. This was not included in your last submission.

A stamped copy of the label is enclosed for your records.

Sincerely yours,

Henry M. Jacoby  
Product Manager (21)  
Fungicide-Herbicide Branch  
Registration Division (TS-767)

Enclosure

RD/FHB:Jacobey:DCR-10760:WANG-0076L:CG:Paven:479-2013:7/30/83:Del.8/16/84

NAME							
SURNAME							
DATE							

Reg No: 707-170

707-170

707-170

**ROHM AND HAAS COMPANY**

INDEPENDENCE MALL WEST  
PHILADELPHIA, PENNSYLVANIA 19105



DITHANER<sup>R</sup> FZ Flowable Agricultural Fungicide with Zinc  
EPA Reg. No. 707-170  
Revised Label

ACCEPTED  
with COMMENTS  
in EPA Letter dated:

AUG 20 1984

Under the Insecticide,  
Fungicide, and Plant Nematicide Act  
as amended, the pesticide  
registered under EPA Reg. No.

707-170

Container Label

707-170

707-170

DITHANE FZ  
Flowable  
Agricultural Fungicide  
with Zinc

EPA Reg. No. 707-170  
EPA Est. No. 707-PA-1  
Copyright 1984 (Rohm and Haas Co.)

Active Ingredient

Maneb (manganese ethylene bisdithiocarbamate) . . . . . 37%\*

(Total metallic manganese . . . . . 7.6%)

Inert Ingredient . . . . . 63%

Equivalent to 4 lbs. of active ingredient per gallon.

KEEP OUT OF REACH OF CHILDREN  
PRECAUTIONARY STATEMENTS  
HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

May cause irritation of nose, throat, eyes and skin. Avoid contact with skin, eyes or clothing. Avoid breathing spray mist. In case of contact immediately flush eyes or skin with plenty of water. Get medical attention if irritation persists.

Protective clothing consisting of long pants, long sleeve shirt, gloves, hat and boots must be worn during mixing and loading.

Wash thoroughly after using and before eating or smoking. Remove and wash contaminated clothing before re-use.

STATEMENTS OF PRACTICAL TREATMENT

IF SWALLOWED: Dilute by giving 2 glasses of water to drink and call a physician. Never give anything by mouth to an unconscious person.

IF INHALED: Move subject to fresh air.

IF IN EYES: Flush eyes with large amounts of water for at least 15 minutes. Consult a physician if irritation persists.

IF ON SKIN: Wash affected skin areas with soap and water.

ENVIRONMENTAL HAZARD

This pesticide is toxic to fish. Do not apply directly to water or wetlands. Do not apply when weather conditions favor drift from areas treated. Do not contaminate water by cleaning of equipment or disposal of wastes.

PHYSICAL AND CHEMICAL HAZARDS

Keep away from fire and sparks

Keep from freezing.

BEST AVAILABLE COPY

CONDITIONS OF SALE AND WARRANTY

Rohm and Haas warrants that the product conforms to its chemical description and is reasonably fit for the purpose stated on the label only when used in accordance with label directions under normal conditions of use. ROHM AND HAAS MAKES NO OTHER EXPRESS OR IMPLIED WARRANTIES EITHER OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE. Handling, storage and use of the product by Buyer or User are beyond the control of Rohm and Haas and Seller. Risks such as crop injury, ineffectiveness or other unintended consequences resulting from, but not limited to, weather or soil conditions, presence of other materials, disease, pests, drift to other crops or property or failure to follow label directions will be assumed by the Buyer or User. IN NO CASE WILL ROHM AND HAAS OR SELLER BE HELD LIABLE FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE HANDLING, STORAGE OR USE OF THIS PRODUCT.

## DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. SEE SIDE PANEL FOR ATTACHED USE DIRECTIONS

## STORAGE AND DISPOSAL

**STORAGE:** Keep away from fire and sparks. Store in a cool well ventilated area, but not below 32°F. Do not allow to become overheated in storage. This may bring on chemical changes which will impair the fungicidal effectiveness of DITHANE FZ fungicide. Keep container closed when not in use.

**PESTICIDE DISPOSAL:** Do not contaminate water, food or feed by storage or disposal. Pesticide wastes are toxic. 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

Plastic Containers - Triple rinse (or equivalent) puncture and then dispose of in a sanitary landfill or incineration or if permitted by State and local authorities by burning. If burned stay out of smoke.

Metal Containers - Triple rinse (or equivalent) puncture and dispose of in a sanitary landfill or by other procedures approved by State and local authorities.

## STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Dike and contain the spill. Scoop or shovel into containers for disposal or reworking. Flush contaminated area with a large amount of water to a chemical or sanitary sewer containing a settling pit. Refer to Precautionary Statements.

9624-M1a

Made in U.S.A.

ROHM AND HAAS COMPANY

INDEPENDENCE MALL WEST

PHILADELPHIA, PENNSYLVANIA 19105



DITHANE<sup>R</sup> FZ Flowable Agricultural Fungicide with Zinc  
EPA Reg. No. 707-170  
Revised Label

Use Directions

**ROHM AND HAAS COMPANY**

INDEPENDENCE MALL WEST  
PHILADELPHIA, PENNSYLVANIA 19105



DITHANE(R) FZ FLOWABLE AGRICULTURAL FUNGICIDE WITH ZINC  
EPA REG. NO. 707-170

DIRECTIONS FOR USE

NOTICE: Before using this product, read the entire Precautionary Statements, Directions for Use and the Conditions of Sale and Warranty. If the Conditions of Sale and Warranty are not acceptable, return product unopened within thirty days of purchase to place of purchase.

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

REENTRY AND WORKERS PROTECTION STATEMENTS

Do not enter treated areas without protective clothing until sprays have dried. Because certain states may require more restrictive reentry intervals for various crops treated with this product, consult your State Department of Agriculture for further information. Do not apply this product in such a manner as to directly or through drift expose workers or other persons. The area being treated must be vacated by unprotected persons.

Written or oral warnings must be given to workers who are expected to be in a treated area or in an area about to be treated with this product. Oral warnings must be given if there is reason to believe that written warnings cannot be understood by workers. When oral warnings are given, warnings shall be given in a language customarily understood by workers. Written warnings must include the following information:

CAUTION

(Insert area of field description) treated with DITHANE FZ fungicide on (insert date of application). Do not enter treated areas without protective clothing until sprays have dried. In case of accidental exposure: Call a doctor (physician), clinic or hospital immediately. Explain that the victim has been exposed to DITHANE FZ fungicide and describe his condition. For further information see the "Statement of Practical Treatment."

Oral warnings must include the same information that is in the written warnings.

(Doc. #6987E)

GENERAL USE INFORMATION

DITHANE FZ fungicide is a broad-spectrum protectant fungicide recommended for the control of fruit, field, vegetable, and ornamental crop diseases. Optimum disease control is achieved when the fungicide is applied in a regularly scheduled preventative spray program. The addition of an agricultural surfactant will improve fungicide performance by providing a more uniform spray deposit, increased foliar redistribution, and fungicide retention during periods of wet weather.

USE RATE DETERMINATION

Carefully read, understand, and follow label use rates and limitations.

Under low disease conditions, minimum per application label rates can be used while maximum label rates and shortened spray schedules are recommended for severe or threatening disease conditions.

For proper application, determine the number of acres to be treated, the recommended label use rate, and the gallonage to be applied per acre. Prepare only the amount of spray solution required to treat the measured acreage. Careful calibration of spray equipment is recommended prior to use.

If only a portion of the container contents are to be used, thoroughly shake the container prior to measuring. When small quantities of spray solution are being prepared for use in hand or power sprayers, the following conversion table should be followed:

Recommend Label Use Rate Per Acre or 100 Gallons	Fluid Ounces DITHANE <sup>(R)</sup> FZ Flowable Agricultural Fungicide with Zinc Required for:			
	10 Gallons	5 Gallons	2 Gallons	1 Gallon
0.5 qt.	1.6	0.8	0.3	0.2
1.0 qt.	3.2	1.6	0.7	0.3
1.5 qts.	4.8	2.4	1.1	0.4
2.0 qts.	6.4	3.2	1.3	0.6
2.5 qts.	8.0	4.0	1.6	0.8
3.0 qts.	9.6	4.8	2.0	0.9
3.5 qts.	11.2	5.6	2.3	1.1
4.0 qts.	12.8	6.4	2.6	1.3

- 1 cup = 8 fluid ounces or 237 milliliters
- 1 fluid ounces = 2 tablespoons or 30 milliliters
- 1 tablespoon = 3 teaspoons or 15 milliliters

MIXING

Slowly pour into spray tank as it is being filled or thoroughly premix in a nurse tank for concentrate or aircraft sprayers. Add other co-applied fungicides, insecticides, growth regulators, micronutrients, and spray adjuvants after DITHANE FZ fungicide has been placed into suspension.

When preparing spray solutions for use in a hand sprayer, premix as a slurry in a small container, and then add to sprayer containing 1/3 to 1/2 the desired final water volume.

COMPATIBILITY

DITHANE FZ fungicide is compatible with most commonly used agricultural fungicides, insecticides, and growth regulators. When preparing tank mixes, user should consult spray compatibility charts or State Extension Service Specialists prior to actual use.

SPRAY ADJUVANTS

The addition of agricultural surfactants to DITHANE FZ fungicide sprays, will improve initial spray deposits, fungicide redistribution, and weatherability. The following spray adjuvants have been especially formulated to optimize the performance of foliar applied agricultural chemicals:

TRITON(R) CS-7                    A spreader-binder designed specifically for use in concentrate and low volume sprays applied by aircraft or ground equipment.

TRITON(R) B-1956(R)            A water dispersible, resin-based nonionic surfactant which resists re-wetting and removal by rain. Effective with dilute sprays applied by ground equipment.

TRITON(R) AG-92                A low foam nonionic general purpose spray adjuvant. May be used in dilute or concentrate sprays applied by aircraft or ground equipment.

Place DITHANE FZ fungicide into suspension prior to adding an adjuvant to the spray mixture. Read and carefully observe the cautionary statements and all other information appearing on both product labels prior to spray preparation.

APPLICATION

Ground:

Apply in sufficient volume of water to provide good coverage with available equipment in either dilute sprays or concentrate ground sprays.

Thorough coverage foliar sprays generally result in optimum disease control. To achieve good coverage use proper spray pressure, gallonage per acre, nozzles (generally hollow cone), discs (generally D-5 to D-7), nozzle spacing, and tractor speed. Consult spray nozzle and accessory catalogues for specific information on proper equipment calibration.

Hand Sprayers:

Thoroughly spray plant foliage until run-off.

(Doc. #6937E)



Aerial:

A uniform initial spray deposit over the crop canopy generally results in optimum disease control. Each aircraft should be prechecked for droplet size, uniformity of spray pattern, swath width, and spray volume.

Nozzle selection - Hollow cone brass nozzles with a D series orifice disc and core (whirlplate) are recommended. Nozzles should point straight down or slightly backward.

Swath width - For most field and vegetable crops, swaths just beyond the wingspan of 36 to 40 feet for light aircraft and up to 45 feet for heavier aircraft are suggested. Optimum swath for helicopters is usually 5 to 10 feet beyond normal boom length.

Spray volume - On vegetable and field crops, 2 to 3 gallons of spray per acre is generally optimum; orchards and vineyards can be handled with spray volumes of 5 gallons per acre. Some tall or dense foliage crops, requiring greater penetration to the lower leaf surface, will require higher spray volumes.

Altitude - For most crops, the spray boom should be positioned 5 to 10 feet above the crop canopy.

Flagging - Swaths should be marked at the end of the field with permanent flags or by a flagman. Swaths should be measured accurately with a chain or other device except when rows can be accurately counted.

Sprinkler Irrigation:

With the exception of potatoes and tomatoes DITHANE FZ fungicide has not been sufficiently tested to assure consistent product performance for all labeled uses. The following calibration and application techniques are provided for user reference, but do not constitute a warranty of fitness for application through sprinkler irrigation equipment. Users must check with State and Local regulatory agencies, for potential use restrictions, prior to applying any agricultural chemical via sprinkler irrigation equipment.

Center-pivot Irrigation Equipment (Use only with electric or oil hydraulic drive systems which provide a uniform water distribution)

- Determine size of area to be treated.
- Determine the time required to apply  $\frac{1}{2}$  inch water over the area to be treated when the system and injection equipment is operated at normal pressures recommended by the equipment manufacturer. Run system at 80 to 95% of manufacturer's rated capacity.
- Using only water, determine the injection pump output when operated at normal line pressure.
- Determine the amount of DITHANE FZ fungicide required to treat area.
- Add the required amount of DITHANE FZ fungicide, and sufficient water to meet the injection time requirements, to the solution tank.
- Maintain constant solution tank agitation during the injection period.

Solid-set and Portable (Wheel Move) Irrigation Equipment

- Stop injection equipment after treatment is completed. Continue to operate the system until the DITHANE FZ fungicide solution has cleared the sprinkler head.
- Determine acreage covered by sprinkler.
- Fill injector solution tank with water and adjust flow rate to use contents over a 15 to thirty minute interval.
- Determine the amount of DITHANE FZ fungicide required to treat area.
- Add the required amount of DITHANE FZ fungicide into the same quantity of water used to calibrate the injection equipment.
- Maintain constant solution tank agitation during the injection period.
- Operate system at normal pressures recommended by the manufacturer of the injection equipment and used for the time interval established during calibration.
- Inject DITHANE FZ fungicide at the end of the irrigation cycle or as a separate application to maximize foliar fungicide retention.
- Stop injection equipment after treatment is completed. Continue to operate the system until the DITHANE FZ fungicide solution has cleared the last sprinkler head.

Precautionary Statements:

Do not operate irrigation system without safety valves or other protective devices to prevent back-siphoning of DITHANE FZ fungicide into water source.

Have injector pump electrical controls coupled with the system's shut-down controls.

Do not chemigate if wind speed exceeds 10 mph.

Irrigation water treated with DITHANE FZ fungicide should be contained on the treated area until the water is absorbed by the soil.

DISEASE MONITORING:

DITHANE FZ fungicide is a broad spectrum protectant fungicide. If not applied on a routine protectant spray schedule, crops should be scouted on a weekly basis. Fungicide application should be made, at the recommended label use rate and spray schedule, at the first sign of disease, report of disease in the area, or during environmental conditions favorable for disease development.

RESTRICTIONS:

Users should carefully read, understand, and follow all use restrictions prior to using DITHANE FZ fungicide.

DIRECTIONS FOR USE:

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Crop	Diseases Controlled	Rate of DITHANE FZ Flowable Fungicide with Zinc Per Application Qts./A	Remarks (Also Refer to Directions For Use)	Pesticide
VEGETABLES:				
Asparagus	Rust	2.4	Start applications when rust first appears and repeat at 10 day intervals. Four applications are usually sufficient.	Apply only to after harvest
Bean (green, dry)	Anthracnose Downy mildew Rust	0.8 to 2.4	Apply when disease first appears and repeat at 7 day intervals.	Do not apply w of harvest. Do not feed to hay to livestock
Broccoli	Alternaria leaf spot Downy mildew	1.2 to 2.4	Apply up to 150 gallons spray per acre, or apply equivalent dosage in concentrate sprays.  Add TRITON B-1956 agricultural spreader sticker to sprays.  In plant beds and direct seeded fields, apply 7 to 10 days after planting or earlier if disease is present. Repeat every 3 days until transplanting or thinning.  In field application apply as soon as disease threatens and repeat weekly as needed. Reduce spray intervals to 3 to 5 days under severe conditions.	Do not apply w harvest.

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Rate of  
DITHANE FZ Flowable  
Fungicide with Zinc  
Per Application  
Qts./A

Remarks  
(Also Refer to Directions for Use)

Restrictions

Crop	Diseases Controlled	Rate of DITHANE FZ Flowable Fungicide with Zinc Per Application Qts./A	Remarks (Also Refer to Directions for Use)	Restrictions
Brussels Sprout	Refer to broccoli			
Cabbage	Alternaria leaf spot Downy mildew	1.2 to 1.8	Refer to broccoli.	Do not apply more than 1.8 qts. per acre per application.
Cantaloupe	Alternaria leaf spot Anthracnose Cercospora leaf spot Downy mildew Gummy stem blight Scab	0.8 to 2.4	Start applications when plants are in the two leaf stage and repeat at 5 to 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.
Carrot	Alternaria leaf spot Cercospora leaf spot	0.8 to 2.4	Apply in 75 to 125 gallons spray per acre. Start applications when disease first threatens and repeat every 7 to 10 days as needed.  The addition of TRITON R-1956 or TRITON 100 to spray solutions will improve performance.	
Casaba Melon	Refer to melon			
Cauliflower	Refer to broccoli			

(Doc. #6987E)

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Crop	Diseases Controlled	Rate of DITHANE FZ Flowable Fungicide with Zinc Per Application QTS./A	Remarks (Also Refer to Directions for Use)	Restrictions
Celery	Early blight Late blight	0.8 to 2.4	Start applications in the plant bed when plants first come through the ground. Make further applications at 3 to 5 day intervals until plants are set in the field. Continue field applications on a 7 day schedule.  Remove excess residue remaining at harvest by stripping, trimming, and washing.  The addition of a TRITON surfactant to spray solutions will improve performance.	Do not apply within 14 days of harvest.
Collard	Refer to broccoli		Remove residues by washing.	Do not apply within 10 days of harvest.
Corn (sweet)	Helminthosporium leaf blights	1.6 to 2.0	Use sufficient water for thorough coverage. Start applications when disease first appears and repeat at 4 to 7 day intervals.  The addition of TRITON B-1956 or TRITON CS-7 to spray solutions will improve performance.	Do not feed treated forage to livestock.
Crenshaw Melon	Refer to melon			
Cucumber				
Eggplant	Anthracnose Early blight Phomopsis blight or fruit rot	0.8 to 2.4	Begin sprays when fruit starts to form and repeat at 7 to 10 day intervals.	

(Doc. #6987E)

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Rate of  
DITHANE FZ Flowable  
Fungicide with Zinc  
Per Application  
Qts./A

Remarks  
(Also Refer to Directions For Use)

Restrictions

Crop

Diseases Controlled

Endive	Downy mildew	0.8 to 2.4	Begin sprays when disease appears and repeat at 7 to 10 day intervals.  Remove residue by washing, trimming or other effective means.	Do not apply within 10 days of harvest.
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Honey Ball Melon	Refer to melon			
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Honey Dew Melon				
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Kale	Refer to broccoli		Remove residue by washing.	Do not apply within 10 days of harvest.
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Kohlrabi	Refer to broccoli			
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Lettuce	Refer to endive		Remove residue from head lettuce by stripping and trimming and from leaf lettuce by washing or other effective means.	
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Melon	Anthracnose Cercospora leaf spot Downy mildew Gummy stem blight	0.8 to 2.4	Start applications when plants are in the two leaf stage and repeat at 5 to 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.
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Rate of  
DITHANE FZ Flowable  
Fungicide with Zinc  
Per Application  
Qts./A

Remarks

(Also Refer to Directions For Use)

Restrictions

Crop	Diseases Controlled	Rate of DITHANE FZ Flowable Fungicide with Zinc Per Application Qts./A	Remarks (Also Refer to Directions For Use)	Restrictions
Muskmelon	Refer to melon			
Mustard Greens	Refer to broccoli		Remove residue by washing.	Do not apply within 10 days of harvest.
Onion	Botrytis leaf blight Downy mildew Purple blotch	0.8 to 2.4	Follow a protective spray schedule starting when diseases are first reported in the area and repeat at 7 day intervals throughout the season.  The addition of a TRITON surfactant to spray solutions will improve performance.	
Pepper	Refer to eggplant			
Persian Melon	Refer to melon			
Potato	Early blight Late blight	0.8 to 1.6	Begin application when plants are 4 to 6 inches high by applying 1 qt. per acre. As the vines increase in size, apply 1½ to 2 qts. per acre.  The addition of a TRITON surfactant to spray solutions will improve performance.	
(seed pieces)	Fusarium decay	1 qt./10 gal.	Dip whole or cut tubers into solution. Spread treated seed pieces in a cool place if held before planting.	Do not use treated seed pieces for food or feed.

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Rate of  
DITHANE FZ Flowable  
Fungicide with Zinc  
Per Application  
-----  
Qts./A

Crop	Diseases Controlled	Rate of Application ----- Qts./A	Remarks (Also Refer to Directions For Use)	Restrictions
Pumpkin	Angular leaf spot Downy mildew	2.4	Start applications when disease threatens and repeat at 7 to 10 day intervals as needed.  Use sufficient water and direct spray to provide thorough coverage of both upper and lower leaf surfaces.	
Rhubarb (greenhouse, Mich.)	Bacterial leaf rot	1.6 qts/100 gal.	Begin 4 weeks before harvest and make 4 applications at 7 day intervals.	
Spinach	Downy mildew (blue mold) White rust	0.8 to 2.4	Start applications when disease symptoms first appear and repeat at 7 to 10 day intervals.  Remove spray residue by washing or other effective means.	Do not apply within 10 days of harvest.
Squash	Refer to melons			Do not apply within 5 days of harvest.
	Pythium fruit rot	1.5 to 3.5	Begin when runners form or at first sign of disease at weekly intervals as needed.	
Tomato	Anthracnose Early blight Gray leaf spot Late blight Leaf mold Septoria leaf spot	0.8 to 2.4	Start applications when seedlings emerge or transplants are set and repeat at 7 to 10 day intervals throughout the season.  In greenhouses use 4.5 to 6.1 fluid ozs. per 5,000 sq. ft. and start applications when first cluster of fruit is well formed. Repeat applications at 7 to 10 day intervals.  The addition of a TRITON surfactant will improve spray performance.	Do not apply within 5 days of harvest.



Crop	Diseases Controlled	Rate of DITHANE FZ Flowable Fungicide with Zinc Per Application		Remarks (Also refer to Directions For Use)	Restrictions
		Qts./A	Qts./100 Gals.		
Turnip	Refer to broccoli			Remove excess residue by washing.	Do not apply within 7 days of harvest.
Watermelon	Refer to melon				
FRUITS AND NUTS:					
Almond (California)	Brown rot (blossom and twig blight) Coryneum blight (shot hole) Leaf blight Scab	4 to 6.4	1.2 to 1.6	Apply at popcorn, full bloom and petal fall, or every 7 to 10 days if bloom is staggered and weather is rainy.  For coryneum blight, begin applications in dormant stage and repeat at 7 to 10 day intervals through petal fall.  Use 4 ounces TRITON 8-1956 per 100 gallons spray.	Do not apply later than 5 weeks after petal fall. If applied after petal fall, do not feed bulls to dairy animals or animals being finished for slaughter.
Apple	Bitter rot Black rot Brown rot Bullseye rot Cedar-apple rust Fly speck Scab Sooty blotch White rot	3.0	0.9 to 1.6	Apply every 7 to 14 days throughout the season starting with a green tip or delayed dormant spray and continue through cover sprays. For low volume air blast sprays, adjust the mixing rate accordingly.  To avoid uneven, blotchy residues from high volume foliate sprays add 2 to 3 ounces TRITON 8-1956 per 100 gallons of spray in the last 1 or 2 applications before harvest. Concentrate applications usually leave a uniform, even deposit.	Do not apply within 15 days of harvest in Arkansas, Delaware, Illinois, Indiana, Kansas, Kentucky, Maryland, Missouri, New Jersey, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee, Virginia, and West Virginia, or within 30 days of harvest in other states.  Do not graze livestock in treated areas.

Rate of  
DITHANE F: Flowable  
Fungicide with Zinc  
Per Application  
Qts./A    Qts./100 Ga. S.

Remarks  
(Also Refer to Directions For Use)

Restrictions

Crop	Diseases Controlled	Rate of Application	Remarks	Restrictions
Apricot (Western States)	Brown rot (blossom, twig, fruit) Coryneum blight (shot hole) Green or Jacket rot Leaf curl	8.0      1.2 to 1.6	Apply at dormant to popcorn stage, repeat every 7 to 14 days through petal fall according to local timing recommendations and disease severity. For fruit brown rot use again at 4 to 6 weeks before harvest, repeating applications every 7 to 14 days.  For Coryneum blight, begin applications in dormant stage and repeat at 7 to 10 day intervals through petal fall.  Use 4 ounces TRITON 8-1956 per 100 gallons spray.	Do not apply within 14 days of harvest.  Do not use in combination with Diazinon <sup>®</sup> .
Banana	Sigatoka	1.6 to 4.0	Apply when leaves first appear and repeat every 2 to 3 weeks or as required. Use sufficient water to provide adequate coverage.  The addition of a TRITON surfactant to spray solutions will improve performance.	
Cranberries	Fruit rot Twig blight	3.0 to 6.0	Start applications at mid-bloom and repeat at 7 to 10 day intervals as required.	Do not apply within 30 days of harvest.
Grape	Black rot Bunch rot	1.2 to 4.0	Apply in sufficient water to provide thorough coverage starting when new shoots are 8 to 10 inches long (prebloom) and continuing until 10 days after bloom. When fruit is present, use maximum of 1.5 lbs. per acre.	Do not apply within 7 days of harvest.

(116) #6987E)

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Rate of  
DITHANE FZ Flowable  
Fungicide with Zinc  
Per Application  
Qts./A Qts./100 Gals.

Remarks  
(Also Refer to Directions For Use)

Restrictions

Crop Diseases Controlled

Nectarine  
(Western  
States)

Refer to apricot

Peach  
(Western  
States)

Refer to apricot

Refer to apricots.

Do not apply within 7 days of harvest.

If applied within 14 days of harvest, remove residues by brushing or washing.

FIELD CROPS:

Grass  
(Seed  
Production)

Leaf rust  
Stem rust  
Stripe rust

1.6 to 2.4

Begin application when disease is first noted or observed in the area and repeat application every 7 to 10 days until harvest or as long as disease threatens.

Do not feed treated grass to livestock.

Sugar Beets

Cercospora  
leaf spot

1.2 to 2.4

Start application when disease first threatens and repeat every 7 to 10 days as needed.

Up to 1.6 qts. per acre per application - do not apply within 14 days before harvest.

Over 1.6 qts. (2.4 qts. max.) per acre per application - do not apply within 14 days before harvest. Do not feed treated tops to livestock.

Tobacco  
(transplant  
beds)

Anthraxnose  
Blue mold

0.4 to 3.2

Spray plant beds when plants are the size of a dime or when blue mold is first reported in the area, applying 2½ to 5 gallons spray per 100 square yards, depending on plant size. Repeat sprays twice weekly or more frequently during wet weather. Continue treatment until seedlings have been transplanted.

(field)

Anthraxnose  
Blue Mold

1.2 to 3.2

Begin application when disease is first noted or observed in area and repeat application as long as disease threatens.

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Rate of  
DITHANE FZ Flowable  
Fungicide with Zinc  
Per Application

Remarks  
(Also Refer to Directions For Use)

Restrictions

Crop Diseases Controlled

Fl. Oz/Bu Fl. Oz/100 Lb.

SEED TREATMENT:

GENERAL USE DIRECTIONS:

Treated seed should be labeled, "Must not be used for food, feed, or oil purposes".

Barley  
Covered smut  
False loose smut  
Damping-off  
Seed rot  
Seedling blights

1.5 to 4.0 3.2 to 8.4

Seeds to be treated should be cleaned and well cured prior to treatment.

DITHANE FZ fungicide may be applied to dry seed with conventional slurry or mist seed treating equipment. The seed must be completely and uniformly covered with fungicide.

A nonacetic dye must be added to DITHANE FZ fungicide to impart an unnatural color to commercially treated seed. Grower treated seed, which is immediately planted after treatment, does not have to include a nonacetic dye.

Beans  
Damping-off  
Seed rots  
Seedling blights

2.0 to 4.0 3.0 to 6.0

Corn  
Damping-off  
Seed Rots  
Seedling blights

2.0 to 4.0 3.4 to 7.6

Cotton  
(acid delinted)

Damping-off  
Seedling blights

5.0 to 8.0

(reginned)

Damping-off  
Seedling blights

9.6 to 16.0

Flax  
Damping-off  
Seed rots  
Seedling blights

1.5 to 4.0 2.7 to 7.0

12812

Rate of  
DITHANE FZ Flowable  
Fungicide with Zinc  
Per Application

Fl. Oz/Bu Fl. Oz/100 Lb.

Remarks

(Also refer to Directions For Use)

Restrictions

Crop	Diseases Controlled	Fl. Oz/Bu	Fl. Oz/100 Lb.	Remarks	Restrictions
Oat	Damping-off Seed rots Seedling blights Smuts	1.5 to 4.0	4.7 to 12.4		
Peanut (shelled)	Damping-off Seed rots Seedling blights	-	2.8 to 4.5		
Pea	Damping-off Seed rots Seedling blights	2.0 to 4.0	2.0 to 4.2		
Rice	Damping-off Seed rots Seedling blights	1.8 to 2.7	4.0 to 6.0	Apply before, during or after soaking in water.	
Rye	Bunt Damping-off Seed rots Seedling blights	1.5 to 4.0	3.8 to 9.2		
Soybean	Damping-off Seed rots Seedling blights	1.5 to 4.0	2.5 to 6.7		
Sorghum	Covered kernel smut Damping-off Seed rots Seedling blights	1.5 to 4.0	3.0 to 8.0		

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Rate of  
 DITHANE FZ Flowable  
 Fungicide with Zinc  
 Per Application  
 Fl. Oz/Bu    Fl. Oz/100 lb.

Crop Use)	Diseases Controlled Restrictions	Rate of		Remarks	(Also Refer to Directions for
		Fl. Oz/Bu	Fl. Oz/100 lb.		
Sugar Beet	Damping-off Seed rots Seedling blights	--	9.6 to 16.0		
Wheat	Bunt Damping-off Seed rots Seedling blights	1.5 to 4.0	2.5 to 6.7		

15862

Rate of  
DITHANE FZ Flowable  
Fungicide with Zinc  
Per Application  
fluid oz./1000 Ft.<sup>2</sup>

Remarks  
(Also Refer to Directions For Use)

Restrictions

Crop

Diseases Controlled

TURF:

Helminthosporium blight  
and melting-out

4.8 to 6.4

GENERAL USE DIRECTIONS:  
Start application when grass greens-up  
in spring or when disease first appears  
and repeat at 7 to 14 intervals or  
until disease threat is past.

Do not graze treated areas.  
Do not feed clippings to  
livestock.

When conditions are especially  
favorable for disease development  
development, apply maximum fungicide  
use rate on a 7-day spray schedule.

Apply in sufficient water to provide  
adequate coverage.

Rhizoctonia brown patch

-----  
Rust (leaf, stem, stripe)

4.4 to 12.8

-----  
Dollar spot

9.6 to 12.8

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Crop	Diseases Controlled	Remarks (Also Refer to Directions For Use)
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ORNAMENTALS:

GENERAL INSTRUCTIONS:

Apply the equivalent of 1.2 qts. per 100 gals.  
 The addition of TRITON B-1956 to spray  
 solutions will improve performance.  
 Begin spraying when plants are well  
 leafed out or at first sign of disease  
 in a full coverage spray at 7 to 10 day  
 intervals throughout season or follow  
 State Extension Service recommendations  
 for disease control on the following  
 ornamental plants:

Buffaleberry (nursery)	Leaf spot	
Carnation	Leaf spot Rust	
Chrysanthemum	Ascochyta blight Botrytis petal spot Rust	Apply twice weekly during blooming period.
Conifers	Needle cast Brown spot	Begin application in spring or early summer before infection occurs. Repeat after heavy rains or at two-week intervals as long as necessary.
Dahlia	Botrytis blight	
Dogwood, flowering	Anthracnose	Apply when buds begin to open, when bracts have fallen, 4 weeks later and again in late summer after flower buds for next season are formed.
Dracaena	Fusarium leaf spot	
Geranium	Puccinia rust	

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25931

Crop	Diseases Controlled	Remarks (Also Refer to Directions For Use)
Gladiolous	Curvularia leaf spot Botrytis blossom blight Stemphylium leaf blight	Make regular weekly applications starting before diseases appear and increase to 2 or 3 applications per week during periods of heavy disease and during rainy weather.  On flower spikes, reduce spray concentration to 3/4 qts. per 100 gals.
Hydrangeas	Botrytis blight	
Iris	Ink spot Leaf spot (fire)	
Lily	Botrytis blight	
Pansy	Anthracnose	
Peony	Botrytis blossom blight Phytophthora blight	Apply in early spring and early fall, drenching soil around plants as well as the foliage. Promptly destroy all infected plant parts.
Skunkbush sumac	Leaf spots	
Rose	Black spot Cercospora leaf spot Rust	
Snapdragon	Rust	
Zinnia	Leaf blight	

restrictive limitations appearing on the product labels.

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CROP	CO-APPLIED FUNGICIDE	FOR IMPROVED CONTROL OF:	USE RATE PER APPLICATION	DITHANE FZ FLOWABLE FUNGICIDE WITH ZINC FUNGICIDE USE RATE PER APPLICATION	(ALSO
Apple	BENLATE <sup>a</sup> ) 50 WP	Powdery mildew	2 to 3 ozs./100 gals.	0.6 to 0.8 qts.	
	TOPSIN-M <sup>a</sup> ) 70 WP				
	BAYLETON 50 WP		1/2 to 2 ozs./100 gals.	0.8 to 1.6 qts.	
	KARATHANE WD	Powdery mildew Mite suppression	1/2 to 3/4 lbs./100 gals.		
	KARATHANE LC		4 to 6 fl. ozs./100 gals.		
Celery	BENLATE <sup>a</sup> ) 50 WP	Early blight Late blight	4 oz./A	1.2 to 1.6 qts.	
	TOPSIN-M <sup>a</sup> ) 70 WP				
	FIXED COPPERS	Bacterial leaf spot	Manufacturers label use rate	1.6 qts.	
Cucumber	Refer to melons				
Grape	BAYLETON 50 WP	Powdery mildew	2 to 6 ozs./A	1.2 to 3.2 qts.	
	KARATHANE WD	Powdery mildew	1 to 2 1/2 lbs./A		Do not

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DITHANE FZ FLOWABLE  
FUNGICIDE WITH ZINC  
FUNGICIDE USE RATE  
PER APPLICATION

REMARKS  
(ALSO REFER TO USE DIRECTIONS)

CROP	CO-APPLIED FUNGICIDE	FOR IMPROVED CONTROL OF:	USE RATE PER APPLICATION	DITHANE FZ FLOWABLE FUNGICIDE WITH ZINC FUNGICIDE USE RATE PER APPLICATION	REMARKS (ALSO REFER TO USE DIRECTIONS)
	KARATHANE LC		4 to 8 fl. ozs./100 gal.		
	BENLATE 50 WP		3/4 to 1 lb./A		
Melon	BENLATE 50 WP	Target spot Gummy stem blight Powdery mildew Anthracnose	4 to 8 ozs./A	1.6 to 2.4 qts.	
	KARATHANE WD	Powdery mildew	8 to 12 ozs./A		Do not use in California.
	KARATHANE LC		3 to 4 fl. ozs./100 gal.		
	DIFOLATAN 80 SPRILLS	Gummy stem blight	2 1/2 pts./A		DIFOLATAN may not be used on squash or pumpkins.
Pepper	Fixed Coppers	Bacterial leaf spot	Manufacturers label use rate	0.8 to 2.4 qts.	
Potato	Triphenyl Tin Hydroxide (TPTH)	Early Blight	1/2 to full label use rate	1.2 to 1.6 qts.	

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CROP	CO-APPLIED FUNGICIDE	FOR IMPROVED CONTROL OF:	USE RATE PER APPLICATION	DITHANE FZ FLOWABLE FUNGICIDE WITH ZINC FUNGICIDE USE RATE PER APPLICATION	REMARKS (ALSO REFER TO USE DIRECTIONS)
Pumpkin	Refer to melons				DIFOLATAN may not be used on pumpkins
Roses, Flowers, Ornamentals, and shade trees	BENLATE 50 WP	Powdery mildew Leaf spots	1/2-1 lb./100 ga.	1.2 qts.	
	TOPSIN-M 70 WP				
	KARATHANE WD	Powdery mildew Mite suppression	6 to 8 oz./100 gal.		
Squash	Refer to melons				DIFOLATAN may not be used on squash
Sugar Beet	BENLATE <sup>(a)</sup> 50 WP	Cercospora leaf spot	4 oz./A	1.2 to 1.6 qts.	
	TOPSIN-M <sup>(a)</sup> 70 WP				
	MERTECT 340-F <sup>(a)</sup>		6 fl. oz./A		
	Triphenyl Tin Hydroxide (TPH)		1/2 to full label rate		
Tomato	Fixed Coppers	Bacterial leaf spot	Manufacturers Label use rate	1.2 to 2.4 qts.	

(Doc. #6987E)

DITHANE FZ FLOWABLE  
FUNGICIDE WITH ZINC  
FUNGICIDE USE RATE  
PER APPLICATION

REMARKS  
(ALSO REFER TO USE DIRECTIONS)

CROP	CO-APPLIED FUNGICIDE	FOR IMPROVED CONTROL OF:	USE RATE PER APPLICATION
	DYRENE	Gray leaf spot	1/2 to 1 lb./A
	BENLATE	Botrytis gray mold Sclerotinia white mold	

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