

GROUP	<b>7</b>	FUNGICIDE
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## VIBRANCE® 500FS Seed Treatment

FUNGICIDE

AGRICULTURAL

SUSPENSION

Broad-spectrum seed treatment fungicide for control of seed- and soil-borne diseases of certain crops.

**GUARANTEE:**

Sedaxane ..... 500 g/L

Contains 1,2-benzisothiazolin-3-one at 0.006% as a preservative.

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

REGISTRATION NO: **30438**  
PEST CONTROL PRODUCTS ACT

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

**Special Use Restrictions:**

**This product contains no colourant. All seed treated with this product must be conspicuously coloured at the time of treatment. Regulations pertaining to the "Seeds Act" must be strictly adhered to when using this product.**

**No open transfer is permitted for commercial seed treatment of barley, wheat, oats, rye, triticale, millet [pearl and proso], teosinte, and wild rice.**

**No on-farm seed treatment is permitted for corn, sorghum, and members of Crop Subgroup 20A (Canola/Rapeseed Subgroup).**

## NOTICE TO USER

This pest control product is to be used only in accordance with the directions on the label. It is an offence under the *Pest Control Products Act* to use this product in a way that is inconsistent with the directions on the label. The user assumes the risk to persons or property that arises from any such use of this product.

## FIRST AID

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

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

**If 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 eyes 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.

Never give anything by mouth to an unconscious person. Remove person to a safe and uncontaminated area. Seek medical attention **IMMEDIATELY** if irritation persists or is severe. Have the product container or label with you when calling a poison control centre or doctor, or going for treatment.

## TOXICOLOGICAL INFORMATION

Treat symptomatically. Product contains petroleum distillates. Vomiting may cause aspiration pneumonia.

## 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.

VIBRANCE® 500FS Seed Treatment is for use on-farm (using an open pour system) and in closed transfer commercial seed treatment facilities only on barley, wheat, oats, rye, triticale, millet [pearl and proso], teosinte, and wild rice. Closed transfer includes closed mixing, loading, calibrating and closed treatment equipment. It is also for use in commercial seed treatment facilities only on corn,

sorghum, members of Crop Group 20A and soybean.

For pulse crops and soybean, on-farm and commercial seed treatment (using either an open or closed transfer application system, in facilities or with mobile treaters) is permitted.

Treat seed in a well-ventilated area.

**For commercial seed treatment:**

Cleaners must wear chemical-resistant coveralls over a long-sleeved shirt and long pants, and chemical-resistant gloves. Treater, baggers, sewers, stackers, forklift operators and others must wear cotton coveralls over a long-sleeved shirt and long pants, and chemical-resistant gloves. 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. 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.

**NOTE:** In case of accident, take the product label to the emergency facility or physician.

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

## ENVIRONMENTAL HAZARDS

TOXIC to aquatic organisms. Do not contaminate food, feed, domestic or irrigation water supplies, lakes, streams and ponds.

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 500FS 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 RESTRICTIONS

1. Treated seed must not be used for food, feed or oil processing.
2. Store away from food and feed.
3. For small-grain cereals, soybean and canola seed treated with VIBRANCE 500FS Seed Treatment, do not graze or feed livestock on treated areas for 45 days after planting. Do not graze or feed livestock on treated area for 60 days after planting corn, sorghum or dry beans

or peas (Crop Subgroup 6C). Do not graze or feed livestock on sugar beet tops prior to harvest of mature roots.

4. Do not plant any crop other than those on the VIBRANCE 500FS Seed Treatment label within 60 days to fields in which seed treated with VIBRANCE 500FS Seed Treatment were planted.
5. All bags containing treated seed for sale or use in Canada must be labeled or tagged as follows: **“This seed has been treated with sedaxane fungicide. Wear long-sleeved shirt, long pants, and chemical-resistant gloves when handling treated seed. Do not graze or feed livestock on seeded area for 45 days after planting small grain cereals, soybean, canola, rapeseed or mustard (Crop Subgroup 20A) or 60 days after planting corn, sorghum or dry beans and peas (Crop Subgroup 6C). Do not graze or feed livestock on sugar beet tops prior to harvest of mature roots. Do not use for food, feed or oil processing. Store away from food and feed.”**

## DECONTAMINATION AND DISPOSAL

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

### **CONTAINER DISPOSAL:**

#### **For recyclable containers:**

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

Do not reuse this container for any purpose. For disposal, the empty container may be returned to the point of purchase (distributor/dealer).

#### **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)***

## GENERAL INFORMATION

VIBRANCE 500FS Seed Treatment is preventative seed treatment fungicide with systemic

properties recommended for the control of labeled disease of certain crops. For additional control of certain seed- and soil-borne pathogens and (or) insect pests, VIBRANCE 500FS Seed Treatment may be combined with the following seed treatments:

**Crop Group 15 (Cereals, except corn):** VIBRANCE 500FS Seed Treatment may be mixed with DIVIDEND XL RTA® Fungicide or DIVIDEND EXTREME Fungicide for broad spectrum disease control of cereals. For protection from various insects, VIBRANCE 500FS Seed Treatment may be mixed with CRUISER® 5FS Seed Treatment Insecticide in commercial seed treatment facilities with closed transfer including closed mixing, loading, calibrating, and closed treatment equipment only. This tank-mix option is only valid for those crops common to the registered labels of VIBRANCE 500FS Seed Treatment and CRUISER 5FS Seed Treatment Insecticide. For combined protection from labeled insect pests and soil- and seed-borne pathogens, VIBRANCE 500FS Seed Treatment may be mixed with CRUISER MAXX® Cereals Seed Treatment or CRUISER MAXX Cereals Commercial Seed Treatment. These tank-mix options are only valid for those crops common to the registered labels of VIBRANCE 500FS Seed treatment and CRUISER MAXX Cereals Seed Treatment or CRUISER MAXX Cereals Commercial Seed Treatment. 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.

**Corn (field, sweet, seed and pop):** VIBRANCE 500FS Seed Treatment may be mixed with APRON XL® LS, MAXIM® XL, DYNASTY 100FS and MAXIM QUATTRO Seed Treatments in commercial seed treatment facilities to control a broad spectrum of diseases. For protection from various insect pests, VIBRANCE 500FS Seed Treatment may be mixed with CRUISER 5FS Seed Treatment Insecticide in commercial seed treatment facilities with closed transfer including closed mixing, loading, calibrating, and closed treatment equipment only. 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.

**Crop Subgroup 20A – Canola/Rapeseed Subgroup:** For additional disease control and protection from labeled insects in canola and mustard, VIBRANCE 500FS Seed Treatment may be mixed with HELIX XTra® Seed Treatment in commercial seed treatment facilities with closed transfer including closed mixing, loading, calibrating, and closed treatment equipment only. This tank-mix option is only valid for those crops common to the registered labels of VIBRANCE 500FS Seed Treatment and HELIX XTra Seed Treatment. 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.

**Soybeans:** VIBRANCE 500FS Seed Treatment may be mixed with APRON MAXX® RTA® or APRON MAXX RFC Seed Treatments and DYNASTY® 100FS Fungicide in commercial seed treatment facilities to control a broad spectrum of diseases. For protection from various insect pests, VIBRANCE 500FS Seed Treatment may be mixed with CRUISER 5FS Seed Treatment Insecticide in commercial seed treatment facilities with closed transfer including closed mixing, loading, calibrating, and closed treatment equipment only. For combined protection from labeled insect and soil- and seed-borne pathogens, VIBRANCE 500FS Seed Treatment may be mixed with CRUISER MAXX Beans Seed Treatment under the same “closed system” conditions as noted above. 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.

**Crop Subgroup 6C (dried shelled peas and beans, including chickpea, lentils and fava beans):** VIBRANCE 500FS Seed Treatment may be mixed with APRON XL LS, APRON MAXX

RTA, APRON MAXX RFC Seed Treatments in on-farm and commercial seed treatment facilities to control a broad spectrum of diseases. For protection from various insect pests, VIBRANCE Seed Treatment may be mixed with CRUISER 5FS Seed Treatment Insecticide in commercial seed treatment facilities with closed transfer including closed mixing, loading, calibrating, and closed treatment equipment only. 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.

**Sugar Beet:** VIBRANCE 500FS Seed Treatment may be tank mixed with APRON XL LS, MAXIM 480FS COLOURLESS, or DYNASTY 100FS Seed Treatments for additional control of certain seed- and soil-borne pathogens. For insect control, VIBRANCE 500FS Seed Treatment may be tank mixed with CRUISER 5FS Seed Treatment. Consult each product label for registered use rates and follow all label use instructions. Follow the most restrictive label precautions and limitations.

**Note:** Treatment of scarred or damaged seed or seed known to be of low vigour and poor quality may result in reduced germination 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 seed or propagating material for all crop seed.

## DIRECTIONS FOR USE

DO NOT contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.

VIBRANCE 500FS Seed Treatment mixes easily with water. When mixing with products from other manufacturers, the compatibility should be tested prior to use by conducting a jar test; mixing all intended seed treatments with the appropriate amount of water in a clear glass container, mix well, and allow to sit for one hour. Remix and observe for incompatibility.

VIBRANCE 500FS Seed Treatment may be applied as a seed treatment following the guidelines specified in the Directions for Use section of this label. Ensure product is thoroughly mixed prior to application. Apply VIBRANCE 500FS Seed Treatment as a water-based slurry utilizing standard slurry seed treatment equipment which provides uniform seed coverage. Uneven or incomplete seed coverage may not give the desired level of disease control. Thoroughly mix the recommended amount of VIBRANCE 500FS Seed Treatment into the required amount of water for the slurry treater and dilution rate to be used. Follow the manufacturer's application instructions for the seed treatment equipment being used. Maintain constant agitation of the slurry during the seed treatment process. Allow the seed to dry before bagging.

Depending on planting equipment, seed treated with VIBRANCE 500FS Seed Treatment or a combination of VIBRANCE 500FS Seed Treatment and other seed treatment products may not flow through planting equipment at the same rate as untreated seed. Recalibrate this equipment before planting treated seed.

**This product contains no colourant. An appropriate colourant must be added when this product is applied to seed. Regulations pertaining to the "Seeds Act" must be strictly adhered to when using this product. Users are responsible for ensuring that the treated**

**seed, when dried and ready for bagging, has an unnatural colour.**

**Seed Treatment and inoculants:** VIBRANCE 500FS Seed Treatment is compatible with Rhizobium based inoculants. Please check with inoculant manufactures for details prior to use. Note: Mixing with inoculants may increase drying time while treating extending the processing time.

## USE RATES

<b>CROP GROUP 15 (CEREALS)</b>	
<b>CROPS</b>	<b>Barley</b>
<b>DISEASES CONTROLLED</b>	True loose smut caused by <i>Ustilago nuda</i> Seed decay, seedling blight and damping-off caused by <i>Rhizoctonia solani</i>
<b>RATE</b>	5 – 10 mL/100 kg seed (2.5 – 5 g ai/100 kg seed)
<b>NOTES</b>	Use the low rate (2.5 g ai/100 kg) for control of pre-emergent damping-off, seed decay, or seedling blight. For extended control of post-emergent damping-off and seedling blight or high disease pressure due to short cropping rotations, or high levels of seed borne infections like smuts, use the high rate (5 g ai/100 kg).
<b>CROPS</b>	<b>Wheat</b>
<b>DISEASES CONTROLLED</b>	Loose smut caused by <i>Ustilago tritici</i> Seed decay, seedling blight and damping-off caused by <i>Rhizoctonia solani</i>
<b>RATE</b>	5 – 10 mL/100 kg seed (2.5 – 5 g ai/100 kg seed)
<b>NOTES</b>	Use the low rate (2.5 g ai/100 kg) for control of pre-emergent damping-off, seed decay, or seedling blight. For extended control of post-emergent damping-off and seedling blight or high disease pressure due to short cropping rotations, or high levels of seed borne infections like smuts, use the high rate (5 g ai/100 kg).
<b>CROPS</b>	<b>Buckwheat, Millet (Pearl and Proso), Oats, Rye, Sorghum, Teosinte, Triticale, Wild Rice</b>
<b>DISEASES CONTROLLED</b>	Seed decay, seedling blight and damping-off caused by <i>Rhizoctonia solani</i>
<b>RATE</b>	5 – 10 mL/100 kg seed (2.5 – 5 g ai/100 kg seed)
<b>NOTES</b>	Use the low rate (2.5 g ai/100 kg) for control of pre-emergent damping-off, seed decay, or seedling blight. For extended control of post-emergent damping-off and seedling blight or high disease pressure due to short cropping rotations, or high levels of seed borne infections like smuts, use the high rate (5 g ai/100 kg).
<b>CROPS</b>	<b>Corn</b>
<b>DISEASES CONTROLLED</b>	Seed decay, seedling blight and damping-off caused by <i>Rhizoctonia solani</i>
<b>RATE</b>	0.0125 – 0.025 µL/seed (6.25 – 12.5 µg ai/seed) This rate is equivalent to 5 – 10 mL/100 kg seed (2.5 – 5 g ai/100 kg seed) based on a seed weight of 4000 seeds/kg.
<b>NOTES</b>	Use the low rate (6.25 µg ai/seed) for control of pre-emergent damping-off, seed decay, or seedling blight. For extended control of post-emergent damping-off and seedling blight or under high disease pressure due to short cropping rotations use the high rate (12.5 µg ai/seed).

<b>OILSEEDS</b>	
<b>CROPS</b>	<b>Crop Subgroup 20A - Canola/Rapeseed Subgroup:</b> Includes canola, borage, crambe, echium, flax seed, gold of pleasure, hare's ear mustard, lequerella, lunaria, meadowfoam, milkweed, mustard seed, oil radish, poppy seed, rapeseed, and cultivars and hybrids of the above crops.
<b>DISEASES CONTROLLED</b>	Seed decay, seedling blight and damping-off caused by <i>Rhizoctonia solani</i>
<b>RATE</b>	5 – 10 mL/100 kg seed (2.5 – 5 g ai/100 kg seed)
<b>NOTES</b>	Use the low rate (2.5 g ai/100 kg) for control of pre-emergent damping-off, seed decay, or seedling blight. For extended control of post-emergent damping-off and seedling blight or under high disease pressure due to short cropping rotations use the high rate (5 g ai/100 kg).
<b>LEGUME VEGETABLES</b>	
<b>CROPS</b>	<b>Soybeans</b>
<b>DISEASES CONTROLLED</b>	Seed decay, seedling blight and damping-off caused by <i>Rhizoctonia solani</i>
<b>RATE</b>	0.0076 – 0.015 µL/seed (3.8 – 7.6 µg ai/seed) This rate is equivalent to 5 – 10 mL/100 kg seed (2.5 – 5 g ai/100 kg seed) based on a seed weight of 6600 seeds/kg.
<b>NOTES</b>	Use the low rate (3.8 µg/seed) for control of pre-emergent damping-off, seed decay, or seedling blight. For extended control of post-emergent damping-off and seedling blight or under high disease pressure due to short cropping rotations use the high rate (7.6 µg/seed).
<b>CROPS</b>	<b>Crop Subgroup 6C – Dried Shelled Peas and Beans, Chickpeas, Lentils and Fava Beans</b>
<b>DISEASES CONTROLLED</b>	Seed decay, seedling blight and damping-off caused by <i>Rhizoctonia solani</i>
<b>RATE</b>	5 – 10 mL/100 kg seed (2.5 – 5 g ai/100 kg seed)
<b>NOTES</b>	Use the low rate (2.5 g ai/100 kg) for control of pre-emergent damping-off, seed decay, or seedling blight. For extended control of post-emergent damping-off and seedling blight or under high disease pressure due to short cropping rotations use the high rate (5 g ai/100 kg).
<b>SUGAR BEET</b>	
<b>CROPS</b>	<b>Sugar beet</b>
<b>DISEASES CONTROLLED</b>	Control of damping off and suppression of crown and root rot caused by <i>Rhizoctonia solani</i>
<b>RATE</b>	1 – 5 mL/100000 seeds (0.5 – 2.5 g ai/100000 seeds)
<b>NOTES</b>	For import use only. Seed must not be treated in Canada.

### Resistance Management Recommendations

For resistance management, VIBRANCE 500FS Seed Treatment contains sedaxane, a Group 7 fungicide. Any fungal population may contain individuals naturally resistant to VIBRANCE 500FS Seed Treatment and other Group 7 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 500FS Seed Treatment or other Group 7 fungicides with different groups that control the same pathogens.

VIBRANCE 500FS Seed Treatment is a carboxamide fungicide; therefore, continuous or sequential use of carboxamide fungicides within or during successive growing seasons must be avoided or reduced. VIBRANCE 500FS Seed Treatment is not cross-resistant with other classes of fungicide that have different modes of action.

Seed treatment 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 Syngenta company representatives at 1-87-SYNGENTA (1-877-964-3682) or at [www.syngenta.ca](http://www.syngenta.ca).

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