

GROUP	3	4	7	12	FUNGICIDES
GROUP	4				INSECTICIDE

## HELIX® VIBRANCE®

### INSECTICIDE AND FUNGICIDE SEED TREATMENT

#### SUSPENSION

#### AGRICULTURAL

A liquid seed treatment to control diseases and insect pests in labeled crops.

#### ACTIVE INGREDIENTS:

Thiamethoxam .....	269 g/L
Difenoconazole .....	16 g/L
Metalaxyl-M and S-isomer .....	5 g/L
Sedaxane .....	3.4 g/L
Fludioxonil .....	1.7 g/L

Contains 1,2-benzisothiazolin-3-one at 0.048% and 2-bromo-2-nitropropane-1,3-diol at 0.021% as preservatives.

#### READ THE LABEL AND BROCHURE BEFORE USING

CAUTION



POISON

**KEEP OUT OF THE REACH OF CHILDREN AND ANIMALS AND PREVENT ACCESS BY UNAUTHORIZED PERSONNEL**

REGISTRATION NUMBER: **31454**  
PEST CONTROL PRODUCTS ACT

NET CONTENTS: **1 L to 1050 L**

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

**For use with commercial seed treaters (facilities and mobile treaters) with closed transfer systems only. No open transfer of HELIX® VIBRANCE® is permitted. All seed treated with this product must be conspicuously coloured at the time of treatment.**

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, 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 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 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 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.

## 3.0 TOXICOLOGICAL INFORMATION

There is no specific antidote for this product if ingested. Treat symptomatically.

## 4.0 PRECAUTIONS

### Safety Precautions

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2. Avoid contact with skin, eyes and clothing. Do not eat, drink or smoke during handling. At the beginning of breaks, remove protective clothing. At the end of work shifts, remove protective clothing and wash thoroughly.
3. Harmful if swallowed. Avoid inhalation of vapours or treated seed dust. Wash hands and face after handling and before eating, smoking, drinking or using the toilet.
4. Store the product in a well-ventilated, secure area. Avoid contamination of feed and foodstuffs.
5. Do not graze or feed livestock on treated areas.
6. Do not plant any crop other than those on the HELIX VIBRANCE or VIBRANCE 500FS

Seed Treatment label within 60 days to fields in which seed treated with HELIX VIBRANCE were planted.

7. Clean up spilled material, equipment and work area as soon as possible after use.
8. Do not apply in a way that this product will contact workers or other persons, either directly or through drift. Only handlers (mixers, loaders and applicators) wearing personal protective equipment may be in the area during application.
9. 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**

Treat seed in a well-ventilated area. Workers involved in clean-up of seed-treating equipment must wear chemical-resistant coveralls over a long-sleeved shirt and long pants, chemical-resistant gloves, socks and chemical-resistant footwear. Workers involved in treating seeds or repair or maintenance of seed treating equipment must wear coveralls over a long-sleeved shirt and long pants, chemical-resistant gloves, socks and chemical-resistant footwear. Workers involved in bagging, sewing, and stacking bags of treated seed, or when transferring seed to a storage bin must wear coveralls over long-sleeved shirt and long pants, chemical-resistant gloves, a NIOSH-approved dust mask, and socks and shoes. Forklift operators must wear coveralls over long-sleeved shirt, long pants, chemical-resistant gloves, and socks and shoes. For good hygiene practice, it is also recommended to wear a NIOSH-approved dust mask during all job activities.

## **6.0 ENVIRONMENTAL HAZARDS**

1. Do not apply this product directly to freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs, ditches and wetlands), estuaries or marine habitats.
2. Do not contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.
3. TOXIC to aquatic organisms.
4. Toxic to bees. Bees can be exposed to product residues in flowers, leaves, pollen and/or nectar resulting from seed treatment applications.
5. Treated seed is TOXIC to birds and small wild mammals. Any spilled or exposed seeds must be incorporated into the soil or otherwise cleaned-up from the soil or other surfaces.

## 7.0 USE RESTRICTIONS

1. Treated seed must not be used for food, feed or oil processing.
2. Not for use in hopper-box, planter-box, slurry-box or other non-commercial seed treatment applications (e.g. on-farm treaters).
3. All bags containing treated seed for sale or use in Canada must be labeled or tagged as follows: **“This seed has been treated with the insecticide, thiamethoxam and fungicides, difenoconazole, metalaxyl-M and S-isomer, fludioxonil and sedaxane. Wear coveralls over a long-sleeved shirt, long pants, socks, shoes, and chemical-resistant gloves when handling treated seeds, planting, and during maintenance, clean-up, and repair. In addition, wear a properly fit-tested NIOSH-approved dust mask rated N95 or higher when handling treated seeds (includes loading and unloading). Use only closed-cab planting equipment. Gloves and a dust mask do not need to be worn when inside the closed cab. Keep out of reach of children and animals. Do not use for food, feed or oil processing. Store away from food and feed. Treated seed is TOXIC to birds. Any spilled or exposed seeds must be incorporated into the soil or otherwise cleaned-up from the soil surface.”**

## 8.0 STORAGE

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

## 9.0 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 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.

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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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## **10.0 PRODUCT INFORMATION**

HELIX VIBRANCE contains an insecticide, thiamethoxam, and four fungicides, difenoconazole, metalaxyl-M and S-isomer, fludioxonil and sedaxane. This product controls a broad spectrum of seed and soil-borne diseases as well as early-season control of flea beetles.

### **10.1 Integrated Pest Management for Canola**

Control of diseases and/or flea beetles can be reduced significantly if:

- Canola is seeded into the same field more than once every three years
- Seeding depths are excessive (>4 cm)
- Emerging seedlings are subjected to poor growing conditions
- Canola is planted into fields with reduced tillage practices

Canola fields should be monitored on a regular basis after emergence. Flea beetles often migrate from field edges inward. Field scouting will determine if a foliar insecticide application is warranted and whether it will be required over the entire field or on the headlands only.

Foliar insecticide application should be considered if:

- Flea beetle damage has reached or is approaching the economic threshold of 25% leaf area damage on the cotyledons or first true leaves.
- Canola stubble or a canola field is adjacent to emerging canola fields.
- Flea beetle populations in previous years have been observed to be high and the level of pressure sustained.

Foliar insecticide applications should be made immediately if:

- Stem feeding is observed. This may occur under cool and windy conditions.

## **11.0 DIRECTIONS FOR USE**

### **11.1 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.

HELIX VIBRANCE is a premix formulation that includes a pigment. To optimize seed coverage, water, additional colourant and polymers can be added to facilitate application.

Apply 1.5 L/100 kg seed of HELIX VIBRANCE using standard commercial seed treatment equipment that provides uniform seed coverage. Uneven or incomplete seed coverage may not give the desired level of insect or disease control. Consult the manufacturer of the seed treating equipment for advice on the operation and calibration of the equipment. Maintain constant product agitation during the seed treatment process. Allow the seed to dry before bagging.

Ideal storage temperature is above freezing and below 30 °C. Repeated freeze-thawing of HELIX VIBRANCE 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.

**This product contains a pigment that will adequately colour the treated seed. However, users are responsible for ensuring that the treated seed, when dried and ready for bagging, 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. Follow instructions on the colourant package for mixing. Regulations pertaining to colouration of treated seed enforced under the “Seed Act” must be strictly adhered to when using this product.**

## 12.0 CROP USE DIRECTIONS

<b>CROPS</b>	<b>Canola Rapeseed Mustard Seed (condiment and oilseed)</b>
<b>INSECTS CONTROLLED</b>	Flea beetles
<b>DISEASES CONTROLLED</b>	Seed-borne Blackleg ( <i>Leptosphaeria maculans</i> ) Seed-borne Alternaria ( <i>Alternaria</i> spp.) Seedling disease complex (damping-off, seedling blight seed rot, and root rot) caused by <i>Pythium</i> spp., <i>Fusarium</i> spp. and <i>Rhizoctonia</i> spp.
<b>RATE</b>	1.5 L product/100 kg seed
<b>NOTES</b>	One application as a seed treatment. Do not make any subsequent application of a Group 4 Insecticide (i.e., in-furrow or foliar application) following treatment with HELIX VIBRANCE.

### Note: Seed Storage

Lab and field studies have shown that HELIX VIBRANCE treated canola and mustard can be safely stored for 18 months without loss in germination or insect and disease performance. However, 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 materials for all crop seed. Treatment of highly mechanically 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. Treating such seed with HELIX VIBRANCE should only be done for curative control of existing disease pests. 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 seed before committing the total seed lot to a selected seed treatment.

### Seeding Equipment:

Depending on the seeding equipment used, seed treated with HELIX VIBRANCE may not flow through the equipment at the same rate as untreated seed or seed treated with other canola seed treatment products. Re-calibration of seeding equipment is recommended before planting seed treated with HELIX VIBRANCE.

### 13.0 RESISTANCE MANAGEMENT RECOMMENDATIONS

For resistance management, HELIX VIBRANCE contains a Group 4 insecticide and Groups 3, 4, 7 and 12 fungicides. Any insect or fungal population may contain individuals naturally resistant to HELIX VIBRANCE and other Group 4 insecticides or Groups 3, 4, 7 and 12 fungicides. A gradual or total loss of pest control may occur over time if these insecticides and fungicides are used repeatedly in the same fields. Other resistance mechanisms that are not linked to site of action but are specific for individual chemicals, such as enhanced metabolism, may also exist. Appropriate resistance-management strategies should be followed.

#### **To delay insecticide and fungicide resistance:**

Where possible, rotate the use of HELIX VIBRANCE or other Group 4 insecticides and Groups 3, 4, 7 and 12 fungicides with different groups that control the same insects or pathogens.

Insecticide and 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 insect and fungal populations for resistance development.

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

For further information and to report suspected resistance, contact Syngenta Canada Inc. at 1-87-SYNGENTA (1-877-964-3682) or at [www.syngenta.ca](http://www.syngenta.ca).

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