

66222-149

7-24-2008

1/14



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

Ms. Anne Stout
Product Registration
MANA, Inc.
4515 Falls of Neuse Rd, Suite 300
Raleigh, NC 27609

JUL 24 2008

Subject: Notification(s) for Label Revisions under PRN 98-10 and PRN 2007-4
Storage & Disposal and Other Changes

Dear Registrant:

The Agency is in receipt of your Application(s) for Pesticide Notification under Pesticide Registration Notices (PRN) 98-10 and 2007-4 dated June 4, 2008 for:

EPA Registration 66222-149 "Equus DF Fungicide"

The Registration Division (RD) has conducted a review of the request(s) for applicability under PRN 98-10 and PRN 2007-4 and finds that the label changes requested fall within the scope of PRN-98-10 and PRN-2007-4. The label has been date-stamped "Notification" and will be placed in our records.

Please be reminded that 40 CFR Part 156.140(a)(4) requires that a batch code, lot number, or other code identifying the batch of the pesticide distributed and sold be placed on non-refillable containers. The code may appear either on the label (and can be added by non-notification/PR Notice 98-10) or durably marked on the container itself.

If you have any questions, please contact me directly at 703-305-6249 or Owen F. Beeder of my staff at 703-308-8899.

Sincerely,

A handwritten signature in black ink, appearing to be "Linda Arrington".

Linda Arrington
Notifications & Minor Formulations Team Leader
Registration Division (7505P)
Office of Pesticide Programs



June 4, 2008

Document Processing Desk (NOTIF)
Registration Division (7504P)
OPP, USEPA
Ariel Rios Building
1200 Pennsylvania Ave, NW
Washington DC 20460

Re: Equus® DF 66222-149
Notification per PRN 98-10 and 2007-4

To Whom It May Concern:

We are notifying the Agency of several label updates as allowed in PR Notices 98-10 and 2007-4. The changes are summarized below:

- Added a voluntary marketing statement about use of an adjuvant (allowed per PRN 98-10, §II(N)(3))
- Added Emergency Responder phone number in Storage & Disposal section (allowed per PRN 2006-01 §II(E))
- Updated container disposal instructions per PRN 2007-4

In support of this submission, the following documents are attached:

- Application for Pesticide Registration (EPA Form 8570-1)
- One copy of final printed labeling

Please contact me at 919-256-9342 or by email at chitchcock@manainc.com if you have any questions regarding this submission or would like a copy of the annotated label showing the changes for your files.

Sincerely,

Christie Hitchcock
Registration Specialist

Enclosures



United States
Environmental Protection Agency
Washington, DC 20460

☐ Registration
☐ Amendment
☒ Other

OPP Identifier Number

Application for Pesticide - Section I

1. Company/Product Number 66222-149	2. EPA Product Manager Linda Arrington	3. Proposed Classification <input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company/Product (Name) Equus® DF	PM# 22 Registration Support Branch	
5. Name and Address of Applicant (Include ZIP Code) Makhteshim Agan of North America, Inc. 4515 Falls of Neuse Rd., Suite 300 Raleigh, NC 27609 <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. NOTIFICATION Product Name JUL 24 2008	

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.
<input checked="" type="checkbox"/> Notification - Explain below.	<input type="checkbox"/> Other - Explain below.

Explanation: Use additional page(s) if necessary. (For section I and Section II.)

Notification per PRN 98-10 & 2007-4: This notification is consistent with the provisions of PR Notice 98-10 & 2007-4 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 false statements to EPA. I further understand that if this notification is not consistent with the terms of PR Notice 98-10 & 2007-4 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 type="checkbox"/> No	Unit Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	Water Soluble Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Metal <input type="checkbox"/> Plastic <input type="checkbox"/> Glass <input type="checkbox"/> Paper <input type="checkbox"/> Other (Specify) _____		
* Certification must be submitted		If "Yes" Unit Packaging wgt.	No. per container	If "Yes" Package wgt	No. per container
3. Location of Net Contents Information <input type="checkbox"/> Label <input type="checkbox"/> Container		4. Size(s) Retail Container		5. Location of Label Directions <input type="checkbox"/> on label	
6. Manner in Which Label is Affixed to Product <input 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 Christie Hitchcock		Title Registration Specialist	
		Telephone No. (Include Area Code) 919-256-9342	
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>Christie Hitchcock</i>		3. Title Registration Specialist	
4. Typed Name Christie Hitchcock		5. Date 06-04-08	

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NOTIFICATION

JUL 24 2008

Equus[®] DF

Fungicide

ACTIVE INGREDIENT:	% BY WT.
Chlorothalonil (tetrachloroisophthalonitrile).....	82.5%
INERT INGREDIENTS:	17.5%
	TOTAL: 100.0%

Contains 0.825 Pound of Active Ingredient Per 1.0 Pound of Product

EPA Reg. No. 66222-149

Manufactured For:
 Makhteshim Agan of North America, Inc.
 4515 Falls of Neuse Road
 Suite 300
 Raleigh, NC 27609
Net Contents: 27.4 Pounds

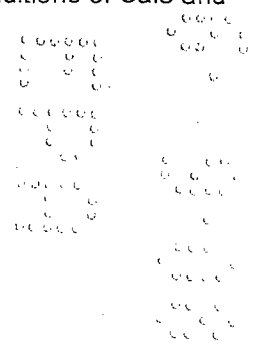
KEEP OUT OF REACH OF CHILDREN

WARNING-AVISO

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

FIRST AID	
IF IN EYES:	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
IF INHALED:	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. • Call a poison control center or doctor for treatment advice.
IF SWALLOWED:	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give anything by mouth to an unconscious or convulsing person.
IF ON SKIN OR CLOTHING:	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For medical emergencies involving this product, call Prosar at 1-877-250-9291. NOTE TO PHYSICIAN: Persons having temporary irritation may respond to treatment with antihistamines or steroid creams and/or systemic steroids.	

See inside booklet for complete Precautionary Statements, Directions for Use, and Conditions of Sale and Warranty.



or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, areas overlaying extremely shallow ground water, areas within field canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and areas overlaying tile drainage systems that drain to surface 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 the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 12 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls
- Chemical-resistant gloves, such as nitrile rubber, natural rubber, or butyl rubber
- Shoes plus socks
- Protective eyewear

Special Eye Irritation Provisions: This product is a severe eye irritant. Although the restricted-entry interval expires after 12 hours, for the next 6.5 days, entry is permitted only when the following safety measures are provided:

- (1) At least one container designed specifically for flushing eyes must be available in operating condition at the WPS-required decontamination site intended for workers entering the treated area.
- (2) Workers must be informed, in a manner they can understand:
 - that residues in the treated area may be highly irritating to their eyes,
 - that they should take precautions, such as refraining from rubbing their eyes, to keep residues out of their eyes,
 - that if they do get residues in their eyes, they should immediately flush their eyes using the eyeflush container that is located at the decontamination site or using other readily available clean water, and
 - how to operate the eyeflush container.

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 the product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Do not enter or allow others to enter the treated area until sprays have dried.

APPLICATION INSTRUCTIONS

Equus DF, a dry flowable product containing chlorothalonil, is recommended for use as a spray for the control of many important plant diseases.

When an adjuvant is to be used with this product, Makhteshim Agan of North America, Inc. suggests the use of a Chemical Producers and Distributors Association certified adjuvant.

RESISTANCE MANAGEMENT

To avoid the development of tolerant or resistant strains of fungi, Equus DF should always be tank mixed with a fungicide of different chemistry, and/or a fungicide of different chemistry should be alternated with Equus DF at each application. If after using Equus DF as recommended and the treatment is not effective, a tolerant or resistant strain of fungi may be present. Discontinue the use of Equus DF for at least one season.

- **Nozzle type**—Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift potential.

BOOM HEIGHT

Setting the boom at the lowest labeled height (if specified) which provides uniform coverage reduces the exposure of droplets to evaporation and wind. For ground equipment, the boom should remain level with the crop and have minimal bounce.

BOOM LENGTH

For some use patterns, reducing the effective boom length to less than $\frac{3}{4}$ of the wingspan or rotor length may further reduce drift without reducing swath width.

APPLICATION HEIGHT

Application should not be made at a height greater than 10 ft. above the top of the largest plants, unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

SWATH ADJUSTMENT

When applications are made with a crosswind, the swath will be displaced downward. Therefore, on the upwind and downwind edges of the field, the application must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase with increasing drift potential (higher wind, smaller drops, etc.).

WIND

Drift potential is lowest between wind speeds of 2 to 10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential.

NOTE: Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

TEMPERATURE AND HUMIDITY

When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

TEMPERATURE INVERSIONS

Applications should not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

SENSITIVE AREAS

The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g., residential areas, bodies of water, known habitat for threatened or endangered species, nontarget crops) is minimal (e.g., when wind is blowing away from the sensitive areas).

SHIELDED SPRAYERS

Shielding the boom or individual nozzles can reduce the effects of wind. However, it is the responsibility of the applicator to verify that the shields are preventing drift and not interfering with uniform deposition of the product.

AIR ASSISTED (AIR BLAST) FIELD CROP SPRAYERS

Air assisted field crop sprayers carry droplets to the target via a downward directed air stream. Some may reduce the potential for drift, but if a sprayer is unsuitable for the application and/or set up improperly, high drift potential can result. It is the responsibility of the applicator to determine that a sprayer is suitable for the intended application, is configured properly, and that drift is not occurring. **NOTE:** Air assisted field sprayers can affect product performance by affecting spray coverage and canopy penetration.

Fill chemical supply tank of injection equipment with water. Operate system for one complete revolution or run across the field, measuring time required, amount of water injected, and acreage covered. Thoroughly mix recommended amount of Equus DF for acreage to be covered into same amount of water used during calibration and inject into system continuously for one revolution or run. Mixture in the chemical supply tank must be continuously agitated during the injection run. Shut off injection equipment after one revolution or run, but continue to operate irrigation system until Equus DF has been cleared from last sprinkler head.

B. Solid Set and Portable (Wheel Move, Side Roll, End Tow, or Hand Move) Irrigation Equipment

With stationary systems, an effectively designed in-line venturi applicator unit is preferred which is constructed of materials that are compatible with pesticides; however, a positive-displacement pump can also be used.

Determine acreage covered by sprinkler. Fill tank of injection equipment with water and adjust flow to use contents over a 30 to 45 minute period. Mix desired amount of Equus DF for acreage to be covered with water so that the total mixture of Equus DF plus water in the injection tank is equal to the quantity of water used during calibration, and operate entire system at normal pressures recommended by the manufacturer of injection equipment used for amount of time established during calibration. No agitation should be required. Equus DF can be injected at the beginning or end of the irrigation cycle or as a separate application. Stop injection equipment after treatment is completed and continue to operate irrigation system until Equus DF has been cleared from last sprinkler head.

Do not use on greenhouse grown crops.

CROP RECOMMENDATIONS-FIELD CROPS

AS A SPRAY (Ground or Aerial Equipment)-Apply Equus DF at the rate shown; use sufficient water to provide thorough coverage. Gallonage will vary with crop and amount of plant growth. Spray volume usually will range between 20 to 150 gallons per acre (200 to 1,400 liters per hectare) for dilute sprays and 5 to 10 gallons per acre (50 to 100 liters per hectare) for concentrate ground sprays and aircraft applications. Both ground and aircraft methods of application are recommended unless specific directions are given for a crop. Application through sprinkler irrigation systems is not recommended unless specific directions are given for a crop. See the following instructions for application and calibration.

FIELD CROPS				
CROP	DISEASES CONTROLLED	RATE OF EQUUS DF PER APPLICATION LBS/ACRE	SEASONAL LIMITS (LB/ACRE/ YEAR)	APPLICATION DIRECTIONS
ASPARAGUS	Rust Purple Spot Cercospora Leaf Blight	1.8-3.6	10.9	Begin application after harvest of spears, when conditions favor disease development on ferns, generally when leaf wetness occurs. Repeat applications at 2 to 4 week intervals until ferns are no longer productive. Use high rate and shortest application interval when conditions favor disease development. Do not apply within 190 days (120 days in CA and AZ) before harvest.
BEANS, DRY Including but not limited to: Navy Bean Pinto Bean Kidney Bean Lima Bean Broad Bean Pink Bean Jack Bean Cow Pea Chick Pea (Garbanzo) Blackeyed Pea Southern Pea, etc.	Rust (Phakopsora spp.) Anthracnose Downy Mildew Cercospora Leaf Spot (for Blackeyed Pea only) Ascochyta Blight	1.25-1.8	7.2	Use in sufficient water to obtain adequate coverage. Begin applications at first onset of disease which may occur as early as 2 to 4 weeks before flowering. Repeat applications at 7 to 10 day intervals. For use only on beans to be harvested dry with pods removed. Do not apply within 14 days of harvest. Equus DF may be applied through sprinkler irrigation equipment. See calibration directions which appear on the product label.
BEANS, SNAP	Rust (Phakopsora spp.) Botrytis Blight (Gray Mold)	1.25-2.7 2.7	10.9	Use in sufficient water to obtain adequate coverage. Begin applications during early bloom stage or when disease first threatens and repeat at 7 day intervals. For resistance management of rust, alternate with another fungicide registered for bean rust control. Do not apply within 7 days of harvest.

CRANBERRY	Fruit Rot Lophodermium Leaf/Twig Blight	3.8-6.0	18.1	Apply at early bloom and repeat at 10 to 14 day intervals. Under severe disease conditions, use the 6 lb. per acre rate on a 10 day schedule. Do not apply within 50 days of harvest. Do not apply to bogs when flooded or allow release of irrigation water from bogs for at least 3 days following application. Equus DF may be applied through sprinkler irrigation equipment. Use 300 gallons of water per acre through solid set systems only. See calibration directions preceding this section.
	Upright Dieback	3.8-6.0	18.1	Apply in sufficient water to uprights and runners making the first application before bloom when shoots begin growth in the spring. Apply at 10 to 14 day intervals. Do not apply within 50 days of harvest. Do not apply to bogs when flooded or allow release of irrigation water from bogs for at least 3 days following application. Equus DF may be applied through sprinkler irrigation equipment. Use 300 gallons of water per acre through solid set systems only. See calibration directions preceding this section.
CUCURBITS Cantaloupe, Cucumbers, Honeydew, Muskmelon, Pumpkin, Squash, Watermelon	Anthrachnose Downy Mildew Target Spot	1.4-1.8	19.0	Use in sufficient water to obtain adequate coverage. Begin applications when plants are in first true leaf stage or when conditions are favorable for disease development. Repeat applications at 7 day intervals. Equus DF may be applied the day of harvest. Equus DF may be applied through sprinkler irrigation equipment (solid set, portable wheel move, or center pivot systems only). See Calibration directions preceding this section.
	Cercospora Leaf Spot Gummy Stem Blight (Black Rot) Alternaria Leaf Blight Alternaria Leaf Spot Scab Powdery Mildew (Sphaerotheca only)	1.8-2.7		Note: Spraying mature watermelons may result in sunburn of the upper surface of the fruit. Do not apply Equus DF to watermelons when any of the following conditions are present: <ul style="list-style-type: none"> • Intense heat and sunlight, • Drought conditions, • Poor vine canopy, • Other crop and environmental conditions which may be conducive to increased natural sunburn. Do not combine Equus DF with anything except water for application to watermelons unless your prior use has shown the combination to be non-injurious to watermelons under your conditions of use.
GRASSES GROWN FOR SEED	Stem Rust Leaf Rust Stripe Rust Septoria Leaf Spot Glume Blotch Bipolaris Leaf Spot Drechslera Leaf Spot	0.9-1.4	5.4	Use in sufficient water to obtain adequate coverage. Begin applications during stem elongation when conditions favor disease development. Re-apply at flag (top) leaf emergence and repeat applications at 14 day intervals. Do not apply within 14 days of harvest. Do not allow livestock to graze on treated areas or feed hay produced before harvest. Feeding of treated plant parts after harvest of seed is allowed. Equus DF may be applied through sprinkler irrigation equipment (solid set, portable wheel move, or center pivot systems only). See Calibration directions preceding this section.
	Selenophoma (Eyespot)	0.9-1.8		

				irrigation equipment (solid set, portable wheel move, or center pivot systems only). See Calibration directions preceding this section.
PASSION FRUIT (HI only)	Alternaria Fruit and Leaf Spot (Passion Fruit Brown Spot) Anthracnose Cercospora Fruit Spot	1.8	9.0	Apply with ground equipment in sufficient water to obtain adequate coverage of fruit and leaves. Begin treatment when fruit spots appear (April to July) and continue treatments at 14 day intervals until weather conditions no longer favor disease development. Do not apply within 7 days of harvest.
PEANUT	Early-Leaf Spot (Cercospora) Late Leaf Spot (Cercosporidium) Pepper Spot	0.9-1.36	10.9	Apply in sufficient water for coverage when leaf wetness first occurs or 30 to 40 days after planting. Repeat at 14 day intervals. When conditions favor late leaf spot or when rust or web blotch occur, apply 1.36 lbs. per acre at 14 day intervals for the remainder of the season. Do not apply within 14 days of harvest. Equus DF may be applied through sprinkler irrigation equipment. Use 1.36 lbs. per acre in solid set, portable wheel move, center pivot, motorized lateral move, or traveling gun sprinkler irrigation equipment. See calibration directions preceding this section. It is recommended to alternate chemigation applications with ground or aerial applications. Do not allow livestock to graze in treated areas. Do not feed hay or threshings from treated fields to livestock.
	Rust Web Blotch	1.36		
POTATO	Late Blight Early Blight Botrytis Vine Rot Black Dot	0.7 then 0.9-1.36	13.6	Begin applications at the low rate when vines are first exposed and leaf wetness occurs. Repeat applications at 5 to 10 day intervals. Begin applying the higher label rates at 5 to 10 day intervals when any one of the following events occur: <ul style="list-style-type: none"> • Vines close within the rows; • Late blight forecasting measures 18 disease severity values (DSV); • The crop reaches 300 P-days Increase water spray volume as canopy density increases. Use the highest rate and shortest interval when plants are rapidly growing and disease conditions are severe. Do not apply within 7 days of harvest. Equus DF may be applied through sprinkler irrigation equipment (solid set, portable wheel move, center pivot, or motorized lateral move systems only). Do not exceed a 10 day interval between applications when using this technique. See calibration directions preceding this section.

				label for chemigation instructions. Do not use Equus DF on strawberry plants in commercial fruit production.
STRAWBERRY TRANSPLANTS (preplant dip)	Ramularia leaf spot (<i>Ramularia tulasnei</i>)	1.4	18.1	Mix Equus DF in water and stir the suspension thoroughly. Stir periodically to assure as uniform mixture. Dip strawberry transplants into the suspension for 5 to 10 minutes until plant surfaces are completely wetted. Transplant treated plant stock into nursery beds without rinsing. Wear chemical resistant gloves of any waterproof material when mixing and applying Equus DF as a transplant dip treatment and while handling treated stock. Do not use Equus DF on strawberry plants in commercial fruit production.

TREE AND ORCHARD CROPS—APPLICATION INSTRUCTIONS

Apply Equus DF in sufficient water and with proper calibration to obtain uniform coverage of tree canopy. Application with ground equipment is preferable to aerial application because ground applications generally give better coverage of the tree canopy. If application with ground equipment is not feasible, Equus DF may be applied with aircraft using at least 20 gallons of spray per acre. When concentrate sprays are used or when treating non-bearing or immature trees, the lower rate of Equus DF listed may be used. Both ground and aircraft methods of application are recommended unless specific directions are given for a crop. Application through sprinkler irrigation systems is not recommended unless specific directions are given for a crop. See the following instructions for application and calibration.

DO NOT allow livestock to graze treated areas. The following spray volumes are recommended as gallons of spray per acre:

CROP	SPRAY VOLUME (Gallons per Acre)
Almonds	20 (concentrate) to 300 (full dilute)
Filberts (Hazelnuts) (Oregon only)	20 (concentrate) to 300 (full dilute)
Peach, Nectarine, Apricot, Tart Cherry, Plum, Prune	20 (concentrate) to 300 (full dilute)
Pistachios	20 (concentrate) to 200 (full dilute)
Conifers:	Dilute Concentrate
Forest Stands	Not used 10 to 20 (aircraft)
Christmas Trees	100 10 to 50 (aircraft or ground equipment)
Nursery Beds	100 5 to 10 (ground equipment only)

CROP	DISEASES CONTROLLED	EQUUS DF RATE LBS./ACRE	EQUUS DF RATE LBS./100 GALLONS*	SEASONAL LIMIT LBS./ACRE	APPLICATION DIRECTIONS
ALMONDS	Anthrachnose Blossom Blight /Brown Rot Shothole Scab	3.6	1.2	22.7	For blossom blight, begin application at popcorn (pink bud) and follow with an application at full bloom. If weather is still conducive for disease development, another application may be made at petal fall. For control of shothole, make an application in the autumn at leaf fall. In the spring, make the first application at budbreak, followed by an application at shuck split to control nut infections and to control scab. Do not apply within 150 days of harvest.
FILBERTS (Hazelnuts)	Eastern Filbert Blight	3.6	1.2	10.9	Begin applications at leaf bud break and repeat applications at 2 to 4 week intervals. Do not apply within a week before or after an oil application or a tank-mix containing oil-based pesticides. Do not apply within 120 days before harvest.
FRUIT TREES Apricot Cherry (Sweet), Cherry (Tart), Nectarine, Peach, Plum, Prune	Leaf Curl Coryneum Blight (Shothole)	2.8-3.8	0.9-1.25	16.9	For best control of both diseases, apply at leaf fall in late autumn, using sufficient water and proper sprayer calibration to obtain uniform coverage. When conditions favor high disease levels, use the high rate of application and apply once or twice more in mid-to-late winter before budswell. If the leaf fall application is not practical, application of Equus DF for control of leaf curl may be made at any time prior to budswell the following spring. Where Coryneum blight (shothole) occurs, also apply at budbreak to protect newly emerging leaves and at shuck split to prevent fruit infections. Make applications at a minimum of 10 day intervals. Equus DF

	Botrytis Seedling Blight Phoma Twig Blight	1.4-2.5	have broken bud, then every 3 to 4 weeks as specified above. In nursery beds, use the high rate on a 3 week schedule.
	Autoecious Needle Rust (Weir's Cushion)(Spruces)	5.0	Begin applications in nursery beds when seedlings are 4 inches tall and when cool, moist conditions favor disease development. Make additional applications at 7 to 14 day intervals as long as disease favorable conditions persist.
			Begin applications when 10% of buds have broken and twice thereafter at 7 to 10 day intervals.

*Volumetric rates to be used only with full dilute spray volume specified on this label for tree and orchard crops.

MUSHROOMS: Verticillium Brown Spot and Dry Bubble – Apply 2.75 to 5.5 fl. oz. of Equus DF per 1,000 sq. ft. of mushroom bed. Apply as a drench to the mushroom bed surface in at least 12.5 gallons of water per 1,000 sq. ft. of mushroom bed. Make two applications. Apply the high rate (5.5 fl.oz.) of Equus DF in the first application and the low rate (2.75 fl. oz.) of Equus DF in the second application. The first application should be made within two days of top-dressing the spawn-colonized mushroom compost with a casing layer. The second application should be made at pinning. Do not apply within 5 days of first harvest. Make no more than two applications per cropping cycle. Do not apply more than 8.25 fl. oz. of Equus DF per cropping cycle.

GRASS: SODFARMS

Use of this product on home lawns is prohibited.

Apply Equus DF in 30 to 40 gallons of water per acre. Begin applications when conditions favor disease development and repeat applications as long as these conditions persist using the rates recommended in the following table.

Under severe disease conditions, a single application of 15 pints per acre may be made with a 7 day retreatment interval. Subsequent applications must follow the rates and retreatment intervals outlined in the following table for the remainder of the year.

Do not mow or water after treatment until spray deposited on grass is thoroughly dry. Equus DF should always be used in conjunction with good turf management practices.

Sodfarm turf treated with chlorothalonil prior to harvest must be mechanically cut, rolled, and harvested. Follow all provisions outlined in the **Agricultural Use Requirements** box.

DISEASES CONTROLLED

LOW DISEASE PRESSURE TREATMENT REGIME

EXTREME DISEASE CONDITION

	Retreatment Interval (Days)	Application Rate (Lbs./Acre) ¹	Minimum Retreatment Interval for the Maximum Single Application (Days)	Application Limit Per Year for Sodfarms (Lbs./Acre)
Dollar Spot	7-10 14-21	2.5 ^a -5.0 5.0-8.8	7	15.75
Leaf Spot, Melting Out, Brown Blight	7-10 14-21	5.0 5.0-8.8		
Brown Patch	7-14	5.0-8.8		
Gray Leaf Spot	7-10	5.0-8.8		
Red Thread	7-10	5.0-8.8		
Anthracnose	7-14	5.0-8.8		

¹One single application of 13.6 lbs. per acre using a minimum retreatment interval of 14 days may be made per year for control of severe disease conditions. After using this high rate the lower rates and retreatment intervals in this table must be followed.

^aLow rate is not effective on intensively mowed grasses.

Diseases are caused by some of the following fungi:

Dollar Spot: *Sclerotinia homeocarpa*, *Lanzia* or *Moellerodiscus* spp.

Leaf Spot, Melting Out and Brown Blight: *Drechslera* spp., *Bipolaris* spp., *Curvularia* spp.

Brown Patch: *Rhizoctonia* spp.

Anthracnose: *Collectotrichum*

GOLF COURSE FAIRWAYS

Apply Equus DF in 30 to 40 gallons of water per acre. Begin applications when conditions favor disease development and repeat applications as long as these conditions persist. Under severe disease conditions, use the highest rate and shortest interval corresponding with the application schedule selected from the table below.

Do not mow or water after treatment until spray deposited on grass is thoroughly dry. Equus DF should always be used in conjunction with good turf management practices. For reentry into treated areas, refer to the Non-Agricultural Use Requirements box.

application rate of 13.6 pounds per acre if turf layer remains frozen prior to snow cover. If snow cover is intermittent or lacking during the winter, reapply Equus DF at 8.8 pounds per acre of turf at monthly intervals until gray snow mold conditions no longer prevail. In areas where pink snow mold (Gerlachia or Fusarium patch) is likely to occur, apply a single application of 8.8 pounds per acre of Equus DF in combination with products containing iprodione at 88.4 ounces active ingredient per acre of turf area. The maximum seasonal application limits are 88.4 pounds per acre for greens, 63 pounds per acre for tees, and 31.5 pounds per acre for general turf and fairways. Read and observe all label directions for products containing these active ingredients.

Fusarium (Gerlachia) Patch:

For control of Fusarium patch only in areas where snow cover is intermittent or lacking during the winter, apply 8.8 pounds per acre of Equus DF. Make an initial application of 13.6 pounds per acre in late autumn; and reapply applications of 8.8 pounds per acre at 21 to 28 day intervals until conditions favoring Fusarium patch no longer exist. The maximum seasonal application limits are 88.4 pounds per acre for greens, 63 pounds per acre for tees, and 31.5 pounds per acre for general turf and fairways.

Algal Scum:

For prevention of algal scum on turfgrasses caused by cyanobacteria of the genus Lyngbia, apply Equus DF at the rate of 5 to 8.8 pounds per acre of turf on a 7 to 14 day schedule. When algal scum is well established, every attempt should be made to dry out the afflicted area. Once dry, spiking or verticutting should be done to enhance turfgrass recovery in conjunction with an Equus DF application at the rate of 13.6 pounds per acre with a 7 day retreatment at the 5 to 8.8 pounds per acre rate. Several applications of Equus DF at the high 8.8 pounds per acre rate may be necessary for turfgrass recovery. Only a preventative spray program with Equus DF will prevent a recurrence of the algae when environmental conditions are favorable for algal growth. The maximum seasonal application limits are 88.4 pounds per acre for greens, 63 pounds per acre for tees, and 31.5 pounds per acre for general turf and fairways.

ORNAMENTAL PLANTS

Use of this product on home lawns is prohibited. Equus DF may be used on ornamental plants grown in the field, nurseries, or greenhouses.

Ornamentals grown in nurseries, greenhouses:

Apply Equus DF at the rates given in the tables below. Apply in a spray to run-off, when conditions are favorable for disease development. Repeat applications at 7 to 14 day intervals until conditions are no longer favorable. During periods when conditions favor severe disease incidence, generally cloudy or wet weather, apply Equus DF at 7 day intervals. Equus DF should be applied to plants when both foliage and flowers are dry or nearly dry.

Do not use mistblowers or high pressure spray equipment when making applications of Equus DF in greenhouses.

Ornamentals grown in the field:

For aerial application to field-planted ornamentals, a minimum rate of 10 gallons of spray per acre should be used during application. For field-grown ornamentals, excluding roses and pachysandra, apply 0.75 pound per 100 gallons (full dilution) or 1.87 pounds per acre in a single treatment. No more than 44.1 pounds per acre of Equus DF may be applied to field-grown ornamentals per year. Equus DF should be applied to plants when both foliage and flowers are dry or nearly dry.

For field-grown roses, apply 1.3 pounds of Equus DF per acre for a single application.

For field-planted pachysandra, apply 3.75 pounds of Equus DF per acre for a single application.

Do not combine Equus DF in the spray tank with pesticides, surfactants, or fertilizers unless prior use has shown the combination to be physically compatible, effective, and noninjurious under your conditions of use.

Use of Equus DF is recommended for control of fungal diseases referred to by numbers in parentheses following each ornamental. Ornamentals listed on this label have been tested and found to tolerate applications of Equus DF at the recommended rates. Plant sensitivities 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, widely varying growth conditions, and varieties of ornamentals and nursery plants, it is impossible to test every one for

5. Powdery Mildews:

Erysiphe cichoracearum

Microsphaera spp.

6. Rusts:

Gymnosporangium spp.

Puccinia spp.

Pucciniastrum hydrangeae

7. Taphrina Blister

8. Scab (*Venturia inaequalis*)

Ornamentals recommended for treatment with Equus DF:

Avoid applications during bloom periods for those plants where flower injury is unacceptable.

For poinsettia, discontinue applications prior to bract formation; phytotoxicity is possible on bracts.

Plant	Disease(s)	Application Rate (lb/100 gal)	Comments
Aglaonema	1	2.5	
Andromeda (Pieris)	4	1.4	
Arabian Violet	2	1.0	
Areca Palm	1	2.5	
Artemesia	1	2.5	
Ash (Fraxinus)	1	1.4	
Aspen	1	1.4	
Azalea	1,2,4	1.4	
Begonia	1	1.0	
Boston Fern	1	2.5	
Buckeye, Horsechestnut	1	1.4	
Camellia	2	1.0	
Carnation	1,2	1.0	
Cherry-laurel	1	1.4	
Chrysanthemum	1,2	1.0	
Crabapple	1,6,8	1.4	
Crocus	1	1.0	
Daffodil	1	1.0	
Daisy	1	1.0	
Dogwood	1	1.4	
Dumbcane, Dieffenbachia	1	2.5	
Dracaena	1	2.5	
Eucalyptus	3	1.4	
Euonymus	1	1.4	
Fatsia (Aralia)	1	2.5	
Ficus	1	2.5	
Firethorn, Pyracantha	1	1.4	
Florida Ruffle Fern	1	2.5	
Flowering Almond	1,2	1.4	
Flowering Cherry	1,2	1.4	
Flowering Peach	1,2	1.4	
Flowering Plum	1,2	1.4	
Flowering Quince	1,2	1.4	
Geranium	1,6	1.0	
Gladiolus	1,2	1.0	
Hawthorn	1,6	1.4	
Holly	1	1.4	

<i>Calistephus chinensis</i>	Aster	1,2	1-2.5
<i>Carissa grandiflora</i>	Natal Plum	1	1-2.5
<i>Clerodendron thomsonae</i>	Bleeding Heart	1	1-2.5
<i>Codiaeum</i> spp.	Croton	1	1-2.5
<i>Cordyline terminalis</i>	Ti Plant	1	1-2.5
<i>Crassula argentea</i>	Jade Plant	1	1-2.5
<i>Cyrtomium falcatum</i>	Holly Leaf Fern	1	1-2.5
<i>Dionaea muscipula</i>	Venus Fly Trap	1	1-2.5
<i>Dizygotheca elegantissima</i>	False Aralia	1	1-2.5
<i>Epipremnum aureum</i>	Golden Pothos, Scindapsus	1	1-2.5
<i>Episcia cupreata</i>	Flame Violet	1	1-2.5
<i>Fittonia</i> spp.	Silver-Nerve Plant	1	1-2.5
<i>Gerbera jamesonii</i>	Gerbera Daisy	1,2,4,5	1-2.5
<i>Gynura sarmentosa</i>	Purple Passion Vine	1,4	1-2.5
<i>Gypsophila paniculata</i>	Baby's Breath	1,2,4	1-2.5
<i>Hoya</i> spp.	Wax Plant	1	1-2.5
<i>Ilex cornuta</i>	Chinese Holly	1	1-2.5
<i>Ilex crenata</i>	Japanese Holly	1	1-2.5
<i>Impatiens</i> spp.	Impatiens	1,2,6	1-2.5
<i>Pilea cadierei</i>	Aluminum Plant	1,4	1-2.5
<i>Platynerium</i> spp.	Staghorn Fern	1	1-2.5
<i>Sansevieria trifasciata</i> "Hahnii"	Birdsnest Sansevieria	1	1-2.5
<i>Tolmeia menziesii</i>	Piggy-Back Plant	1	1-2.5
<i>Yucca elephantipes</i>	Spineless Yucca	1	1-2.5
<i>Zygocactus truncatus</i>	Christmas Cactus	1	1-2.5

Note: Do not apply Equus DF to either green or variegated *Pittosporum* or to *Schefflera* as multiple applications have been demonstrated to cause phytotoxic responses.

STORAGE AND DISPOSAL

Do not contaminate water, foodstuffs, feed, or seed by storage or disposal.

PESTICIDE STORAGE: Store in a cool place. Protect from excessive heat. Store product in original container only away from water, food, or feed. Keep container closed to prevent spills and contamination. Carefully open containers. After partial use, replace lid and close tightly. Do not put concentrate or diluted product into food or drink containers.

PESTICIDE DISPOSAL: Do not contaminate water, food, or feed by disposal. Improper disposal of excess pesticide, pesticide spray, or rinsate is a violation of Federal law. Wastes resulting from the use of this product that cannot be used according to the label instructions or chemically reprocessed may be disposed of on site or at a landfill or waste disposal facility approved for pesticide disposal, or in accordance with all applicable Federal, state, or local regulations. For further guidance, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL:

Nonrefillable Container (flexible-bag-all weights): Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Empty containers retain vapor and product residues.

Nonrefillable Container (rigid-fifty lbs. or less): Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Nonrefillable Container (rigid-greater than fifty lbs.): Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.