GROUP 12 FUNGICIDE

MEDALLION™ Fungicide

FUNGICIDE

SUSPENSION

COMMERCIAL

For control of diseases on turf. For control and suppression of diseases in outdoor and greenhouse ornamentals, and greenhouse vegetables (cucumber and peppers).

GUARANTEE:

Fludioxonil 125 g/L

Contains 1,2-benzisothiazolin-3-one at 0.037% and 2-bromo-2-nitropropane-1,3-diol at 0.036% as preservatives.

READ THE LABEL AND PAMPHLET BEFORE USING KEEP OUT OF REACH OF CHILDREN

REGISTRATION NO.: 31528
PEST CONTROL PRODUCTS ACT

Syngenta Canada Inc.

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Telephone: 1-877-964-3682

Pamphlet

NOTICE TO USER

This pest control product is to be used only in accordance with the directions on the label. It is an offence under the *Pest Control Products Act* to use this product in a way that is inconsistent with the directions on the label. The user assumes the risk to persons or property that arises from any such use of this product.

FIRST AID

IF POISONING IS SUSPECTED, IMMEDIATELY contact a physician or a poison control centre. Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

IF SWALLOWED, call a poison control centre 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 centre or doctor. Do not give anything by mouth to an unconscious person.

IF ON SKIN OR CLOTHING, take off contaminated clothing. Rinse skin **IMMEDIATELY** with plenty of water for 15-20 minutes. Call a poison control centre or doctor for treatment advice.

IF INHALED, move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth if possible. Call a poison control centre or doctor for further treatment advice.

IF IN EYES, hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control centre or doctor for treatment advice.

TOXICOLOGICAL INFORMATION

There is no specific antidote known. Treat symptomatically.

PRECAUTIONS

KEEP OUT OF REACH OF CHILDREN.

DO NOT enter or allow entry into treated turf areas until MEDALLION™ Fungicide is dry. For all other crops, **DO NOT** enter or allow worker entry into treated areas for 12 hours following application.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Wear coveralls or a long sleeved shirt and long pants, chemical resistant gloves, and goggles when mixing, loading or during equipment clean up or repair. Wear coveralls or a long sleeved shirt and long pants during application.

Remove clothing/PPE 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.

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.

All users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.

ENVIRONMENTAL HAZARDS

TOXIC to aquatic organisms, birds, small wild mammals and non-terrestrial plants. Observe buffer zones specified under DIRECTIONS FOR USE.

Fludioxonil is persistent and may carryover. It is recommended that any products containing fludioxonil not be used in areas treated with this product during the previous season.

To reduce runoff from treated areas into aquatic habitats avoid application to areas with a moderate to steep slope, compacted soil, or clay.

Avoid application when heavy rain is forecast.

Contamination of aquatic areas as a result of runoff may be reduced by including a vegetative strip between the treated area and the edge of the water body.

STORAGE

Store in original container in a cool, dry place. **DO NOT** use or store near heat or open flame.

DO NOT store this product under wet conditions. Keep container closed when not in use. Do not store near food or feed.

DECONTAMINATION AND DISPOSAL

For information on disposal of unused, unwanted product, or in the case of a spill or spill clean-up, contact the manufacturer or provincial regulatory agency.

CONTAINER DISPOSAL:

For recyclable containers for commercial use:

DO NOT reuse this container for any other purpose. This is a recyclable container, and is to be disposed of at a container collection site. Contact your local distributor/dealer or municipality for the location of the nearest collection site. Before taking the container to the collection site:

- 1. Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank or dispose of the rinsings in accordance with provincial requirements.
- 2. Make the empty, rinsed container unsuitable for further use.

If there is no container collection site in your area, dispose of the container in accordance with provincial requirements.

For refillable containers commercial use:

DO NOT reuse this container for any other purpose. For disposal, this container may be returned to the point of purchase (distributor/dealer). It must be refilled by the distributor/dealer with the same product.

For returnable containers commercial use:

DO NOT reuse this container for any other purpose. This empty container may be returned to the point of purchase (distributor/dealer) for disposal.

IN CASE OF EMERGENCY INVOLVING A MAJOR SPILL, FIRE OR POISONING, CALL 1-800-327-8633 (1-800-FASTMED)

PRODUCT INFORMATION

MEDALLION Fungicide is a broad spectrum contact and protective fungicide for control of listed diseases in turf and control and suppression of diseases in outdoor and greenhouse ornamentals. It is a suspension concentrate formulation containing 125 g/L fludioxonil. Fludioxonil is a long lasting contact fungicide belonging to the phenyl pyrrole chemistry group that provides broad-spectrum activity against a wide range of diseases through the inhibition of fungal mycelial growth.

DO NOT apply using fogging or ultra low volume equipment.

DO NOT apply using handheld mistblowers or handheld airblast equipment.

DIRECTIONS FOR USE

MEDALLION Fungicide provides control of turf diseases when used in an integrated disease management program.

For optimum turfgrass quality and disease control, use MEDALLION Fungicide in conjunction with turfgrass management practices that promote plant health. 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.

As this product is not registered for the control of pests in aquatic systems, DO NOT use to control aquatic pests.

DO NOT contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.

DO NOT apply more than 180 mL product/100 m²/year (18.0 L product/ha/year) on turfgrass.

<u>Field sprayer application</u>: **DO NOT** apply during periods of dead calm. Avoid application of this product when winds are gusty. **DO NOT** apply with spray droplets smaller than the American Society of Agricultural Engineers (ASAE S572.1) medium classification. Boom height must be 60 cm or less

above the crop or ground.

<u>Airblast application</u>: **DO NOT** apply during periods of dead calm. Avoid application of this product when winds are gusty. **DO NOT** direct spray above plants to be treated. Turn off outward pointing nozzles at row ends and outer rows. **DO NOT** apply when wind speed is greater than 16 km/h at the application site as measured outside of the treatment area on the upwind side.

DO NOT apply by air.

BUFFER ZONES

Use of the following spray methods or equipment **DO NOT** require a buffer zone: hand-held or backpack sprayer and spot treatment.

The buffer zones specified in the table below are required between the point of direct application and the closest downwind edge of sensitive terrestrial habitats (such as grasslands, forested areas, shelter belts, woodlots, hedgerows, riparian areas and shrublands), sensitive freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs and wetlands) and estuarine/marine habitats.

	Crop		Buffer Zones (metres) Required for the Protection of:				
			Freshwater Habitat of Depths:		Estuarine/Marine Habitats of Depths:		Terrestrial habitat
Method of							
application			Less than	Greater	Less than	Greater	
			1 m	than 1 m	1 m	than 1 m	
Field	Turf		3	1	1	0	1
sprayer	Outdoor ornamentals		1	0	0	0	0
Airblast		Early	20	1	0	0	0
	Outdoor	growth					
	ornamentals	stage					
		Late	10	1	0	0	0
		growth					
		stage					

For tank mixes, consult the labels of the tank-mix partners and observe the largest (most restrictive) buffer zone of the products involved in the tank mixture and apply using the coarsest spray (ASAE) category indicated on the labels for those tank mix partners.

The buffer zones for this product can be modified based on weather conditions and spray equipment configuration by accessing the Buffer Zone Calculator on the Pest Management Regulatory Agency web site.

MIXING INSTRUCTIONS

To prepare spray solution, fill half of the required water volume in the spray tank with clean water and begin agitation. Add the required amount of MEDALLION Fungicide to the tank, allowing time for good dispersion. Finish filling the tank to the desired volume to obtain the proper spray concentration. Maintain agitation throughout the spraying operation. Do not allow spray mixture to stand overnight or for prolonged periods. Make up only the amount of spray required for immediate use. Sprayers should be calibrated before application and thoroughly cleaned immediately after application. Do not use silicone based products with MEDALLION Fungicide due to possible phytotoxicity.

MEDALLION Fungicide + Tank Mixtures: MEDALLION Fungicide is usually compatible with many tank-mix partners registered for use on turf.

If tank mixes are desired, observe all directions, precautions, and limitations on labeling of all products used. Do not combine MEDALLION Fungicide in the spray tank with pesticides, surfactants, or fertilizers; unless compatibility charts or your own prior use has shown that the combination is physically compatible, effective, and non-injurious under your conditions of use. To determine the physical compatibility of MEDALLION Fungicide with other products, use a jar test.

In some cases, tank mixing a pest control product with another pest control product or a fertilizer can result in biological effects that could include, but are not limited to: reduced pest efficacy or increased host crop injury. The user should contact Syngenta Canada Inc. at 1-87-SYNGENTA (1-877-964-3682) for information before mixing any pesticide or fertilizer that is not specifically recommended on this label. The user assumes the risk of losses that result from the use of tank mixes that do not appear on this label or that are not specifically recommended by Syngenta Canada Inc.

DIRECTION FOR USE

The following use instructions will provide control of the listed diseases unless stated otherwise.

TURF: GOLF COURSES	
DISEASES	Anthracnose (Colletotrichum cereale) Brown patch (Rhizoctonia solani) Leaf spot (Drechslera poae)
PRODUCT RATE	6 L/ha or 60 mL/100 m ²
APPLICATION INTERVAL	14 days
DISEASES	Fusarium patch (Microdochium nivale)
PRODUCT RATE	3-6 L/ha or 30-60 mL/100 m ²
APPLICATION DIRECTIONS	Use low rate on fairways only under conditions of low to moderate disease pressure.
APPLICATION INTERVAL	14 days

DISEASES	Brown ring patch (Waitea circinata var. circinata)
PRODUCT RATE	3-6 L/ha or 30-60 mL/100 m ²
APPLICATION INTERVAL	7-14
MAXIMUM APPLICATIONS OF PRODUCT PER YEAR	3
APPLICATION DIRECTIONS	For best control, use as a component of an integrated disease management program.
	Begin applications when conditions are favourable for disease infection and prior to disease symptom expression.
	Under conditions of high disease pressure, use the highest label rate and the shortest interval. For optimum disease control tank mix or alternate MEDALLION Fungicide with a contact fungicide such as DACONIL® 2787 or DACONIL Ultrex.
	Apply in sufficient water to ensure thorough coverage. 4-8 litres of water per 100 m ² is recommended.
	Use AI, XC or XR nozzles.
	Apply after mowing.
	Allow sprayed area to completely dry before irrigation.
DISEASE	Pink snow mould (Microdochium nivale)
PRODUCT RATE	6 L/ha or 60 mL/100 m ²
MAXIMUM APPLICATIONS OF PRODUCT PER YEAR	1
APPLICATION INSTRUCTIONS	For optimum disease control tank mix MEDALLION Fungicide with A15457TO Fungicide. Under conditions of high disease pressure also include BANNER MAXX or Heritage MAXX in the tank mix.
	Make one application in the late fall before snow cover.
	DO NOT apply on top of snow or when the temperature is below 0°C.
	For best control, use as a component of an integrated disease management program.
	Apply in sufficient water to ensure thorough coverage. 2-8 litres of water per 100 m ² is recommended.
	Use AI, XR or Syngenta XC nozzles.
	Apply after mowing and do not mow after application.

NOTE TO USER: READ THE FOLLOWING BEFORE USING THIS PRODUCT FOR THE INDICATED SPECIAL USE APPLICATIONS:

The DIRECTIONS FOR USE for this product for the use(s) described below were developed by persons other than Syngenta Canada Inc. and accepted for registration by Health Canada under the User Requested Minor Use Label Expansion program. Syngenta Canada Inc. itself makes no representation or warranty with respect to performance (efficacy) or crop tolerance (phytotoxicity) claims for this product when used on the crop(s) listed below.

Accordingly, the Buyer and User assume all risks related to performance and crop tolerance arising, and agree to hold Syngenta Canada Inc. harmless from any claims based on efficacy or phytotoxicity in connection with the use(s) described below.

DIRECTIONS FOR USE:

The following use instructions will provide control of the listed diseases unless stated otherwise.

ORNAMENTALS (Outdoor and	Greenhouse)	
DRENCH APPLICATION		
DISEASES	Rhizoctonia stem rot and aerial blight (Rhizoctonia solani) Fusarium wilt (Fusarium oxysporum) - suppression only Black root rot (Thielaviopsis basicola)	
PRODUCT RATE	300 – 600 mL/1000 L of water	
APPLICATION METHOD	Drench	
APPLICATION INTERVAL	Completely drench the growing medium at planting then if needed apply 21 to 28 days later	
MAXIMUM APPLICATIONS OF PRODUCT PER GROWING CYCLE	2	
APPLICATION DIRECTIONS	2 applications per growing cycle during conditions favourable for disease development are usually adequate to control diseases of ornamentals. Precaution for irrigation applications: Where distribution patterns do not overlap sufficiently, unacceptable control may result. Where distribution patterns overlap excessively, injury to desirable plants may result. Under conditions optimum for high disease pressure, use the higher rate and the shorter interval. Plant safety has been found to be acceptable for many ornamental plants, however, not all possible plant species and varieties have been tested under all conditions. It is recommended to test MEDALLION Fungicide on a small portion of the crop to ensure that a phytotoxic response will not occur. DO NOT apply more than 3000 L/ha for drench application to greenhouse ornamentals.	

FOLIAR APPLICATION			
DISEASES	Alternaria leaf spot (<i>Alternaria alternata, A. zinnae</i>) Rhizoctonia stem rot and aerial blight (<i>Rhizoctonia solani</i>)		
PRODUCT RATE	300 - 600 mL/1000 L of water		
DISEASES	Botrytis blight/grey mould (Botrytis cinerea)		
PRODUCT RATE	600 – 1200 mL/1000 L of water		
DISEASES	Boxwood blight (Cylindrocladium buxicola)		
PRODUCT RATE	1200 mL/1000 L of water		
APPLICATION METHOD	Foliar		
APPLICATION INTERVAL	7-14 days		
MAXIMUM APPLICATIONS OF PRODUCT PER GROWING CYCLE	4		
APPLICATION DIRECTIONS	DO NOT apply more than four consecutive applications per growing cycle; rotate to another registered product with a different mode of action.		
	Precaution for irrigation applications: Where distribution patterns do not overlap sufficiently, unacceptable control may result. Where distribution patterns overlap excessively, injury to desirable plants may result. Under conditions optimum for high disease pressure, use the higher rate and the shorter interval. Plant safety has been found to be acceptable for many ornaments plants, however, not all possible plant species and varieties have bee tested under all conditions. It is recommended to test MEDALLIO Fungicide on a small portion of the crop to ensure that a phytotox		
	response will not occur. DO NOT apply more than one application at a spray volume of 1500 L/ha for foliar application to greenhouse cut flowers. A maximum of four applications can be made to greenhouse cut flowers if a reduced spray volume of 500 L/ha is used.		

GREENHOUSE VEGETABLES	
CROP	Greenhouse Cucumber
DISEASES	Suppression fusarium stem and root rot caused by Fusarium oxysporum f.sp. radicis-cucumerinum
APPLICATION METHOD	Drench application
RATE OF APPLICATON	250 mL solution per plant (solution: 300 mL product in 1000 L of water)
	(Equivalent to 0.75 L product/ha (93 g ai/ha) based on planting density for GH cucumber of 10,000 plants/ha)
APPLICATION VOLUME	Apply 250 mL of the Medallion mixture to the growing media at the base of each plant
MAXIMUM APPLICATIONS OF PRODUCT PER GROWING CYCLE	Apply 1 application per crop cycle
APPLICATION TIMING	Growing medium drench: apply to seedling crop prior to transplanting or transfer to larger containers. Completely drench growing medium with mixture. It is recommended to test MEDALLION alone and with any mixtures on a small portion of the crop to ensure that a phytotoxic response will not occur as a result of application.
PREHARVEST INTERVAL (PHI)	1 day
APPLICATION DIRECTIONS	Completely drench growing medium with mixture
	DO NOT apply Medallion Fungicide to the foliage.
	DO NOT use in the propagation house.
	DO NOT apply to cucumbers intended for transplant out to fields.
	It is recommended to test MEDALLION alone and with any mixtures on a small portion of the crop to ensure that a phytotoxic response will not occur as a result of application.

GREENHOUSE VEGETABLES	
CROP	Greenhouse Pepper
DISEASES	Suppression of fusarium crown rot, stem rot and root rot caused by Fusarium solani
APPLICATION METHOD	Drench application
RATE OF APPLICATON	250 mL solution per plant (solution: 300 mL product in 1000 L of water) (Equivalent to 2.25 L product/ha (281 g ai/ha) based on planting density for GH pepper of 30,000 plants/ha)
APPLICATION VOLUME	Apply 250 mL of the Medallion mixture to the growing media at the base of each plant
MAXIMUM APPLICATIONS OF PRODUCT PER GROWING CYCLE	Apply 2 application per crop cycle.
APPLICATION TIMING (CROP / PEST STAGE)	Growing medium drench: apply to seedling crop prior to transplanting or transfer to larger containers. Completely drench growing medium with mixture. It is recommended to test MEDALLION alone and with any mixtures on a small portion of the crop to ensure that a phytotoxic response will not occur as a result of application.
PREHARVEST INTERVAL (PHI)	1 day
APPLICATION DIRECTIONS	DO NOT apply Medallion Fungicide to the foliage. DO NOT use in the propagation house. DO NOT apply to peppers intended for transplant out to fields.
	Completely drench growing medium with mixture It is recommended to test MEDALLION alone and with any mixtures on a small portion of the crop to ensure that a phytotoxic response will not occur as a result of application.

RESISTANCE MANAGEMENT RECOMMENDATIONS

For resistance management, MEDALLION Fungicide contains a Group 12 Fungicide. Any fungal population may contain individuals naturally resistant to MEDALLION Fungicide and other Group 12 fungicides. A gradual or total loss of pest control may occur over time if these fungicides are used repeatedly in the same fields. Other resistance mechanisms that are not linked to site of action but specific for individual chemicals, such as enhanced metabolism, may also exist. Appropriate resistance management strategies should be followed.

Use tank mixtures with fungicide from a different group that is effective on the target pathogen when such use is permitted.

Where possible, make use of predictive disease models to effectively time fungicide applications.

To delay fungicide resistance:

Where possible, rotate the use of MEDALLION Fungicide or other Group 12 fungicide with different groups that control the same pathogens.

Do not apply more than the maximum number of applications listed in the label.

Fungicide use should be based on an IPM program that includes scouting, historical information related to pesticide use and crop rotation and considers cultural, biological and other chemical control practices.

Monitor treated fungal populations for sign of resistance development. If disease continues to progress after treatment with this product, do not increase the use rate. Discontinue use of this product, and switch to another fungicide with a different target site of action, if available.

Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or IPM recommendations for specific crops and disease problems in your area.

For further information or to report suspected resistance, contact company representatives at 1-87-SYNGENTA (1-877-964-3682) or at www.syngenta.ca.

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