



## Lumiscend™ Fungicide Seed Treatment

GROUP	7	FUNGICIDE
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### COMMERCIAL

Lumiscend™ Fungicide Seed Treatment is a fungicide seed treatment product providing systemic protection against seed and seedling diseases caused by fungal pathogens

**ACTIVE INGREDIENT:** Inpyrfluxam 381 g/L

Contains 1,2-benzisothiazolin-3-one at 0.046 %

OR

5-Chloro-2-methyl-4-isothiazolin-3-one at 0.0017% and 2-Methyl-4-isothiazolin-3-one at 0.0006% as a preservative.

Suspension

**REGISTRATION NUMBER: 34469 PEST CONTROL PRODUCTS ACT**

### WARNING



**POISON**

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

For all labelled seeds, commercial seed treatment (facilities and mobile treaters with closed transfer, including closed mixing, loading, calibrating, and closed treatment equipment only) is permitted.

This product contains no colourant. An appropriate colourant must be added when the product is applied to seed, according to regulations pertaining to the "Seeds Act".

NET CONTENTS: 130 ml to Bulk

### **Corteva Agriscience Canada Company**

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## PRECAUTIONS

### KEEP OUT OF THE REACH OF CHILDREN

### KEEP TREATED SEED OUT OF REACH OF CHILDREN AND ANIMALS

Harmful or fatal if swallowed

- Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing/personal protective equipment (PPE) immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product.
- Wash the outside of gloves before removing.
- As soon as possible, wash thoroughly and change into clean clothing.

Apply only in a way that this product will not contact workers or other persons, either directly or through drift. Only workers wearing the personal protective equipment may be in the area where treating, bagging, sewing and/or stacking is occurring.

### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Follow the personal protective equipment and restriction requirements for the appropriate mixer/loader and applicator scenario:

Seed Type	Tasks	PPE/Engineering Controls
<b>For Commercial Seed Treatment (including facility workers and mobile treaters)</b>		
All labelled seeds	Treating (including mixing, loading, treating, calibrating, bagging, sewing and stacking)	Closed transfer only. Closed transfer includes closed mixing, loading, calibrating and closed treatment.  Wear coveralls over a long-sleeved shirt, long pants, chemical-resistant gloves, socks and shoes.
	Cleaning and repairing	Wear coveralls over a long-sleeved shirt, long pants, chemical-resistant gloves, socks and shoes.
<b>For Planting and Handling Treated Seed</b>		
All label seeds	Planting	Wear a long-sleeved shirt, long pants, chemical-resistant gloves, socks and shoes.  Use an open-cab or closed-cab tractor when planting. Gloves are not required within a closed cab.

Follow the 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.

### FIRST AID

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 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.

**IF ON SKIN OR CLOTHING:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 - 20 minutes. Call a poison control center or doctor for treatment advice.

### TOXICOLOGICAL INFORMATION

No specific antidote is available. Treat the patient symptomatically.

## ENVIRONMENTAL PRECAUTIONS

Toxic to aquatic organisms, birds, small wild mammals and non-target terrestrial plants. Any spilled or exposed seeds must be incorporated into the soil or otherwise cleaned-up from the soil surface.

This product demonstrates the properties and characteristics associated with chemicals detected in groundwater. The use of this product in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

## STORAGE

Keep pesticide in its original container. Store in a cool place. Do not store in direct sunlight. Protect from freezing temperatures. Store this product away from food or feed.

## DISPOSAL

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 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.

## USE INFORMATION

Lumiscend is a systemic fungicide seed protection product for use on rapeseed (canola).. The active ingredient, inpyrfluxam, provides protection against *Rhizoctonia solani* causing seed decay/pre-emergence damping-off, post-emergence damping-off, seedling blight and root rot. Inpyrfluxam also suppresses black leg (*Leptosphaeria maculans*) when used with varieties that are resistant to black leg.

For best results, use Lumiscend combined with Oomycete-active seed treatment fungicides, to broaden the spectrum of activity against seed and seedling pathogens that cause seed decay and seedling dieback.

## MODE OF ACTION

The active ingredient in Lumiscend, inpyrfluxam, belongs to FRAC Group 7, the succinate dehydrogenase inhibitor (SDHI) group of fungicides. As with other Group 7 fungicides, inpyrfluxam acts by inhibiting succinate dehydrogenase, a key enzyme in the fungal respiration chain.

## USE RESTRICTIONS

- Do not use treated seed for food, feed, or oil processing.
- Due to seed quality conditions beyond the control of Corteva Agriscience Canada Company, no claims are made to guarantee germination of carry-over seed.

## LABELLING OF TREATED SEED

All containers or packages containing treated seed for sale or use in Canada must be labeled or tagged as follows:

- This seed has been treated with Lumiscend containing inpyrfluxam.
- Do not use for feed, food or oil processing.
- Excess seed may be used for ethanol production only if (1) by-products are not used for livestock feed and (2) no measurable residues of pesticide remain in ethanol by-products that are used in agronomic practices.
- Store away from feeds and other foodstuffs.
- Wear a long-sleeved shirt, long pants, chemical-resistant gloves, socks and shoes when handling and planting treated seeds. Gloves are not required within a closed-cab tractor.
- Dispose of all excess treated seed. Left over treated seed may be double-sown around the headland or buried away from water sources in accordance with local requirements. Do not contaminate water bodies when disposing of planting equipment washwaters.
- Dispose of seed packaging in accordance with local requirements.

- 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 surface.
- KEEP TREATED SEED OUT OF REACH OF CHILDREN AND ANIMALS.
- DO NOT plant by hand.

**SEED QUALITY AND STORAGE OF TREATED SEED**

Use proper storage conditions for treated seed. Due to seed quality and seed storage conditions beyond the control of Corteva Agriscience Canada Company, no claims are made to guarantee the germination of carry-over treated seed.

**DIRECTIONS FOR USE**

Lumiscend Fungicide must be used only in accordance with use instructions on this label utilizing standard mechanical or slurry seed treating equipment that is calibrated to accurately and uniformly apply the product to seed. This product is for commercial application. Do not apply this product in a hopper-box or planter-box at planting time. Always mix product thoroughly before use.

**Tank mixing**

In some cases, tank mixing a pest control product with another pest control product or a fertilizer can result in biological effects that could include, but are not limited to: reduced pest efficacy or increased host crop injury. The user should contact Corteva Agriscience Canada Company for information before mixing any pesticide or fertilizer that is not specifically recommended on this label.

Pre-test tank mixtures with other seed treatment products to evaluate formulation compatibility and to ensure proper physical compatibility of products. Follow more restrictive limitations or cautions on labels of all products used in a seed treatment mixture. Do not tank mix with any products which contain a prohibition on tank mixing.

Accurate application of Lumiscend to seed is required for best performance. Thoroughly mix Lumiscend in the desired seed slurry mixture, prior to application to seed.

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

The following table provides use rates of Lumiscend by diseases controlled.

When applied as directed, Lumiscend can be expected to control the listed diseases, unless otherwise indicated as suppression.

<b>RAPESEED (INCLUDING CANOLA)</b>	
<b>Diseases Controlled</b>	<b>Application Rate (mL/100 kg seed)</b>
Seed decay/pre-emergence damping-off, post-emergence damping-off, seedling blight and root rot ( <i>Rhizoctonia solani</i> )	13 (5 g a.i./100 kg seed)
Black leg ( <i>Leptosphaeria maculans</i> )	13-26 (5-10 g a.i./100 kg seed)  Within the rate range, use the lowest rate of Lumiscend Fungicide for blackleg suppression; use the highest rate for blackleg control in fields where there is a history of disease pressure or when conditions are conducive for disease development.

**RESISTANCE MANAGEMENT RECOMMENDATIONS**

For resistance management, please note that Lumiscend is a Group 7 fungicide. Any fungal population may contain individuals naturally resistant to Lumiscend and other Group 7 fungicides. A gradual or total loss of pest control may occur over time if this fungicide is 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 Lumiscend or other Group 7 fungicides with different chemical groups that control the same pathogens.
- 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 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 resistance development. Notify Corteva Agriscience Canada Company if reduced sensitivity of the pathogen to Lumiscend 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 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 the specific crops and pathogens.

For further information and to report suspected resistance, contact Corteva Agriscience Canada Company at 1-800-667-3852.

**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.

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Label Code: CN-34469-002-E

Replaces: CN-34469-001-E

Specimen Label Notes:

Increase rate and change blackleg from suppression to control