

CLARIVA™ pn

BIOLOGICAL NEMATICIDE SEED TREATMENT

LIQUID FLOWABLE SUSPENSION

COMMERCIAL

GUARANTEE:

Pasteuria nishizawae Pn1 1.56 x 10¹⁰ spores per mL (minimum)

Refer to container specific guarantee below for calculation of application rate.

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

POTENTIAL SENSITIZER

REGISTRATION NO.: **31681**
PEST CONTROL PRODUCTS ACT

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.

Syngenta Canada Inc.
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Guelph, Ontario
N1G 4Z3
Telephone: 1-877-964-3682

This package contains ____ x 10— spores / mL .
Date of Manufacture:

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

IF POISONING IS SUSPECTED, IMMEDIATELY contact a doctor 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. 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 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.

TOXICOLOGICAL INFORMATION

Treat symptomatically.

PRECAUTIONS

KEEP OUT OF THE REACH OF CHILDREN. Potential sensitizer. Avoid contact with skin, eyes or clothing. Avoid inhaling of spray mist or breathing dust from treated seeds. Wear a long-sleeved shirt, long pants, water proof gloves and a dust/mist filtering NIOSH approved respirator with any N-95, R-95, P-95 filter when applying product and during all clean-up/repair activities. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

USE RESTRICTIONS

1. Treated seed must not be used for food, feed or oil processing.
2. To prevent contamination, store away from food and feed.
3. All bags containing treated seed for use in Canada must be labeled or tagged as follows:
“**This seed has been treated with CLARIVA™ pn. Do not use for food, feed or oil**”

processing. Store away from food and feed. Any spilled or exposed seeds must be incorporated into the soil or otherwise cleaned-up from the soil surface.”

STORAGE

Keep in original container during storage. To prevent contamination, store this product away from food or feed. Keep away from direct sunlight, fire or open flame, or other source of heat.

Store closed product in dry place at 4°C. Unopened product has a viable shelf-life of 12 months from date of manufacture.

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.

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.

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

GENERAL INFORMATION

This product contains a biological nematicide for the suppression of the soybean cyst nematode in soybeans. CLARIVA pn nematicide should be included in an integrated approach to nematode management, which can include the application of CLARIVA pn on soybean cyst nematode resistant varieties and rotating to non-host crops.

DIRECTIONS FOR USE

Dilute CLARIVA pn in sufficient water to ensure thorough and even coverage. Apply slurry directly to dry seed or mix with inoculants and other tank-mix partners listed on this label. A suitable colourant must be added to the slurry prior to application to the seed. Do not mix CLARIVA pn with any product containing a label prohibition against such mixing. When tank-mixing with any of the listed seed treatment insecticide and/or fungicide, always read and follow all use directions, restrictions, and precautions of both CLARIVA pn and the tank mix partner(s)

labels. The resulting tank mix must be in accordance with the more restrictive label limitations and precautions. Do not exceed label dosage rates. Allow the seed to dry before bagging. Seed treated with CLARIVA pn may not flow through a seed drill at the same rate as untreated seed. Recalibrate the seed drill before planting treated seed.

Treatment of highly mechanically scarred or damaged seed, or seed known to be of low vigor and poor quality, except for the purpose of curative control of existing disease pests, may result in reduced germination and/or reduction of seed and seedling vigor. 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. Due to seed quality, crop or variety sensitivity, and seed storage conditions beyond the control of manufacturer, no claims are made to guarantee the germination of carry-over seed or propagating material for all crop seed.

Seed Treatment and Inoculants:

CLARIVA pn is compatible with *Rhizobium* based inoculants. Please check with inoculant manufacturers for details prior to use. Mixing with inoculants may increase the drying time after treating, extending the processing time.

This product does not contain a colourant. A suitable colourant must be added to the slurry prior to application to the seed. Regulations pertaining to colouration of treated seed enforced under the “Seed 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.

SOYBEANS	
CROP	Soybeans
PEST	Suppression of soybean cyst nematode (<i>Heterodera glycines</i>)
RATE	8 to 10 million spores per seed NOTE: The CLARIVA pn label guarantee may change from container to container. The required amount of product per 100 kg of seed will depend on the specific batch guarantee and seed size. Use the formula below this table to determine the amount of CLARIVA pn required. Use lower rate when nematode pressure is expected to be low and higher rate when nematode pressure is expected to be moderate to high.
APPLICATION METHOD	Apply as a seed treatment. Dilute in sufficient water to achieve thorough and even coverage to the seed.
NOTES	CLARIVA pn may be mixed with APRON XL® LS Fungicide, APRON MAXX® RTA® or APRON MAXX RFC Seed Treatments, MAXIM® 480FS, VIBRANCE® 500FS and VIBRANCE® MAXX RFC to control certain diseases. For protection from certain insect pests, CLARIVA pn may be mixed with CRUISER® 5FS Seed Treatment. For combined protection from certain insect and soil- and seed-borne pathogens, CLARIVA pn may be mixed with CRUISER MAXX® Beans Seed Treatment. Follow all appropriate treating and use directions, precautions, and limitations as specified on the respective product labels.

To determine the amount (mL) of CLARIVA pn required to treat 100 kg of seed, use the following formula:

$$\begin{aligned} & \textbf{Rate per 100 kg seed (mL per 100 kg seed)} \\ & = 10,000,000 \text{ spores per seed} \div \text{product guarantee (spores per mL)} \\ & \quad \times \text{seed size (seeds per kg)} \times 100 \text{ kg seed} \end{aligned}$$

Example:

$$\begin{aligned} & \textbf{Rate per 100 kg seed} \\ & = 10,000,000 \text{ spores per seed} \div 50,000,000,000 \text{ spores per mL} \\ & \quad \times 6,600 \text{ seeds per kg} \times 100 \text{ kg seed} \\ & = \textbf{132 mL per 100 kg seed} \end{aligned}$$

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

DO NOT apply by air.

For further information, contact Syngenta Canada Inc. company representatives at 1-87-SYNGENTA (1-877-964-3682) or at www.syngenta.ca.

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