GROUP 11 FUNGICIDE

# QUADRIS<sup>®</sup> Flowable Fungicide

COMMERCIAL AGRICULTURAL

SUSPENSION

For Use in Controlling Diseases in Labelled Crops.

**ACTIVE INGREDIENT:** 

Contains 1,2-benzisothiazolin-3-one at 0.031% OR 1,2-benzisothiazolin-3-one at 0.039% plus 2bromo-2-nitropropane-1,3-diol at 0.03% OR 5-chloro-2-methyl-4-isothiazolin-3-one at 0.00089% and 2-methyl-4-isothiazolin-3-one at 0.00030% PLUS 2-bromo-2-nitropropane-1,3-diol at 0.03% as preservatives.

#### READ THE LABEL AND ATTACHED BOOKLET BEFORE USING KEEP OUT OF REACH OF CHILDREN

REGISTRATION NO: 26153 PEST CONTROL PRODUCTS ACT

NET CONTENTS: 1 L to 1000 L

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

Label

# 1.0 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.

# 2.0 FIRST AID

**IN CASE OF POISONING,** contact a doctor 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 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 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 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.

# 3.0 TOXICOLOGICAL INFORMATION

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

# 4.0 **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.

**Restricted Entry Intervals (REI): DO NOT** enter or allow worker entry into the treated area during the restricted-entry (REI) interval of 12 hours following application. Workers shall be given oral warning of the re-entry interval.

Apply only when the potential for drift to areas of human habitation or activity such as houses, cottages, schools and recreational areas is minimal. Take into consideration wind speed, wind direction, temperature inversions, application equipment and sprayer settings.

If this pest control product is to be used on a commodity that may be exported to other countries in the world and you require information on acceptable residue levels in these countries, please contact Syngenta Canada Inc. at 1-87-SYNGENTA / 1-877-964-3682.

# 5.0 PERSONAL PROTECTIVE EQUIPMENT (PPE)

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

Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Wash splashes from skin IMMEDIATELY with plenty of water. Remove PPE immediately after handling this product. Wash the outside of gloves with soap and water before removing. As soon as possible, wash thoroughly and change into clean clothing. After spraying, wash hands and shower thoroughly with soap and water.

Heavily contaminated or drenched clothing and other absorbent materials contaminated with this product should be discarded. Do not reuse them.

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.

Wear freshly laundered clothes daily.

Do not wear contaminated shoes.

Users should wash hands and exposed skin before eating, drinking, chewing gum, using tobacco, applying cosmetics or using the toilet.

While using product, do not eat, drink or use tobacco (including smoking).

#### 6.0 ENVIRONMENTAL PRECAUTIONS

TOXIC to aquatic organisms. Observe buffer zones specified below under DIRECTIONS FOR USE.

Azoxystrobin is persistent and will carryover. It is recommended that this product not be used in areas treated with Azoxystrobin during the previous year.

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.

The properties of this product indicate it may leach to ground water. The use of this product may result in contamination of ground water, particularly in areas where soils are permeable (e.g. sandy soil) and/or the depth to the water table is shallow.

**DO NOT** apply this product directly to freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs, and wetlands), estuarine/marine habitats.

**DO NOT** contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or containers, or disposal of wastes. Do not discharge effluent containing this product into sewer systems, lakes, streams, ponds, estuaries, oceans and other waters.

# 7.0 STORAGE

Keep in original container, tightly closed, during storage. Store in a cool, dry, well-ventilated secure area away from feed and foodstuffs, and out of the reach of children and animals. Store this product away from seed, food, feed or fertilizer.

#### 8.0 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.

#### 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. Add the rinsings to the spray mixture in the tank.
- 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:

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. Do not reuse this container for any other purpose.

#### For Returnable Containers:

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

QUADRIS<sup>®</sup> is a trademark of a Syngenta Group Company.

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#### REGISTRATION NO: 26153 PEST CONTROL PRODUCTS ACT

# Syngenta Canada Inc.

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

Pamphlet

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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.

Wear freshly laundered clothes daily.

Do not wear contaminated shoes.

Users should wash hands and exposed skin before eating, drinking, chewing gum, using tobacco, applying cosmetics or using the toilet.

While using product, do not eat, drink or use tobacco (including smoking).

#### 6.0 ENVIRONMENTAL PRECAUTIONS

TOXIC to aquatic organisms. Observe buffer zones specified below under DIRECTIONS FOR USE.

Azoxystrobin is persistent and will carryover. It is recommended that this product not be used in areas treated with Azoxystrobin during the previous year.

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.

The properties of this product indicate it may leach to ground water. The use of this product may result in contamination of ground water, particularly in areas where soils are permeable (e.g. sandy soil) and/or the depth to the water table is shallow.

**DO NOT** apply this product directly to freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs, and wetlands), estuarine/marine habitats.

**DO NOT** contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or containers, or disposal of wastes. Do not discharge effluent containing this product into sewer systems, lakes, streams, ponds, estuaries, oceans and other waters.

# 7.0 STORAGE

Keep in original container, tightly closed, during storage. Store in a cool, dry, well-ventilated secure area away from feed and foodstuffs, and out of the reach of children and animals. Store this product away from seed, food, feed or fertilizer.

#### 8.0 DISPOSAL

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#### For Refillable Containers:

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

#### 9.0 **PRODUCT INFORMATION**

QUADRIS<sup>®</sup> Flowable Fungicide is a broad spectrum, preventative fungicide with systemic properties recommended for the control of plant diseases of canola, legume vegetables including soybeans, seed corn, potatoes, tomatoes, ginseng, hazelnuts, filberts, sugarbeets, coriander, ferns of asparagus, spinach, sweet and field corn, carrots, radish, daikon, horseradish, rutabaga, turnip, garden beet, tobacco, cereals, celery and ground cherries and for the suppression of plant diseases in cabbage, cumin, caraway, globe artichoke and strawberry varieties.

QUADRIS Flowable Fungicide is to be applied as a foliar spray. Optimum disease control/suppression will be obtained by protective treatments prior to disease establishment. Refer to the specific use directions for each crop for detailed instructions on rates, application timing and technique.

Do not apply QUADRIS Flowable Fungicide through irrigation equipment unless specified.

#### 10.0 DIRECTIONS FOR USE

#### 10.1 General Information

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.

This product may be tank mixed with a fertilizer, a supplement, or with registered pest control products, whose labels also allow tank mixing, provided the entirety of both labels, including Directions for Use, Precautions, Restrictions, Environmental Precautions, and Spray Buffer Zones are followed for each product. In cases where these requirements differ between the tank mix partner labels, the most restrictive label must be followed. Do not tank mix products containing the same active ingredient unless specifically listed on this label.

In some cases, tank mixing pest control products can result in reduced pesticide efficacy or increased host crop injury. The user should contact Syngenta Canada Inc. at 1-87-SYNGENTA / 1-877-964-3682 for information before applying any tank mix that is not specifically recommended on this label.

Syngenta Canada Inc. has not fully assessed performance (efficacy) and/or crop tolerance (phytotoxicity) of all potential tank mixes under all environmental conditions or for all crop varieties. Tank mixes that are not specifically listed on this label should be tested on a small area first, under local conditions and using standard practices, to confirm the tank mix is suitable for widespread application.

To determine the physical compatibility of this product with other products, use a jar test.

Always read and follow label directions including WALES mixing order.

# 10.2 Ground Application

# 10.2.1 General Precautions

**Field sprayer application:** 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 and Biological Engineers (ASABE S572.1) medium classification. Boom height must be 60 cm or less above the crop or ground.

# **10.2.2 Mixing Instructions**

- 1. Ensure that the sprayer interior is clean, then fill the spray tank with ½ the required amount of water and engage gentle agitation. Good agitation is indicated by a rippling or rolling action on the surface of the water.
- 2. Add any WG or DF formulation mix partners and agitate to ensure complete mixing.
- 3. Add QUADRIS Flowable (SC) and agitate to ensure complete mixing.
- 4. Add any additional SC formulation mix partners and agitate to ensure complete mixing.
- 5. Add any EC formulation mix partners and agitate to ensure complete mixing.
- 6. Fill the tank to  $\frac{3}{4}$  the required amount of water.
- 7. Add any solution (SN or SL) formulation mix partners and agitate to ensure complete mixing.
- 8. Finish filling the sprayer with water, maintaining good agitation.
- 9. After any break in spraying operations, agitate thoroughly before spraying again.
- 10. Spray the pesticide suspension the same day as mixing.
- 11. Do not mix, load or clean spray equipment where there is a potential to contaminate wells or aquatic systems.

When using chemical handling equipment to fill the sprayer, the following additional recommendations apply:

- WG and DF formulations are preferentially batch mixed.
- SC, SN, and SL formulations may be inducted or batch mixed.
- EC formulations are preferentially batch mixed.

# **10.2.3 Spraying Instructions**

- 1. <u>Water Volume:</u> Specific to crop and disease. Consult the following tabulated instructions for use.
- Spray Nozzles: 80° or 110° drift reducing flat fan (e.g. those with a pre-orifice or turbulence chamber) or air induction nozzles are recommended. Use 50 mesh nozzle screens. Do not use flood type nozzles, controlled droplet application equipment, spray foils or hollow cone nozzles.
- 3. <u>Pressure:</u> As recommended by the nozzle manufacturer to achieve ASABE medium sized droplets.
- 4. Apply at uniform speed and avoid overlapping. Shut off spray boom while starting, turning, slowing or stopping to avoid potential crop injury from over application.

# 10.2.4 Equipment Clean-Up

# Before Spraying:

Prior to using QUADRIS Flowable Fungicide, ensure that the spray tank, lines and filter are

thoroughly clean.

#### After Spraying:

Thoroughly clean application equipment immediately after spraying. DO NOT allow QUADRIS Flowable Fungicide residue to dry within application equipment.

When using tank mixes, consult the tank-mix partner label for additional clean-up instructions. The following recommendations are provided:

- 1. Drain and flush tank walls, boom and all hoses for ten minutes with a clean water/detergent mixture. Rinse with clean water. DO NOT clean application equipment near desirable vegetation, wells or other water sources.
- 2. Remove all nozzles and screens and wash separately.
- 3. Dispose of all rinsate in accordance with provincial regulations.

# 10.3 Airblast Application

# **10.3.1 General Precautions**

<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.

#### 10.3.2 Mixing Instructions

- 1. Ensure that the sprayer interior is clean, then fill the spray tank with ½ the required amount of water and engage gentle agitation. Good agitation is indicated by a rippling or rolling action on the surface of the water.
- 2. Add any WG or DF formulation mix partners and agitate to ensure complete mixing.
- 3. Add QUADRIS Flowable (SC) and agitate to ensure complete mixing.
- 4. Add any additional SC formulation mix partners and agitate to ensure complete mixing.
- 5. Add any EC formulation mix partners and agitate to ensure complete mixing.
- 6. Fill the tank to  $\frac{3}{4}$  the required amount of water.
- 7. Add any solution (SN or SL) formulation mix partners and agitate to ensure complete mixing.
- 8. Finish filling the sprayer with water, maintaining good agitation.
- 9. After any break in spraying operations, agitate thoroughly before spraying again.
- 10. Spray the pesticide suspension the same day as mixing.
- 11. Do not mix, load or clean spray equipment where there is a potential to contaminate wells or aquatic systems.

When using chemical handling equipment to fill the sprayer, the following additional recommendations apply:

- WG and DF formulations are preferentially batch mixed.
- SC, SN, and SL formulations may be inducted or batch mixed.

• EC formulations are preferentially batch mixed

#### 10.3.3 Spraying Instructions

- 1. <u>Water Volume</u>: Apply in a minimum spray volume of 1000 L/ha OR the volume given in the crop and pest specific instructions tabulated below, whichever is LARGER. Water volume should exceed the minimum recommendation at later stages of crop development.
- 2. <u>Spray Quality</u> Select nozzles and pressure to achieve a minimum of ASABE mediumsized droplets.
- 3. <u>Spray Distribution</u>: Select nozzles, orient deflectors, and adjust air speed and volume to ensure only the canopy is sprayed. Spray should just reach the top of the target. Account for the shape and canopy density of the target when setting spray distribution.
- 4. Apply at uniform speed and avoid overlapping. Shut off spray boom while starting, turning, slowing or stopping to avoid potential crop injury from over application.

# 10.3.4 Equipment Clean-Up

#### Before Spraying:

Prior to using QUADRIS Flowable Fungicide, ensure that the spray tank, lines and filter are thoroughly clean.

#### After Spraying:

Thoroughly clean application equipment immediately after spraying. DO NOT allow QUADRIS Flowable Fungicide residue to dry within application equipment.

When using tank mixes, consult the tank-mix partner label for additional clean-up instructions. The following recommendations are provided:

- 1. Drain and flush tank walls, boom and all hoses for ten minutes with a clean water/detergent mixture. Rinse with clean water. DO NOT clean application equipment near desirable vegetation, wells or other water sources.
- 2. Remove all nozzles and screens and wash separately.
- 3. Dispose of all rinsate in accordance with provincial regulations.

# 10.4 Aerial Application

# **10.4.1 General Precautions**

<u>Aerial application:</u> DO NOT apply during periods of dead calm. Avoid application of this product when winds are gusty. 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 and Biological Engineers (ASABE S572.1) 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 rotorspan in order to reduce drift caused by turbulent wingtip vortices.

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 the specific use, this product cannot be

applied by any type of aerial equipment.

# **10.4.2 Operator Precautions**

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.

All ground crew and the mixer/loaders must wear chemical resistant gloves, long-sleeved shirt and long pants or coveralls when mixing/loading, and during clean-up and repair activities. Follow the more stringent label precautions in cases where the operator precautions exceed the generic label recommendations on the existing field sprayer label.

# 10.4.3 Pilot 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.

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.

Ensure uniform application and a uniform spray with minimum potential for drift. To avoid streaked, uneven or overlapped application, use appropriate marking technology. GPS based marking is preferred.

**DO NOT** apply to any body of water. Avoid drifting of spray onto any body of water or other non-target areas. Specified buffer zones should be observed.

# **10.4.4 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. Application of this specific product must meet and/or conform to the following:

Volume: Apply the recommended rate in at least 45 litres of water per hectare.

QUADRIS Flowable Fungicide is extremely phytotoxic to certain apple varieties. Avoid spray drift. Extreme care must be taken to prevent injury to apple trees (and apple fruit). DO NOT spray QUADRIS where spray drift may reach apple trees.

Do not spray when the wind is blowing towards a nearby sensitive crop, garden, terrestrial habitat (such as shelter-belt) or aquatic habitat.

The spray buffer zones specified in the Spray Buffer Zones section 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.

Follow recommendations provided by local disease monitoring services or provincial spray calendars regarding the appropriate application timing for protectant fungicides in your area. Cultural practices such as canopy management and removal of overwintered plant debris should be integrated with the use of fungicides to reduce disease incidence. Use the higher rate, and the shorter application interval under conditions of heavy infection pressure, on highly susceptible varieties, or when environmental conditions are favourable for disease development.

QUADRIS Flowable Fungicide treatments should be integrated into an overall disease management strategy that includes selection of varieties with disease tolerance, plant residue management, crop rotation, and proper timing and placement of fertilizer and irrigation. Fungicide applications should begin prior to disease infection and continue throughout the growing season following a resistance management strategy (see **Resistance-Management Recommendations**).

# **10.4.5 Mixing Instructions**

Mixing this product directly in the aircraft hopper **IS NOT** recommended. The use of chemical handling or managing equipment to load the hopper **IS** recommended. This product **MAY BE** inducted into a hopper which is prefilled with water or when the product and water are mixed prior to entering the hopper. This product **MAY BE** batch mixed and pumped into the hopper. In all cases the chemical handling equipment and hopper interior must be clean prior to use.

**NOTE:** WG and DF formulations are preferentially batch mixed.

**NOTE:** SC, SN, and SL formulations may be inducted or batch mixed.

**NOTE:** EC formulations are preferentially batch mixed.

It is **NOT** recommended to combine solid (WG or DF) formulations with liquid tank mix partners within a single batch. Batch mix WG or DF formulations first, pump into the hopper, and then add liquid tank mix partners by induction or as an additional batch mix. When tank mixing multiple products, follow the mixing order outlined below:

- 1. Pump water into the hopper to at least  $\frac{1}{4}$  to  $\frac{1}{2}$  of the desired spray volume. Engage hopper circulation, if possible.
- 2. Thoroughly batch mix any WG or DF formulation mix partners and agitate to ensure complete mixing. Pump into the hopper
- 3. Induct or thoroughly batch mix QUADRIS Flowable (SC) and any additional SC formulations.
- 4. Thoroughly batch mix any EC formulation mix partners. EC formulations may be added to the batch from Step 2, if desired.
- 5. Induct or thoroughly batch mix any solution (SN or SL) formulation mix partners. SN/SL formulations may be added to the batch from Step 2, if desired.
- 6. Pump batch mixed SC, EC, and/or SN/SL products into the hopper.
- 7. Finish filling the hopper with water.
- 8. If it was not possible to engage hopper agitation in Step 1, do so as soon as possible once airborne.
- 9. Spray the pesticide suspension the same day as mixing.

10. Do not mix, load or clean equipment where there is a potential to contaminate wells or aquatic systems.

# 10.4.6 Spraying Instructions

- 1. <u>Water Volume</u>: Apply in a minimum spray volume of 45 L/ha OR the volume given in the crop and pest specific instructions tabulated below, whichever is LARGER.
- 2. <u>Spray Nozzles:</u> Use only ASABE medium or coarse nozzles rated as delivering droplets of volume median diameter of 300 microns or greater.
- 3. <u>Pressure:</u> As recommended by the nozzle manufacturer to achieve ASABE medium sized droplets.
- 4. Ensure hopper agitation is engaged whenever possible during flight.

# 10.4.7 Equipment Clean-Up

#### Before Spraying:

Prior to using QUADRIS Flowable Fungicide, ensure that the hopper, chemical handling equipment, lines and filter are thoroughly cleaned.

#### After Spraying:

Thoroughly clean application equipment immediately after spraying. **DO NOT** allow QUADRIS Flowable Fungicide residue to dry within application equipment.

When using tank mixes, consult the tank-mix partner label for additional clean-up instructions. The following recommendations are provided:

- 1. Drain and flush tank walls, boom and all hoses for ten minutes with a clean water/detergent mixture. Rinse with clean water. **DO NOT** clean application equipment near desirable vegetation, wells or other water sources.
- 2. Remove all nozzles and screens and wash separately.
- 3. Dispose of all rinsate in accordance with provincial regulations.

# 10.5 Spray Buffer Zones

Spot treatments using hand-held equipment DO NOT require a buffer zone.

The spray buffer zones specified in the table below are required between the point of direct application and the closest downwind edge of sensitive freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs and wetlands) and estuarine/marine habitats.

Method of Crop		Buffer Zones (metres) Required for the Protection of:				
Application			Freshwater Habitats of Depths:		Estuarine/Marine Habitats of Depths:	
			Less than 1 m	Greater than 1 m	Less than 1 m	Greater than 1 m
Chemigation	Cranberry		1	1	1	1
Field sprayer	,		1	1	1	1
Airblast	Hazelnuts	Early Growth Stage	15	1	4	1
		Late Growth Stage	5	1	2	1
Aerial	Canola, soybeans and legumes, field tomatoes, potatoes, cereals, corn		5	1	1	1

The spray drift buffer zones for this product can be modified based on weather conditions and spray equipment configuration by accessing the Buffer Zone Calculator on the Pesticides portion of the Canada.ca website.

When tank mixes are permitted, 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 (ASABE) category indicated on the labels for those tank mix partners.

# **10.6** Rotational Crop Restrictions

Rotational Crops	Planting Time From Last Application of Azoxystrobin-containing Products
All crops with Azoxystrobin registered uses	0 days
All other crops Intended for Food and Feed	30 days

# 11.0 CROP USE DIRECTIONS

#### 11.1 Canola

Сгор	Canola
Disease Controlled	Virulent Blackleg (Leptosphaeria maculans)
Use Rate	500 mL/ha
	One (1) litre of QUADRIS Flowable Fungicide will treat 2 hectares.
Application Timing	1 application as a broadcast foliar spray at the 2-6 leaf stage
Disease Controlled	Sclerotinia Stem Rot (Sclerotinia sclerotiorum)
Use Rate	700 - 1000 mL/ha
	Use the higher rate if there is a history of <i>Sclerotinia</i> infection in the area and when environmental conditions favour disease development.
Application Timing	1 application as a broadcast foliar spray at the early bloom stage (prior to 30% bloom)
Disease Controlled	Alternaria Black Spot (Alternaria brassicae, Alternaria raphani)
Use Rate	500 mL/ha
	One (1) litre of QUADRIS Flowable Fungicide will treat 2 hectares.
Application Timing	1 application as a broadcast foliar spray at the pod stage (90% petal fall)
Disease Suppressed	Alternaria Black Spot (Alternaria brassicae, Alternaria raphani)
Use Rate	700-1000 mL/ha
	One (1) litre of QUADRIS Flowable Fungicide will treat 1 to 1.4 hectares.
Application Timing	Early bloom stage (prior to 30% bloom)
Pre-Harvest Interval (PHI)	30 days
	Fungicide is not a substitute for good management practices. For optimum

control of Blackleg, plant seed treated with a seed treatment recommended for the control of seed borne Blackleg, followed by a foliar application of QUADRIS Flowable Fungicide.

# 11.2 Legume Vegetables (Crop Group 6) Including Soybeans

Crops	Crop Group 6
	Crop Group 6A: Edible-podded legume vegetables - Any succulent
	cultivar of edible podded bean ( <i>Phaseolus</i> spp.) and any succulent cultivar
	of edible-podded pea ( <i>Pisum</i> spp.). Bean ( <i>Phaseolus</i> spp.) (includes runner
	bean, snap bean, wax bean); bean ( <i>Vigna</i> spp.) (includes asparagus bean,
	Chinese longbean, moth bean, yardlong bean); jack bean; pea ( <i>Pisum</i> spp.)
	(includes dwarf pea, edible-podded pea, snow pea, sugar snap pea); pigeon
	pea; soybean (immature seed); and sword bean.
	Crop Group 6B: Succulent shelled pea and bean - Any succulent shelled
	cultivar of bean ( <i>Phaseolus</i> spp.) and garden pea ( <i>Pisum</i> spp.); bean
	( <i>Phaseolus</i> spp.) (includes lima bean, green bean); broad bean (succulent);
	bean (Vigna spp.) (includes black-eyed pea, cowpea, southern pea); pea
	(Pisum spp.) (includes English pea, garden pea, green pea); and pigeon
	pea.
	Crop Group 6C: Dried shelled pea and bean - Any dried cultivar of bean
	(Phaseolus spp.); and dried cultivar of pea (Pisum spp.): dried cultivars of
	bean ( <i>Lupinus</i> spp.) (includes grain lupin, sweet lupin, white lupin, and sweet
	white lupin); (Vigna spp.) (includes adzuki beans); (Phaseolus spp.)
	(includes field bean, kidney bean, lima bean (dry), navy bean, pinto bean,
	tepary bean, mung bean, rice bean, southern bean, urd bean); broad bean
	(dry); chickpea; guar; lablab bean; lentil; pea ( <i>Pisum</i> spp.) (includes field
	pea); and pigeon pea.
	Soybeans
Disease Controlled	Asian (Soybean) Rust (Phakopsora pachyrhyizi)
Use Rate	500 mL/ha
Application Timing	Make first application at the R1 to R3 developmental stage, or when there is
	5% disease level in the field, followed by a second application 14 days after
	the first, if environmental conditions are favourable for disease development.
Crops	Soybeans and Field Peas (Pisum spp.)
Disease Controlled	<b>Powdery Mildew</b> ( <i>Microsphaera diffusa, Erysiphe pisi, E. polygoni</i> )
Use Rate	500 mL/ha
Application Timing	Make first application at the R1 to R3 developmental stage, or when there is $5\%$ discover level in the field followed by a second application 14 days
	is 5% disease level in the field, followed by a second application 14 days after the first, if environmental conditions are favourable for disease
	development.
Crops	Soybeans only
Disease Controlled	Cercospora Leaf Spot (Cercospora kikuchii)
Use Rate	500 mL/ha
	1 300 IIIL/IId
Application Timing	Make first application at the R1 to R3 developmental stage, or when there

Crops	Succulent Shelled Peas varieties		
Diseases Controlled	Ascochyta blight (Ascochyta spp.)		
	Powdery Mildew (Microsphaera diffusa, Erysiphe pisi, E. polygoni)		
Use Rate	500 mL/ha		
Application Timing	For Ascochyta blight the first application must be applied before disease is established and no later than the onset of flowering. A second application can be made 10-14 days after the first application, when disease pressure is severe or when agronomic or weather conditions are conducive to disease development or movement.		
	For powdery mildew make first application at the R1 to R3 developmental stage, or when there is 5% disease level in the field, followed by a second application 14 days after the first, if environmental conditions are favourable for disease development.		
Crops	<b>Crop Group 6C: Dried shelled pea and bean</b> - Any dried cultivar of bean ( <i>Phaseolus</i> spp.); and dried cultivar of pea ( <i>Pisum</i> spp.): dried cultivars of bean ( <i>Lupinus</i> spp.) (includes grain lupin, sweet lupin, white lupin, and sweet white lupin); ( <i>Vigna</i> spp.) (includes adzuki beans); ( <i>Phaseolus</i> spp.) (includes field bean, kidney bean, lima bean (dry), navy bean, pinto bean, tepary bean, mung bean, rice bean, southern bean, urd bean); broad bean (dry); chickpea; guar; lablab bean; lentil; pea ( <i>Pisum</i> spp.) (includes field pea); and pigeon pea.		
Diseases Controlled	Ascochyta blight (Ascochyta spp.)		
	Mycosphaerella blight (Mycosphaerella pinodes)		
	Anthracnose (Colletotrichum spp.)		
	Sclerotinia (Sclerotinia sclerotiorum) – suppression only		
Use Rate	500 mL/ha		
Application Timing	The first application must be applied before disease is established and no later than the onset of flowering. A second application can be made 10-14 days after the first application, when disease pressure is severe or when agronomic or weather conditions are conducive to disease development or movement.		
Pre-Harvest Interval	15 days		
(PHI)			
Maximum Number of	2		
Applications Per Year	Alternate with a fungicide with a different mode of action after each application.		
recommended label rates	egume vegetable group have been tested for efficacy and phytotoxicity at the s. The user should test the product on a small area first, under local ndard practices, to confirm the product is suitable for widespread		

application. 2. Do not feed dried pea vines to livestock.

Crops	<ul> <li>Crop Group 6</li> <li>Crop Group 6A: Edible-podded legume vegetables - Any succulent cultivar of edible podded bean (<i>Phaseolus</i> spp.) and any succulent cultivar of edible-podded pea (<i>Pisum</i> spp.). Bean (<i>Phaseolus</i> spp.) (includes runner bean, snap bean, wax bean); bean (<i>Vigna</i> spp.) (includes asparagus bean, Chinese longbean, moth bean, yardlong bean); jack bean; pea (<i>Pisum</i> spp.) (includes dwarf pea, edible-podded pea, snow pea, sugar snap pea); pigeon pea; soybean (immature seed); and sword bean.</li> <li>Crop Group 6B: Succulent shelled pea and bean - Any succulent shelled cultivar of bean (<i>Phaseolus</i> spp.) and garden pea (<i>Pisum</i> spp.); bean (<i>Phaseolus</i> spp.) (includes lima bean, green bean); broad bean (succulent); bean (<i>Vigna</i> spp.) (includes black-eyed pea, cowpea, southern pea); pea (<i>Pisum</i> spp.) (includes English pea, garden pea, green pea); and pigeon pea.</li> <li>Crop Group 6C: Dried shelled pea and bean - Any dried cultivar of bean (<i>Phaseolus</i> spp.) (includes grain lupin, sweet lupin, white lupin, and sweet white lupin); (<i>Vigna</i> spp.) (includes grain lupin, sweet lupin, white lupin, and sweet white lupin); (<i>Vigna</i> spp.) (includes adzuki beans); (<i>Phaseolus</i> spp.) (includes field bean, kidney bean, lima bean (dry), navy bean, pinto bean, tepary bean, mung bean, rice bean, southern bean, urd bean); broad bean</li> </ul>
	(dry); chickpea; guar; lablab bean; lentil; pea ( <i>Pisum</i> spp.) (includes field pea); and pigeon pea.
	Soybeans
Disease Controlled	Asian (Soybean) Rust (Phakopsora pachyrhyizi)
Use Rate	0.3 - 0.45 L/ha
Use Rate Tank Mix Partner	0.5 - 0.75 L/ha TILT <sup>®</sup> 250E Fungicide
Application Timing	Make the first application at the first sign of disease. Apply the high rate only under conditions of high disease pressures. A second application at 14 days interval may be needed if conditions persist. It is important to protect the developing pod of soybean and podded legume vegetables.
	Good spray coverage and canopy penetration are important for best results. Apply in a minimum of 45 L of water per hectare.
Pre-Harvest Interval (PHI)	30 days for Crop Subgroup 6C (dry legume vegetables) and soybeans 15 days for Crop Subgroup 6A (edible podded legume vegetables) and Crop Subgroup 6B (succulent shelled legume vegetables)
Maximum Number of Applications Per Year Restrictions:	2 applications of QUADRIS Flowable Fungicide 2 applications of TILT 250E Fungicide

#### **Restrictions:**

- 1. Do not make more than one application to soybean hay and dry pea hay.
- 2. Do not apply within 14 days of harvest of soybean hay and dry pea hay.
- 3. Do not feed dried pea vines to livestock.
- 4. Not all members of the legume vegetable group have been tested for efficacy and phytotoxicity at the recommended label rates and this tank mix. The user should test the product on a small area first, under local conditions and using standard practices, to confirm the product is suitable for widespread application. The tank mix of QUADRIS Flowable Fungicide plus TILT 250E Fungicide may be applied by air or ground application equipment.
- 5. Note: The directions for use for Rhizoctonia stem and stolon canker, and black scurf were developed under the User Requested Minor Use Label Expansion Program. Refer to the Minor Use Statement at the top of Section 12.0 MINOR USES

#### 11.3 Potatoes

Сгор	Potatoes
Disease Controlled	Early Blight (Alternaria solani)
Use Rate	500 - 800 mL/ha
Application	Apply on a 7 to 14 day interval, starting prior to disease establishment.
Timing/Instructions	
	Apply as a broadcast foliar spray in sufficient water for thorough coverage.
	Use the higher rate if extending the treatment interval to 14 days.
	Use the high rate and short application interval under high disease pressures.
Disease Controlled	Black Dot (Colletotrichum coccodes)
Use Rate	500 - 800 mL/ha
Application	Apply on a 7 to 14 day interval, starting prior to disease establishment.
Timing/Instructions	
	Apply as a broadcast foliar spray in sufficient water for thorough coverage.
	Use the higher rate if extending the treatment interval to 14 days.
	Use the high rate and short application interval under high disease pressures.
Pre-Harvest Interval (PHI)	1 day
Maximum Number of	3
Applications Per Year	
Maximum Amount of	2.4 L/ha
Product Per Year	
Restrictions:	

- 1. For early blight, the number of solo applications should not exceed 33% of the total number of sprays. Where mixtures (co-formulations or tank mixes) with an effective non-Group 11 fungicide are used, do not exceed 50% of the total number of sprays. Group 11 resistant populations of *Alternaria solani* are present in some regions of Canada. Where resistance has been confirmed, only apply in mixture with partners contributing to the effective control of the target pathogens.
- 2. Follow all precautions, restrictions and directions on the labels of fungicide products used in an alternation program. Follow all precautions, restrictions and directions on the labels of fungicide products used in an alternation program.

Сгор	Potatoes
Disease Controlled	Soilborne Diseases: Silver Scurf (Helminthosporium solani), Rhizoctonia Stem and Stolon Canker (Rhizoctonia spp.) and Black Scurf (Rhizoctonia solani)
Use Rate	4-6 mL/100 m row Use the higher rate of QUADRIS Flowable Fungicide when the risk of disease is high.
Application Timing/Method	<ul><li>In-Furrow: Apply once as an in-furrow spray in 50 to 140 L per hectare of water at planting.</li><li>Mount the spray nozzle so the spray is directed into the furrow as a 15-20 cm band just before the seed is covered.</li></ul>
<b>Restrictions:</b> 1. DO NOT apply by air.	· · · · · · · · · · · · · · · · · · ·

# 11.4 Cereals

Crops	Barley, Oats
Disease Controlled	Barley Net Blotch (Pyrenophora teres)
Use Rate	0.225 L/ha
Use Rate Tank Mix Partner	0.5 L/ha of TILT 250E Fungicide
Application	Apply once between stem elongation and half-head emergence (BBCH
Timing/Instructions	Growth Stage 29-55).
rining/instructions	Growth Glage 23-33).
	Good spray coverage and canopy penetration are important for best results.
Crops	Barley, Rye
Disease Controlled	Barley Scald (Rhynchosporium secalis)
Use Rate	0.225 L/ha
Use Rate Tank Mix Partner	0.5 L/ha of TILT 250E Fungicide
Application Timing/Instructions	Apply once between stem elongation and half-head emergence (BBCH Growth Stage 29-55).
	Good spray coverage and canopy penetration are important for best results.
Crops	Barley
Disease Controlled	Barley Leaf Rust (Puccinia hordei)
Use Rate	0.225 L/ha
Use Rate Tank Mix Partner	0.5 L/ha of TILT 250E Fungicide
Application Timing/Instructions	Apply once between stem elongation and half-head emergence (BBCH Growth Stage 29-55).
	Good spray coverage and canopy penetration are important for best results.
Crops	Wheat, Barley, Rye, Oats, Triticale
Disease Controlled	Septoria Leaf Spot (Septoria sp.)
Use Rate	0.225 L/ha
Use Rate Tank Mix Partner	0.5 L/ha of TILT 250E Fungicide
Application Timing/Instructions	Apply once between stem elongation and half-head emergence (BBCH Growth Stage 29-55).
	Good spray coverage and canopy penetration are important for best results.
Crops	Wheat, Barley, Rye, Triticale
Disease Controlled	Tan Spot (Pyrenophora tritici-repentis)
Use Rate	0.225 L/ha
Use Rate Tank Mix Partner	0.5 L/ha of TILT 250E Fungicide
Application Timing/Instructions	Apply once between stem elongation and half-head emergence (BBCH Growth Stage 29-55).
	Good spray coverage and canopy penetration are important for best results.

Crops	Winter Wheat, Spring Wheat, and Barley
Disease Controlled	Stripe Rust (Puccinia striiformis)
Use Rate	0.2-0.3 L/ha
Use Rate Tank Mix Partner	0.4-0.5 L/ha of TILT 250E Fungicide
Application Timing/Instructions	Apply once between stem elongation and half-head emergence (BBCH Growth Stage 29-55).
	Good spray coverage and canopy penetration are important for best results.
Crops	Winter Wheat and Spring Wheat
Disease Controlled	Wheat Leaf Rust (Puccinia triticina)
Use Rate	0.2-0.3 L/ha
Use Rate Tank Mix Partner	0.4-0.5 L/ha of TILT 250E Fungicide
Application	Apply once between stem elongation and half-head emergence (BBCH
Timing/Instructions	Growth Stage 29-55).
Destrictions	Good spray coverage and canopy penetration are important for best results.

#### Restrictions:

 Do not make more than one application per year of this tank mixture. An additional application of TILT 250E Fungicide can be made, if required. Refer to the TILT 250E Fungicide label for details of the rate and timing. A total of two applications of TILT 250E Fungicide should be applied per year either in a tank mix with QUADRIS Flowable Fungicide or alone. Do not apply within 30 days of harvesting for forage and hay or 45 days for mature grain.

2. The tank mix of QUADRIS Flowable Fungicide and TILT 250E Fungicide may be applied with ground or air equipment. GROUND APPLICATION: Apply specified rates in a minimum of 100 L of water per hectare. AERIAL APPLICATION: Apply specified rates in a minimum of 45 L of water per hectare.

# 11.5 Corn

Crops	Field corn, Sweet Corn (including Seed Production), Popcorn
	(including Seed Production)
Diseases Controlled	Rust (Puccinia sorghi)
	Northern Corn Leaf Blight (Setosphaeria turcicum)
	Southern Corn Leaf Blight (Cochliobolus heterostrophus)
	Eye Spot (Aureobasidium zeae)
	Grey Leafspot (Cercospora zeae-maydis)
Use Rate	0.225 - 0.3 L/ha
	Use the low rate of QUADRIS under low to moderate disease pressure.
	Use the high rate of QUADRIS only under conditions of severe disease
	pressure.
Use Rate Tank Mix Partner	0.5 L/ha of TILT 250E Fungicide
Application	Make first application at the first sign of disease, followed by a second
Timing/Instructions	application 14 days after the first, if environmental conditions are
•	favourable for disease development. Good spray coverage and canopy
	penetration are important for best results.
Pre-Harvest Interval (PHI)	30 days for forage
, , , , , , , , , , , , , , , , , , ,	14 days for grain
	14 days for sweet corn
Restrictions:	

#### **Restrictions:**

1. DO NOT apply to field corn and field corn grown for seed after brown silk.

2. A maximum of two applications of QUADRIS Flowable Fungicide and a maximum of two applications of TILT 250E Fungicide should be applied per year either as a tank mix or as products applied alone. Not all of these cereal crops have been tested for efficacy and phytotoxicity at the recommended label rates. The user should test the tank mix of QUADRIS Flowable Fungicide and TILT 250E Fungicide on a small area first, under local conditions and using standard practices, to confirm the product is suitable for widespread application.

3. The tank mix of QUADRIS Flowable Fungicide and TILT 250E Fungicide may be applied with ground or air equipment.

GROUND APPLICATION: Apply specified rates in a minimum of 100 L of water per hectare. AERIAL APPLICATION: Apply specified rates in a minimum of 45 L of water per hectare.

# 11.6 Field Tomatoes Only

Crop	Field Tomatoes ONLY
Disease Controlled	Anthracnose (Colletotrichum coccodes)
Use Rate	300 - 500 mL/ha
Application	Apply on a 7 to 10 day interval, starting at first fruit set.
Timing/Instructions	Apply as a broadcast foliar spray in sufficient water for thorough coverage.
	Use the higher rate if extending the treatment interval to 14 days.
	Apply in alternation with fungicides which have a different mode of action, and to which disease resistance has not developed.
Disease Controlled	Early Blight (Alternaria solani)
Use Rate	300 - 500 mL/ha
Application	Apply on a 7 to 14 day interval, starting prior to disease establishment.
Timing/Instructions	
Ū	Apply as a broadcast foliar spray in sufficient water for thorough coverage.
	Use the higher rate if extending the treatment interval to 14 days.
	Apply in alternation with fungicides which have a different mode of action, and to which disease resistance has not developed.
Pre-Harvest Interval (PHI)	1 day
Maximum Number of	3
Applications Per Year	
Maximum Amount of	1.5 L/ha
Product Per Year	
Restrictions:	1

**Restrictions:** 

1. Do not apply sequential treatments of QUADRIS Flowable Fungicide.

2. To avoid damage to tomatoes, QUADRIS Flowable Fungicide should not be applied within 6 days, either before or after, a broadcast application of metribuzin. Follow all precautions, restrictions and directions on the labels of fungicide products used in an alternation program.

3. QUADRIS Flowable Fungicide should not be applied until 21 days after transplanting or 35 days after seeding.

4. The number of solo applications should not exceed 33% of the total number of sprays. Where mixtures (co-formulations or tank mixes) with an effective non-Group 11 fungicide are used, do not exceed 50% of the total number of sprays. Group 11 resistant populations of *Alternaria solani* are present in some regions of Canada. Where resistance has been confirmed, only apply in mixture with partners contributing to the effective control of the target pathogens.

# 12.0 MINOR USES

The DIRECTIONS FOR USE for the uses described in this section of the label were developed by persons other than Syngenta Canada Inc. under the User Requested Minor Use Label Expansion program. For these uses, Syngenta Canada Inc. has not fully assessed performance (efficacy) and/or crop tolerance (phytotoxicity) under all environmental conditions or for all crop varieties when used in accordance with the label. The user should test the product on a small area first, under local conditions and using standard practices, to confirm the product is suitable for widespread application.

#### 12.1 Seed Corn

Crops	Seed Corn
Disease Controlled	Rust (Puccinia sorghi)
Use Rate	453 mL/ha
Application Timing/Instructions	First application should begin prior to disease development and continue with the second application with 7-14 day interval. <b>Ground application ONLY</b> - Apply in 200 litres of water per hectare.
Pre-harvest Interval (PHI)	7 days
Maximum Number of	2
Applications Per Year	
Restrictions:	

1. Do not apply QUADRIS Flowable Fungicide through irrigation equipment.

2. DO NOT apply by air.

#### Ginseng 12.2

Сгор	Ginseng
Disease Controlled	Rhizoctonia (Rhizoctonia solani)
Use Rate	Newly seeded gardens: 1.12 L/ha
Application	For best control of Rhizoctonia (Rhizoctonia solani) on ginseng, apply
Timing/Method	QUADRIS Flowable Fungicide in 4000 L of water per hectare.
	<b>Newly seeded gardens:</b> Maximum of two applications at the rate of 280 g a.i./ha in 4000 L water. One application in the fall (September/October) of the first growing year; apply after seedling prior to straw mulch application. Second application in the following spring; apply over straw mulch (pre-emergence). An aquatic buffer zone is not required for the ginseng use (aquatic buffer zone 0 m).
Pre-harvest Interval (PHI)	24 months
Restrictions:	
1. Ground application onl	y. DO NOT apply QUADRIS Flowable Fungicide by air.

Count application only. DO NOT apply QUADRIS Flowable Fungicide by
 DO NOT apply QUADRIS Flowable Fungicide through irrigation equipment.
 DO NOT use the leaves for feed.

#### 12.3 **HazeInuts and Filberts**

Crops	Hazelnuts and Filberts
Disease Controlled	Eastern filbert blight (Anisogramma anomala)
Use Rate	900 mL/ha
	Apply in 1000 L of water per hectare.
Application Timing	Apply at a 7-10 day interval prior to the disease development; from bud swell to bud break (approximately mid March to mid May).
Pre-Harvest Interval (PHI)	45 days
Maximum Number of	4
Applications Per Year	
Restrictions: 1. DO NOT apply by air. 2. The number of applicatio	ns of a solo Group 11 fungicide should not exceed one when one to two

fungicide applications are planned, two when three to seven fungicide applications are planned, or

three when eight to 11 fungicide applications are planned for eastern filbert blight. When Group 11 fungicides are applied with an effective tank-mix partner, the number of applications should not exceed two when two to five fungicide applications are planned, three when six or seven fungicide applications are planned, or four when eight or nine fungicide applications are planned for eastern filbert blight.

# 12.4 Sugarbeets

Сгор	Sugarbeets
Disease Controlled	Rhizoctonia root and crown rot (Rhizoctonia solani)
Use Rate	0.5 – 1.1 L/ha (4-6 mL/100 m of row for in-furrow)
	Apply in 50 - 100 L water/ha.
Application Timing	Apply once in-furrow at seeding or a banded application over the row soon after emergence but before the 6th leaf stage.
Pre-Harvest Interval (PHI)	100 days
Maximum Number of	1
Applications Per Year	
Restrictions:	
1. DO NOT apply by air.	

# 12.5 Sweet and Field Corn

Сгор	Sweet and Field Corn
Disease Controlled	Rust (Puccinia sorghi)
Use Rate	453 mL/ha in 200 L of water/ha
Application Timing	Begin applications prior to disease establishment and subsequently at a
	7 to 14 day interval.
Application Interval	7-14 days
Pre-Harvest Interval (PHI)	7 days
Maximum Number of	2
Applications Per Year	
Restrictions:	
1. DO NOT apply by air.	

# 12.6 Coriander

Crop	Coriander (Plants Grown for Seed Only)
Disease Controlled	Blossom blight (Aureobasidium spp.)
Use Rate	453-1125 mL/ha
	Apply in a minimum of 100 L of water per hectare with ground boom
	sprayer.
Application Timing	Apply prior to disease establishment.
	Use higher rate (1125 mL product/ha) at high disease pressure.
Pre-Harvest Interval (PHI)	21 days
Maximum Number of	1
Applications Per Year	
Restrictions:	

Restrictions:

1. DO NOT apply by air.

2. Do not use treated leaves for food.

3. Do not apply QUADRIS Flowable Fungicide through irrigation equipment.

4. Apply using nozzle tips and in sufficient water volume for thorough coverage (i.e. at least 100 L/ha).

# 12.7 Ferns of Asparagus

Use Rate       453-1124 mL/ha         Apply in a minimum of 100 L of water/ha         Application Timing       Use the lower rate (453 mL product/ha) and the longer application interval (14 days) under low disease pressure and the higher rate (1124 mL product/ha) and the shorter interval (7 days) under high disease pressure. Begin applications following the final harvest of asparagus spears, prior to disease development.         Application Interval       7 - 14 days         Pre-Harvest Interval (PHI)       180 days         Maximum       Number       3	Crop	Ferns of Asparagus
Apply in a minimum of 100 L of water/ha         Application Timing       Use the lower rate (453 mL product/ha) and the longer application interval (14 days) under low disease pressure and the higher rate (1124 mL product/ha) and the shorter interval (7 days) under high disease pressure. Begin applications following the final harvest of asparagus spears, prior to disease development.         Application Interval       7 - 14 days         Pre-Harvest Interval (PHI)       180 days         Maximum       Number       0	Disease Controlled	Purple Spot Disease (Stemphylium vesicarium)
Application Timing       Use the lower rate (453 mL product/ha) and the longer application interval (14 days) under low disease pressure and the higher rate (1124 mL product/ha) and the shorter interval (7 days) under high disease pressure. Begin applications following the final harvest of asparagus spears, prior to disease development.         Application Interval       7 - 14 days         Pre-Harvest Interval (PHI)       180 days         Maximum       Number       0	Use Rate	453-1124 mL/ha
(14 days) under low disease pressure and the higher rate (1124 mL product/ha) and the shorter interval (7 days) under high disease pressure. Begin applications following the final harvest of asparagus spears, prior to disease development.         Application Interval       7 - 14 days         Pre-Harvest Interval (PHI)       180 days         Maximum       Number       0		Apply in a minimum of 100 L of water/ha
Pre-Harvest Interval (PHI) 180 days Maximum Number of 3	Application Timing	(14 days) under low disease pressure and the higher rate (1124 mL product/ha) and the shorter interval (7 days) under high disease pressure. Begin applications following the final harvest of asparagus spears, prior
Maximum Number of 3	Application Interval	7 - 14 days
	Pre-Harvest Interval (PHI)	180 days
Applications Per Year	Maximum Number of	3
	Applications Per Year	

**Restrictions:** 

1. DO NOT apply by air.

2. Do not apply QUADRIS Flowable Fungicide through irrigation equipment.

3. Apply using nozzle tips and in sufficient water volume for thorough coverage (i.e. at least 100 L/ha).

4. The number of applications of a solo Group 11 fungicide should not exceed one when one to two fungicide applications are planned, two when three to seven fungicide applications are planned, or three when eight to 11 fungicide applications are planned for purple spot. When Group 11 fungicides are applied with an effective tank-mix partner, the number of applications should not exceed two when two to five fungicide applications are planned, or three when six or seven fungicide applications are planned for purple spot.

# 12.8 Spinach

Crop	Spinach
Disease Controlled	Downy Mildew (Peronospora farinosa f.sp. spinaciae)
Use Rate	1.125 L/ha (281 g ai/ha) mixed in sufficient water for thorough coverage
Application Timing	Begin applications prior to disease establishment and subsequently at a 7 day interval.
Application Interval	7 days
Pre-Harvest Interval (PHI)	7 days
Maximum Number of Applications Per Year	2
<b>Restrictions:</b> 1. DO NOT apply by air.	

1. DO NOT apply by air.

2. Do not apply QUADRIS Flowable Fungicide through irrigation equipment. Apply using nozzle tips and in sufficient water volume for thorough coverage (i.e. at least 100 L/ha). Higher water volumes may be necessary to provide adequate coverage in thick crop canopies.

3. The number of applications of a solo Group 11 fungicide should not exceed one when one to two fungicide applications are planned for downy mildew.

#### 12.9 Carrots, Daikon, Horseradish, Rutabaga, Turnip and Garden Beet

Сгор	Carrots, Daikon, Horseradish, Rutabaga, Turnip and Garden Beet
Disease Controlled	Rhizoctonia root rot, crown rot and stem canker (Rhizoctonia solani)
Use Rate	4-6 mL/100 m row in 50-100 L water/ha
Application Timing/Method	Apply either in-furrow at seeding or as a banded application over the row soon after emergence or within 30 days of emergence.
	Use the higher rate when the weather conditions are expected to be conducive for disease development or if minimum or low till programs are in place.
Pre-Harvest Interval (PHI)	40 days
Maximum Number of Applications Per Year	1
<ul> <li>Restrictions:</li> <li>1. Banded applications come in contact with foliage and are counted as foliar applications when considering resistance management.</li> </ul>	

# 12.10 Radish

Crop	Radish
Disease Controlled	Rhizoctonia root rot, crown rot and stem canker ( <i>Rhizoctonia solani</i> )
Use Rate	4-6 mL /100 m row in 50-100 L water/ha
Application Timing/Method	Apply either in-furrow at seeding or as a banded application over the row soon after emergence.
	Use the higher rate when the weather conditions are expected to be conducive for disease development or if minimum or low till programs are in place.
Pre-Harvest Interval (PHI)	15 days
Maximum Number of	1
Applications Per Year	
Restrictions:	

1. Banded applications come in contact with foliage and are counted as foliar applications when considering resistance management.

2. DO NOT apply by air.

3. Do not apply through irrigation equipment.

4. Apply using nozzle tips and in sufficient water volume for thorough coverage (i.e. 50-100 L/ha).

# 12.11 Tobacco

Сгор	Торассо
Disease Controlled	Blue Mold (Peronospora tabacina)
Use Rate	870 mL/ha
Application Timing/Method	Begin applications prior to disease development or at the first indication that blue mold is in the area. DO NOT apply QUADRIS Flowable Fungicide as a curative application.
	Apply on a 7 to 14 day interval with shorter intervals under conditions conducive for disease development.
Disease Suppressed	Target spot (Rhizoctonia solani)
Use Rate	870 mL/ha Apply QUADRIS Flowable Fungicide in sufficient water volume for adequate coverage and canopy penetration.
Application Timing/Method	Apply once in the spring or early summer
Pre-Harvest Interval (PHI)	21 days
Maximum Number of	2 applications for blue mold
Applications Per Year	1 application for target spot
Restrictions:	

1. Apply by ground application.

2. DO NOT apply more than one application of QUADRIS Flowable Fungicide or other Group 11 fungicides before alternation with a fungicide that is not from Group 11.

3. QUADRIS may enhance weather flecking on the leaves of certain tobacco types. This does not affect yield and quality.

4. Tank mixing with insecticides formulated as ECs or containing high amounts of solvents may cause some crop injury.

#### 12.13 Ground Cherries

Crop	Ground Cherries
Disease Controlled	Early blight (Alternaria solani)
Use Rate	300 - 500 mL/ha
	Use sufficient water to provide thorough coverage as a ground application
	or a broadcast foliar spray.
Application Timing	Begin applications prior to disease development.
Application Interval	Allow 7 to 14 days between applications.
	Use the higher rate if extending the treatment interval to 14 days.
Pre-Harvest Interval (PHI)	1 day
Maximum Number o	3
Applications Per Year	
Maximum Amount o	1.5 L/ha
Product Per Year	
Postrictions:	

#### **Restrictions:**

1. Do not apply sequential treatments of QUADRIS Flowable Fungicide.

- 2. QUADRIS Flowable Fungicide should not be applied within 6 days, either before or after, of a broadcast application of metribuzin.
- 3. Follow all precautions, restrictions and directions on the labels of fungicide products used in an alternation program.
- 4. QUADRIS Flowable Fungicide should not be applied until 21 days after transplanting or 35 days after seeding.
- 5. The number of applications of a solo Group 11 fungicide should not exceed one when one to two fungicide applications are planned, or two when three to seven fungicide applications are planned for early blight. When Group 11 fungicides are applied with an effective tank-mix partner, the number of applications should not exceed two when two to five fungicide applications are planned for early blight.

Сгор	Cumin
Disease Suppressed	Blossom blight (Ascochyta spp. and Alternaria spp.)
Use Rate	1125 mL/ha (281 g ai/ha)
	Apply in a minimum of 100 L of water per hectare.
Application Timing	Begin foliar applications prior to disease establishment.
Pre-Harvest Interval (PHI)	21 days
Maximum Number of	1
Applications Per Year	
Restrictions:	
1. DO NOT apply by air.	

# 12.12 Cumin

# 12.13 Cabbage

Сгор	Cabbage
Disease Suppressed	Alternaria leaf spot (Alternaria brassicae)
Use Rate	1.12 L/ha (280 g ai/ha) For foliar ground application, apply in a minimum spray volume of 95 L/ha.
Application Timing	Begin applications prior to disease development and continue throughout the season.
Application Interval	7 - 14 days
Pre-Harvest Interval (PHI)	1 day
Maximum Number of Applications Per Year	3
Maximum Amount of Product Per Year	3.36 L/ha (840 g ai/ha)
Restrictions:	

1. The number of applications of a solo Group 11 fungicide should not exceed one when one to two fungicide applications are planned, or two when three to seven fungicide applications are planned for Alternaria leaf spot. When Group 11 fungicides are applied with an effective tank-mix partner, the number of applications should not exceed two when two to five fungicide applications are planned for Alternaria leaf spot.

2. DO NOT apply by air.

3. Suppression only.

#### 12.14 Safflower

aria leaf spot ( <i>Alternaria carthami</i> ) nL/ha ninimum spray volume of 100 L/ha to provide thorough coverage. plication is to be made preventively at early bloom when the first
ninimum spray volume of 100 L/ha to provide thorough coverage.
plication is to be made preventively at early bloom when the first
are seen in the field.
3

# 12.15 Cranberries

Crop	Cranberries
Diseases Controlled	Fruit rots (Physalospora vaccinii, Glomerella cingulata, and
	Coleophoma empetri)
Disease Suppressed	Cottonball rot (Monilinia oxycocci)
Use Rate	1.0 L/ha
Application Timing/Method	Begin applications at 5 -10% bloom
	Foliar Spray - Apply as a broadcast foliar spray in sufficient water
	(minimum 100L/ha) for thorough coverage.
Application Interval	Alternate with other registered fungicides on a 7 to 10 day schedule.
Pre-Harvest Interval (PHI)	30 days
Maximum Number of	3
Applications Per Year	
Maximum Amount of	3.0 L/ha
Product Per Year	

#### **Restrictions:**

1. Follow all precautions, restrictions and directions on the labels of fungicide products used in an alternation program.

- 2. DO NOT apply by air. DO NOT apply by chemigation if applied by broadcast foliar spray.
- 3. The number of applications of a solo Group 11 fungicide should not exceed one when one to two fungicide applications are planned, or two when three to seven fungicide applications are planned for the listed diseases. When Group 11 fungicides are applied with an effective tank-mix partner, the number of applications should not exceed two when two to five fungicide applications are planned for the listed diseases.

Сгор	Cranberries
Diseases Controlled	Fruit rots (Physalospora vaccinii, Glomerella cingulata, Coleophoma
	empetri)
Disease Suppressed	Cottonball rot (Monilinia oxycocci)
Use Rate	1.0 L/ha
Application Timing/Method	Begin applications at 5 -10% bloom
	Chemigation - Apply as a foliar spray in sufficient water (minimum 1000
	L/ha) for thorough coverage.
Application Interval	7 to 10 days
Pre-Harvest Interval (PHI)	30 days
Maximum Number of	3
Applications Per Year	
Maximum Amount of	3.0 L/ha
Product Per Year	
Destrictions	

#### **Restrictions:**

1. DO NOT apply by broadcast foliar spray if applied by chemigation.

2. The number of applications of a solo Group 11 fungicide should not exceed one when one to two fungicide applications are planned, or two when three to seven fungicide applications are planned for the listed diseases. When Group 11 fungicides are applied with an effective tank-mix partner, the number of applications should not exceed two when two to five fungicide applications are planned for the listed diseases.

3. Do not allow spray pattern to exceed the enclosed bed area.

#### **Chemigation Application for Cranberry**

**Chemigation**: **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 and Biological Engineers (ASABE S572.1) fine/medium/coarse classification. Applications **MUST** be conducted **WITHOUT** the use of end guns.

**Types of Irrigation Systems:** QUADRIS Flowable may be applied through sprinkler type irrigation systems only, such as overhead solid set irrigation systems. Do not apply QUADRIS Flowable through any other type of irrigation system.

**Injection for Chemigation:** Inject the specified dosage of QUADRIS Flowable into the irrigation main water stream: (1) through a constant flow, metering device; (2) into the center of the main line flow via a pitot tube or equivalent; (3) at a point ahead of at least one, right angle turn in the main stream flow such that thorough mixing with the irrigation water in ensured.

Uniform Water Distribution and System Calibration: The irrigation system must provide uniform distribution of QUADRIS Flowable treated water. Crop injury, lack of effectiveness, or illegal pesticide residues in or on the crop can result from non-uniform distribution. The system must be calibrated to uniformly distribute the rates specified for chemigation application. If you have questions about calibration, contact a provincial agricultural specialist, equipment manufacturers, or other experts.

**Chemigation Monitoring:** 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.

Required Injection and Sprinkler System Safety Devices: 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. 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/engine stops; or in cases where there is no water pump, when water pressure decreases to the point where pesticide distribution is adversely affected. Injection systems must use a metering pump or equivalent, such as a positive displacement injection pump (e.g., diaphragm pump, venture injection) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Using Water from Public Water Systems: 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. 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. The pesticide injection pipeline must contain a functional, automatic, guickclosing check valve to prevent the flow of fluid back toward the injection. 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. 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. 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.

**Cleaning the Chemical Injection System:** In order to apply pesticides accurately, the chemical injection system must be kept clean, free of chemical or fertilizer residues and sediments. Refer to your owner's manual or ask your equipment supplier for the cleaning procedure for your injection system.

**Flushing the Irrigation System:** At the end of the application period, allow time for all lines to flush the pesticide through all nozzles or emitters before turning off irrigation water. To ensure the lines are flushed and free of pesticides, a dye indicator may be injected into the lines to mark the end of the application period.

Solid Linear Systems: Injection should be during the last 30 minutes of regular irrigation period or as a separate 30 minute application not associated with a regular irrigation.

Crop	Celery		
Disease Controlled	Early blight (Cercospora apii), Late blight (Septoria apiicola)		
Use Rate	0.672-1.120 L/ha		
Disease Controlled	Anthracnose (Colletotrichum acutatum)		
Use Rate	1.120 L/ha		
Application	Begin applications prior to disease development.		
Timing/Method	Use sufficient water to provide thorough coverage as a ground application		
	or a broadcast foliar spray.		
Application Interval	7 - 12 days		
Pre-Harvest Interval (PHI)	1 day		
Maximum Number of	3		
Applications Per Year			
Maximum Amount of	3.36 L/ha		
Product Per Year			
Restrictions:			
	ons of a solo Group 11 fungicide should not exceed one when one to two		
<b>e</b>	fungicide applications are planned, or two when three to seven fungicide applications are planned		
	for the listed diseases. When Group 11 fungicides are applied with an effective tank-mix partner, the		
	hould not exceed two when two to five fungicide applications are planned		
for the listed diseases.			
	strictions and directions on the labels of fungicide products used in an		
alternation program.			

# 12.16 Celery

# 12.17 Strawberries

Crop	Strawberries
Disease Suppressed	Black root rot (Rhizoctonia fragariae)
Use Rate	1.1 L/ha (6 mL / 100 m of row) in 1000-1500 L water/ha
Application Timing/Method	<b>NEW PLANTINGS:</b> <u>First Application</u> –Apply once in-furrow at planting or a banded drench application immediately after planting up to 8 days post planting. <u>Second Application</u> – Apply over rows during the establishment year when plants are setting axillary buds (Principle Growth Stage 9 Senescence, beginning of dormancy, BBCH 91).
	<b>ESTABLISHED PLANTINGS:</b> <u>First Application</u> – Apply in the spring when new leaves emerge (Principle growth stage 1 Leaf development, BBCH 10) <u>Second Application</u> - Apply over rows as above (Principle Growth 9 Senescence, beginning of dormancy, BBCH 91).
	Do not apply more than one application before alternating with a fungicide with a different mode of action registered for the same disease.
	Apply as a drench application in sufficient water to ensure even coverage or as a high volume foliar application directed at the crown (1000 – 1500 L/ha). Mount the spray nozzle so the spray is directed over the plants as a $15 - 20$ cm wide band. Typically, for drench application use 9.9 L of water per 100 m and irrigation afterwards to ensure adequate movement of the product to the roots.
	Apply through a drip irrigation system using a minimum of 25,000 L of water per hectare. Water volumes used will be dependent on soil type, size and layout of field, and irrigation system (no. of emitters, flow rate). The soil should have adequate moisture capacity prior to drip application. Irrigation lines should be flushed after application. It is recommended that growers run a dye test to measure how long it takes to flush lines at the most distant zone. Consult a local crop or irrigation specialist for assistance if required.
	Do not apply this product through any other type of irrigation system.
	Ensure that the chemigation system used has devices to prevent water source contamination from back flow. The irrigation pump and the injection pump must have an interlocking electrical system.
	<ul> <li>To ensure uniformity of pesticide application by drip irrigation:</li> <li>Begin QUADRIS Flowable Fungicide injections only when the drip irrigation system has reached full operating pressure.</li> <li>Extended injection time will increase QUADRIS Flowable Fungicide application uniformity. As a minimum, the drip irrigation system must operate at least until water moves from the point of injection to the furthest emitter. To calculate this time, inject soluble dye or soap solution into the drip irrigation system and record the time of movement of this solution from point of injection to most distant emitter.</li> </ul>

	Post plant drenches should be made in a 20cm band.
Pre-Harvest Interval (PHI)	1 day
Maximum Number of Applications Per Year	2
<b>Restrictions:</b> 1. DO NOT apply by air.	

# 12.18 Parsley

Crop		Parsley
Diseases Controlled		Leaf blight (Alternaria spp.)
		Leaf blight (Septoria petroselini)
Use Rate		0.45-1.12 L/ha
Application		Begin applications before the symptoms occur.
Timing/Method		Apply as a broadcast foliar spray in sufficient water for thorough coverage.
-		It is recommended to apply in a minimum of 100 L per hectare.
Application Interval		Alternate with other registered fungicides on a 7 to 14 day schedule.
Pre-Harvest Interval (PF	II)	1 day
Maximum Number	of	3
Applications Per Year		
Maximum Amount	of	3.36 L/ha
Product Per Year		
Restrictions:		

#### **Restrictions:**

1. The number of applications of a solo Group 11 fungicide should not exceed one when one to two fungicide applications are planned, or two when three to seven fungicide applications are planned for the listed diseases. When Group 11 fungicides are applied with an effective tank-mix partner, the number of applications should not exceed two when two to five fungicide applications are planned for the listed diseases.

2. DO NOT apply more than one application of QUADRIS Flowable Fungicide per crop per year if a non-group 11 alternative product is not available.

3. Follow all precautions, restrictions and directions on the labels of fungicide products used in an alternation program.

# 4. DO NOT apply by air.

#### 12.19 Caraway

Use Rate	Blossom blight (Aureobasidium spp.) 0.453-1.125 L/ha
	0.452.4.425 L/ba
	0.455-1.125 L/na
	Use higher rate at high disease pressure.
Timing/Method	Begin applications prior to disease development, when disease conditions are critical for disease development. Apply as a broadcast foliar spray in sufficient water (minimum 100 L/ha) for thorough coverage.
Pre-Harvest Interval (PHI)	21 days
Maximum Number of	1
Applications Per Year	
Restrictions:	
1. DO NOT apply by air.	

# 12.20 Globe Artichoke

Crop	Globe Artichoke		
Disease Suppressed	Ramularia leaf spot (Ramularia cynarae)		
Use Rate	0.800-1.125 L/ha		
Application Timing/Method	Begin applications prior to or in the early stages of disease development, and continue as needed throughout the season at a 2- to 3-week interval, up to and including the day of harvest. Apply as a broadcast foliar spray in sufficient water (minimum 500 L/ha)		
	for thorough coverage.		
Pre-Harvest Interval (PHI)	0 days		
Maximum Number of	3		
Applications Per Year			
Restrictions:			
1. The number of applications of a solo Group 11 fungicide should not exceed one when one to two fungicide applications are planned, or two when three to seven fungicide applications are planned for the listed diseases. When Group 11 fungicides are applied with an effective tank-mix partner, the number of applications should not exceed two when two to five fungicide applications are planned for the listed diseases.			

2. DO NOT apply more than one application of QUADRIS Flowable Fungicide per crop per year if a nongroup 11 alternative product is not available.

#### 13.0 RESISTANCE MANAGEMENT RECOMMENDATIONS

For resistance management, QUADRIS Flowable Fungicide contains a Group 11 fungicide. Any fungal population may contain individuals naturally resistant to 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:

Where possible, rotate the use of QUADRIS Flowable Fungicide or other Group 11 fungicides with different groups that control the same pathogens.

Do not exceed the total number of applications of QUADRIS Flowable Fungicide per year per crop as stated in the label.

Do not apply sequential treatments of QUADRIS Flowable Fungicide, or other fungicides in the same Fungicide Group, in a year. Do not apply at rates lower than recommended on the label.

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

Fungicide use should be based on an integrated disease management (IPM) program that includes scouting, historical information related to pesticide use and crop rotation and considers host plant resistance, impact of environmental conditions on disease development, disease thresholds, as well as cultural, biological and other chemical control practices.

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

Monitor treated fungal populations for signs of resistance development. Notify Syngenta Canada Inc. if reduced sensitivity of pathogen to QUADRIS Flowable Fungicide is suspected.

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 to which pathogen resistance has not developed, 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 pathogens.

Сгор	PHI Interval	Maximum number of applications per year
Canola	30 days	2
Legume Vegetables	15 days	2
Potatoes (Foliar application)	1 day	3
Tomatoes	1 day	3
Seed, Sweet and Field Corn	7 days	2
Ginseng	24 months	2
Hazelnuts and Filberts	45 days	4
Sugarbeets	100 days	1
Ferns of Asparagus	180 days	3
Coriander	21 days	1
Spinach	7 days	2
Carrot, Daikon, Horseradish, Rutabaga, Turnip and Garden Beet	40 days	1
Radish	15 days	1
Tobacco	21 days	1 (target spot); 2 (blue mold)
Chickpeas	15 days	2
Ground Cherries	1 day	3
Cumin	21 days	1
Cabbage	1 day	3
Safflower	21 days	1
Cranberries	30 days	3
Celery	1 day	3
Strawberries	1 day	2
Parsley	1 day	3
Caraway	21 days	1
Globe Artichoke	0 days	3

#### Application Limitation and Preharvest Interval

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

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