

U.S. ENVIRONMENTAL PROTECTION AGENCY Office of Pesticide Programs Registration Division (7505P) Ariel Rios Building 1200 Pennsylvania Ave., NW Washington, D.C. 20460

EPA
Registration.
Number:

Date of Issuance:

100-1357

MAR 1 1 2010

NOTICE OF PESTICIDE:

\_x\_ Registration \_\_ Reregistration (under FIFRA, as amended) Term of Issuance: Conditional

Name of Pesticide Product: Medallion II

Name and Address of Registrant (include ZIP Code):

Syngenta Crop Protection, Inc. P.O. Box 18300 Greensboro, NC 27419-8300

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior tonise of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act. Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA sec. 3 (c) (7) (A) provided that you:

- 1. Submit/cite all data required for the registration/ reregistration of your product when the Agency requires all registrants of similar products to submit data; and submit acceptable responses required for reregistration of your product under FIFRA section 4.
- 2. Make the following label changes:
- (a) Change the EPA Registration Number to 100-1357.

(Continued)

Signature of Approving Official:

Shaja B. Joyner, Product Manager 20

Fungicide Branch

Registration Division (7505P)

Date:

MAR 1 1 2010

EPA Form 8570-6

# (b) Page 2 – Engineering Controls

Add the title "Engineering Controls" above the paragraph starting with "When handlers use closed systems......as specified in the WPS."

(c) Page 3 – User Safety Requirements – User Safety Recommendations
Create a separate box with the title "User Safety Requirements" that contains the first three bullets on the current label, followed by an additional separate box with the title "User Safety Recommendations" incorporating the fourth bullet.

The "User Safety Recommendations" and "User Safety Requirement" boxes respectively, should appear after the "Applicators and others must wear" and before the "Engineering Controls" sections.

# (d) Page 8 – Mixing Procedures – Jar Compatibility Test

In the paragraph beginning "If using Medallion II in a tank mixture . . . " change the text: "No label dosage rate should be exceeded and the most restrictive label precautions and limitations should be followed. This product should not be mixed with any product which prohibits such mixing." to:

"Do not exceed the dosage rates on any label. Follow the most restrictive label precaution. Do not mix this product with any other product whose label prohibits such mixing."

#### (e) Page 8 – Application Instructions

In the bullet beginning "Do not apply during a temperature inversion . . . " change "Mist of fog . . ." to "Mist or fog . . ."

(f) Page 10 – Directions for Use Through [Microjet or Drip] Chemigation . . . Remove the square brackets from the heading.

# (g) Page 16 - Ornamentals - Maximum Use Rates

In the second paragraph, change "The high use rates recommended for container nurseries, . . ." to "The high use rates *specified* for container nurseries, . . ."

# (h) Page 19 – Storage and Disposal – Container Handling:

Change this section to:

Container Handling [For boxes and paper and plastic bags]

Non-refillable container. Do not reuse or refill this container. Completely empty box or bag into application equipment. Then offer for recycling or dispose of empty box or bag in a sanitary landfill or by incineration or, if allowed by state and local authorities, by burning. If containers are burned, stay out of smoke.

Container Handling [For water-soluble packets]

Offer for recycling, if available or, dispose of the empty outer foil pouch in the trash as long as water-soluble packet is unbroken.

3. Submit one (1) copy of the revised final printed label before the product is released for shipment.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

A stamped copy of the label is enclosed for your records. If you have any questions, contact Lisa Jones of my team at (703) 308-9424 or at jones.lisa@epa.gov.

Sincerely,

Ŝhaja B./ Joyner

Product Manager (20)

Fungicide Branch

Registration Division (7505P)

Enclosure: Stamped copy of label

GROUP 12 FUNGICIDE

# Medallion® II Fungicide

For control of certain foliar, stem, and root diseases in turfgrass including golf courses, institutional, commercial and residential lawns, sod farms, sports fields, parks, municipal grounds and cemeteries, and of ornamentals grown in interiorscapes, field nursery plantings, container nurseries, forest nurseries, residential and commercial landscapes, greenhouses, lath and shade houses, or other enclosed structures

Active Ingredient:

Fludioxonil*	50.0%
Other Ingredients:	50.0%
Total:	100.0%

\*CAS No. 131341-86-1

Medallion II is a 50% wettable powder.

Water-soluble packaging.

This outer protective container contains Medallion II in [total number] inner water-soluble packets. These inner packets dissolve in water, allowing contents to wet. After opening outer container, immediately dump the required number of unopened inner packets into the partially filled sprayer or mix tank. Do not handle the soluble packets or expose them to moisture, since this may cause rupturing.

Do not offer individual packets for sale

#### KEEP OUT OF REACH OF CHILDREN.

#### CAUTION

See additional precautionary statements and directions for use inside booklet.

EPA Reg. No. 100-XXXX

EPA Est.

\_\_ x \_\_ ounce Water-Soluble Packets

Net Weight

ACCEPTED with COMMENTS In EPA Letter Dated:
MAR 1 1 2010

Under the Federal Insecticide, Pungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No.

100 - 1357

	FIRST AID
If in eyes	Hold eye open and rinse slowly and gently with water for 15-20 minutes.  Parameters and largest if present affect 5 minutes than 15-20 minutes.
	<ul> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> </ul>
	Call a poison control center or doctor for treatment advice.
If on skin	Take off contaminated clothing.
or clothing	Rinse skin immediately with plenty of water for 15-20 minutes.
	Call a poison control center or doctor for treatment advice.
•	duct container or label with you when calling a poison control center or ing for treatment.
	HOT LINE NUMBER
F	or 24 Hour Medical Emergency Assistance (Human or Animal)
	Chemical Emergency Assistance (Spill, Leak, Fire, or Accident), Call
	1-800-888-8372

### PRECAUTIONARY STATEMENTS

#### **Hazards to Humans and Domestic Animals**

#### **CAUTION**

Causes moderate eye irritation. Harmful if absorbed through skin. Avoid contact with eyes, skin, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

### **Personal Protective Equipment (PPE)**

### Applicators and other handlers must wear:

- Long-sleeved shirt and long pants.
- Chemical-resistant gloves made from any waterproof material.
- Shoes plus socks.

When handlers use closed systems or enclosed cabs in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR 170.240 (d)(4-6), the handler PPE requirements may be reduced or modified as specified in the WPS.

6/23

Water-soluble packets when used correctly qualify as a closed loading system under the WPS. Handlers handling this product while it is enclosed in intact water-soluble packets may elect to wear reduced PPE of long-sleeved shirt, long pants, shoes, and socks.

# **User Safety Requirements**

#### **Users must:**

- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.
- Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.
- Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

#### **Environmental Hazards**

This pesticide is toxic to fish, aquatic invertebrates, oysters and shrimp. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash water or rinsates.

### **Ground Water Advisory**

This chemical has properties and characteristics associated with chemicals detected in ground water. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination.

#### **Surface Water Advisory**

This chemical may contaminate water through drift of spray in wind. This chemical has a high potential for runoff for several months or more after application. Poorly draining soils and soils with shallow water tables are more prone to produce runoff that contains this chemical. A level, well maintained vegetative buffer strip between areas to which this chemical is applied and surface water features such as ponds, streams, and springs will reduce the potential for contamination of water from rainfall runoff. Runoff of this chemical will be reduced by avoiding applications when conditions favor runoff (such as when soils are saturated and/or significant rainfall is forecast in the next 48 hours). Sound erosion control practices will reduce this chemical's contribution to surface water contamination.

# Physical or Chemical Hazards

Do not use or store near heat or open flame

#### CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

**NOTICE:** Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of SYNGENTA CROP PROTECTION, Inc. or Seller. To the extent permitted by applicable law, Buyer and User agree to hold SYNGENTA and Seller harmless for any claims relating to such factors.

SYNGENTA warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. To the extent permitted by applicable law: (1) this warranty does not extend to the use of the product contrary to label instructions or under conditions not reasonably foreseeable to or beyond the control of Seller or SYNGENTA, and, (2) Buyer and User assume the risk of any such use. TO THE EXTENT PERMITTED BY APPLICABLE LAW, SYNGENTA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS WARRANTED BY THIS LABEL.

To the extent permitted by applicable law, in no event shall SYNGENTA be liable for any incidental, consequential or special damages resulting from the use or handling of this product. TO THE EXTENT PERMITTED BY APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF SYNGENTA AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF SYNGENTA OR SELLER, THE REPLACEMENT OF THE PRODUCT.

SYNGENTA and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitation of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of SYNGENTA.

# **DIRECTIONS FOR USE**

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

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the State or Tribal agency responsible for pesticide regulation.

#### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for 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), notification to workers, 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.

Exception: If the product is applied by drenching, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

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 made of any waterproof material.
- · Shoes plus socks

Page 7 Medallion II EPA Reg. No. 100-XXXX

## NON-AGRICULTURAL USE REQUIREMENTS

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

Do not enter treated areas without protective clothing until sprays have dried.

FAILURE TO FOLLOW THE DIRECTIONS FOR USE AND PRECAUTIONS ON THIS LABEL MAY RESULT IN POOR DISEASE CONTROL [OR PLANT INJURY].

#### **USE RESTRICTIONS AND PRECAUTIONS**

Hawaii: Use is limited to ornamentals grown in interiorscapes, greenhouses, lath and shade houses, containers, or other enclosed structures.

Nassau and Suffolk Counties, New York: Use is limited to ornamentals grown in interiorscapes, greenhouses, lath and shade houses, containers, or other enclosed structures.

Do not apply Medallion II with any type of aircraft.

#### RESISTANCE MANAGEMENT

Medallion II is a protective fungicide used to aid in the control of soil and foliar diseases. Medallion II contains fludioxonil which is in the phenylpyrrole class of chemistry and has a unique mode of action, which prevents fungal respiration (Fungicide Action Group 12). Fungal isolates with acquired resistance to Group 12 may eventually dominate the fungal population if Group 12 fungicides are used repeatedly or in successive years as the primary method of control for targeted species. This may result in partial or total loss of control of those species by fludioxonil or other Group 12 fungicides. A disease management program that includes alternation or tank mixes between Medallion II and other labeled fungicides that have a different mode of action may prevent pathogen populations from developing resistance. Sanitation and other cultural practices to minimize disease are also recommended to aid in control as well as to assist in preventing/delaying resistance development.

#### **MIXING PROCEDURES**

Prepare no more spray mixture than is needed for the immediate operation. Thoroughly clean spray equipment before using this product. Vigorous agitation is necessary to maintain uniformity of the spray mixture. Maintain maximum agitation throughout the spraying operation. Do not let the spray mixture stand overnight in the spray tank. Flush the spray equipment thoroughly following each use [and apply the rinsate to a previously treated area].

To determine the physical compatibility of Medallion II with other products, use a jar test as described below.

Jar Compatibility Test: Using a quart jar, add the proportionate amounts of the products to 1 qt. of water. Add wettable powders and water-dispersible granular products first, then liquid flowables, and emulsifiable concentrates last. After thoroughly mixing, let stand for at least 5 minutes. If the combination remains mixed or can be remixed readily, it is physically compatible. Once compatibility has been proven, use the same procedure for adding required ingredients to the spray tank.

If using Medallion II in a tank mixture, observe all directions for use, crops/sites, use rates, dilution ratios, precautions, and limitations which appear on the tank mix product label. No label dosage rate should be exceeded and the most restrictive label precautions and limitations should be followed. This product should not be mixed with any product which prohibits such mixing. Tank mixtures are permitted only in those states where the tank mix partner is registered.

Note: Use with oils or adjuvants may cause plant damage.

Plant tolerance has been found acceptable for turfgrass and all ornamentals listed in the ORNAMENTALS section of this label. However, not all possible tank-mix combinations have been tested under all conditions. When possible, it is recommended to test the combinations on a small portion of target plants to ensure a phytotoxic response will not occur as a result of application.

**Medallion II Alone:** Add ½ of the required amount of water to the spray or mixing tank. With the agitator running, drop the required number of **unopened** soluble packets of Medallion II into the spray tank all at once. Continue agitation while adding the remainder of the water. Begin application of the spray solution after the packets have dissolved, and the material has completely dispersed into the mix water. Maintain agitation until all of the mixture has been applied.

**Medallion II + Tank Mixtures:** Medallion II is usually compatible with Banner MAXX®, Subdue MAXX®, Daconil Ultrex®, Daconil WeatherStik® and other commonly used fungicides, insecticides, and foliar nutrient products. However, the physical and biological compatibility of Medallion II with tank mix partners should be tested before

use. If in doubt, run a "jar compatibility test" or consult with Syngenta company representatives, other users, university or extension personnel before proceeding.

Add ½ of the required amount of water to the spray or mixing tank. With the agitator running, drop the required number of **unopened** soluble packets of Medallion II into the tank all at once. Continue agitation while adding the remainder of the water. Allow the packets of Medallion II to dissolve and the product to completely disperse into the mix water. Then add the desired amount of other products recommended for tank mixture and allow them to become completely dispersed. Continue agitation to maintain a uniform suspension until all of the spray solution has been applied.

Water-soluble packets of Medallion II and any other products packaged in water-soluble film must be completely dissolved and dispersed in water before any other tank mix partner, including micronutrients or other liquid or dry fertilizers, are added to the spray solution. Other wettable powders or water dispersible granules should be added to the water in the tank next, followed by flowable products, and emulsifiable concentrates added last. Provide sufficient mechanical or bypass agitation during mixing and application.

# **APPLICATION INSTRUCTIONS**

Apply Medallion II at rates and timings as described in this label.

OBSERVE THE FOLLOWING PRECAUTIONS WHEN SPRAYING IN THE VICINITY OF AQUATIC AREAS SUCH AS LAKES, RESERVOIRS, RIVERS, PERMANENT STREAMS, MARSHES OR NATURAL PONDS, ESTUARIES, AND COMMERCIAL FISH FARM PONDS.

- Do not apply within 75 ft. of bodies of water such as lakes, reservoirs, rivers, permanent streams, natural ponds, marshes or estuaries.
- For all plantings within 150 ft. of bodies of water as described above, spray crops from outside the planting away from the bodies of water.
- Shut off the sprayer when at row ends.
- Spray the last three rows windward of aquatic areas using nozzles on one side only, with spray directed away from aquatic areas.
- Do not cultivate within 10 ft. of aquatic areas as to allow a vegetative filter strip.
- Do not apply when weather conditions favor drift to aquatic areas. Do not apply when gusts or sustained winds exceed 10 mph.
- Do not apply during a temperature inversion. Mist of fog may indicate the presence of an inversion in humid areas.

Directions for Use Through [Microjet or Drip] Chemigation Systems (Ornamentals Only)

For applications of Medallion II as soil drench applications only.

Do not use in overhead irrigation systems.

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.

Medallion II alone or in tank mixture with other pesticides which are registered for microjet or drip application may be applied in irrigation water at rates specified in this label.

Applications to the soil may be made through microjets or drip irrigation. With microjet systems, apply additional water after application is complete to remove residues from the foliage. Apply enough supplemental water to wet the root zones of the plants.

Do not apply this product through any other type of irrigation system. Plant injury or lack of effectiveness can result from non-uniform distribution of treated water. If you have questions about calibration, you should contact State Extension specialists, equipment manufacturers, or other experts.

Thorough coverage is necessary to provide good disease control. Where distribution patterns do not overlap sufficiently, unacceptable control may result. Where distribution patterns overlap excessively, injury to desirable plants may result.

**Spray Preparation:** Chemical tank and injector system should be thoroughly cleaned. Flush system with clean water.

Prepare a mixture of Medallion II with clean water in the mix (supply) tank. The mix (supply) tank should be set up to provide vigorous agitation. Make a slurry of Medallion II and water. Use a minimum of 1 gal. of water to one packet of Medallion II.

Fill the mix (supply) tank with the required amount of water. Start agitation in the tank. Add all of the required water-soluble packets of Medallion II at the same time. Agitate the solution until all of the water-soluble packets have dissolved and the Medallion II has completely dispersed into the solution. Then add desired amount of tank mix partners. Maintain agitation in the tank and inject this mixture into the irrigation system. Injecting a larger volume of a more dilute mixture per hour will usually provide more accurate calibration of metering equipment. Maintain sufficient agitation to keep the fungicide in suspension.

Meter into irrigation water during the beginning of the irrigation cycle.

# **Operation Instructions**

The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water-source contamination from backflow.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of 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.

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.

Allow sufficient time for pesticide to be flushed through all lines and all nozzles before turning off irrigation water. 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.

#### **Specific Instructions for Public Water Systems:**

- 1. 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.
- 2. Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, back-flow 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.

- 3. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- 4. The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- 5. 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.
- 6. 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.
- 7. Do not apply when wind speed favors drift beyond the area intended for treatment.

### **TURFGRASS**

Medallion II is a protectant fungicide for control of certain diseases of turfgrass. Medallion II provides control of brown patch, leaf spot, yellow patch, brown ring patch, large patch, summer patch, anthracnose, Fusarium/Microdochium patch, gray leaf spot, bentgrass dead spot, Rhizoctonia leaf and sheath spot, and pink and gray snow mold when used in an integrated, preventive disease management program. For control of other diseases of turfgrass such as Pythium blight, yellow tuft, and downy mildew, use Subdue MAXX.

#### DO NOT USE ON TURFGRASS IN HAWAII.

- 1. USE MEDALLION II AS A FOLIAR SPRAY IN AN INTEGRATED, PREVENTIVE DISEASE MANAGEMENT PROGRAM ALONE OR IN COMBINATION WITH OTHER FUNGICIDES.
- 2. Apply in sufficient water to ensure thorough coverage.
- Apply after mowing.
- 4. For control of foliar diseases, allow sprayed area to completely dry before irrigation.

Page 13 Medallion II EPA Reg. No. 100-XXXX

- 5. Under conditions optimum for high disease pressure, use the higher rate and the shorter interval.
- 6. For optimum turfgrass quality and disease control, use Medallion II in conjunction with turfgrass management practices that promote good plant health and optimum disease control.
- 7. Before use of any fungicide, proper diagnosis of the organism causing the disease is important. Use of diagnostic kits or other means of identification of the disease is essential to determine the best control measures.

**Notes:** (1) To avoid possible illegal residues, do not graze animals on treated areas, and (2) Do not feed clippings from treated areas to livestock or poultry. (3) **Note:** Do not apply more than 1.5 oz./1,000 sq. ft./year (4 lbs. product/A/year) on turfgrass.

# **Turfgrass Disease Control With Medallion II**

Rate product/			
Diagona	1,000 sq. ft. *see chart	Application	Instructions
Disease Algae (algal scum of close cut	0.25-0.50 oz.	Interval 7-14 days	Instructions Apply early before turf loss occurs.
turfgrass)	0.25-0.30 02.	7-14 days	Repeat applications or use in combination with Daconil®
			fungicides to enhance control and turfgrass recovery.
Anthracnose (Colletotrichum cereale)	0.25-0.50 oz.	14 days	Begin applications prior to disease development. For best control,
(formerly known as C.			use as a component of a
graminicola)			preventive disease control program.
Bentgrass Dead Spot (Ophiosphaerella agrostis)	0.30-0.50 oz.	14 days	Begin applications prior to disease development. For more broad
(			spectrum disease control, tank mix Medallion II with 1.0-2.0 fl. oz. of
	and the state of t		Banner MAXX per 1,000 sq. ft.
Brown Patch <i>(Rhizoctonia solani)</i> of cool season turf),	0.20-0.25 oz.	7 days	Begin applications prior to disease development. For extended and
Large patch ( <i>R. solani</i> of warm season turf)			more broad spectrum disease control (up to 21 days), including
5545511 (41.1)			dollar spot, tank mix 0.20-0.50 oz.
			of Medallion II with 1.0-2.0 fl. oz. of Banner MAXX per 1,000 sq. ft.
Cool Season Brown Patch,	0.25-0.50 oz.	14 days	Apply when conditions are
Yellow Patch, Brown Ring Patch, (Rhizoctonia cerealis,			favorable for disease development. For best disease
Waitea circinata var. circinata),			control, tank mix with Heritage
Rhizoctonia leaf and sheath spot (Rhizoctonia/Chrysorhiza			50WG at 0.2 oz. or 1.0-2.0 fl. oz. of Banner MAXX per 1,000 sq. ft.
zeae)			For large patch control, preventive
			applications made when soil temperatures drop to 70°F, will
			give best control (apply in 2 gals.
Gray Leafspot	0.25-0.50 oz.	14 days	water or greater/1000 sq. ft.).  Apply when conditions are
(Pyricularia grisea)			favorable for disease development. For best control, use
			as a component of a preventive
Leaf Spot	0.25-0.50 oz.	14-21 days	disease control program.  Apply when conditions are
(Bipolaris spp., Drechslera spp.)			favorable for disease development.
Microdochium (Fusarium)	0.25-0.50 oz.	14-21 days	For the control of Microdochium
Patch (Microdochium nivale)			Patch without snow cover. Under Heavy infestations combine with
· -/			Banner MAXX or Heritage.
			Repeat applications can be made at 7-14 day intervals when
			conditions are favorable for
		l	disease development.

Disease	Rate product/ 1,000 sq. ft. *see chart	Application Interval	Instructions
Snow Mold: Gray ( <i>Typhula incarnata</i> , <i>Typhula ishikariensis</i> ) Pink ( <i>Microdochium nivale</i> )	0.50 oz.	Late Fall	Apply one to two applications in late fall before snow cover. Do not apply on top of snow. For best disease control, tank mix with one to two registered snow mold products. For example, mix with a combination of Banner MAXX and Daconil Ultrex. Medallion II at 0.25-0.30 oz. rate can be used when tank mixing with Banner MAXX and Daconil Ultrex when disease conditions are expected to be light to moderate.
Summer Patch ( <i>Magnaporthe poae</i> )	0.50 oz.	14 days	Apply when conditions are favorable for disease development. For best disease control, tank mix 0.30-0.50 oz. of Medallion II with 0.2 oz of Heritage 50WG or 1.0-2.0 fl. oz. of Banner MAXX per 1,000 sq. ft.

# \*Medallion II Conversion Chart

Rate Product/1,000 sq. ft.	Treated Area sq. ft./1 oz. Packet	Treated Area sq. ft./5 oz. Packet
0.20 oz.	5,000	25,000
0.25 oz.	4,000	20,000
0.30 oz.	3,340	16,700
0.50 oz.	2,000	10,000

#### **ORNAMENTALS**

Medallion II is a protectant fungicide for control of certain foliar, stem, and root diseases in ornamentals grown in interiorscapes, field nursery plantings, container nurseries, forest nurseries, residential and commercial landscapes, greenhouses, lath and shade houses, or other enclosed structures.

**HAWAII ONLY:** Use is limited to ornamentals grown in interiorscapes, greenhouses, lath and shade houses, containers, or other enclosed structures.

Medallion II controls foliar diseases of ornamentals caused by *Rhizoctonia* spp., *Botrytis* spp., *Cercospora* spp., *Alternaria* spp., *Septoria* spp., and *Myrothecium* spp. when applied on a regular schedule as a full coverage spray.

Medallion II also will provide control of stem and root diseases caused by *Rhizoctonia* spp., *Fusarium* spp. (e.g., oxysporum), *Cylindrocladium* spp., *Sclerotium* spp., and *Thielaviopsis* spp., when mixed with the potting media or as a drench to the root zone of plants.

For control of stem and root diseases caused by *Pythium* spp. and *Phytophthora* spp., tank mix Medallion II with labeled rates of Subdue MAXX. See mixing instructions for these tank mixes.

#### **Maximum Use Rates**

For indoor drench applications, use up to 30 oz. of Medallion II per 1,000 sq. ft. (80 lbs. product/A) per year or crop cycle. Applications to pre-potting mix can be made up to 4 oz. of Medallion II per cu. yd.

The high use rates recommended for container nurseries, greenhouses, or other enclosed structures are due to the high organic matter soil mixes used in these systems and the high binding affinity of Medallion II for organic matter.

For field grown and landscape ornamentals, apply up to a maximum of 1.5 oz./1,000 sq. ft./year (4 lbs. product/A/year). For outdoor container grown ornamentals, apply up to a maximum of 3 oz./1,000 sq. ft./year (8 lbs. product/A/year).

# **Plant Species**

Medallion II has been tested and found to be safe on the ornamentals listed in this table at specified rates. For plants not listed in the table, see the **NOTICE TO USER** box at the bottom of the table. Numbers in parentheses refer to diseases controlled. See Table 1.

African Violets (1-12)	Coreopsis* (1-12)	Petunia (1-12)
Ageratum (1-10)	Cyclamen (1-12)	Pittosporium (8-12)
Alyssum (1-12)	Daffodil (4, 9, 10)	Poinsettia (1,4, 9-12)
Aster (1-12)	Dahlia* (1-12)	Portulaca* (1-12)
Azalea (4, 11, 12)	Daisy* (1-12)	Pothos (1-12)
Begonia (1-12)	Fern** (1-12)	Rose (1, 4, 9)
Bleeding Heart* (1-12)	Fuchsia* (1-4)	Salvia (1-12)
Bridal Veil* (1-12)	Gerbera Daisy (1-12)	Snapdragon (1-12)
Caladium (1-12)	Gomphrena (1-12)	Spathiphyllum (1-12)
Calendula (1-12)	Iris (4, 9, 10)	Sunflower* (1-12)
Carnation (1-12)	Lantana* (1-12)	Tobacco, flowering* (1-12)
Celosia (1-12)	Lysianthus (8-12)	Tulip (4, 9, 10)
Centrosa* (1-12)	Marigold (1-12)	Verbena (1-12)
Chenille* (1-12)	Mexican Heather* (1-7)	Vinca (1-12)
Christmas Cactus (1-12)	Nephthytis* (1-12)	Wandering Jew* (1-12)
Chrysanthemums (1-12)	Pansy (1-12)	Zinnia (1-12)
Coleus (1-12)		

<sup>\*</sup>Indicates that only foliar applications have been tested for plant safety.

#### Note:

- Drench or at seedling applications to Impatiens or New Guinea Impatiens may cause stunting and/or chlorosis.
- Foliar or drench applications to Geranium can cause stunting or chlorosis.
   Responses may vary depending on environmental conditions. Medallion II should be tested on a limited area to evaluate for any possible damage before proceeding with treatment of the entire crop.

NOTICE TO USER: Plant tolerance to Medallion II has been found to be acceptable for the specific genera and species listed on this label. Due to the large number of species and varieties of ornamentals and nursery plants, it is impossible to test every one for tolerance to Medallion II. Neither the Manufacturer nor the Seller has determined whether or not Medallion II can be used safely on ornamental plants not specified on this label. The professional user should determine if Medallion II can be used safely prior to commercial use. In a small area, test the required rates on a small number of plants for phytotoxicity prior to widespread use.

<sup>\*\*</sup>Do not apply Medallion II to leather leaf fern.

# Table 1: Diseases Controlled by Medallion II

# **Foliar Diseases**

- 1. Aerial Blight (*Rhizoctonia* spp.)
- 2. Alternaria Leaf Blight (Alternaria spp.)
- 3. Alternaria Leaf Spot (*Alternaria* spp.)
- 4. Botrytis Blight (*Botrytis* spp.)
- 5. Cercospora Leaf Spot (Cercospora spp.)
- 6. Myrothecium Leaf Spot and Blight (*Myrothecium* spp.)
- 7. Septoria Leaf Spot (Septoria spp.)

# Stem, Crown, and Root Rots

- 8. Cylindrocladium Stem and Root Rot (*Cylindrocladium* spp.)
- 9. Fusarium Stem and Root Rot (Fusarium spp.)
- 10. Rhizoctonia Stem and Root Rot (*Rhizoctonia* spp.)
- 11. Southern Blight (Sclerotium rolfsii)
- 12. Black Root Rot (*Thielaviopsis* spp.)

#### **Foliar Spray**

For control of *Rhizoctonia* spp., *Alternaria* spp., *Septoria* spp., *Myrothecium* spp., and *Cercospora* spp., use 1-2 oz./100 gals. of water and spray to runoff at 7 to 14-day intervals while conditions are favorable for disease development.

For control of *Botrytis* spp., use 2-4 oz./100 gals. of water and spray to runoff at 7 to 14-day intervals while conditions are favorable for disease development. For management of the potential development of resistance in the *Botrytis* population, use no more than two consecutive applications of Medallion II before rotating to another effective product registered for *Botrytis* control on ornamentals with a different mode of action.

**Notes:** (1) Under severe conditions, use the highest rate and/or the shortest application interval. (2) Use sufficient spray volume to wet the plants to the point of drip. (3) For a single foliar application, apply up to a maximum of 4 oz./100 gals. (1 oz./25 gals).

# **Pre-Potting Growing Media Mix**

Medallion II can be mixed with the potting media before seeding or transplanting by uniformly mixing 1-2 oz. per cu. yd. of potting media. The desired amount of Medallion II should be mixed with 0.50-1 gal. of water and applied to 1 (one) cu. yd. of potting media. It is recommended that Medallion II treatment should be made just before the plants are seeded or potted up. Uniform mixing can be accomplished by placing the potting mix in a rotating drum and spraying the Medallion II solution onto the mix while the drum is rotating.

Page 19 Medallion II EPA Reg. No. 100-XXXX

# **Growing Medium Drench**

#### At Seeding

For the control of damping-off, root, and stem diseases, mix 1 oz./100 gals. of water. When using Medallion II for control of *Rhizoctonia* spp., apply sufficient mix to wet the upper one-half of the growing medium. For control of other root and stem diseases, completely drench the growing medium. Make only one application to the seeding crop prior to transplanting or transfer to larger containers.

#### **Transplants and Cuttings**

For the control of root and stem diseases, mix 1-2 oz./100 gals. of water. When using Medallion II for control of *Rhizoctonia* spp., apply sufficient mix to wet the upper one-half of the growing medium. For control of other root and stem diseases, completely drench the growing medium. If needed, retreat transplants and cuttings with Medallion II as described above at 21 to 28-day intervals. Two applications per year during conditions favorable for disease development are usually adequate to control diseases of ornamentals.

**Notes:** (1) Under severe conditions, use the highest rates and/or the shortest application interval. (2) For control of *Pythium* and *Phytophthora* diseases in addition to *Rhizoctonia* spp., *Cylindrocladium* spp., *Thielaviopsis* spp., *Fusarium* spp., and *Sclerotium* spp., tank mix Medallion II with labeled rates of Subdue MAXX. (3) Drench applications can be made at up to a maximum of 2 pts./sq. ft. to wet the root zone of plants.

#### STORAGE AND DISPOSAL

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

### **Pesticide Storage**

Store in a cool, dry, secure place. Do not store this product under wet conditions. Handle outer container carefully to avoid breakage of inner water-soluble packets.

### **Pesticide Disposal**

Improper disposal of unused 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 of the nearest EPA Regional Office for guidance.

# Container Handling [For paper and plastic bags]

Non-refillable container. Do not reuse or refill this container. Completely empty bag into application equipment. Then offer for recycling or dispose of empty bag in a sanitary landfill or incineration or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

# CONTAINER IS NOT SAFE FOR FOOD, FEED OR DRINKING WATER.

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For non-emergency (e.g., current product information), call Syngenta Crop Protection at 1-800-334-9481.

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