

(Container Label)



Lumisena™ Fungicide Seed Treatment

GROUP	49	FUNGICIDE
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FLOWABLE SUSPENSION

A seed treatment product for the control of *Phytophthora* seed rot/pre-emergence damping off and post-emergence damping-off (*Phytophthora sojae*) in soybeans and systemic downy mildew (*Plasmopara halstedii*) in sunflowers

COMMERCIAL- AGRICULTURAL

READ THE LABEL AND ATTACHED BOOKLET BEFORE USING

ACTIVE INGREDIENT: Oxathiapiprolin 200 g/L

Contains 5-chloro-2-methyl-4-isothiazolin-3-one at 0.00113% as a preservative

Contains 2-methyl-4-isothiazolin-3-one at 0.00037% as a preservative

REGISTRATION NO 33001 PEST CONTROL PRODUCTS ACT

NET CONTENTS: 1 L – 1,500 L

For use in commercial seed treatment facilities only.

For use by commercial treaters (facilities) with closed transfer systems only. Closed transfer includes closed mixing, loading, calibrating and closed treatment equipment. No open transfer of Lumisena Fungicide Seed Treatment is permitted.

This product contains no colourant. An appropriate colourant must be added when this product is applied. Regulations pertaining to the SEEDS ACT must be strictly adhered to when using this product. Seed must be conspicuously coloured at the time of treatment.

Corteva Agriscience Canada Company

Suite 240, 115 Quarry Park Rd. SE

Calgary, Alberta

T2C 5G9

1-800-667-3852

™ Trademark of Corteva Agriscience and its affiliated companies.

PRECAUTIONS

- **KEEP OUT OF REACH OF CHILDREN**
- Wear a long-sleeved shirt, long pants, and chemical resistant gloves, socks and shoes during mixing, loading, applying, and performing other activities involving handling treated seed.
- Wear coveralls over a long-sleeved shirt, long pants, chemical resistant gloves, socks and shoes during clean-up and repair.
- Follow manufacturer's instructions for cleaning/maintaining personal protective equipment (PPE). If no such instructions for washables are available, use detergent and hot water. Keep and wash PPE separately from other laundry.
- Users should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Do not use treated seed for food, feed, or oil processing.

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. 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 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.

TOXICOLOGICAL INFORMATION: Treat symptomatically.

ENVIRONMENTAL PRECAUTIONS

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

LABELLING OF TREATED SEED

All bags containing treated seed must be labelled or tagged as follows:

- This seed has been treated with Lumisena Seed Treatment which contains oxathiapiprolin.
- Do not use for feed, food or oil processing.
- Store away from feeds and other foodstuffs.
- Wear long-sleeved shirt, long pants and chemical-resistant gloves, socks and shoes when handling treated seed.
- 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.
- Dispose of seed packaging in accordance with local requirements.
- Do not contaminate water bodies when disposing of planting equipment washwaters.
- Cover or incorporate spilled treated seeds.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage, disposal, or by cleaning of equipment.

PESTICIDE STORAGE

Store product in original container only, away from fertilizer, food or feed. Not for use or storage in or around the home. Keep container closed. Store this product away from food and feed.

PESTICIDE 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.

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FOR RETURNABLE CONTAINERS

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

FOR REFILLABLE CONTAINERS

1. After use, return the container to the point of purchase or designated locations.
2. This container must only be refilled with the same product at designated locations.
3. Do not reuse container for other purposes.
4. Prior to refilling, inspect thoroughly for damage.
5. Check for leaks after refilling and before transportation.
6. Do not refill or transport damaged or leaking containers.
7. If the container is not being refilled, return to the point of purchase.

FOR DISPOSABLE CONTAINERS

1. Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.
2. Follow provincial instruction for any required additional cleaning of the container prior to its disposal.
3. Make the empty, rinsed container unsuitable for further use.
4. Dispose of the container in accordance with provincial requirements.

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.

(Booklet)



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TOXICOLOGICAL INFORMATION: Treat symptomatically

ENVIRONMENTAL PRECAUTIONS

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

GENERAL INFORMATION

Lumisena™ Fungicide Seed Treatment is a flowable suspension that is applied as a seed treatment for control of *Phytophthora* seed rot/pre-emergence damping off and post-emergence damping off (*Phytophthora sojae*) in soybeans and systemic downy mildew (*Plasmopara halstedii*) in sunflowers.

DIRECTIONS FOR USE

This product contains no colourant. An appropriate colourant must be added when this product is applied. Regulations pertaining to the SEEDS ACT must be strictly adhered to when using this product. Seed must be conspicuously coloured at the time of treatment.

Lumisena Fungicide Seed Treatment is for use in commercial seed treatment facilities only. It is not for use in on-farm treating systems such as hopper-box or slurry-box applications just prior to planting.

Lumisena Fungicide Seed Treatment provides control of the following oomycete pathogens: *Phytophthora* seed rot/pre-emergence damping off and post-emergence damping off (*Phytophthora sojae*) in soybean and systemic downy mildew (*Plasmopara halstedii*) in sunflowers. When rate ranges are given, use higher rates where disease pressure is expected to be severe.

TANK MIXTURES

This product may be tank mixed with a fertilizer, a supplement, or with registered pest control products, whose labels also allow tank mixing, provided the entirety of both labels, including Directions For Use, Precautions, Restrictions, Environmental Precautions, and Spray Buffer Zones are followed for each product. In cases where these requirements differ between the tank mix partner labels, the most

restrictive label must be followed. Do not tank mix products containing the same active ingredient unless specifically listed on this label.

In some cases, tank mixing pest control products can result in reduced pesticide efficacy or increased host crop injury. The user should contact Corteva Agriscience Canada Company at 1-800-667-3852 or www.corteva.ca for information before applying any tank mix that is not specifically recommended on this label.

As this product is not registered for the control of pests in aquatic systems, DO NOT use to control aquatic pests.

SOYBEAN

CROP	PEST CONTROLLED	RATE: Lumisena Fungicide Seed Treatment mg ai per seed	SPECIFIC DIRECTIONS
SOYBEANS	Phytophthora seed rot/pre-emergence damping off and post-emergence damping off (<i>Phytophthora sojae</i>)	0.012 – 0.024 mg ai/seed (8.4 - 16.8 mL product/140 000 seeds) 37 - 74 mL/100 kg seed (based on an average of 6,160 seeds per kg or 2,800 seeds per pound)	Use the higher rates in areas with high disease pressure, or where extended early season control is required.

SUNFLOWER

CROP	PEST CONTROLLED	RATE: Lumisena Fungicide Seed Treatment mg ai per seed	SPECIFIC DIRECTIONS
SUNFLOWERS	Systemic downy mildew (<i>Plasmopara halstedii</i>)	0.00937 – 0.01875 mg ai/seed (9.37 – 18.75 mL product/200 000 seeds) 67.2 – 134.4 mL/100 kg seed (based on an average of 14,300 seeds per kg or 6,500 seeds per pound)	Use the higher rates in areas with high disease pressure, or where extended early season control is required.

Seed Storage

Field and laboratory tests have demonstrated that application of Lumisena Fungicide Seed Treatment to soybean and sunflowers will not negatively affect germination. However, 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 seed.

Treatment of damaged seed, or seed known to be of low vigour and poor quality, may result in reduced germination and/or seed and seedling vigour. In cases where seed quality is unknown, treat a small portion of the seed with Lumisena Fungicide Seed Treatment and confirm acceptable germination, prior to treating the entire seed lot.

MIXING INSTRUCTIONS

Before transferring Lumisena Fungicide Seed Treatment from its container, thoroughly mix the contents to insure the product is homogenous.

Dilute in a sufficient volume to obtain thorough, uniform coverage.

Polymers, colourants, and other additives should be tested for compatibility and seed safety prior to use in combination with Lumisena Fungicide Seed Treatment.

LABELLING OF TREATED SEED

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ROTATIONAL CROP RESTRICTIONS

Crops and crop groups that are on this label may be planted immediately after harvest.

For all legume crops except succulent peas and soybeans, a plant-back interval of 180 days is required.

All other crops may be planted immediately following the planting of seed treated with Lumisena Fungicide Seed Treatment.

Seed treated with Lumisena Fungicide Seed Treatment may be replanted if an emergency replanting is required due to an early season crop failure.

RESISTANCE-MANAGEMENT RECOMMENDATIONS

For resistance management, please note that Lumisena Fungicide Seed Treatment contains the active ingredient oxathiapiprolin which is listed by FRAC as a Group 49 fungicide. Any pathogen population may contain individuals naturally resistant to Lumisena Fungicide Seed Treatment and other OSBP-inhibiting fungicide. A gradual or total loss of pest control may occur over time if these groups of 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 Lumisena Fungicide Seed Treatment with different groups that control the same pathogen in a field.
- Use tank mixtures with fungicides from a different group that is effective against the target pathogen when such use is permitted.
- Fungicide use should be based on an IPM 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 pathogen populations for resistance development. Notify Corteva Agriscience Canada Company if reduced sensitivity of the pathogen to Lumisena Fungicide Seed Treatment is suspected.
- 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 and to report suspected resistance, contact Corteva Agriscience Canada Company representatives at 1-800-667-3852.

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