GROUP 4 7 12 FUNGICIDES

VIBRANCE® MAXX RFC

SEED TREATMENT FUNGICIDE

SUSPENSION

COMMERCIAL

A seed treatment product for control of seed- and soil-borne diseases in labeled crops.

ACTIVE INGREDIENT:

Sedaxane	50 g/L
Metalaxyl-M and S-isomer	
Fludioxonil	

Contains 1,2-benzisothiazolin-3-one at 0.00135%, 5-chloro-2-methyl-4-isothiazolin-3-one at 0.00056% and 2-methyl-4-isothiazolin-3-one at 0.00019% as preservatives.

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

Warning: contains the allergen soy

REGISTRATION NO: 32272

PEST CONTROL PRODUCTS ACT

NET CONTENTS: 1 L to 1050 L

ALL SEED TREATED WITH THIS PRODUCT MUST BE CONSPICUOUSLY COLOURED

Syngenta Canada Inc.

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

NOTICE TO USER

This pest control product is to be used only in accordance with the directions on the label. It is an offence under the *Pest Control Products Act* to use this product in a way that is inconsistent with the directions on the label.

FIRST AID

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

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

If 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.

TOXICOLOGICAL INFORMATION

NOTE TO PHYSICIAN: Treat symptomatically.

PRECAUTIONS

KEEP OUT OF REACH OF CHILDREN AND DOMESTIC ANIMALS. Wash hands and face after handling and before eating, using tobacco (including smoking), applying cosmetics, or using the toilet. Avoid contamination of feed and foodstuffs.

For commercial seed treatment:

Cleaners must wear chemical-resistant coveralls over a long-sleeved shirt and long pants, and chemical-resistant gloves. Treaters, baggers, sewers, stackers, forklift operators and others must wear cotton coveralls over a long-sleeved shirt and long pants, and chemical-resistant gloves. A NIOSH approved N95 filtering facepiece respirator (dust mask) that is properly fit tested must be worn when bagging or sewing bags of treated seed or when transferring seed to a storage bin. For good hygiene practice, it is also recommended to wear a NIOSH-approved N95 filtering facepiece respirator (dust mask) that is properly fit tested during all job activities.

For on-farm treating and planting:

When treating seeds, handling and planting treated seed, workers must wear cotton coveralls or long sleeved shirt and long pants, chemical-resistant gloves, and work boots. In addition, wear a NIOSH-approved N95 filtering facepiece respirator (dust mask) that is properly fit tested or an appropriate respirator to minimize exposure to dust.

Do not contaminate food, feed or domestic water supplies.

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.

ENVIRONMENTAL HAZARDS

This product is toxic to fish and other aquatic organisms. Do not apply directly to aquatic habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs, ditches and wetlands), estuaries or marine habitats. Do not contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.

Treated seed is toxic to small wild mammals. Any spilled or exposed seeds must be incorporated into the soil or otherwise cleaned-up from the soil surface.

STORAGE

Ideal storage temperature is above freezing and below 30 °C. Repeated freeze-thawing of VIBRANCE® MAXX RFC Seed Treatment will not affect the physical integrity of the product. If the product should freeze, bring the product back to room temperature and ensure the contents are mixed well prior to application.

USE LIMITATIONS

- 1. Do not use treated seed for food, feed or oil purposes.
- 2. Do not plant any crop other than cereals, corn, soybeans, members of Crop Subgroup 6C (Dried shelled peas and beans, chickpeas, lentils and fava beans) or members of Crop Subgroup 20A (Canola/rapeseed subgroup), within 60 days to fields in which treated seeds were planted.
- 3. Do not graze or feed livestock on treated area for 45 days after planting soybeans. Do not graze or feed livestock on treated area for 60 days after planting members of Crop Subgroup 6C (Dried shelled peas and beans, chickpeas, lentils and fava beans).

NOTE:

Seed treated with VIBRANCE MAXX RFC must be labeled with the following statements: "This seed has been treated with the fungicides metalaxyl-M and S-isomer, fludioxonil and sedaxane. When handling and planting treated seed, workers must wear cotton coveralls or long sleeved shirt and long pants, chemical-resistant gloves, and work boots. For good hygiene practice, it is also recommended to wear a NIOSH-approved N95 filtering facepiece respirator (dust mask) that is properly fit tested during all job activities. Do not use for food, feed or oil processing. Store away from food and feed."

DISPOSAL OF UNUSED, UNWANTED PRODUCT

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

CONTAINER DISPOSAL:

For recyclable containers:

Do not reuse this container for any purpose. This is a recyclable container, and is to be disposed of at a container collection site. Contact your local distributor/dealer or municipality for the 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.

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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.

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

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USE LIMITATIONS

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- 2. Do not plant any crop other than cereals, corn, soybeans, members of Crop Subgroup 6C (Dried shelled peas and beans, chickpeas, lentils and fava beans) or members of Crop Subgroup 20A (Canola/rapeseed subgroup), within 60 days to fields in which treated seeds were planted.
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GENERAL INFORMATION

VIBRANCE MAXX RFC is a seed treatment product containing the fungicides, fludioxonil, metalaxyl-M and S-isomer and sedaxane. This product controls a broad spectrum of seed- and soil-borne diseases in soybeans and member of Crop Subgroup 6C (Dried shelled peas and beans, chickpeas, lentils and fava beans).

Note: Treatment of highly mechanically scarred or damaged seed, or seed known to be of low vigour and poor quality, except for the purpose of curative control of existing disease pests, may result in reduced germination, reduced emergence and/or reduction of seed and seedling vigour. Treat a small quantity of seed using equipment similar to that planned for treating the total seed lot. Conduct germination tests on a small portion of the seed before committing the total seed lot to a selected seed treatment. Due to seed quality and seed storage conditions beyond the control of Syngenta Canada Inc. no claims are made to guarantee the germination of carry-over treated seed.

Note: Experience has shown that strains of fungi resistant to metalaxyl-M (and isomer) and fludioxonil may develop. Failure to control the disease will likely result in crop damage and/or yield losses. Since the occurrence of resistance cannot be foreseen, Syngenta Canada Inc. accepts no responsibility for any loss of, or damage to, crops resulting from the failure of VIBRANCE MAXX RFC to control the resistant fungus strains. If disease appears in a treated field, consult the government extension specialist immediately.

DIRECTIONS FOR USE

VIBRANCE MAXX RFC is a seed treatment formulation for use in commercial seed treatment (in facilities or with mobile treaters) and for on-farm treatment using seed treatment equipment that accurately meters, mixes and applies a flowable seed treatment. The equipment must provide uniform coverage of VIBRANCE MAXX RFC on the seed. Uneven seed coverage may not give the desired level of disease control. Allow the seed to dry before bagging, storing or seeding.

Thoroughly mix the recommended amount of VIBRANCE MAXX RFC Seed Treatment with the required amount of water for the slurry treater and dilution rate to be used. Slurry volumes will vary depending on seed size. Follow the manufacturer's application instructions for the seed treatment equipment being used. Maintain constant agitation of the slurry during the treatment.

Seed Treatment and Inoculants:

VIBRANCE MAXX RFC is compatible with Rhizobium based inoculants. Please check with inoculant manufacturers for specific planting windows and methods of application prior to use. Consult the manufacturer of the application equipment planned to be used for suitability for this application and for instructions on operation and calibration of the equipment.

Ideal storage temperature of bulk material is above freezing and below 30 °C.

Seed treated with VIBRANCE MAXX RFC, or a combination of VIBRANCE MAXX RFC and seed inoculants, may not flow through a seed drill at the same rate as untreated seed. Recalibrate the seed drill before planting treated seed. **Mixing with inoculants may increase drying time while treating, extending the processing time.**

This product contains a pigment that will colour the treated seed; however, users are responsible for ensuring that the treated seed, when dried and ready for bagging, storage or seeding has an unnatural colour. If the pigment contained in the formulation does not colour the seed adequately, additional colourant must be added to the mixture while treating the seed.

USE RATES

For control of various seed-borne and soil-borne diseases on soybeans, beans, lentils, lupins, faba beans, and peas, apply 100 mL of VIBRANCE MAXX RFC Fungicide plus 225 mL of water (or Rhizobia inoculant at rates recommended by the manufacturer to achieve proper total slurry volumes) per 100 kg of seed. For chickpeas a total slurry volume of 650 mL per 100 kg of seed is recommended for optimal coverage.

CROP	Soybeans

DICEACE	Cood vet/are amounted downing off most amounted downing off and
DISEASE	Seed rot/pre-emergence damping-off, post-emergence damping-off and
CONTROLLED	seedling blight caused by Fusarium spp., Pythium spp. and Rhizoctonia
	spp.
	Seedling root rot caused by <i>Fusarium</i> spp.
	Seed rot and seedling blight caused by seed-borne <i>Phomopsis</i> spp.
	Seed-borne Sclerotinia sclerotiorum
	Early season root rot caused by <i>Phytophthora megasperma</i> var. sojae ¹
RATE	100 mL/100 kg seed or 0.15 μL/seed
NOTES	VIBRANCE MAXX RFC provides early season protection against
	Phytophthora root rot for tolerant varieties of soybeans. If target fields have
	a history of high <i>Phytophthora</i> pressure, or more susceptible varieties are
	to be treated, then tank-mix VIBRANCE MAXX RFC with 31 mL of APRON
	XL [®] LS Fungicide per 100 kg of seed.
CROP	Dried, shelled beans [<i>Phaseolus</i> spp. (field bean, kidney bean, lima
	bean (dry), navy bean, pinto bean, tepary bean); (<i>Vigna</i> spp.) (includes
	adzuki bean, blackeyed pea, catjang, cowpea, Crowder pea, moth
	bean, mung bean, rice bean, southern pea, urd bean); guar
	(Cyamopsis tetragonoloba); lablab bean (Lablab purpureus)
DISEASE	Seed rot/pre-emergence damping-off and post-emergence damping-off
CONTROLLED	caused by Fusarium spp., Pythium spp. and Rhizoctonia spp.
	Seedling blight caused by <i>Pythium</i> spp and <i>Rhizoctonia spp</i> .
	Seed-borne Sclerotinia sclerotiorum
	Anthracnose caused by seed-borne Colletotrichum spp.
RATE	100 mL/100 kg seed
CROP	Dried, shelled peas (<i>Pisum</i> spp and <i>Cajanus cajan</i>)
DISEASE	Seed-borne Ascochyta blight and foot root caused by Ascochyta pinodes
CONTROLLED	Seed rot/pre-emergence damping-off, post-emergence damping-off and
	seedling blight caused by Fusarium spp., Pythium spp. and Rhizoctonia
	spp.
	Seed-borne Sclerotinia sclerotiorum
RATE	100 mL/100 kg seed
CROP	Chickpeas
DISEASE	Seed-borne Ascochyta blight caused by <i>Ascochyta rabiei</i>
CONTROLLED	Seed rot/pre-emergence damping-off and post-emergence damping-off and
001111102222	seedling blight caused by <i>Fusarium</i> spp., <i>Pythium</i> spp. and <i>Rhizoctonia</i>
	spp.
	Seed rot and seedling blight caused by seed-borne <i>Botrytis</i> spp.
	Seed-borne Sclerotinia sclerotiorum
RATE	100 mL/100 kg seed
CROP	Lentils
DISEASE	Seed-borne Ascochyta blight caused by Ascochyta lentis
CONTROLLED	Seed rot/pre-emergence damping-off, post-emergence damping-off and
	seedling blight caused by Fusarium spp., Pythium spp. and Rhizoctonia
	spp.
	1 300.
	Seedling root rot caused by Fusarium spp.
	Seedling root rot caused by <i>Fusarium</i> spp. Seed-borne <i>Sclerotinia sclerotiorum</i>
RATE	Seedling root rot caused by <i>Fusarium</i> spp. Seed-borne <i>Sclerotinia sclerotiorum</i> Seed rot and seedling blight caused by seed-borne <i>Botrytis</i> spp.
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CROP	Seedling root rot caused by Fusarium spp. Seed-borne Sclerotinia sclerotiorum Seed rot and seedling blight caused by seed-borne Botrytis spp. 100 mL/100 kg seed Lupins and faba beans
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Tank Mixes

For protection from various insect pests, VIBRANCE MAXX RFC may be mixed with CRUISER® 5FS Seed Treatment Insecticide. Consult each product label for registered use rates and follow all label use instructions. Read the label directions for each product and follow the most restrictive label precautions and limitations.

Resistance Management Recommendations

For resistance management, please note that VIBRANCE MAXX RFC contains Group 4, 7 and 12 fungicides. Any fungal population may contain individuals naturally resistant to VIBRANCE MAXX RFC and other Group 4, 7 and 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 VIBRANCE MAXX RFC or other Group 4, 7 and 12 fungicides with different groups that control the same pathogens.

Fungicide use should be based on an integrated disease management 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.

Monitor treated fungal populations for resistance development. Notify Syngenta Canada Inc. if

Monitor treated fungal populations for resistance development. Notify Syngenta Canada Inc. reduced sensitivity of the pathogen to VIBRANCE MAXX RFC 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, 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.

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

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