GROUP 12 FUNGICIDE

# SCHOLAR<sup>®</sup> 230SC FUNGICIDE

#### COMMERCIAL

SUSPENSION

For control of post harvest diseases on listed crops.

# **ACTIVE INGREDIENT:**

Fludioxonil ...... 230 g/L

Contains 1,2-benzisothiazolin-3-one at 0.019% as a preservative. or Contains 2-bromo-2-nitropropane-1,3-diol at 0.03% as a preservative.

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

REGISTRATION NUMBER: 29528 PEST CONTROL PRODUCTS ACT

NET CONTENTS: 1 L to Bulk

**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. The user assumes the risk to persons or property that arises from any such use of this product.

# 2.0 FIRST AID

**IN CASE OF POISONING,** call a physician or 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/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 mouth-to-mouth if possible. Call a poison control centre or doctor for further treatment advice.

# 3.0 TOXICOLOGICAL INFORMATION

There is no specific antidote known. Treat symptomatically.

# 4.0 **PRECAUTIONS**

# KEEP OUT OF REACH OF CHILDREN.

Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Wash thoroughly with soap and water after handling. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

Do not use or store near heat or open flame.

Do not eat, drink or smoke while mixing or during application. Change and wash clothing immediately after use. Wash hands and face before eating, drinking, smoking or using the toilet. Store and wash all protective clothing separately from household laundry. Wash in detergent and hot water before reuse.

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

Applicators and other handlers of the fungicide should wear chemical-resistant gloves made from any waterproof material, goggles, long-sleeve shirt, long pants, and shoes with socks, when mixing, loading and applying the product, and during clean-up and repair activities.

Wear chemical resistant gloves and coveralls when handling crops treated with SCHOLAR<sup>®</sup> 230SC Fungicide during sorting/culling-related activities.

#### 6.0 ENVIRONMENTAL HAZARDS

This product is TOXIC to fish and aquatic organisms. DO NOT apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. DO NOT allow fludioxonil contaminated waste water from the processing plants to enter lakes, streams, ponds or other waters.

Observe buffer zones specified under DIRECTIONS FOR USE.

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

To reduce runoff from treated areas into aquatic habitats, avoid application to areas with a moderate to sleep 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.

#### USE ONLY ON CROPS AS LISTED ON THIS LABEL.

DO NOT APPLY BY AIR.

#### 7.0 STORAGE

Store in original containers only. Keep container closed when not in use. Do not store near food or feed. In case of spill on floor or paved surfaces, mop and remove to chemical waste storage area until proper disposal can be made if product cannot be used according to the label. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes. To prevent contamination, store this product away from food or feed.

#### 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.

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

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Pamphlet

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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.

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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**

SCHOLAR 230SC Fungicide is a protective fungicide used to aid in the control of post harvest diseases on stone, pome fruits, sweet potato and carrots and for disease control/suppression in ginseng and strawberry.

**NOTE:** SCHOLAR 230SC Fungicide may be degraded by exposure to direct sunlight. Treated fruit should not be stored in direct sunlight.

# FAILURE TO FOLLOW DIRECTIONS AND PRECAUTIONS ON THIS LABEL MAY RESULT IN CROP INJURY, POOR DISEASE CONTROL, AND/OR ILLEGAL RESIDUES.

# 9.1 Spray Equipment

Thorough coverage is necessary to provide good disease control. Applications using sufficient water volume to provide thorough and uniform coverage generally provide the most effective disease control.

For ground application equipment, a minimum of 200 L of water per hectare is recommended. To avoid spray drift, do not apply when conditions favor drift beyond the target area. Avoid spray overlap, as crop injury may occur.

Equip sprayers with nozzles that provide accurate and uniform application. Calibrate sprayer before use.

#### 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.

#### **10.2 Ground Application**

**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 Engineers (ASAE) fine classification. Boom height must be 60 cm or less above the crop or ground.

**DO NOT** apply by air.

DO NOT apply this product through any type of irrigation system.

Use a pump with capacity to maintain the correct rated pressure for the nozzles selected.

Maintain sufficient agitation to keep the mixture in suspension. Use a jet agitator, liquid sparge tube, or mechanical paddle for agitation. Do not air sparge.

It is suggested that screens be used to prevent nozzles from clogging. Screens placed after the tank and before the nozzles should be 50-mesh or coarser. Check nozzle manufacturer's recommendations.

For more information on spray equipment and calibration, consult sprayer manufacturers and provincial recommendations.

#### 10.3 Buffer Zones

Use the following spray methods or equipment **DOES 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 freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs, and wetlands).

	Сгор	Buffer Zones (metres) Required for the Protection of Freshwater Habitat of Depths:		, .
Method of application		Less than 1 m	Greater than 1 m	
Field sprayer	Ginseng	5	1	

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

The 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 Pest Management Regulatory Agency web site.

# 11.0 CROP USE DIRECTIONS

Use SCHOLAR 230SC Fungicide as a post-harvest dip and drench immediately before the storage of fruit for the control of the post-harvest diseases listed below:

Crono	Pests	Product Rate	
Crops	Fesis	Drench Application	Dip Application
<b>Pome Fruit</b> : Apple, Crabapple, Loquat, Mayhaw, Pear, Pear (oriental), Quince	Blue Mold ( <i>Penicillium</i> <i>expansum</i> ) Gray Mold ( <i>Botrytis</i> <i>cinerea</i> )	Mix 496 mL of product in 378 L of water, for the crop being treated. Can treat up to 90,000 kg of fruit.	Mix 496 mL of product in 378 L of water, for the crop being treated. Dip for approximately 30 seconds and allow fruit to drain. Can treat up to 90,000 kg of fruit.
Stone Fruit : Apricot, Nectarine, Peach, Plum, Plum (Chickasaw), Plum (Damson), Plum (Japanese), Plumcot, Prune (fresh) as well as other cultivars of these Note: This product is intended for use on plums meant for direct consumption; should not be used on plums intended for processing in to prunes.	Blue Mold ( <i>Penicillium</i> <i>expansum</i> ) Gray Mold ( <i>Botrytis</i> <i>cinerea</i> ) Brown Rot ( <i>Monilinia</i> <i>fructicola</i> ) Rhizopus Rot ( <i>Rhizopus</i> spp.)	Mix 496 mL of product in 378 L of water, for the crop being treated. Can treat up to 90,000 kg of fruit.	Mix 496 mL of product in 378 L of water, for the crop being treated. Dip for approximately 30 seconds and allow fruit to drain. Can treat up to 90,000 kg of fruit.
Cherries: Cherry (sweet), Cherry (tart) as well as other cultivars and hybrids of these		Mix 496 mL of product in 378 L of water, for the crop being treated. Can treat up to 11,500 kg of fruit.	Mix 496 mL of product in 378 L of water, for the crop being treated. Dip for approximately 30 seconds and allow fruit to drain. Can treat up to 11,500 kg of fruit.

NOTE: Do not make more than one post-harvest application to pome or stone fruit.

# 12.0 MINOR USES

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

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

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

Сгор	Sweet Potato
Target Disease	Post-harvest rhizopus rot caused by Rhizopus stolonifer
Method and Timing of	
Applications	allow sweet potatoes to drain.
Use Rate	Mix 473 ml of SCHOLAR 230SC in 378 L of water, wax/emulsion, or
	aqueus dilution of wax/oil emulsion.
	After each 18,750 kg (750 bushels of cured sweet potato) is treated, drain
	and flush the tank. Refill with fresh dip suspension.
Number of applications	Maximum one application
Additional Use Directions	To ensure SCHOLAR 230SC solution remains in suspension use agitation.
	SCHOLAR 230SC may be degraded by exposure to direct sunlight.
	Treated sweet potatoes should not be stored in direct sunlight.
Сгор	Sweet Potato
Target Disease	Post-harvest rhizopus rot caused by Rhizopus stolonifer
Method and Timing of	Apply in-line aqueous or fruit coating spray application.
Applications	
Use Rate	Mix 473 ml of SCHOLAR 230SC in 378 L of water, wax/emulsion, or
	aqueous dilution of wax/oil emulsion (300 ppm) for the crop being treated.
	Use T-jet, CDA or similar application.
Number of applications	Maximum one application
Additional Use Directions	Ensure proper coverage of the crop.
	To ensure SCHOLAR 230SC solution remains in suspension use agitation.
	SCHOLAR 230SC may be degraded by exposure to direct sunlight.
Cron	Treated sweet potatoes should not be stored in direct sunlight.
Crop	Carrots
Target Disease	Post-harvest white mold/sclerotinia rot caused by <i>Sclerotinia sclerotiorum</i>
Method and Timing of	Apply as a post-harvest dip or drench immediately before storage. Dip for approximately 30 seconds and allow carrots to drain.
Applications Use Rate	Mix 496 mL of product in 378 L of water. Can treat up to 90,000 kg of
USE Rale	carrots.
Number of applications	Maximum one application
Additional Use Directions	SCHOLAR 230SC Fungicide may be degraded by exposure to direct
	sunlight. Treated carrots should not be stored in direct sunlight.
	Replenish the suspension when the volume is too low or when it becomes
	dirty.
	The runoff and wastes from the dipping operation should not be discarded
	in a drainage which could enter public water systems.

Сгор	Ginseng
Target Disease	Root rots- Rhizoctonia solani (control) and Cylindrocarpon destructans
-	(suppression)
	Alternaria Blight (Alternaria panax) and Botrytis Blight (Botrytis cinerea)
Method and Timing of	Apply by broadcast ground application in sufficient water volume to obtain
Applications	thorough coverage and penetration to the soil and root zone.
	Apply on a 14 to 21 day interval.
Use Rate	0.6 – 1.2 L/ha (140 – 280 g ai/ha)
Number of applications	DO NOT make more than 3 applications per season.
<b>Additional Use Directions</b>	DO NOT apply within 14 days of harvest.
	DO NOT exceed 3.6 L product/ha per season.
	DO NOT APPLY BY AIR.
	DO NOT enter or allow worker entry into treated areas during the restricted
	entry interval (REI) of 12 hours.

fficient water to ensure even coverage on directed at the crown (1000 – 1500 the spray is directed over the plants as a for drench application use 9.9 L of water to ensure adequate movement of the
on directed at the crown $(1000 - 1500)$ is spray is directed over the plants as a or drench application use 9.9 L of water
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em using a minimum of 25,000 L of used will be dependent on soil type, size stem (no. of emitters, flow rate). The so pacity prior to drip application. Irrigation ation. It is recommended that growers it takes to flush lines at the most or irrigation specialist for assistance if
ny other type of irrigation system. n used has devices to prevent water ow. The irrigation pump and the injection ectrical system. oplication by drip irrigation: ide injections only when the drip perating pressure. rates at least the minimum time required e point of injection to furthest emitter. by injection of soluble dye or soap novement of this solution from point of ease SCHOLAR 230SC Fungicide
week of transplanting when transplants e Growth Stage 1 Leaf development, ws during the late July to early August nts are setting axillary buds (Principle
nning of dormancy, BBCH 91). ng when new leaves emerge (Principle BBCH 10). novation (late July – early August)
eginning of dormancy, BBCH 91).
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# 13.0 RESISTANCE MANAGEMENT RECOMMENDATIONS

For resistance management, SCHOLAR 230SC Fungicide contains a Group 12 Fungicide. Any fungal population may contain individuals naturally resistant to SCHOLAR 230SC Fungicide and other Group 12 fungicides. A gradual or total loss of pest control may occur over time if these fungicides are used repeatedly in the same fields. Other resistance mechanisms that are not linked to site of action but specific for individual chemicals, such as enhanced metabolism, may also exist. Appropriate resistance management strategies should be followed.

#### To delay fungicide resistance:

Where possible, rotate the use of SCHOLAR 230SC Fungicide or other Group 12 fungicide with different groups that control the same pathogens.

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

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

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

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

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

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