GROUP 3 **FUNGICIDE**

TOPAS® FUNGICIDE

FUNGICIDE

COMMERCIAL

Emulsifiable Concentrate for disease control in Peaches, Nectarines, Plums, Sweet Cherries, Sour Cherries, Apricots, Highbush and Lowbush Blueberries, Saskatoon Berries, Cranberries, Caneberries, Rutabagas, Asparagus, Western Red Cedar, Kentucky Bluegrass Grown for Seed and Strawberries.

GUARANTEE:

READ THE LABEL AND ATTACHED PAMPHLET BEFORE USING

CAUTION



POISON

WARNING **EYE AND SKIN IRRITANT** POTENTIAL SKIN SENSITIZER

REGISTRATION NO.: 30163 PEST CONTROL PRODUCTS ACT

NET CONTENTS: 1 L to 400 L

Syngenta Canada Inc.

140 Research Lane, Research Park Guelph, Ontario N1G 4Z3

Telephone: 1-877-964-3682

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

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

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.

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 SWALLOWED, call a poison control centre or doctor **IMMEDIATELY** for treatment advice. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give **any** liquid to the person. Do not give anything by mouth to an unconscious person.

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.

TOXICOLOGICAL INFORMATION

There is no specific antidote for this product. Apply symptomatic therapy. This product contains petroleum distillates. Vomiting may cause aspiration pneumonia.

PRECAUTIONS

KEEP OUT OF THE REACH OF CHILDREN. DO NOT get in eyes, on skin or on clothing. Avoid breathing spray mist or vapours. Harmful if swallowed, inhaled or absorbed through the skin. Causes eye and skin irritation. This product may cause skin sensitization reactions in certain individuals.

Wear long pants, a long sleeve shirt, shoes and socks and chemical-resistant gloves during mixing/loading, application, clean-up and repair activities. Wear protective goggles or face shield when handling the concentrated product. The wearing of neoprene gloves by pilots when entering the aircraft is essential. Mechanical flagging devices must be used. DO NOT eat, drink or smoke during work; wash hands and face thoroughly before doing so. Immediately wash off accidental splashes of the concentrate or spray mixture from skin, clothing and out of eyes. After work, change clothing and wash entire body thoroughly. Wash contaminated working clothes separately from other laundry before reuse.

DO NOT allow entry into treated area for 12 hours following application (12 hr REI). See the **DIRECTIONS FOR USE** section for crop specific restricted entry intervals.

NOTE: Do not graze livestock on treated green crops.

Do not contaminate food or feed.

If this pest control product is to be used on a commodity that may be exported to the U.S. and you require information on acceptable residue levels in the U.S., visit CropLife Canada's website at www.croplife.ca.

ENVIRONMENTAL HAZARDS

Toxic to aquatic organisms and non-target terrestrial plants. This pesticide is toxic to fish. DO NOT spray any body of water by direct application, drift or by cleaning and rinsing spray equipment.

This product contains a petroleum distillate which is moderately to highly toxic to aquatic organisms. Avoid contamination of aquatic systems during application. DO NOT contaminate these systems through direct application, disposal or waste or cleaning equipment.

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

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.

Toxic to certain beneficial insects. Minimize spray drift to reduce harmful effects on beneficial insects in habitats next to the application sites such as hedgerows and woodland.

STORAGE

To prevent contamination store this product away from food or feed.

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 cleanup of spills.

CONTAINER DISPOSAL OR REFILLING:

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 location of the nearest collection site. Before taking the container to the collection site:

- 1. Triple- or pressure-rinse the empty container. 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:

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:

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 (FASTMED)

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Wear long pants, a long sleeve shirt, shoes and socks and chemical-resistant gloves during mixing/loading, application, clean-up and repair activities. Wear protective goggles or face shield when handling the concentrated product. The wearing of neoprene gloves by pilots when entering the aircraft is essential. Mechanical flagging devices must be used. DO NOT eat, drink or smoke during work; wash hands and face thoroughly before doing so. Immediately wash off accidental splashes of the concentrate or spray mixture from skin, clothing and out of eyes. After work, change clothing and wash entire body thoroughly. Wash contaminated working clothes separately from other laundry before reuse.

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NOTE: Do not graze livestock on treated green crops.

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

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.

Toxic to certain beneficial insects. Minimize spray drift to reduce harmful effects on beneficial insects in habitats next to the application sites such as hedgerows and woodland.

STORAGE

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DISPOSAL

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

DIRECTIONS FOR USE

DO NOT use in greenhouses.

A restricted entry interval (REI) of 5 days is required for workers hand-harvesting and pruning highbush blueberries.

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.

GENERAL INFORMATION

Introduction

TOPAS® Fungicide is a broad spectrum systemic fungicide for control of a wide range of diseases on certain crops. TOPAS Fungicide will protect the crop from yield and quality losses due to disease. TOPAS Fungicide may be used in conjunction with higher seeding rates, higher fertilizer inputs, plant growth regulators and other fungicides as required. (See "NOTE" under Precautions)

CROP	DISEASES CONTROLLED
Cranberries	Cottonball (Monilinia oxycocci)
Kentucky Bluegrass Grown for Seed	Powdery Mildew
Lowbush Blueberries	Monilinia Blight (Mummyberry)
Highbush Blueberries	Mummyberry (Monilinia vaccinii-corymbosi)
Rutabagas	Powdery Mildew
Saskatoon Berry	Entomosporium Leaf and Berry Spot and Saskatoon Juniper Rust
Stone Fruit (Apricots, Nectarines, Peaches, Plums, Sweet and Sour Cherries)	Brown Rot, Blossom Blight and Fruit Brown Rot, Cherry Leaf Spot (Blumeriella jaapii – sweet and sour cherries)
Plums and Sour Cherries	Black Knot (Apiosporina morbosa) – Suppression ONLY
Western Red Cedar	Keithia Foliar Blight
Asparagus	Rusts (<i>Puccinia asparagi</i>)
Caneberries	Yellow Rust
Strawberries	Common leaf spot (Mycosphaerella fragariae)

Factors Affecting TOPAS Fungicide Performance:

TOPAS Fungicide should be applied as a preventative disease control measure. Established diseases are more difficult to control and may have already reduced crop vigour. If rainfall occurs within one hour of application, reapplication is necessary.

<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 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.

<u>Aerial Application</u>: **DO NOT** apply during periods of dead calm. Avoid application of this product when winds are gutsy. **DO NOT** apply when wind speed is greater than 16 km/h at flying height at the site of application. **DO NOT** apply with spray droplets smaller than the American Society of Agricultural Engineers (ASAE) medium classification. To reduce drift caused by turbulent wingtip vortices, the nozzle distribution along the spray boom length **MUST NOT** exceed 65% of the wing- or rotor span. High humidity and low temperatures (10 - 20°C) allow for a better deposition of spray droplets.

Sprayer and Application Information:

The performance of this product depends on correct application. Follow the guidelines given below for optimal application of TOPAS Fungicide.

Sprayer Information:

	GROUND APPLICATION	AERIAL APPLICATION
Spray Volume:	minimum 200 L water/ha	40 - 50 L water/ha
Spray Pressure:	200 - 300 kPa	100 - 200 kPa
Nozzle Type:	110° Flat Fan (XR11004, 4110-20)	Flat Fan (6510-6515) or Hollow Cone (D8-45)
Droplet Size:	Medium Spray (300 - 400 microns VMD)	Medium Spray (350 - 400 microns VMD)
Ground Speed:	10 km/h	
Nozzle Angle:	90° (straight down)	90° (straight down)
Boom Height:	40 - 50 cm above the crop canopy	2 - 3 m above the crop canopy

Ground Application - Mixing and Spraying Instructions

- 1. Spray equipment should be thoroughly flushed with clean water before mixing TOPAS Fungicide.
- 2. Fill spray tank 1/2 full with clean water. Engage gentle agitation.
- 3. Add the required amount of TOPAS Fungicide and agitate thoroughly.
- 4. Continue filling the tank with water until the tank is 9/10 full and, if applicable, add the required amount of tankmix partner.
- 5. Complete filling the spray tank with water, maintaining agitation during mixing and spraying operations.
- 6. Use nozzle screens no finer than 50 mesh. Keep by-pass line on or near the bottom of the tank to minimize foaming.

<u>Aerial Application</u> - Mixing and Spraying Instructions

- 1. Spray equipment should be thoroughly flushed with clean water before mixing TOPAS Fungicide.
- 2. Fill premix tank 1/2 full with clean water. Engage gentle agitation.
- 3. Add the required amount of TOPAS Fungicide and agitate thoroughly.
- 4. Continue filling the tank with water until the tank is 9/10 full and, if applicable, add the required amount of tankmix partner.
- 5. Complete filling the premix tank with water.
- 6. Maintain gentle agitation during mixing.
- 7. Transfer the premix contents into the aircraft spray tank.
- 8. Maintain sufficient agitation during the mixing and spraying operation to ensure TOPAS Fungicide remains in suspension.
- 9. Use nozzle screens no finer than 50 mesh. Keep by-pass line on or near the bottom of the tank to minimize foaming.

Apply only by fixed-wing or rotary aircraft equipment which has been functionally and operationally calibrated for the atmospheric conditions of the area and the application rates and conditions of this label. Label rates, conditions and precautions are product specific. Read and understand the entire label before opening this product. Apply only at the rate recommended for aerial application on this label. Where no rate for aerial application appears for a specific use, this product cannot be applied by any type of aerial equipment. Ensure uniform application. To avoid streaked, uneven or overlapped application, use appropriate marking devices.

AERIAL APPLICATION USE PRECAUTIONS

Apply only when meteorological conditions at the treatment site allow for complete and even crop coverage. Apply only under conditions of good practice specific to aerial application as outlined in the *National Aerial Pesticide Application Manual*, developed by the Federal/Provincial/Territorial Committee on Pest Management and Pesticides. Do not apply to any body of water. Avoid drifting of spray onto any body of water or other non-target areas. Coarse sprays are less likely to drift; therefore, avoid combinations of pressure and nozzle type that will result in fine particles (mist). Do not apply during periods of dead calm or when wind velocity and direction pose a risk of spray drift. Do not spray when the wind is blowing towards a nearby sensitive crop, garden, terrestrial habitat (such as a shelter-belt) or aquatic habitat.

AERIAL APPLICATION OPERATOR PRECAUTIONS

Do not allow the pilot to mix chemicals to be loaded onto the aircraft. Loading of premixed chemicals with a closed system is permitted. It is desirable that the pilot have communication capabilities at each treatment site at the time of application. The field crew and the mixer/loaders must wear chemical resistant gloves, coveralls and goggles or face shield during mixing/loading, cleanup and repair. Follow the more stringent label precautions in cases where the operator precautions exceed the label recommendations on the ground application section. All personnel on the job site must wash hands and face thoroughly before eating and drinking. Protective clothing, aircraft cockpit and vehicle cabs must be decontaminated regularly.

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.

	Cron		Buffer Zones (metres) Required for the Protection				tection of:
Method of application			Freshwater Habitat of Depths:		Estuarine/Marine Habitats of Depths:		Terrestrial
		Less than 1 m	Greater than 1 m	Less than 1 m	Greater than 1 m	habitat	
Field sprayer*	Rutabagas, cranberries, strawberries, asparagus, Kentucky bluegrass, western cedar		1	0	1	1	1
	Oh a mi a a	Early growth stage	5	0	10	3	10
	Cherries	Late growth stage	2	0	4	2	4
Airblast apric necta peac	Blueberries, apricots, nectarines, peaches, plums, Saskatoon berries, blackberries, loganberries, raspberries, other berries	Early growth stage	4	0	5	2	5
		Late growth stage	2	0	3	1	3
	Blueberries,	Fixed wing	1	0	3	1	20
Aerial	Kentucky bluegrass (seed prod.)	Rotary wing	1	0	1	1	20

^{*}For field sprayer application, buffer zones can be reduced with the use of drift reducing spray shields. When using a spray boom fitted with a full shield (shroud, curtain) that extends to the crop canopy, the labelled buffer zone can be reduced by 70%. When using a spray boom where individual nozzles are fitted with coneshaped shields that are no more than 30 cm above the crop canopy, the labelled buffer zone can be reduced by 30%.

For tank mixes, consult the labels of 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.

PRODUCT SPECIFIC PRECAUTIONS

Read and understand the entire label before opening this product. If you have questions call the manufacturer at 1-87-SYNGENTA (1-877-964-3682) or obtain technical advice from the distributor or your provincial agricultural representative.

Fertilizer - Mixing and Spraying Instructions

If desired, small amounts of nitrogen may be applied with TOPAS Fungicide. The appropriate amount of urea can be dissolved in water and added to the spray tank before adding TOPAS Fungicide. The rate of actual nitrogen must not exceed 10 kg/ha.

CAUTION: Excessive nitrogen concentrations may injure the crop. NOTE: DO NOT add nitrogen when tank-mixing TOPAS Fungicide with a herbicide.

NOTE: Do not graze livestock on treated crop.

DIRECTIONS FOR USE

RUTABAGAS	
DISEASE	Powdery Mildew
RATE/HA	400 mL
REMARKS	Make two applications per season; the first 50 days after planting and the second 20 days later. Apply to vegetative foliage. Use 200 L of water per hectare. LAST APPLICATION MUST BE MADE PRIOR TO 21 DAYS BEFORE HARVEST (21 day PHI).

WESTERN RED CEDAR	
DISEASE	Keithia Foliar Blight
RATE/HA	500 mL
REMARKS	Apply, using ground application equipment, every four weeks. Make a maximum of 6 applications per year. Apply in a volume of 1000 L of water per hectare.

HIGHBUSH BLUEBERRY			
DISEASE	Mummyberry (Monilinia vaccinii-corymbosi)		
RATE/HA	500 mL		
REMARKS	Apply first application at or near flower bud swelling; make a second application at leaf bud swelling. Apply by ground only, making no more than two applications per year. In BC only, apply by ground, a third application at pink bloom and a fourth application 7 to 10 days later at early bloom, making no more than 4 applications per year. Use a minimum of 200 L of water per hectare. LAST APPLICATION MUST BE MADE PRIOR TO 60 DAYS BEFORE HARVEST (60 day PHI).		

LOWBUSH BLUEBERRY		
DISEASE	Monilinia Blight	
RATE/HA	500 mL	
REMARKS	Apply first application when flower bud scales first appear and make a second application 10 days later. Use ground application or aerial application equipment, making no more than two applications per year. Use a minimum of 200 L of water per hectare if applying by ground equipment; use 40-50 L of water per hectare if applying by air. LAST APPLICATION MUST BE MADE PRIOR TO 60 DAYS BEFORE HARVEST (60 day PHI).	

CRANBERRY	
DISEASE	Cottonball (Monilinia oxycocci)
RATE/HA	500 mL
REMARKS	Apply the first application at leaf bud break. Make a second application 10 -14 days later, a third application at early bloom, and a fourth application 10 - 14 days after the third application. Make no more than four applications per year. LAST APPLICATION MUST BE MADE PRIOR TO 45 DAYS BEFORE HARVEST (45 day PHI).

SASKATOON BERRY		
DISEASE	Entomosporium Leaf and Berry Spot and Saskatoon Juniper Rust	
RATE/HA	500 mL	
REMARKS	As a foliar spray, apply up to three applications per season. The first application to occur at "white tip", the second application at "petal fall", and the third application at "green fruit". Use a minimum of 200 L of water per hectare by ground, applying to runoff. LAST APPLICATION MUST BE MADE PRIOR TO 38 DAYS BEFORE HARVEST (38 day PHI).	

PEACHES, NECTAR	RINES, PLUMS, SWEET & SOUR CHERRIES, APRICOTS
DISEASE	Brown Rot, Blossom Blight
RATE/HA	500 mL
REMARKS	Apply 500 mL of TOPAS Fungicide in 500 L of water per hectare. Make 1 st application at early bloom with a 2 nd application at 50 - 75% bloom. If disease conditions persist, make a 3 rd application at petal fall.
DISEASE	Fruit Brown Rot
RATE/HA	500 mL
REMARKS	Apply no more than 2 applications in the 3 weeks prior to harvest. Apply 500 mL of product in 500 L of water per hectare.
DISEASE	Suppression of Black Knot (Plums and Sour Cherries ONLY)
RATE/HA	500 mL
REMARKS	Apply 500 mL of TOPAS Fungicide in a minimum of 500 L of water per hectare by ground. Make 1 st application at early bloom with 2 nd application at 50 - 75% bloom. If disease conditions persist, make 3 rd application at petal fall.

DO NOT APPLY WITHIN 3 DAYS OF HARVEST (3 day PHI). DO NOT REENTER TREATED AREAS WITHIN 3 DAYS OF APPLICATION (3 day REI). IF REQUIRED, INDIVIDUALS MAY REENTER TREATED AREAS WITHIN 3 DAYS OF APPLICATION FOR SHORT TERM TASKS WHICH DO NOT REQUIRE HAND LABOUR IF AT LEAST 4 HOURS HAS PASSED SINCE APPLICATION AND PROVIDED LONG PANTS, LONG SLEEVED SHIRTS, AND CHEMICAL RESISTANT GLOVES ARE WORN.

FOR SOUR CHERRIES:

- a) It is recommended that no more than 2 consecutive applications of TOPAS Fungicide be made before switching to another fungicide with a different mode of action according to disease management practices.
- b) Apply a MAXIMUM of 5 APPLICATIONS PER SEASON of TOPAS Fungicide.

KENTUCKY BLUEGRASS for SEED PRODUCTION		
DISEASE	Powdery Mildew	
RATE/HA	500 mL	
REMARKS	Apply as a foliar spray. Make no more than 2 applications per crop year with the first application at pre-heading and the second at 50 - 100% heading. Apply in 200 - 300 L/ha of water by ground or 40 - 50 L/ha of water by air.	

ASPARAGUS	
DISEASE	Rust (Puccinia asparagi)
RATE/HA	250 mL
REMARKS	Apply TOPAS Fungicide to asparagus ferns in Ontario and Quebec only. Once harvest is complete, make the first application of TOPAS Fungicide as soon as fern growth begins, followed by applications at 14 - 21 day intervals. For new, non-harvested plantings, apply TOPAS Fungicide when first sign of rust is visible, followed by applications at 14 - 21 day intervals. Apply by ground only, making no more than three applications per year. Use a minimum of 370 L of water per hectare. LAST APPLICATION MUST BE MADE PRIOR TO 8 MONTHS BEFORE HARVEST (8 month PHI).

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 uses 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) and/or crop tolerance (phytotoxicity) claims for this product when used on the crops listed below.

Accordingly, the Buyer and User assume all liability 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.

SWEET AND SOUR CHERRIES (Minor Use)		
DISEASE	Cherry Leaf Spot (Blumeriella jaapii)	
RATE/HA	500 mL	
REMARKS	Maximum of three applications per season. Ground application by airblast sprayer. Retreatment interval 7 - 10 days. DO NOT apply within 3 days of harvest (3 day PHI). It is recommended that no more than 2 consecutive applications of TOPAS Fungicide be made before switching to another fungicide with a different mode of action according to disease management practices.	

CANEBERRIES (Crop Group 13A; cultivars and/or varieties of red and black raspberry, loganberry, and blackberry) (Minor Use)		
DISEASE	Yellow Rust	
RATE/HA	500 mL	
REMARKS	Apply 500 mL product per hectare in 500 L water by ground application at first detection of disease in the field and then 14 days later. Apply a maximum of two applications per season. DO NOT apply within 30 days of harvest (30 day PHI).	

STRAWBERRIES (Minor Use)		
DISEASE	Common Leaf Spot (Mycosphaerella fragariae)	
RATE/HA	500 mL	
REMARKS	Apply 500 mL of TOPAS Fungicide per hectare by ground in enough water to ensure thorough coverage. Make first application when disease levels are no more than 5%. Apply at 10 day intervals for control of leaf spot.	
	It is recommended that no more than 2 consecutive applications of TOPAS Fungicide be made before switching to another fungicide with a different mode of action, according to disease management practices.	
	APPLY A MAXIMUM OF 4 APPLICATIONS PER SEASON OF TOPAS Fungicide TO STRAWBERRIES. DO NOT APPLY WITHIN 1 DAY OF HARVEST (1 day PHI).	

RESISTANCE MANAGEMENT RECOMMENDATIONS

For resistance management, TOPAS Fungicide contains a Group 3 Fungicide. Any fungal population may contain individuals naturally resistant to TOPAS Fungicide and other Group 3 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:

Where possible, rotate the use of TOPAS Fungicide or other Group 3 Fungicides with different groups that control the same pathogens.

Avoid application of more than the maximum number listed in the label and consecutive sprays of TOPAS Fungicide or other fungicides in the same group in a season.

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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