GROUP 11 FUNGICIDE

HERITAGE[®] Fungicide

COMMERCIAL

Wettable Granules

For Use in Controlling Diseases in Turf and for Controlling Daylily Rust (*Puccinia hemerocallidis*) on Daylilies in Outdoor Nurseries and Landscapes

GUARANTEE:

CAUTION - EYE IRRITANT READ THE LABEL AND BOOKLET BEFORE USING KEEP OUT OF REACH OF CHILDREN

RESIDENTIAL USE IS RESTRICTED

REGISTRATION NO: 26155 PEST CONTROL PRODUCTS ACT

NET CONTENTS: 500 g to 10 Kg

Syngenta Canada, Inc. 140 Research Lane, Research Park Guelph, Ontario N1G 4Z3 Telephone: 1-877-964-3682

LABEL

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 topersons or property that arises from any such use of this product.

FIRST AID

IF POISONING IS SUSPECTED, call a poison control centre or doctor for treatment advice. 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, ca911 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 first5 minutes, then continue rinsing eye. Call a poison control centre or doctor for treatment advice.

TOXICOLOGICAL INFORMATION

No specific symptoms of poisoning are known for this product. If ingested, nausea, vomiting, diarrhoea and abdominal pain may occur. Treat symptomatically.

PRECAUTIONS

KEEP OUT OF REACH OF CHILDREN.

May irritate eyes. Avoid contact with eyes, skin and clothing. Avoid breathing dust or spray mist. Wash with soap and water after handling, and before eating, drinking or smoking. Wash contaminated clothing, separately from household laundry, before re-use. Do not wear contaminated shoes.

Wear long sleeved shirt, long pants and chemical resistant gloves when mixing, loading and applying and during clean-up and repair activities. Wear chemical resistant gloves during mixing and loading and when applying by hand wand or backpack.

Do not re-enter treated turf until residues have dried.

ENVIRONMENTAL HAZARDS

TOXIC to aquatic organisms and non-terrestrial plants. Observe buffer zones specified under DIRECTIONS FOR USE.

The use of this chemical may result in contamination of groundwater particularly in areas where soils are permeable (exempli gratia sandy soil) and/or the depth to the water table is shallow.

STORAGE

Keep in original container, tightly closed, during storage. Store in a cool, dry, well ventilated area away from feed and foodstuffs, and out of the reachof children and animals. Keep awayfrom fire or open flame, or other sources of heat.

SPILL CLEANUP

Wear appropriate protective equipment (gloves, glasses, apron) when attempting to clean up the spill. Sweep up spilled product with a broom and shovel into tightly closable container. If anfloor or hard surface, wash the surface or floor with detergent and water, then rinse.

If on soil, collect contaminated surface soil with the product. If the product is clean, it may be used; otherwise follow the DISPOSAL instructions.

DECONTAMINATION AND DISPOSAL

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

CONTAINER DISPOSAL:

For recyclable containers:

Do not reuse this container for any 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 lociet 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 mixture in the tank.
- 2. Make the empty, rinsed container unsuitable for future use.

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

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

Product names marked ® or [™] are registered trademarks of a Syngenta Group Company ® HERITAGE is a registered trademark of A.E. McKenzie Co. Inc., Syngenta Canada, Inc. is a licensed user.

GROUP 11 FUNGICIDE

HERITAGE[®] Fungicide

COMMERCIAL

Wettable Granules

For Use in Controlling Diseases in Turf and for Controlling Daylily Rust (*Puccinia hemerocallidis*) on Daylilies in Outdoor Nurseries and Landscapes

GUARANTEE:

CAUTION - EYE IRRITANT READ THE LABEL AND BOOKLET BEFORE USING KEEP OUT OF REACH OF CHILDREN

RESIDENTIAL USE IS RESTRICTED

REGISTRATION NO: 26155 PEST CONTROL PRODUCTS ACT

Syngenta Canada, Inc. 140 Research Lane, Research Park Guelph, Ontario N1G 4Z3 Telephone: 1-877-964-3682

PAMPLET

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 topersons or property that arises from any such use of this product.

FIRST AID

IF POISONING IS SUSPECTED, call a poison control centre or doctor for treatment advice. 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, ca@11 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 first5 minutes, then continue rinsing eye. Call a poison control centre or doctor for treatment advice.

TOXICOLOGICAL INFORMATION

No specific symptoms of poisoning are known for this product. If ingested, nausea, vomiting, diarrhoea and abdominal pain may occur. Treat symptomatically.

PRECAUTIONS

KEEP OUT OF REACH OF CHILDREN.

May irritate eyes. Avoid contact with eyes, skin and clothing. Avoid breathing dust or spray mist. Wash with soap and water after handling, and before eating, drinking or smoking. Wash contaminated clothing, separately from household laundry, before re-use. Do not wear contaminated shoes.

Wear long sleeved shirt, long pants and chemical resistant gloves when mixing, loading and applying and during clean-up and repair activities. Wear chemical resistant gloves during mixing and loading and when applying by hand wand or backpack.

Do not re-enter treated turf until residues have dried.

ENVIRONMENTAL HAZARDS

TOXIC to aquatic organisms and non-terrestrial plants. Observe buffer zones specified under DIRECTIONS FOR USE.

The use of this chemical may result in contamination of groundwater particularly in areas where soils are permeable (exempli gratia sandy soil) and/or the depth to the water table is shallow.

STORAGE

Keep in original container, tightly closed, during storage. Store in a cool, dry, well ventilated area away from feed and foodstuffs, and out of the reachof children and animals. Keep awayfrom fire or open flame, or other sources of heat.

SPILL CLEANUP

Wear appropriate protective equipment (gloves, glasses, apron) when attempting to clean up the spill. Sweep up spilled product with a broom and shovel into tightly closable container. If anfloor or hard surface, wash the surface or floor with detergent and water, then rinse.

If on soil, collect contaminated surface soil with the product. If the product is clean, it may be used; otherwise follow the DISPOSAL instructions.

DECONTAMINATION AND DISPOSAL

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

CONTAINER DISPOSAL:

For recyclable containers

Do not reuse this container for any 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 lociet 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 mixture in the tank.
- 2. Make the empty, rinsed container unsuitable for future use.

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

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

PRODUCT INFORMATION

HERITAGE Fungicide is a broad spectrum, preventative fungicide with systemic and curative properties recommended for the control of daylily rust in daylilies and many diseases on turf. HERITAGE Fungicide may be applied as a foliar spray as part of an integrated disease management strategy for daylilies in outdoor nurseries and landscapes and for turon golf courses and commercial turf farms. Cultural practices such as appropriate choice of variety, nutrient management, proper cutting height, thatch management, and proper watering, drainage, and moisture stress management, should be integrated with use of fungicidesto increase vigour and reduce susceptibility to disease. Consult local agricultural and authorities in your area for guidance.

CAUTION: HERITAGE Fungicide has been shown to be applied where there is the possibility of crabapple varieties. HERITAGE Fungicide should not be applied where there is the possibility of spray drift reaching apple and crabapple trees. **DO NOT** use sprayers used to apply HERITAGE Fungicide to spray apples or crabapples.

DO NOT graze or feed clippings from the treated area to livestock.

DO NOT apply HERITAGE with silicone-based wetting agents due to possible phytotoxicity.

DIRECTIONS FOR USE

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 waste.

<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) medium classification. Boom height must be 60 cmor less above the crop or ground.

Proper adjustments and calibration of spraying equipment, to give good canopy penetration and coverage, is essential for good disease control. The higher rates, in the rate range and/or shorter spray intervals, may be required under conditions of heavy infection pressure, highly susceptible varieties, or when disease conducive environmental conditions exist.

DO NOT apply by air.

DO NOT apply through irrigation equipment.

DO NOT apply through any type of ultra-low volume (ULV) spray system (less than 30 litres per hectare).

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), freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, cre&s, marshes, streams, reservoirs and wetlands) and estuarine/marine habitats.

Method of	Crop	Buffer Zones (metres) Required for the Protection of:				
application		Freshwater Habitat of Depths:		Estuarine/Marine Habitats of Depths:		Terrestrial Habitat
		Less than 1 m	Greater than 1 m	Less than 1 m	Greater than 1m	
Field	Turf	2	1	1	1	1
sprayer	Daylily	1	0	1	0	0

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.

TURF: Golf Courses, Commercial Turf Farms - For control of *Pythium* blight, Brown Patch, *Fusarium* Patch, Grey Snow Mould, Pink Snow Mould, Anthracnose, Fairy Ring, Leaf Spots, Melting-Out and Summer Patch. Refer to the following table to determine the appropriate use rate and application interval by target disease.

Do not apply more than 5.4 kg of Heritage Fungicide per hectare per year.

Target Disease	Product Rate		Application	Remarks	
	Kg/ hectare	grams/ 100 m ²	Interval (days)		
Pythium aphanidermatum (Pythium blight)	1.2	12	10 - 14	Begin application before disease is present (usually late May or June) when environmental conditions favour disease development, i.e., relative humidity greater than 90% for at least 9 hours, maximum daily temperature of 27.7°C and low temperature of 20°C.	
<i>Rhizoctonia solani</i> (Brown Patch)	0.6	6	14 - 28	Begin application before disease is present (usually late May or June) when conditions favour disease development (high surface moisture or humidity and warm night temperatures). During prolonged periods of favourable conditions apply on the shorter application interval.	

Farget Disease Product Rate		Application Interval	Remarks	
	Kg/ hectare	grams/ 100 m ²	(days)	
Microdochium nivale (Fusarium Patch)	0.6	6	14 - 28	Apply when conditions are favourable for disease development, i.e., extended period of cool (<15.5°C) and wet weather in spring and fall.
<i>Typhula incarnata</i> (Grey Snow Mould) and <i>Microdochium nivale</i> (Pink Snow Mould)	1.8 - 2.4	18 - 24	one fall application	Apply in late fall before snow cover. Do not apply on top of snow. Use the higher rate if there is a history of severe snow mould infection on the site.
<i>Colletotrichum graminicola,</i> (Anthracnose)	0.6 – 1.2	6 - 12	14-28	Use preventatively. Begin applications when conditions are favorable for disease infection, prior to disease symptom development.
Basidiomycete, including Lycoperdon spp. (Fairy Ring)	1.2	12	28	Apply as soon as possible after fairy ring symptoms develop. Severely damaged or thin turf may require reseeding. Fairy ring symptoms may take 2 to 3 weeks to disappear following applications.
Bipolaris sorokiniana, Drechslera poae (Leaf Spots and Melting-Out)	0.6 – 1.2	6 - 12	14-28	Apply when conditions are favorable for disease development.
<i>Magnaporthe poae</i> Summer Patch	0.6 – 1.2	6 - 12	14-28	Initiate applications when conditions are favourable for disease development. Apply 6 g product/100 m ² at 14 day intervals or 12 g product/ 100 m ² at 28 day intervals.

Note: HERITAGE Fungicide alone does not control **Dollar Spot**. For Dollar Spot control please refer to the tank mix recommendations below.

Dollar Spot - TANK MIX ONLY	HERITAGE Fungicide alone does not control Dollar Spot. To control Dollar Spot, HERITAGE Fungicide must be tank mixed with either Banner MAXX Fungicide at 26-51 mL/100m ² or DACONIL 2787 Flowable Fungicide at 190 mL/100m ² .
	Read the label of Banner MAXX Fungicide or DACONIL 2787 Flowable Fungicide and follow the precautionary statements, directions for use (rates, diseases controlled and application intervals) and other restrictions.

Application Directions: Apply the required amount of HERITAGE Fungicide in 8 to 16 litres of water per 100 m² (800 to 1600 litres per hectare). Repeatapplications at specified intervals and do not apply more than 5.4 Kg of HERITAGE Fungicide per hectare per year. Use the shorter specified application interval when prolonged favourable disease conditions exist. (Refer to Resistance Management section) Apply by ground sprayer only.

Ground application - HERITAGE Fungicide may be applied with all types of spray equipment commonly used for making ground applications. Apply HERITAGE Fungicide in sufficient water volume for adequate coverage and canopy penetration. Do not apply HERITAGE Fungicide through any type of ultra-low volume (ULV) spray system (less than 30 litres per hectare). Proper adjustments and calibration of spraying equipment, to give good canopy penetration and coverage, is essential for good disease control. The higher rates, in the rate range and/or shorter spray intervals, may be required under conditions of heavy infection pressure, highly susceptible varieties, or when disease conducive environmental conditions exist.

Over spray or drift to sensitive habitats should be avoided. Do not over spray sensitive terrestrial habitats including forested areas, shelterbelts, woodlots, hedgerows, and shrublands. A buffer zone of 21 metres is required between the downwind edge of the boom and sensitive aquatic habitats such as sloughs, ponds, prairie potholes, lakes, rivers, streams and wetlands. Do not contaminate these habitats when cleaning and rinsing spray equipment or containers.

Do not apply during periods of dead calm, when winds are gusty or when wind speed is greater than 15 km/hr at 2 metres above ground at the site of application.

HERITAGE Fungicide Only

Mixing Instructions: To prepare spray solution, partially fill the spray tank with clean water and begin agitation. Add the specified amount of HERITAGE 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 thoroughly cleaned immediately after application. Do not use silicone-based products with HERITAGE Fungicide due to possible phytotoxicity.

Mixing and Application Guidance: Refer to the following table for assistance in calculating product requirements based on target application spray volume, and size of mix load.

Amount of HERITAGE Fungicide (grams) required for each**100 litres** of spray solution at selected rates and target application volumes:

Rate of HERITAGE	Target Application Volume (litres/100 m ²)				
Fungicide (grams/100 m ²)	8	12	16		
6	75	50	37.5		
12	150	100	75		
18	225	150	112.5		
24	300	200	150		
Rate of HERITAGE	Target Ap	plication Volum	e (litres/ha)		
Rate of HERITAGE Fungicide (Kg/ha)	Target Ap 800	olication Volum 1200	e (litres/ha) 1600		
Fungicide					
Fungicide (Kg/ha)	800	1200	1600		
Fungicide (Kg/ha) 0.6	800 75	1200 50	1600 37.5		

Examples:

1) If the intended rate of application is 6 grams per 100 m², and the sprayer is calibrated to deliver 12 litres per 100 m², a 100 litre batch size would require 50 grams of HERITAGE Fungicide.

2) If the intended rate of application is 1.2 kilograms per hectare, and the sprayer is calibrated to deliver 800 litres per hectare, each 100 litres of spray solution would require 150 grams of HERITAGE Fungicide.

Tank Mixtures - Pesticides:

For Dollar Spot control, HERITAGE Fungicide can be tank mixed either with Banner MAXX[®] Fungicide or DACONIL[®] 2787 Flowable Fungicide. HERITAGE Fungicide can also be tankmixed with Primo MAXX[®] Turf Growth Regulator. Read the Banner MAX X Fungicide, DACONIL 2787 Flowable Fungicide and Primo MAXX Turf Growth Regulator label(s) and follow the precautionary statements, directions for use (rates, diseases controlled and application intervals) and other restrictions.

- 1. Always check the compatibility of the tankmix using a jar test with proportionate amounts of HERITAGE Fungicide, Banner MAXX Fungicide, DACONIL 2787 Flowable Fungicide and Primo MAXX Turf Growth Regulator or other chemicals to be used, and the water, before mixing in the spray tank.
- 2. Provide sufficient jet or mechanical agitation during filling and application to keepthe tank mix uniformly suspended.
- 3. Fill tank at least 1/2 full of clean water.
- 4. If using Banner MAX X Fungicide or Primo MAX X Turf Growth Regulator as a tank mix partner, add Banner MAXX Fungicide and HERITAGE Fungicide first theradd Primo MAXX Turf Growth Regulator next.
- 5. If using DACONIL 2787 Flowable Fungicide as a tank mix partner, add HERITAGE Fungicide first then DACONIL 2787 Flowable Fungicide next.
- 6. Do not leave tank mix combinations in the spray tank for prolonged periods without agitation. Mix and apply them the same day.

NOTE TO USER: READ THE FOLLWING BEFORE USING THIS PI INDICATED SPEICAL USE APPLICATIONS

THIS PRODUCT FOR THE

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

Accordingly, the Buyer and User assume all risksrelated to performance and crop tolerance arising, and agree to hold Syngenta Canada, Inc. harmless, from any claims based on efficacy and/or phytotoxicity in connection with the uses described below.

DAYLILIES					
Target Disease	Product Rate	Water Volume (L/ha)	Application Interval (days)	Remarks	
<i>Puccinia hemerocallidis</i> (Daylily Rust)	0.282 kg/ha (0.3 g/L)	940	14-28	Apply as a broadcast spray to foliage, prior to disease development and continue throughout the season at the 14 – 28 days interval following resistant management guidelines.	
GOLF COURSE TURF					
For the suppression of take-all patch (<i>Gaeumannomyces</i> <i>graminis var.</i> <i>avenae</i>)	1.2 kg/ha (12 g/100 m ²)	800-1600 L/ha (8-16 L/ 100m ²)	See "Remarks"	Apply one application in the spring when conditions favour infection but prior to disease symptom development. Apply a second application in the fall.	

Restrictions:

Residential use is restricted. DO NOT apply more than 2 applications per season. DO NOT APPLY BY AIR.

Ground Application:

Overspray or drift into sensitive habitats should be avoided. Do not overspray sensitive terrestrial habitats, including forested areas, shelterbelts, woodlots, hedgerows or shrublands. Do no overspray sensitive aquatic habitats such as sloughs, ponds, prairie potholes, lakes, rivers, streams and wetlands. Do not contaminate these habitats when cleaning or rinsing sprayequipment or containers.

RESISTANCE MANAGEMENT RECOMMENDATIONS

For resistance management, please note that HERTAGE Fungicide contains a Group 11 fungicide. Any fungal population may contain individuals naturally resistant to HERITAGE Fungicide and other Group 11 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.

To delay fungicide resistance:

HERITAGE Fungicide should be applied in an alternation program with other registered fungicides that have a different mode of action, and to which pathogen resistance has not developed.

DO NOT apply more than two (2)applications before applying one (1) application of a fungicide of a different group with a different mode of action.

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 fugicide with a different target site of action, if available.

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

For further information or to report suspected re sistance, contact company representatives at 1-87-SYNGENTA (1-877-964-3682) or at <u>www.syngenta.ca</u>.

Product names marked ® or [™] are registered trademarks of a Syngenta Group Company ® HERITAGE is a registered trademark of A.E. McKenzie Co. Inc., Syngenta Canada, Inc. is a licensed user.

This label transcript service is offered by the Pest Management Regulatory Agency to provide efficient searching for label information. This service and this information do not replace the official hard-copy label. The PMRA does not provide any guarantee or assurance that the information obtained through this service is accurate, current or correct, and is therefore not liable for any loss resulting, directly or indirectly, from reliance upon this service.