

352-841

5/28/2014

1/7



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

OFFICE OF  
CHEMICAL SAFETY AND  
POLLUTION PREVENTION

Richard Carver, PhD  
DuPont Crop Protection  
Stine-Haskell Research Center  
P.O. Box 30  
Newark, DE 19714

MAY 28 2014

Dear Dr. Carver:

Subject: Amendment to decrease use rate from 0.5-0.75 mg ai per seed to 0.25-0.75 mg ai per seed  
and to add pests  
Dupont Lumivia  
EPA Registration No. 352-841  
Decision Number: 489424  
Submission Date: March 27, 2014

The label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable. A stamped copy of the label is enclosed for your records. Please submit two copies of your final printed labeling before you release the product for shipment. If you have any questions regarding these labels, please contact Dr. Jennifer Urbanski at 703-347-0156 or [urbanski.jennifer@epa.gov](mailto:urbanski.jennifer@epa.gov).

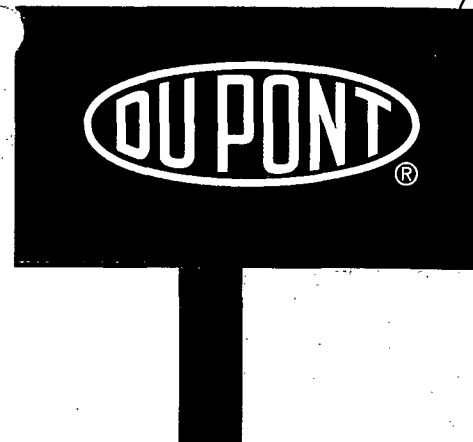
Sincerely yours,

A handwritten signature in cursive script that reads "Venus Eagle".

Venus Eagle  
Product Manager (01)  
Insecticide-Rodenticide Branch  
Registration Division (7505P)

Enclosure- Stamped Label

2/7



# DuPont™ Lumivia™

## INSECTICIDE SEED TREATMENT

GROUP	28	INSECTICIDE
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<i>Active Ingredient</i>	<i>By Weight</i>
Chlorantraniliprole 3-Bromo-N-[4-chloro-2-methyl-6-[(methylamino)carbonyl]phenyl]-1-(3-chloro-2-pyridinyl)-1H-pyrazole-5-carboxamide	50%
<i>Other Ingredients</i>	50%
TOTAL	100%

LUMIVIA™ is a flowable suspension.  
 Contains 5.21 lb. active ingredient per gallon.  
 EPA Reg. No. 352-841  
**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)

**ACCEPTED**  
**MAY 28 2014**  
**Under the Federal Insecticide, Fungicide,**  
**and Rodenticide Act, as amended, for the**  
**pesticide registered under:**

EPA. Reg. No: 352-841

### 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.

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

When used as directed this product does not present a hazard to humans or domestic animals.

#### PERSONAL PROTECTIVE EQUIPMENT

Applicators and other handlers must wear:  
 Long-sleeved shirt and long pants.  
 Shoes plus socks.

After the product has been diluted in accordance with label directions for use, shirt, pants, socks, and shoes are sufficient Personal Protective Equipment. 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, oysters, and shrimp. Do not apply directly to water. Drift and runoff may be hazardous to aquatic organisms in water adjacent to use sites.

#### Surface Water Advisory-

This product may impact surface water quality due to runoff of rain water. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having high potential for reaching surface water via runoff for several months or more after application. A level, well-maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential loading of Chlorantraniliprole from runoff water and sediment. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours.

#### Ground Water Advisory-

This chemical has properties and characteristics associated with chemicals detected in ground water. This chemical may leach into ground water if used in areas where soils are permeable, particularly where the water table is shallow.

### DIRECTIONS FOR USE

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

- Apply this product in commercial seed treatment facilities only. Not for use on agricultural establishments in hopper-box, planter box, slurry box, or other seed treatment applications at or immediately before planting.
- 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™ LUMIVIA™ will provide protection against early season injury to corn from Wireworms, White grubs, Black cutworms, Seedcorn maggot, and Fall armyworm. 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.

LUMIVIA™ field corn seed treatment must be used only in accordance with directions on this label or in separate DuPont supplemental labeling that is available as a result of new EPA approvals.

LUMIVIA™ is to be applied to field corn seed only; corn seeds are typically planted at a soil depth of 1.5 to 2 inches.

Treated seed exposed on soil surface may be hazardous to aquatic invertebrates. Cover or collect seeds spilled during loading.

Store treated seed away from food or feed.

Dispose of all excess treated seed by burying seed away from bodies of water.

LUMIVIA™ treated field corn seed may be replanted if an emergency replanting due to crop failure occurs.

Use of LUMIVIA™ as a seed treatment must be communicated to all personnel involved in seasonal insect control applications.

Following the planting of LUMIVIA™ treated seed, total foliar applications for a crop must not exceed a total rate of 0.146 lb chlorantraniliprole per acre. Soil applications of chlorantraniliprole containing products are not permitted.

LUMIVIA™ is a member of the anthranilic diamide class of insecticides with a mode of action acting on insect ryanodine receptors. LUMIVIA™ is effective through ingestion of treated plant material. After exposure to LUMIVIA™, affected insects will rapidly stop feeding, become paralyzed, and typically die within 1 - 3 days.

### INTEGRATED PEST MANAGEMENT

DuPont supports the use of Integrated Pest Management (IPM) programs to control pests. This product may be used as part of an IPM program, which can include biological, cultural, and genetic practices, aimed at preventing economic pest damage. IPM principles and practices include field scouting or other detection methods, correct target pest identification, population monitoring, rotation of insecticides with different modes-of-action, and treating when target pest populations reach locally determined action thresholds. Consult your state cooperative extension service, professional consultants or other qualified authorities to determine appropriate action treatment threshold levels for treating specific pest/crop or site systems in your area.

### RESISTANCE MANAGEMENT

LUMIVIA™ is a Group 28 Insecticide. Repeated and exclusive use of LUMIVIA™ or other Group 28 Insecticides may lead to the buildup of resistant strains of insects in some crops.

Because the development of resistance cannot be predicted, this product may be used as part of resistant management strategies established for the use area. These strategies may include incorporation of cultural and biological control practices, alternation of mode-of-action classes of insecticides (non-Group 28) on succeeding generations and targeting the most susceptible life stage. Consult your local or state agricultural authorities for details.

When planting field corn seed treated with LUMIVIA™:

Unless directed otherwise in the specific crop/pest sections of this label, the best practices are to follow these instructions to delay the development of insecticide resistance:

4/7

- Avoid using the same mode of action (same insecticide group) on consecutive generations of insect pests.
- Apply DuPont™ LUMIVIA™ or other Group 28 insecticides using a “treatment window” approach to avoid exposure of successive insect pest generations to the same mode of action.
- A “treatment window” is defined as the period of residual activity provided by single or sequential applications of products with the same mode of action.
- This “treatment window” should not exceed approximately the length of one generation of the target pest which may vary from 25 - 40 days.
- Following a LUMIVIA™ field corn seed treatment, do not apply Chlorantraniliprole or other Group 28 products for approximately 60 days.
- Following a “Group 28 treatment window”, rotate to a treatment window of effective products with a different mode of action. This “Non-Group 28 Window” should approximate the duration of one generation of the target pest. Target the most susceptible insect life stages, whenever possible.

If resistance develops in your area, LUMIVIA™ or other products with a similar mode of action may not provide adequate control. If poor performance cannot be attributed to improper application or extreme weather conditions a resistant strain of insect may be present.

If you experience difficulty with control and resistance is a reasonable cause, immediately consult your local DuPont Crop Protection company representative or agricultural advisor for the best alternate method of control for your area. For additional information on insect resistance monitoring, visit the Insecticide Resistance Action Committee (IRAC) on the web at <http://www.irac-online.org>.

### **MIXING GUIDANCE**

For use in commercial seed treaters only, operating standard, calibrated seed treatment equipment. Treatment equipment must be clean and free of previous pesticide deposits before applying LUMIVIA™. Add LUMIVIA™ directly to mixing tank. Mix thoroughly specified amount of LUMIVIA™ 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.

### **APPLICATION**

LUMIVIA™ 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 LUMIVIA™ and added dyes or polymers before mixing in a large tank for seed treatment. Avoid mixtures of several materials and very concentrated spray mixtures. Follow the most restrictive of the labeling limitations and precautions of all products used in mixtures. Do not mix this product with any product that prohibits such mixing.

### **USE RATE**

Apply LUMIVIA™ at 0.25 to 0.75 milligrams of chlorantraniliprole per seed. Do not exceed a maximum of 0.054 lb chlorantraniliprole per acre regardless of field corn seeding density.

### **CROP ROTATION**

Crops on this label and the following crops or crop groups may be planted immediately following harvest: Artichoke; Asparagus; Brassica (Cole) Leafy Vegetables (Crop Group 5); Bulb Vegetables (Crop Group 3); Cereal Grains (Crop Group 15); Corn (pop, seed, and sweet); Cotton; Cucurbit Vegetables (Crop Group 9); Fruiting Vegetables (Crop Group 8); Grape; Grass Forage, Fodder and Hay (Crop Group 17); Herbs subgroup (Crop Group subgroup 19A); Leafy Vegetables (non-brassica, Crop Group 4); Legume Vegetables (Crop Group 6); Foliage of Legume Vegetables (Crop Group 7); Spearmint; Peppermint; Nongrass Animal Feeds (Forage, Fodder, Straw, and Hay Crop Group 18); Okra; Peanut; Potato; Prickly Pear Cactus; Root and Tuber Vegetables (Crop Group 1); Strawberries; Sugarcane; Tree Nuts (Crop Group 14); Ti Palm; Tobacco and Tops of Root and Tuber Vegetables (Crop Group 2).

All other crops cannot be planted until 12 months after the last planting of LUMIVIA™ treated seed.

## COMMERCIAL SEED BAG LABELING

In accordance with the Federal Seed Act and the US Environmental Protection Agency requirements, seeds commercially treated with a pesticide must be labeled as follows:

- Treated Seed. Do not use for food, feed or oil purposes.
- This seed has been treated with DuPont™ LUMIVIA™ seed treatment (Chlorantraniliprole).
- Treated seed exposed on soil surface may be hazardous to aquatic invertebrates. Ensure planted seed is covered with soil. Cover or collect spilled seeds.
- Store away from food or feed.
- Dispose of all excess treated seed by burying seed away from bodies of water.
- LUMIVIA™ may be applied to field corn seed only; corn seeds are typically planted at a soil depth of 1.5 to 2 inches.
- LUMIVIA™ treated field corn seed may be replanted if an emergency replanting due to a crop failure.
- Use of LUMIVIA™ as a seed treatment must be communicated to all personnel involved in seasonal insect control applications.
- Do not apply other seed treatment products to seed already treated with Lumivia™.
- Following a LUMIVIA™ field corn seed treatment, do not apply Chlorantraniliprole or other Group 28 products for approximately 60 days. 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).
- Following the planting of LUMIVIA™ treated seed, total foliar applications to a field corn crop may not exceed a total rate of 0.146 lb Chlorantraniliprole per acre. Soil applications of Chlorantraniliprole-containing products are not permitted to corn if LUMIVIA™ treated seeds are planted.

### Crop Rotation

Crops on this label and the following crops or crop groups may be planted immediately following harvest: Artichoke; Asparagus; Brassica (Cole) Leafy Vegetables (Crop Group 5); Corn (pop, seed, and sweet); Cotton; Cucurbit Vegetables (Crop Group 9); Fruiting Vegetables (Crop Group 8); Grape; Grass Forage, Fodder and Hay (Crop Group 17); Herbs subgroup (Crop Group subgroup 19A); Leafy Vegetables (nonbrassica, Crop Group 4); Legume Vegetables (Crop Group 6); Foliage of Legume Vegetables (Crop Group 7); Spearmint; Peppermint; Nongrass Animal Feeds (Forage, Fodder, Straw, and Hay Crop Group 18); Okra; Potato; Prickly Pear Cactus; Root and Tuber Vegetables (Crop Group 1); Strawberries; Sugarcane; Tobacco and Tops of Root and Tuber Vegetables (Crop Group 2). The following crops or crop groups may be planted 30 days following the last planting of LUMIVIA™ treated seed: garlic; greatheaded garlic; dry bulb onion; leek; green onion; Welsh onion; shallot; Cereal Grains (Crop Group 15); soybean and peanut. All other crops cannot be planted until 12 months after the last planting of LUMIVIA™ treated seed.

6/7

## 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™ LUMIVIA™ containing Chlorantraniliprole 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.

7/7

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**LIMITATION OF WARRANTY AND LIABILITY**

NOTICE: Read this Limitation of Warranty and Liability Before Buying or Using This Product. If the Terms Are Not Acceptable, Return the Product at Once, Unopened, and the Purchase Price Will Be Refunded.

DuPont will not be responsible for losses or damages resulting from use of this product in any manner not specifically published by DuPont and stated on this label or other labels or recommendations which conform with Section 2(ee) of the Federal Insecticide, Fungicide and Rodenticide Act. User assumes all risks associated with such non-specified use.

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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