



# DuPont™ Lumiderm™

## INSECTICIDE SEED TREATMENT

GROUP	28	INSECTICIDE
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For seed treatment applications to rapeseed/canola and mustard seed for pest management of sucking and chewing insects

<i>Active Ingredient</i>	<i>By Weight</i>
Cyantraniliprole 3-bromo-1-(3-chloro-2-pyridinyl)-N-[4-cyano-2-methyl-6-[(methylamino)carbonyl]phenyl]-1H-pyrazole-5-carboxamide	50%
<i>Other Ingredients</i>	50%
TOTAL	100%

LUMIDERM™ is a flowable suspension.  
Contains 5.21 lb. active ingredient per gallon.  
EPA Reg. No. 352-858

### Nonrefillable Container

Net: \_\_\_\_\_

OR

### Refillable Container

Net: \_\_\_\_\_

E. I. du Pont de Nemours and Company  
1007 Market Street  
Wilmington, Delaware 19898

Phone: 1-800-441-7515 (Toll Free)

## PRECAUTIONARY STATEMENTS

### KEEP OUT OF REACH OF CHILDREN

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

### FIRST AID

For questions regarding emergency medical treatment, you may contact 1-800-441-3637 for information.

### PERSONAL PROTECTIVE EQUIPMENT

Applicators and other handlers must wear:

Long-sleeved shirt and long pants.

Shoes plus socks.

Chemical resistant gloves made of any waterproof material (Category A such as natural rubber ≥ 14 mils).

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.

### USER SAFETY RECOMMENDATIONS

**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.

### ENVIRONMENTAL HAZARDS

This pesticide is toxic to aquatic invertebrates and oysters. Do not contaminate water when disposing of equipment wash water.

### PHYSICAL OR CHEMICAL HAZARDS

Do not place product near or allow product to come into contact with strong oxidizing substances (such as potassium permanganate) since a hazardous chemical reaction may occur.

## DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

- Use this product only as a commercial seed treatment in rapeseed/canola or mustard seed.
- Treated seed must not be used for or mixed with food or animal feed, or processed for oil.

When applied according to this label, DuPont™ LUMIDERM™ will provide control of cutworms and flea beetles. Consult your local DuPont Crop Protection company representative or agricultural advisor for guidance on predicted pest pressure based on historical field data for these pests in your area.

LUMIDERM™ must be used in accordance with the directions for use on this label, in separately issued labeling or exemptions under FIFRA (Supplemental Labels, Special Local Need Registrations, FIFRA Section 18 exemptions, FIFRA 2(ee) Bulletins), or as otherwise permitted by FIFRA. Always read the entire label, including the Limitation of Warranty and Liability.

LUMIDERM™ may be applied to rapeseed/canola or mustard seed. Rapeseed/canola and mustard seed are typically planted at a soil depth of 1/2 to 1 inch.

Treating significantly damaged seed or seed that is low in vigor or overall poor quality may result in reduced germination, seedling vigor and plant stand. Before treating an entire seed lot with the proposed seed treatment, treat a small portion of the seed lot and conduct subsequent germination tests. DuPont makes no guarantee regarding the germination of damaged or carry-over treated seed, since seed quality and storage conditions are beyond the control of DuPont.

DuPont will not be responsible for losses or damages resulting from the use of this product in any manner not specifically stated on this label or other labels or bulletins published by DuPont. User assumes all risks associated with such non-recommended use.

## APPLICATION

LUMIDERM™ may be applied as a water-based slurry with other registered seed treatment fungicides and insecticides. Potential mixing partners should be tested for physical compatibility with LUMIDERM™ and added dyes or polymers before mixing in a large tank for seed treatment. Follow the most restrictive of the label limitations. Do not mix this product with any product that prohibits such mixing.

## USE RATE

Use LUMIDERM™ as directed in the following Use-Rate Table for control of cutworms and flea beetles. Consult your DuPont Crop Protection company representative for further guidance.

**LUMIDERM™ Seed Treatment Use-Rate Table**

Crop	Pest*	LUMIDERM™	LUMIDERM™	LUMIDERM™
		Use Rate (fl oz/100 lb of seed)	Use Rate (lb ai/100 lb of seed)	Use Rate (mL/100kg seed)
Rapeseed including canola varieties, Mustard Seed	Flea Beetles	14.8 - 24.6	0.6 - 1.0	960 - 1600
	Cutworms	3.7 - 24.6	0.15 - 1.0	240 -1600

\* Use the higher rates in areas that are predicted to have high pest pressure, in areas with high populations of striped flea beetle, or where extended early season control is required.

## MIXING GUIDANCE

For use in commercial seed treaters only, operating standard, calibrated seed treatment equipment. Not for use in hopper box, planter box, slurry box, or other farmer applied applications. Treatment equipment must be clean and free of previous pesticide deposits before applying LUMIDERM™. Add LUMIDERM™ directly to mixing tank. Mix thoroughly recommended amount of LUMIDERM™ with the required amount of water.

Add an EPA approved dye or colorant to treat the seeds per 40 CFR 153.155(b)(1) during the seed treatment process. Ensure that all treated seed are dyed an unnatural color.

## MIXING TANK CLEANOUT

Prior to application, start with clean, well maintained application equipment. Immediately following application, thoroughly clean all mixing equipment to reduce the risk of forming hardened deposits, which might become difficult to remove.

Drain mixing equipment. Thoroughly rinse mixing equipment and flush with clean water.

Clean all other associated application equipment. Take all necessary safety precautions when cleaning equipment. Do not clean near wells, water sources or desirable vegetation. Dispose of waste rinse water in accordance with local regulations.

## COMMERCIAL SEED BAG LABELING

The Federal Seed Act requires that bags containing treated seeds shall be labeled with the following statements:

- Treated Seed. Do not use for food, feed or oil purposes.
- This seed has been treated with DuPont™ LUMIDERM™ insecticide seed treatment (cyantraniliprole).

In addition, the U.S. Environmental Protection Agency requires the following statements on bags containing seeds treated with Lumiderm (cyantraniliprole):

- Store away from food or feed.
- Do not allow children, pets, or livestock to have access to treated seed.
- Wear long-sleeved shirt, long pants and chemical-resistant gloves when handling treated seed.
- Use of LUMIDERM™ as a seed treatment must be communicated to all personnel involved in seasonal insect control recommendations.
- This product is highly toxic to bees. Ensure that the planting equipment is functioning properly in accordance with manufacturer specifications to minimize seed coat abrasion during planting to reduce dust which can drift to blooming crops and weeds.
- Rapeseed/canola and mustard seed are typically planted at a soil depth of 1/2 to 1 inch.
- Treated seed exposed on soil surface may be hazardous to wildlife. Cover or collect seeds spilled during loading.
- Dispose of all excess treated seed by burying seed away from bodies of water. Leftover treated seed may be double sown around the headland or buried away from water sources in accordance with local requirements.
- Excess treated seed may be used for ethanol production only if (a) ethanol production by-products are not used for livestock feed and, (2) no measurable residues of pesticides remain in the ethanol by-products that are used in agronomic practice.
- Dispose of seed packaging in accordance with local requirements.
- This seed has been treated with maximum of 1.0 lb cyantraniliprole per 100 lb seed. Therefore, each 1 lb cyantraniliprole treated canola seed planted per acre results in an application of 0.01 lb cyantraniliprole/acre.
- Do not apply a total of more than 0.4 lb ai/A of cyantraniliprole containing products per crop; this is the total cyantraniliprole applied by seed treatment, soil application, and foliar application.
- Including the LUMIDERM™ seed treatment, make no more than two applications of cyantraniliprole or other Group 28 products per generation to the same insect species on a crop or within a 30 day period (count planting date as day 1 if using treated seed). Application(s) to the next generation of target pest(s) must be with an effective product with a different mode of action (non-Group 28 insecticide).

### Crop Rotation

- LUMIDERM™ treated rapeseed/canola seed may be replanted immediately if needed due to crop failure.
- The following crops or crop groups may be planted immediately following the last application of cyantraniliprole. Brassica Leafy Vegetables (Crop Group 5); Bulb Vegetables (Crop Group 3- 07); Bushberries (Berry and Fruit Crop Group subgroup 13- 07B); Citrus (Crop Group 10-10); Cotton; Cucurbit Vegetables (Crop Group 9); Fruiting Vegetables (Crop Group 8-10); Leafy Vegetables (except brassicas) (Crop Group 4); Low Growing Berries (Berry and Fruit Crop Group subgroup 13-07G); Oilseeds (Crop Group 20); Pome Fruits (Crop Group 11-10); Stone Fruits (Crop Group 12); Tree Nuts (Crop Group 14-12).
- The following crops or crop groups may be planted 30 days following the last application of cyantraniliprole. Cereal Grains (Crop Group 15); Foliage of Legume Vegetables (Crop Group 7); Forage, Fodder and Straw of Cereal Grains (Crop Group 16); Grass Forage, Fodder and Hay (Crop Group 17); Legume Vegetables (succulent or dried) (Crop Group 6); Nongrass Animal Feeds (forage, fodder, straw and hay) (Crop Group 18); Peanuts; Leaves of Root and Tuber Vegetables (Crop Group 2); Root Vegetables (Root and Tuber Vegetables Crop Group subgroup 1A); Tuberous and Corm Vegetables (Root and Tuber Vegetables Crop Group subgroup 1C).
- All other crops cannot be planted until 12 months after the last application of cyantraniliprole.

## STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Do not subject to temperatures below 32 degrees F. Store product in original container only in a location inaccessible to children and pets. Do not contaminate water, other pesticides, fertilizer, food or feed in storage. Not for use or storage in or around the home.

**PESTICIDE DISPOSAL:** Do not contaminate water, food or feed by storage or disposal. Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

### CONTAINER HANDLING:

**Refer to the Net Contents section of this product's labeling for the applicable "Refillable Container" or "Nonrefillable Container" designation.**

**Nonrefillable Rigid Plastic and Metal Containers (Capacity Equal to or Less Than 5 Gallons):** Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then, for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration. Do not burn, unless allowed by state and local ordinances. For Metal Containers, offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

**Nonrefillable Plastic and Metal Containers (Capacity Greater Than 5 Gallons):** Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then, for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration. Do not burn, unless allowed by state and local ordinances. For Metal Containers, offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

**Nonrefillable Plastic and Metal Containers, e.g., Intermediate Bulk Containers [IBC] (Size or Shape Too Large to be Tipped, Rolled or Turned Upside Down):** Nonrefillable container. Do not reuse or refill this container. Clean container promptly after emptying the contents from this container into application equipment or mix tank and before final disposal using the following pressure rinsing procedure. Insert a lance fitted with a suitable tank cleaning nozzle into the container and ensure that the water spray thoroughly covers the top, bottom and all sides inside the container. The nozzle manufacturer generally provides instructions for the appropriate spray pressure, spray duration and/or spray volume. If the manufacturer's instructions are not available, pressure rinse the container for at least 60 seconds using a minimum pressure of 30 PSI with a minimum rinse volume of 10% of the container volume. Drain, pour or pump rinsate into application equipment or rinsate collection system. Repeat this pressure rinsing procedure two more times. Then, for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration. For Metal Containers, offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

**All Refillable Containers:** Refillable container. *Refilling Container:* Refill this container with DuPont™ LUMIDERM™ containing cyantraniliprole only. Do not reuse this container for any other purpose. Cleaning before refilling is the responsibility of the refiller. Prior to refilling, inspect carefully for damage such as cracks, punctures, abrasions, worn out threads and closure devices. If leaks are found, do not reuse or transport container, contact DuPont at the number below for instructions. *Disposing of Container:* Do not reuse this container for any other purpose other than refilling (see preceding). Cleaning the container before final disposal is the responsibility of the person disposing of the container. To clean the container before final disposal, use the following pressure rinsing procedure. Insert a lance fitted with a suitable tank cleaning nozzle into the container and ensure that the water spray thoroughly covers the top, bottom and all sides inside the container. The nozzle manufacturer generally provides instructions for the appropriate spray pressure, spray duration and/or spray volume. If the manufacturer's instructions are not available, pressure rinse the container for at least 60 seconds using a minimum pressure of 30 PSI with a minimum rinse volume of 10% of the container volume. Drain, pour or pump rinsate into application equipment or rinsate collection system. Repeat this pressure rinsing procedure two more times. Then, for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration. Do not burn, unless allowed by state and local ordinances. For Metal Containers, offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Do not transport if container is damaged or leaking. If the container is damaged, leaking or obsolete, or in the event of a major spill, fire or other emergency, contact DuPont at 1-800-441-3637, day or night.

**NOTICE TO BUYER**— Purchase of this material does not confer any rights under patents of countries outside of the United States.

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**SL - 1921 102214 12-17-14**

## **LIMITATION OF WARRANTY AND LIABILITY**

NOTICE: Read this Limitation of Warranty and Liability Before Buying or Using This Product. DuPont will not be responsible for losses or damages resulting from the use of this product in any manner not specifically directed by DuPont. User assumes all risks associated with such non-directed use. If the Terms Are Not Acceptable, Return the Product at Once, Unopened, and the Purchase Price Will Be Refunded.

It is impossible to eliminate all risks associated with the use of this product. Such risks arise from weather conditions, soil factors, off target movement, unconventional farming techniques, presence of other materials, the manner of use or application, or other unknown factors, all of which are beyond the control of DuPont. These risks can cause: ineffectiveness of the product, crop injury, or injury to non-target crops or plants. **WHEN YOU BUY OR USE THIS PRODUCT, YOU AGREE TO ACCEPT THESE RISKS.**

DuPont warrants that this product conforms to the chemical description on the label thereof and is reasonably fit for the purpose stated in the Directions for Use, subject to the inherent risks described above, when used in accordance with the Directions for Use under normal conditions.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, DUPONT MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR OF MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, IN NO EVENT SHALL DUPONT OR SELLER BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT. BUYER'S OR USER'S BARGAINED-FOR EXPECTATION IS CROP PROTECTION. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER AND THE EXCLUSIVE LIABILITY OF DUPONT OR SELLER, FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY OR CONTRACT, NEGLIGENCE, TORT OR STRICT LIABILITY), WHETHER FROM FAILURE TO PERFORM OR INJURY TO CROPS OR OTHER PLANTS, AND RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT, OR AT THE ELECTION OF DUPONT OR SELLER, THE REPLACEMENT OF THE PRODUCT.

To the extent consistent with applicable law that allows such requirement, DuPont or its Ag Retailer must have prompt notice of any claim so that an immediate inspection of buyer's or user's growing crops can be made. Buyer and all users shall promptly notify DuPont or a DuPont Ag Retailer of any claims, whether based on contract, negligence, strict liability, other tort or otherwise, or be barred from any remedy.

This Limitation of Warranty and Liability may not be amended by any oral or written agreement.

**For product information call: 1-888-6-DUPONT [1-888-638-7668]**

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