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

KEEP OUT OF REACH OF CHILDREN

CAUTION

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

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 sleeved 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 HAZARDS

This product 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

RE-ENTRY AND WORKER PROTECTION STATEMENTS

Do not enter treated areas without protective clothing until sprays have dried. Because certain states may require more restrictive re-entry 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 or field description) treated with DITHANE F-45 flowable 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 F-45 and describe his condition. For further information see the "Statements of Practical Treatment"

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

*Equivalent to 4 lbs active ingredient per gallon

EPA Reg No 707-156

ROHM AND HAAS
PHILADELPHIA PA 19105

DIRECTIONS FOR USE

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

GENERAL USE INFORMATION

DITHANE F-45 is a broad-spectrum protectant fungicide recommended for outdoor or greenhouse grown crops Optimum disease control is achieved when the fungicide is applied in a regularly scheduled preventive spray program The addition of an agricultural surfactant will improve fungicide performance by providing a more uniform spray deposit, increased foliar redistribution, and improved fungicide retention during periods of wet weather

USE RATE DETERMINATION

Carefully read, understand, and follow label use rates and restrictions

Under low disease conditions, minimum label rates per application 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's 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 (rates are based on dilute thorough coverage sprays)

Recommended Label Use Rate Per Acre or 100 Gals.*	Fluid Ounces DITHANE F-45 Flowable Agricultural Fungicide Required for. 10 Gals	5 Gals.	2 Gals.	1 Gal.
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 ounce = 2 tablespoons or 30 milliliters
1 tablespoon = 3 teaspoons or 15 milliliters
*Dilute thorough coverage sprays

MIXING

Slowly place 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 F-45 flowable 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

used agricultural fungicides, insecticides, and growth regulators. When preparing tank mixes, user should consult spray compatibility charts or State Cooperative Extension Service Specialists prior to actual use.

SPRAY ADJUVANTS

The addition of agricultural surfactants to DITHANE F-45 flowable 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 AG-98®	A low foam, nonionic, general purpose spray adjuvant. May be used in dilute or concentrate sprays applied by aircraft or ground equipment.
TRITON® B 1956®	A water-dispersible, resin-based nonionic surfactant which resists re-wetting and removal by rain. Effective with dilute sprays applied by ground equipment.
TRITON CS-7®	A spreader-binder designed specifically for use in concentrate and low volume sprays applied by aircraft or ground equipment.

Place DITHANE F-45 flowable fungicide into suspension prior to adding an adjuvant to the spray mixture. Read and carefully observe the precautionary statements and all other information appearing on both product labels prior to spray preparation.

APPLICATION

Ground

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 0-5 to 0-7), 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.

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 are 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.

DITHANE F-45 fungicide must be applied on a regular protectant fungicide schedule, **not an irrigation schedule.** If irrigation cycles are less frequent than recommended DITHANE F-45 fungicide application intervals, ground or aerial applications must supplement chemigation applications to achieve adequate disease control.

Apply DITHANE F-45 fungicide only through sprinkler irrigation systems including center-pivot, lateral move, end tow, side (wheel) roll, traveler, solid set, or hand move irrigation systems. Do not apply product through any other type of irrigation system.

Lack of fungicidal effectiveness or illegal pesticide residues in the crop can result from nonuniform distribution of treated 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.

Before applying DITHANE F-45 fungicide through sprinkler irrigation equipment, the chemigation system must meet the following specifications:

- Public water system 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 preventer (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 or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.
- Systems not connected to a public water supply must contain a functional check valve, vacuum relief valve, and low-pressure drain appropriately located in the irrigation pipeline to prevent water source contamination from back flow.
- The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.
- 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.

Center-pivot, Lateral Move, End Tow, and Traveler 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 no more than ¼ inch water (6,750 gallons water per acre) over the area to be treated when the system and injection equipment are 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 F-45 fungicide required to treat area
- Add the required amount of DITHANE F-45 fungicide and sufficient water to meet the injection time requirements of the solution tank
- Maintain constant solution tank agitation during the injection period
- Stop injection equipment after treatment is completed. Continue to operate the system until DITHANE F-45 fungicide solution has cleared the sprinkler head.

Solid-set, Side (wheel) Roll, and Hand Move Irrigation Equipment:

- Determine acreage covered by sprinkler.
- Fill injector solution tank with water and adjust flow rate to use contents over a 10 to 30 minute interval.
- Determine the amount of DITHANE F-45 fungicide required to treat area
- Add the required amount of DITHANE F-45 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 F-45 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 DITHANE F-45 fungicide solution has cleared the last sprinkler head.

DISEASE MONITORING

DITHANE F-45 flowable 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 F-45 flowable fungicide.

VEGETABLES

Crop	Diseases Controlled	Rate of DITHANE F-45 Flowable Per Application Qts./A	Remarks (Also Refer To Directions For Use)	Restrictions
Asparagus	Cercospora leaf spot Rust	1 6	Start applications when rust first appears and repeat at 10 day intervals Four applications are usually sufficient	Apply only on asparagus ferns after spears have been harvested
Cantaloupes	Refer to melons		Some varieties are sensitive to DITHANE F 45 flowable fungicide Consult State Cooperative Extension Service Specialist prior to use	Refer to melons
Carrots	Alternaria leaf spot Cercospora leaf spot	1 2 to 1 6	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 B 1956 or TRITON CS-7 to spray solutions will improve performance	Do not apply within 7 days of harvest Do not use treated tops for food or feed
Celery	Early blight Late blight	1 6	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.
Corn (sweet, popcorn)	Common corn rust Helminthosporium leaf blight	1 2	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 apply within 7 days of harvest Do not feed treated forage to livestock.
Cucumbers	Refer to melons			
Fennel	Refer to celery			Do not apply within 7 days of harvest
Melons	Alternaria leaf spot Anthracnose Cercospora leaf spot Downy mildew Gummy stem blight Scab	1.6 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.
Muskmelons	Refer to melons			
Onions (dry bulb)	Botrytis leaf blight Downy mildew Neck rot Purple blotch	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 Do not allow spray or drift to contact bulbs after lifting from soil	Do not apply within 7 days of harvest
(furrow drench)	Smut		Apply 2.4 qts per acre as a furrow drench at time of planting onion seeds Use 75 to 125 gallons water per acre	Do not use more than 2 4 qts actual per acre (29,000 linear feet of furrow)
Potatoes	Early blight Late blight	0 8 to 1 6	Begin application when plants are 4 to 6 inches high by applying 0.8 qt per acre As the vines increase in size, apply 1 2 to 1 6 qts per acre The addition of a TRITON surfactant to spray solutions will improve performance	
Seedpiece (treatment)	Fusarium decay Seedborne common scab		Dip whole or cut potato tubers in 1 qt DITHANE F-45 flowable fungicide per 50 gallons of water Place treated tubers in a clean container following treatment and plant as soon as possible Spread treated seedpieces in a cool place if held before planting	Do not use treated seed potatoes for food or feed purposes
Squash, summer	Refer to melons			Refer to melons.
Tomatoes	Anthracnose Early blight Gray leaf spot Late blight Leaf mold Septoria leaf spot	1 2 to 2 4	Start applications when seedlings emerge or transplants are set and repeat at 7 day intervals throughout the season The addition of a TRITON surfactant to spray solutions will improve performance.	Do not apply within 5 days of harvest
Watermelons	Refer to melons			Refer to melons.

FRUITS AND NUTS

Crop	Diseases Controlled	Rate Of DITHANE F-45 Flowable Per Application: Qts./A	Rate Of DITHANE F-45 Flowable Per Application: Qts./100 Gals.	Remarks (Also Refer To Directions For Use)	Restrictions
Apples	Bitter rot Black rot Brown rot Fly speck Rusts Scab Sooty blotch	6 4 to 8	8 to 1 6	For apple scab apply every 7 to 14 days throughout the season starting with a green tip or delayed dormant spray and continue through cover sprays For control of rust diseases, begin application during bloom period For control of other diseases listed, begin application at first cover spray When using low volume air blast sprays adjust the mixing rate accordingly To avoid uneven, blotchy residues from high volume dilute sprays add 2 to 3 ounces TRITON B 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 21 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 not mentioned above Do not graze livestock in treated areas
Bananas	Sigatoka	1.6 to 3 2		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	
Crabapples	Refer to apples	6 4 to 8	.8 to 1.6		Do not apply within 15 days of harvest Do not graze livestock in treated areas
Cranberries	Fruit rot	2 4 to 4.8		Start applications at mid bloom and repeat at 7 to 10 day intervals as required	Do not apply within 30 days of harvest
Grapes (California only)	Bunch rot Deadarm Downy mildew	1 2 to 3 2		Apply in sufficient water to provide thorough coverage starting when new shoots are ½ to 1½ inches long Repeat when shoots are 3 to 5 inches long, when shoots are 8 to 10 inches long, and then at 10 to 14 day intervals until fruit is set or 66 days before harvest	Do not apply after fruit is set.
(Other areas)	Black rot Deadarm Downy mildew			For late season control of black rot, deadarm and downy mildew the use of other approved and recommended fungicides is suggested	Do not apply within 66 days of harvest
Papaya	Anthracnose Phytophthora fruit rot	1 6 to 2		Use 20 to 100 gallons water per acre Start applications at flowering and continue at 14 day intervals and at 7 day intervals during periods of heavy disease Direct spray to crown and blossom area Use 6 to 8 ounces TRITON B-1956 spreader-sticker per acre	
Pears	Refer to apples				Do not apply within 15 days of harvest Do not graze livestock in treated areas
	Pear psylla nymphs	6 4 to 8	1 2	Effective control of young nymphs can be obtained by using 2 to 3 consecutive sprays Applications should start at petal fall and continue at 7 to 10 day intervals As new growth occurs, it must be protected by spraying Timing of sprays should coincide with the initial appearance of pear psylla nymphs Specific timing of sprays should be obtained from State Agricultural Experiment Station workers or State Extension Service specialists	
(postharvest sprays)			1 2 to 1 6	Use a full coverage spray of 800 to 1000 gallons spray per acre. Timing of spray should be under direction of State Agricultural or Extension Service workers	Do not graze livestock in treated areas
Quince	Refer to apples				Do not apply within 15 days of harvest Do not graze livestock in treated areas

FIELD CROPS

Crop	Diseases Controlled	Rate Of DITHANE F-45 Flowable Per Application Qts./A	Remarks (Also Refer To Directions For Use)	Restrictions
Barley	Refer to wheat			
Corn (field hybrid seedcorn)	Common corn rust Helminthosporium leaf blight	1 2	Start application when disease symptoms first appear and, depending on severity of infection, continue on a 4 to 14 day schedule The addition of TRITON B 1956 or TRITON CS 7 to spray solutions will improve performance	Do not apply within 40 days of harvest
Cotton (Southwest U S only)	Rust	1 to 1 6	Start applications when rust first appears and repeat at 10 to 14 day intervals until disease threat is past	Do not apply after bolls are open. Do not graze livestock in treated areas or feed gin trash to livestock
Oats	Refer to wheat			
Peanuts	Cercospora leaf spot Rust	0 8 to 1 6	Start applications when disease first appears or is reported in area Repeat sprays at 10 to 14 day intervals Reduce sprays to a 7 day interval during humid weather	Do not apply within 14 days of harvest Do not feed treated vines to livestock
Rye	Refer to wheat			
Sugar Beets	Cercospora leaf spot	1.2 to 1 6	Start application when disease first threatens and repeat every 7 to 10 days as needed The addition of a TRITON surfactant to spray solutions will improve performance	Do not apply within 14 days of harvest Do not feed treated tops to livestock
Wheat	Helminthosporium leaf spot Leaf rust Septoria leaf spot Septoria glume blotch Tan spot	1 6	Start application at onset of disease or when plants are in the tillering to jointing stage and repeat at 7 to 10 day intervals The addition of TRITON CS-7 to spray solutions will improve performance	Do not make more than three applications during the season. Do not apply within 26 days of harvest. Do not graze livestock in treated areas within 26 days after application

SEED TREATMENT

Crop	Diseases Controlled	Rate of DITHANE F-45 Flowable Per Application Fl. Oz./Bu.	Rate of DITHANE F-45 Flowable Per Application Fl. Oz./100 Lb.	Remarks (Also Refer To Directions For Use)	Restrictions
GENERAL USE INSTRUCTIONS				Seeds to be treated should be cleaned and well cured prior to treatment. DITHANE F-45 flowable fungicide 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 seed treatment, a dye must be added to DITHANE F-45 flowable fungicide that will impart an unnatural color to the seed.	Treated seed should be labeled, "Must not be used for food, feed, or oil purposes."
Barley	Covered smut Damping-off False loose smut Seed rots Seedling blights	2 to 3.2	4.3 to 6 7		
Corn (field)	Damping-off Seed rots Seedling blights	2.4 to 4 8	4.3 to 8.6		
Cotton (acid delinted)	Damping-off Seedling blights		4 8		
(reginned)	Damping-off Seedling blights		9.6		
Flax	Damping-off Seed rots Seedling blights	3 2 to 6.4	5.7 to 11.3		

SEED TREATMENT (cont'd)

Crop	Diseases Controlled	Rate of DITHANE F-45 Flowable Per Application Fl. Oz./Bu.	Rate of DITHANE F-45 Flowable Per Application Fl. Oz./100 Lb.	Remarks (Also Refer To Directions For Use)	Restrictions
Oats	Damping off Seed rots Seedling blights Smuts	2 to 3 2	6 4 to 10		
Peanuts (shelled)	Damping-off Seed rots Seedling blights	3 2 to 6 4	12 8 to 25 6		
Rice	Damping off Seed rots Seedling blights		3 2 to 6 4	Apply before, during or after soaking in water	
Rye	Bunt Damping-off Seed rots Seedling blights	2 to 3 2	3 6 to 5 7		
Safflower	Seedborne rust (Puccinia carthami)		3 2		
Sorghum	Covered kernel smut Damping-off Seed rots Seedling blights	2 4 to 4 0	4 3 to 7 2		
Tomatoes	Damping-off Seed rots Seedling blights		12 8		
Wheat	Bunt Damping-off Seed rots Seedling blights	2 to 3 2	3 5 to 5 2		

MISCELLANEOUS

Crop	Diseases Controlled	Rate of DITHANE F-45 Flowable Per Application	Remarks (Also Refer To Directions For Use)
Asparagus crowns	Crown rot	0 8 qts per 100 gals.	Place loosely packed crowns into a burlap bag and soak with gentle agitation, in the fungicide solution for 5 minutes. Remove bag, drain well, and plant crowns as soon as possible A tank large enough to hold a single burlap bag will treat 2 bags of crowns. Clean dipping suspension should then be prepared in a clean tank. Dirty crowns should be pre-washed to remove excess soil.
Caprifig	Endosepsis (Fusarium) Assorted molds	0 8 qts per 25 gals	Prepare mamme figs by making a shallow cut through the eye and then hand dividing to avoid wasp injury. Submerge mamme figs in the fungicide suspension for a minimum of 15 minutes. The fungicide suspension should be stirred frequently to prevent settling out. Fresh dipping solutions should be used after treating 4 or 5 batches of figs. After treatment, figs should be drained prior to placement in trees.
Conifers	Lophodermium needle cast	3 2 qts per 100 gals.	For use in nursery and newly transplanted plantings. Apply at 21 day intervals during periods of sprinkler irrigations and at monthly intervals during the rest of the year when beds are not covered with snow. The addition of TRITON B-1956 to spray solutions is recommended.
Pineapples	Phytophthora heart rot	2 6 qts per 10 gals.	Dip planting material in fungicide solution prior to planting. Stir solution frequently to prevent settling out. A new solution should be prepared when at least two-thirds of the volume has been used or sooner if soil from plant material has noticeably discolored the solution. Depending on the cleanliness and size of planting stock, up to 100 gallons of fungicide solution should be used to treat the propagative materials used to plant one acre.

TURF

Crop	Diseases Controlled	Rate of DITHANE F-45 Flowable Per Application Oz./1000 Sq Ft.	Remarks (Also Refer To Directions For Use)	Restrictions
GENERAL USE INSTRUCTIONS			Start application when grass greens-up in spring or when disease first appears and repeat at 7 to 14 day intervals or until disease threat is past. When conditions are especially favorable for disease development, apply maximum fungicide use rate on a 7 day spray schedule Apply in sufficient water to provide adequate coverage.	Do not graze treated areas. Do not feed clippings to livestock.
Assorted Grasses	~~Helminthosporium~~ melting-out Rust (leaf, stem, stripe)	64		
	Copper spot Fusarium blight Red thread Slime mold	64 to 128		
	Algae	96		
	Dollar spot	96 to 128		
	Rhizoctonia brown patch	64	Apply on a 7 day spray schedule	
	Pythium blight	128	Apply at 5 day intervals, or more frequently, if conditions are especially favorable for disease development	
	Fusarium snow mold	96 to 128	Apply at 2 to 6 week intervals during winter	

ORNAMENTALS

Crop	Diseases Controlled	Remarks (Also Refer To Directions For Use)	Restrictions
GENERAL USE INSTRUCTIONS Neither the manufacturer nor the seller has determined the effects of using DITHANE F-45 flowable fungicide on ornamentals not specified on this label. Prior to any large-scale application on such plants, the user should determine the effects of DITHANE F-45 flowable fungicide by testing a small section of the type of plants to be treated. User assumes all risks arising out of application to unlabeled plants. The Conditions of Sale and Warranty apply to all uses. For outdoor or greenhouse use apply the equivalent of 1.2 qts. DITHANE F-45 flowable fungicide 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:			
African violet	Botrytis blight		
Anthurium	Anthracnose, spadix rot		
Arborvitae	Cercospora blight		
Ash, mountain	Entomosporium leaf spot Guignardia leaf blotch		
Ash, white	Anthracnose Cylindrosporium leaf spot		
Aster, perennial	Puccinia rusts		
Aucuba, japonica	Alternaria leaf spot Anthracnose		
Azalea	Cylindrocladium rot Petal blight Phytophthora twig and bud blight	Apply in a full coverage spray, 2 to 3 times a week, while flowers are opening. Direct spray into flowers and thoroughly spray ground under bushes	
Begonia	Botrytis blight		
Buffaloberry	Cylindrosporium leaf spot		Do not use fruit for food or feed purposes
Camellias	Petal blight	Refer to azalea	

ORNAMENTALS (cont'd)

Crop	Diseases Controlled	Remarks (Also Refer To Directions For Use)	Restrictions
Carnation	Rust Septoria leaf spot		
Cedar, red (Juniper)	Cercospora blight Phomopsis blight		
Chrysanthemum	Ascochyta blight Botrytis petal spot Rust	Apply twice weekly during blooming period	
Conifers	Lophodermium needle cast Pine gall rust Scirrhia brown spot	Begin application in spring or early summer before infection occurs. Repeat after heavy rains and at two week intervals as long as needed	
Cordyline	Cercospora leaf spot		
Crabapple (Ornamental)	Cedar-apple rust Scab Sphaeropsis leaf spot		
Cypress Arizona (Cupressus sp)	Cercospora blight Monochaetia canker		
Dahlia	Botrytis blight		
Dieffenbachia	Leptosphaeria brown spot		
Dogwood, flowering	Anthracnose Elsinoe leaf spot Septoria leaf spot	Apply when buds begin to open, when bracts have fallen, 4 weeks later and again in late summer after flower buds for next season have formed	
Dracaena	Fusarium leaf spot		
Elm	Black leaf spot		
Euonymus	Anthracnose		
Fatsia	Anthracnose		
Fern	Rhizoctonia blight		
Ficus	Cercospora leaf spot		
Firethorn (Pyracantha)	Fusicladium scab		
Fir, Douglas	Swiss needle cast		
Fuchsia	Botrytis blight Rust		
Geranium	Rust		
Gladiolus	Botrytis blossom blight Curvularia leaf spot	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 0.6 qts. per 100 gals	
Hawthorn	Cedar-apple rust Fabraea leaf spot Frogeye leaf spot Hawthorn rust Scab		
Holly	Purple spot		
Hollyhock	Anthracnose Cercospora leaf spot Puccinia rusts		
Honeysuckle	Herpobasidium blight		
Horsechestnut, Buckeye	Alternaria leaf spot Guignardia leaf blotch		
Hydrangea	Botrytis blight Cercospora leaf spot		
Iris	Didymellina leaf spot Mystrosporium ink spot		
Juniper	Phomopsis blight		

ORNAMENTALS (cont'd)

Crop	Diseases Controlled	Remarks (Also Refer To Directions For Use)	Restrictions
Laurel, mountain	Cercospora leaf spot Petal blight	Refer to azalea	
Ligustrum	Cercospora leaf spot		
Lily	Botrytis blight		
Magnolia	*Gloeosporium* leaf spot		
Maple	Alternaria leaf spot *Phyllosticta* leaf spot		Do not use on Sugar maples intended for the production of maple syrup
Marigold	Botrytis blossom blight		
Narcissus	Botrytis blight (fire) Smoulder		
Oak	Actinopelte leaf spot Taphrina leaf blister		
Orchid (Dendrobium)	Botrytis blossom blight		
Pachysandra	Volutella blight	Use a drenching spray of 1.6 qts *per* 50 gallons of water per 5,000 sq. ft. of bed. Start application at first sign of disease and apply at least 5 applications at 10 to 14 day intervals	
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	
Peperomia	Cercospora leaf spot		
Philodendron	Dactylaria leaf spot Phytophthora leaf spot		
Photinia	Entomosporium leaf spot		
Pleomele	*Fusarium* leaf spot		
Poinsettia	Sphaceloma scab		
Rhododendron	Cercospora leaf spot Discosia leaf spot Petal blight	Refer to azalea.	
Rose	Black spot Cercospora leaf spot Rust		
Schefflera	Alternaria blight		
Skunkbush, sumac	Cylindrosporium leaf spot		
Snapdragon	Rust		
Statice	*Cercospora* frogeye		
Syngonium	Cephalosporium leaf spot		
Tulip	Botrytis blight (fire)		
Venus, flytrap	Anthracnose		
Viburnum	Downy mildew Ramularia leaf spot		
Walnut	Anthracnose		Do not use treated walnuts for food or feed purposes
Zinnia	Alternaria leaf blight		

FUNGICIDE TANK MIXES:

The following tank mix recommendations are made for the improved control of specific diseases. Before mixing DITHANE F-45 *flowable with any* other fungicide, read and carefully observe the precautionary and all other information appearing on both product labels. User must abide by the most restrictive limitations appearing on the product labels.

Crop	Co-Applied Fungicide	For Improved Control Of:	Use Rate Per Application	DITHANE F-45 *Flowable* Use Rate *Per Application*	Remarks (Also Refer To Directions For Use)
Apples	BENLATE 50 WP*	Powdery mildew	2 to 4 ozs./100 gals.	0.6 to 0.8 qts./100 gals.	
	*TOPSIN-M70 WP**				
	RAYLETON 50 WP		½ to 2 ozs./100 gals.	0.8 to 1.6 qts./100 gals.	
	KARATHANE WD	Mite suppression Powdery mildew	½ to ¾ lb./100 gals.		
	KARATHANE LC		4 to 6 fl. ozs./100 gals.		

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FUNGICIDE TANK MIXES (cont'd)

Crop	Co-Applied Fungicide	For Improved Control Of:	Use Rate Per Application	DITHANE F-45 Flowable Use Rate Per Application	Remarks (Also Refer To Directions For Use)
Barley	BAYLETON 50 WP	Powdery mildew Rust (leaf, stem, stripe)	2 to 4 ozs /A	1 6 qts /A	
Celery	BENLATE 50 WP*	Early blight Late blight	4 ozs /A	1 2 to 1 6 qts /A	
	TOPSIN M70 WP*				
	FIXED COPPERS	Bacterial leaf spot	Manufacturer's label use rate	1 6 qts /A	
Cucumbers	Refer to melons				
Grapes	BAYLETON 50 WP	Powdery mildew	2 to 6 ozs /A	1 2 to 3 2 qts /A	
	KARATHANE WD		1 to 2½ lbs /A		Do not use in California
	KARATHANE LC		4 to 8 fl ozs /100 gals		
	BENLATE 50 WP*		¾ to 1 lb /A		
Melons	BENLATE 50 WP*	Anthracnose Gummy stem blight Powdery mildew Target spot	4 to 8 ozs /A	1 6 to 2 4 qts /A	
	KARATHANE WD	Powdery mildew	8 to 12 ozs /A		Do not use in California
	KARATHANE LC		3 to 4 fl ozs /100 gals		
	DIFOLATAN 80 SPRILLS	Gummy stem blight	1½ to 2 lbs /A		
Peanuts	BENLATE 50 WP*	Ascochyta web blotch Early leaf spot Late leaf spot	4 ozs /A	0.8 to 1 6 qts /A	
	TOPSIN-M70 WP*	Early leaf spot			
Pears	BAYLETON 50 WP	Powdery mildew	½ to 2 ozs /100 gals	0.8 to 1.6 qts /100 gals	
	KARATHANE WD	Mite suppression Powdery mildew	½ to ¾ lbs./100 gals		Do not use in California
	KARATHANE LC		4 to 6 fl ozs /100 gals		
Potatoes	Triphenyl Tin Hydroxide (TPTH)	Early blight	½ to full label use rate	1.2 to 1.6 qts /A	
Pumpkins	Refer to melons				DIFOLATAN may not be used on pumpkins or squash
Squash, summer					
Sugar Beets	BENLATE 50 WP*	Cercospora leaf spot	4 ozs./A	1.2 to 1.6 qts /A	
	TOPSIN-M70 WP*				
	MERTECT 340-F*		6 fl ozs /A		
	Triphenyl Tin Hydroxide (TPTH)		½ to full label rate		
Tomatoes	Fixed Coppers	Bacterial leaf spot	Manufacturer's label use rate	1 2 to 2 4 qts /A	
	DYRENE 50 WP	Gray leaf spot	½ to 1 lb /A		
	BENLATE 50 WP*	Botrytis gray mold Sclerotinia white mold			
Wheat	BAYLETON 50 WP	Powdery mildew Rust (leaf, stem, stripe)	2 to 4 ozs./A	1.6 qts /A	

*Do not use if fungal resistance to this fungicide is present in field to be treated or has been reported in the area

STORAGE AND DISPOSAL

STORAGE Keep away from fire and spark- 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 F 45 flowable 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) Then puncture and dispose of in a *sanitary landfill* by incineration or, if allowed by State and local authorities by burning If burned stay out of smoke **Fiber Drum (with liner)** — Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles Dispose of liner in a sanitary landfill or by incineration if allowed by State and local authorities If drum cannot be reused dispose of in the same manner

Metal Containers — Triple rinse (or equivalent) then offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill or by other procedures approved by State and local authorities

Bulk Containers — Drain thoroughly and return to specified destination for cleaning and re use

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED Dike and contain the spill Transfer liquid and solid diking material to separate containers for recovery or disposal Flush contaminated area with a large amount of water to a chemical or sanitary sewer containing a settling pit Remove contaminated clothing and wash affected skin areas with soap and water Wash clothing before re-use Keep the solids out of the municipal sewers and open bodies of water Refer to *Precautionary Statements*

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.**

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