

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

March 28, 2017

Sharlyne Pyles Regulatory Product Manager Syngenta Crop Protection, LLC P.O. Box 18300 Greensboro, NC 27419

Subject: PRIA Label Amendment – New seed treatment uses on oilseeds and corn

Product Name: Fortenza

EPA Registration Number: 100-1420 Application Dates: 8/29/2014, 10/3/2014 Decision Numbers: 495044, 496146

Dear Ms. Pyles:

The application referred to above, submitted under the Federal Insecticide, Fungicide and Rodenticide Act, as amended is acceptable under FIFRA sec 3 (c)(5). You must submit and/or cite all data required for registration/registration/registration review of your product when the Agency requires all registrants of similar products to submit such data.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one (1) copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

Your release for shipment of the product constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance

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with FIFRA section 6. If you have any questions, please contact Jacquelyn Herrick by phone at 703-347-0559, or via email at herrick.jacquelyn@epa.gov.

Sincerely,

Venus Eagle, Acting Branch Chief Invertebrate and Vertebrate Branch 3 Registration Division (7505P) Office of Pesticide Programs

Enclosure

# (Master label)

# Sale, use, and distribution of this product in Nassau and Suffolk Counties in the State of New York is prohibited.

GROUP 28 INSECTICIDE

#### **Fortenza®**

Insecticide

A seed treatment product for protection against early-season damage caused by [Colorado potato beetle and European corn borer on potato,] cutworms and wireworms on rapeseed crop subgroup 20A, sunflower crop subgroup 20B and cottonseed crop subgroup 20C; and cutworms, grubs and wireworms on corn

Active Ingredient:

Cyantraniliprole <sup>1</sup>	48.8%
Other Ingredients:	51.2%
Total:	100.0%

<sup>1</sup>CAS No. 736994-63-1

Fortenza is formulated as a flowable suspension.

Fortenza contains 5.0 lb/gal [600 g/L] of cyantraniliprole (FS). One fluid ounce of Fortenza contains 17.72 grams of cyantraniliprole.

#### KEEP OUT OF REACH OF CHILDREN.

# **CAUTION**

See additional precautionary statements and directions for use in booklet [on label].

EPA Reg. No. 100-1420 EPA Est. xxxxx

Product of xxxxx Formulated in xxxxx

**Net Contents** 

ACCEPTED

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 100-1420

FIRST AID					
If in eyes	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>				
If inhaled	<ul> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>				
If swallowed	<ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>Have person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>				
If on skin or clothing	<ul> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>				
Have the product codoctor, or going for	ontainer or label with you when calling a poison control center or treatment.				

# **HOT LINE NUMBER**

For 24-Hour Medical Emergency Assistance (Human or Animal) or Chemical Emergency Assistance (Spill, Leak, Fire or Accident)

Call

1-800-888-8372

# PRECAUTIONARY STATEMENTS

## **Hazards to Humans and Domestic Animals**

## **CAUTION**

Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling, and before eating, drinking, chewing gum, using tobacco, or using the toilet.

# Personal Protective Equipment (PPE)

# **Applicators and Other Handlers Must Wear:**

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, natural rubber ≥ 14 mils, polyethylene, polyvinyl chloride (PVC) or Viton® ≥ 14 mils
- Shoes plus socks

# **User Safety Requirements**

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions exist for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

# **Engineering Control Statements**

When handlers use closed systems in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

# User Safety Recommendations Users should:

- Wash thoroughly with soap and water after handling.
- 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.
- 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.

#### **Environmental Hazards**

This pesticide is toxic to aquatic invertebrates. This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not contaminate water when disposing of equipment washwater.

#### CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

**NOTICE:** Read the entire Directions for Use and Conditions of Sale and 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.

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of SYNGENTA CROP PROTECTION, LLC or Seller. To the extent permitted by applicable law, Buyer and User agree to hold SYNGENTA and Seller harmless for any claims relating to such factors.

SYNGENTA warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. To the extent permitted by applicable law: (1) this warranty does not extend to the use of the product contrary to label instructions, or under conditions not reasonably foreseeable to or beyond the control of Seller or SYNGENTA, and (2) Buyer and User assume the risk of any such use. TO THE EXTENT PERMITTED BY APPLICABLE LAW, SYNGENTA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS WARRANTED BY THIS LABEL.

To the extent permitted by applicable law, in no event shall SYNGENTA be liable for any incidental, consequential or special damages resulting from the use or handling of this product. TO THE EXTENT PERMITTED BY APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF SYNGENTA AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) 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 SYNGENTA OR SELLER, THE REPLACEMENT OF THE PRODUCT.

SYNGENTA and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitation of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of SYNGENTA.

#### **DIRECTIONS FOR USE**

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

#### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 12 hours. Exception: If the seed is treated with the product and the treated seed is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is:

- Coveralls
- Chemical-resistant gloves made of barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, natural rubber ≥ 14 mils, polyethylene, polyvinyl chloride (PVC) or Viton ≥ 14 mils
- Shoes plus socks

# FAILURE TO FOLLOW THE DIRECTIONS FOR USE AND PRECAUTIONS ON THIS LABEL MAY RESULT IN CROP INJURY, POOR INSECT CONTROL, AND/OR ILLEGAL RESIDUES.

Sale, use, and distribution of this product in Nassau and Suffolk Counties in the State of New York is prohibited.

Treatment of highly mechanically scarred or damaged seed, or seed known to be of low vigor and poor quality, 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 Syngenta,

no claims are made to guarantee the germination of carry-over seed [or propagating material] for all crop seed.

#### PRODUCT INFORMATION

Cyantraniliprole is a broad-spectrum insecticide belonging to the chemical class of diamides. Cyantraniliprole products are effective on the larval stages of lepidopteran insects; and some other insect pests including some coleopterans and dipterans. The length of control of the major insect pests will vary depending on the product use rate, insect pressure, crop growth and maturity, and soil and environmental conditions. When rate ranges are given, use the higher rate within the listed rate range when insect pressure is expected to be high.

# **Resistance Management**

GROUP 28 INSECTICIDE

Fortenza contains cyantraniliprole, a Group 28 insecticide. Cyantraniliprole is a systemic insecticide belonging to the diamide class of chemistry. Diamides cause muscle contraction and paralysis in insects by activating muscle ryanodine receptors.

Insect populations may contain individuals naturally resistant to Group 28 insecticides and if used repeatedly in the same fields, then resistant members may eventually dominate the population. Because resistance development cannot be predicted, use sound resistance management strategies established for the crop and use area.

Base seed treatment on an integrated pest management program that includes field sanitation, historical information related to pesticide use, careful selection of pest-tolerant crop varieties, scouting, and management practices which optimize populations of natural enemies of insect pests such as within-field refugia (untreated areas). Sound management programs also consider cultural and biological control practices.

# In order to maintain susceptibility to this class of chemistry:

- Use products at their full, specified doses.
- Use appropriate, well-maintained equipment. Use specified water volumes and apply at optimal temperatures in order to obtain optimal treatment.
- When rate ranges are given, use the higher rate within the listed rate range when insect pressure is expected to be high.
- Avoid using a single active ingredient or mode of action (same insecticide group)
  exclusively for season long control of insect species with more than one generation
  per crop season.
- For insect species with successive or overlapping generations, use a treatment window approach. A treatment window is a period of time defined by the stage of crop development and the biology of the pests of concern. Within the treatment window, depending on the length of residual activity, single or consecutive applications may be made using seed, in-furrow, or foliar treatments unless

- otherwise excluded by product labels. Do not exceed the maximum amount of this insecticide's mode of action allowed per growing season.
- Following a treatment window of this insecticide's mode of action, rotate to a
  treatment window of effective products with a different mode of action before making
  additional applications of this insecticide.

If resistance to this product develops in your area, this product or other products with a similar mode of action may not provide adequate control. If poor performance cannot be attributed to improper application or 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 company representative or agricultural advisor for the best alternative method of control for the crop and use area.

Syngenta encourages responsible product stewardship to ensure effective long term control of the insect pests on this label.

# For additional information on Insect Resistance Management:

- Contact Syngenta representatives at 1-800-334-9481.
- Contact your local Cooperative Extension Service specialist, pest control advisor, or certified crop advisor.
- Visit the Insecticide Resistance Action Committee (IRAC) on the web at: http://www.irac-online.org.

#### MIXING PROCEDURES

**Important:** Thoroughly recirculate or agitate the container of Fortenza prior to use.

Apply Fortenza as a water-based slurry utilizing standard slurry seed treatment equipment which provides uniform seed coverage. Uneven or incomplete seed coverage may not give the desired level of insect or disease control. Thoroughly mix the specified amount of Fortenza into the required amount of water for the slurry treater and dilution rate to be used. (See **Fortenza in Tank Mixtures.**) Consult the manufacturer of the application equipment you plan to use for suitability for this application and for instructions on operation and calibration of the equipment.

- Use an EPA-approved dye or colorant that imparts an unnatural color to the seed as stated in 40 CFR 153.155 (c).
- Allow seed to dry before bagging.
- Store away from feed and foodstuffs.

Fortenza has been found to be compatible with some liquid inoculant products. Fortenza may be mixed or applied sequentially with approved liquid inoculants. Consult the maker of the liquid inoculants and a Syngenta Crop Protection representative for directions before applying Fortenza with inoculants.

Apply Fortenza at commercial seed treatment facilities only using operating standard, calibrated seed treatment equipment except for potatoes where applications can be done using Syngenta-approved equipment either on farm by the grower or at a commercial seed treatment facility. Not for use in hopper box, planter box, slurry box, or other farmer-applied applications.

#### Fortenza in Tank Mixtures:

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture."

## SEED BAG LABEL REQUIREMENTS

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

- This seed has been treated with cyantraniliprole [Fortenza] insecticide seed treatment
- Do not use treated seed for food, feed or oil purposes.

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

- Store treated seed away from food and feedstuffs.
- 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 Fortenza as a seed treatment must be communicated to all personnel involved in seasonal insect control recommendations.
- This product is highly toxic to bees exposed to direct treatment or residues on blooming crop or weeds. 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.
- Corn seeds are typically planted at a soil depth of 1½ inches.
- Potato seed tubers are typically planted at a soil depth of 2 to 8 inches.
- Rapeseed crop subgroup 20A seeds are typically planted at a soil depth of ¼ inch.
- Sunflower crop subgroup 20B seeds are typically planted at a soil depth of 1 inch.
- Cottonseed crop subgroup 20C seeds are typically planted at a soil depth of 1 inch.

- Treated seeds 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. Do not contaminate
  bodies of water when disposing of excess treated seed or washwaters of planting
  equipment.
- 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.
- For all crops: Do not apply a total of more than 0.4 lb ai per acre of cyantraniliprole-containing products per calendar year; this is the total cyantraniliprole applied by seed treatment, soil application and foliar application.
- For corn: This seed has been treated with a maximum of 0.5 mg cyantraniliprole per seed. Calculate actual amount of cyantraniliprole applied per acre based on seeds planted per acre.
- For potato: This seed has been treated with a maximum of 0.0135 lb cyantraniliprole per 100 lb seed tuber. Do not plant more than 3000 tubers per acre when treated at 0.0135 lb ai/100 lb of seed.
- For rapeseed crop subgroup 20A [based on flax seed]: This seed has been treated with a maximum of 0.05 mg active cyantraniliprole per seed. Calculate actual amount of cyantraniliprole applied per acre based on seeds planted per acre.
- For sunflower crop subgroup 20B: This seed has been treated with a maximum of 0.2 mg active cyantraniliprole per seed. Calculate actual amount of cyantraniliprole applied per acre based on seeds planted per acre.
- For cottonseed crop subgroup 20C: This seed has been treated with a maximum of 0.9 mg active cyantraniliprole per seed. Calculate actual amount of cyantraniliprole applied per acre based on seeds planted per acre. Do not apply more than 0.17 lb active cyantraniliprole per acre as a seed treatment application.
- Including the Fortenza 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**

- There is no plant back restriction for conversion of a treated field or for making a new or replacement planting into established orchards or fields of Bushberries (Crop Subgroup 13-07B); Citrus (Crop Group 10-10); Pome Fruits (Crop Group 11-10); Stone Fruits (Crop Group 12); Low Growing Berries (Crop Subgroup 13-07G); or Tree Nuts (Crop Group 14-12).
- Fortenza-treated sunflower seed may be replanted immediately if needed due to crop failure.
- Crops on this label and the following crops or crop groups may be planted immediately following the last application of Fortenza: Brassica Leafy Vegetables (Crop Group 5); Bulb Vegetables (Crop Group 3- 07); Corn (Field, Pop, Seed and Sweet); Cotton; Cucurbit Vegetables (Crop Group 9); Fruiting Vegetables (Crop Group 8-10); Leafy Vegetables (except Brassicas) (Crop Group 4); Leaves of Root and Tuber Vegetables (Crop Group 2); Legume Vegetables (Crop Groups 6 and 7); Low Growing Berries (Crop Subgroup13- 07H); Oilseeds (Crop Group 20); Peanuts; Root and Tuber Vegetables (Crop Subgroups 1B and 1C); Tobacco.
- The following crops or crop groups may be planted 30 days following the last application of Fortenza: Cereal Grains (Crop Group 15); Forage, Fodder and Straw of Cereal Grains (Crop Group 16); Grass Forage, Fodder and Hay (Crop Group 17); Nongrass Animal Feeds (forage, fodder, straw and hay) (Crop Group 18); Sugar beets.
- All other crops cannot be planted until 12 months after the last application of cyantraniliprole.

#### **FOR POTATO SEED**

Treatment of potato seed pieces can be done using Syngenta-approved equipment either on-farm by the grower or at a commercial seed treatment facility.

FOR CORN (FIELD, POP, SEED AND SWEET) AND OILSEED CROPS (RAPESEED CROP SUBGROUP 20A, SUNFLOWER CROP SUBROUP 20B AND COTTONSEED CROP SUBGROUP 20C)

Treatment of corn and rapeseed crop subgroup 20A, sunflower crop subgroup 20B and cottonseed crop subgroup 20C seeds can be done only by Syngenta-approved commercial seed treatment facilities.

#### CROP USE DIRECTIONS

# CORN (FIELD, POP, SEED AND SWEET) SEED TREATMENT

To provide early-season protection against damage caused by black cutworm, white grubs, and wireworms on corn

Fortenza at labeled rates provides protection against the damage caused by black cutworm, white grubs, and wireworms during early-season growth and development of corn. Full-season protection or complete reduction of damage from the use of Fortenza is **not** expected against the listed insects. Apply Fortenza at a rate of 0.125 - 0.5 milligrams active cyantraniliprole per seed (each milliliter of Fortenza contains 0.6 grams of cyantraniliprole). Do not apply more than 0.4 lb ai of cyantraniliprole-containing products per acre per calendar year including all types of applications (seed treatment, soil, foliar).

It is recommended to apply Fortenza with compatible and registered seed treatment fungicides such as Apron XL®, Dynasty®, Maxim® 4FS, Maxim® Quattro, and Vibrance® which are proven to provide protection from seed and seedling diseases and Cruiser® 5FS for additional early season insect pest protection and Avicta® Complete Corn for early-season disease, insect and nematode protection.

Follow planter manufacturer instructions for use of talc or other hopper box additives at planting.

#### POTATO SEED PIECE TREATMENT

Fortenza is to be used as an integral part of potato pest management strategy. This strategy includes the use of high quality certified potato seed, crop rotation, monitoring proper insect population thresholds, appropriate comprehensive insect control measures, optimal harvest time of potato tubers and proper handling of the potatoes. Consult your local agricultural extension agent for more detailed information on insect management practices.

Fortenza used at labeled rates provides protection against damage caused by Colorado potato beetle and European corn borer during early to mid-season growth and development of potatoes. Full-season protection or complete reduction of damage caused by labeled pests is <u>not</u> expected with the use of Fortenza. Apply Fortenza at a rate to achieve between 0.15 and 0.35 fl oz product (0.006 and 0.0135 lb active cyantraniliprole) per 100 pounds of seed tuber [6 and 13.5 grams active cyantraniliprole per 100 kg of seed tuber]. (Fortenza contains 5.0 lb of cyantraniliprole per gallon [0.6 grams per milliliter]). Do not apply more than 0.4 lb ai of cyantraniliprole-containing products per acre per calendar year including all types of applications (seed treatment, soil, foliar) (**Tables 1 and 2**).

For protection against certain seed and soil borne diseases of potatoes Fortenza may be applied with Maxim 4 FS, Dynasty®, CruiserMaxx® Vibrance Potato, CruiserMaxx® Potato or CruiserMaxx® Potato Extreme family of products. Application of Fortenza with CruiserMaxx Potato or CruiserMaxx Potato Extreme also provides protection against potato aphid, green peach aphid, beet leaf hopper and psyllids.

# **Application of Fortenza**

Apply Fortenza utilizing Syngenta-approved seed treating systems designed to apply liquid seed treatments of potatoes. Uneven or incomplete seed coverage may not give the desired level of insect control. For slurry treatment, thoroughly mix the specified amount of Fortenza into the required amount of water for the slurry treater and dilution rate to be used. Maintain constant agitation of the slurry during the seed treatment process. Follow the manufacturer's application instructions for the seed treatment equipment being used with appropriate set-up and calibration. Calibrate the equipment so that every potato seed tuber is uniformly coated with a fine layer of the slurry mix without any excess dripping off of the treated seed.

# <u>DO NOT BAG POTATO SEED THAT IS TREATED WITH ANY LIQUID SEED TREATMENTS.</u>

#### **Storing Treated Potato Seed Piece**

If the treated potato seed piece needs to be stored or held for few days (2 to 3 weeks maximum), make sure the potato seed piece is stored in well ventilated areas that allow air to move through and out the treated potato seed piece. An ideal air temperature is 60 degrees Fahrenheit at a relative humidity of 85 to 90 percent. Do not allow free moisture to form within or around the treated potato seed piece during storage.

If possible, allow treated potato seed pieces to dry during transit and planted the same day of treatment.

If an inert dust (fir bark or talc etc.) or a dust-based fungicide is applied, apply Fortenza prior to applying the dust treatments.

Syngenta, LLC makes no claims as to the effect of this product or delivery systems on germination of the potato seed. The user, buyer or applicator of the seed treatment assumes all risks from such application.

**Note:** Treatment of highly damaged or bruised potato seed, or seed known to be of low vigor and poor quality, or potato seed that is deemed "physiologically old", may result in reduced germination and/or reduction of seed and seedling vigor and multiple stems from germination of the seed. When in doubt or if the status/condition of the potato seed tubers is unknown, treat a small sample batch of the same potato seed load with Fortenza using specified rates, equipment, and application procedures; before treating the total seed lot. Conduct this test on a small batch of the potato seed and observe the germination, emergence, stem count from the germinating seed. Consult with local

experts in the region or conduct the test with university or area experts. Only if the data confirm that the seed treated with Fortenza are acceptable should the rest of the seed load from which the sample was taken be treated. Due to seed quality, seed condition and seed storage conditions beyond the control of Syngenta LLC, no claims are made to guarantee the germination and/or performance of the potato seed tuber from treatment with Fortenza.

Table 1. Empirical Calculations based on popular potato seeding rates:

Seeding rate	Expected Ib ai per acre at popular seeding rates and expected use rate of Fortenza		
Pounds/acre	0.006 lb ai/100 lb	0.01 lb ai/100 lb	0.0135 lb ai/100 lb
1500	0.090	0.150	0.203
2000	0.120	0.200	0.270
2500	0.150	0.250	0.338
3000	0.180	0.300	0.405
3500	0.210	0.350	Do not apply.1

<sup>&</sup>lt;sup>1</sup> The lb ai applied per acre at this seeding density and application rate exceeds the maximum allowable 0.4 lb ai per acre.

Table 2. Empirical Calculations based on popular potato seeding rates:

Seeding rate	Expected fl oz per acre at popular seeding rates and expected use rate of Fortenza		
Pounds/acre	0.15 fl oz./100 lb	0.26 fl. oz/100 lb	0.35 fl oz/100 lb
1500	2.3	3.8	5.2
2000	3.1	5.1	6.9
2500	3.8	6.4	8.6
3000	4.6	7.7	10.4
3500	5.4	9.0	Do not apply.1

<sup>&</sup>lt;sup>1</sup>The fl oz applied per acre at this seeding density and application rate exceeds the maximum allowable 11 fl oz per acre.

#### **OILSEED CROP GROUP 20**

#### RAPESEED CROP SUBGROUP 20A SEED TREATMENT

Crops in this group are: borage; Crambe; Cuphea; Echium; flax seed; gold of pleasure; hare's ear mustard; Lesquerella; Lunaria; meadowfoam; milkweed; mustard seed; oil radish; poppy seed; rapeseed (including canola); sesame; sweet rocket; cultivars, varieties, and/or hybrids of these.

To provide early-season protection against cutworms and flea beetles on rapeseed crop subgroup 20A

Fortenza at labeled rates provides protection against the damage caused by cutworms during early-season growth and development of rapeseed crop subgroup 20A. Full-season protection or complete reduction of damage from the use of Fortenza is not expected against the listed insects. Apply Fortenza at a rate of 7.7 fl oz product (0.30 lb active cyantraniliprole) per 100 lb seed for protection against cutworms. [Apply Fortenza at a rate of 20.4 fl oz product (0.80 lb active cyantraniliprole) per 100 lb seed for protection against flea beetles.] For protection against damage caused by flea beetles when applied at 7.7 fl oz product per 100 lb seed, Fortenza must be tank mixed with Helix Vibrance or other thiamethoxam-containing seed treatment product. Do not apply more than 0.40 lb ai of cyantraniliprole-containing products per acre per calendar year including all types of applications (seed treatment, soil, foliar).

In all cases, it is recommended to apply Fortenza with Helix Xtra® and Vibrance seed treatments for control of seedling diseases and other insect pests of seedling crops.

Follow planter manufacturer instructions for use of talc or other hopper box additives at planting.

#### SUNFLOWER CROP SUBGROUP 20B SEED TREATMENT

Crops in this group are: Calendula; castor oil plant; Chinese tallowtree; Euphorbia; evening primrose; jojoba; Niger seed; rose hip; safflower; Stokes aster; sunflower; tallowwood; tea oil plant; Vernonia; cultivars, varieties, and/or hybrids of these.

To provide early-season protection against damage by cutworms [and additional protection against wireworm when used with Cruiser®] on sunflower crop subgroup 20B

Fortenza at labeled rates provides protection against the damage caused by cutworms during early-season growth and development of sunflower crop subgroup 20B. Full-season protection or complete reduction of damage from the use of Fortenza is **not** expected against the listed insects. Apply Fortenza at a rate to achieve between 0.56 and 1.1 fl oz product (0.022 to 0.044 lb active cyantraniliprole) per 100,000 seed\* [0.1 and 0.2 milligrams active cyantraniliprole per seed\*] (Fortenza contains 5.0 lb of cyantraniliprole per gallon.). [When applied at these rates in combination with Cruiser, Fortenza may provide additional protection against wireworms.] Do not apply more than 0.4 lb ai of cyantraniliprole-containing products per acre per calendar year including all types of applications (seed treatment, soil, foliar).

\*Based on an average of 4,500 seeds per pound

It is recommended to apply Fortenza with compatible and registered seed treatment fungicides such as Apron XL, Dynasty, Bion®, Maxim 4FS or Plenaris™200FS which are proven to control seed and seedling diseases and Cruiser 5FS for additional early-season insect pest protection.

Follow planter manufacturer instructions for hopper box additives at planting.

#### COTTONSEED CROP SUBGROUP 20C SEED TREATMENT

Crops in this group are: cottonseed; cultivars, varieties, and/or hybrids of these.

To provide early season protection against cutworm damage [and additional protection against wireworm when used with Cruiser] on cottonseed crop subgroup 20C

Fortenza at labeled rates provides protection against the damage caused by cutworms during early-season growth and development of cotton crop subgroup 20C. Full-season protection or complete reduction of damage from the use of Fortenza is **not** expected against the listed insects. Apply Fortenza at a rate to achieve between 0.1 and 0.9 milligrams active cyantraniliprole per seed (Fortenza contains 5.0 lb of cyantraniliprole per gallon.). [When applied at these rates in combination with Cruiser, Fortenza may provide additional protection against wireworms.] Do not apply more than 0.17 lb active cyantraniliprole per acre as a seed treatment application. Do not apply more than 0.40 lb ai of cyantraniliprole-containing products per acre per calendar year including all types of applications (seed treatment, soil, foliar).

It is recommended to apply Fortenza with compatible and registered seed treatment fungicides such as Apron XL, Dynasty, Bion or Maxim 4FS, which are proven to provide early-season protection from seed and seedling diseases, and Cruiser 5FS for additional early-season insect pest protection.

Follow planter manufacturer instructions for hopper box additives at planting.

#### ROTATIONAL CROP RESTRICTIONS

- There is no plant back restriction for conversion of a treated field or for making a new or replacement planting into established orchards or fields of Bushberries (Crop Subgroup 13-07B); Citrus (Crop Group 10-10); Pome Fruits (Crop Group 11-10); Stone Fruits (Crop Group 12); Low Growing Berries (Crop Subgroup 13-07G); or Tree Nuts (Crop Group 14-12).
- Fortenza-treated sunflower seed may be replanted immediately if needed due to crop failure.
- Crops on this label and the following crops or crop groups may be planted immediately following the last application of Fortenza: Brassica Leafy Vegetables (Crop Group 5); Bulb Vegetables (Crop Group 3- 07); Corn (Field, Pop, Seed and Sweet); Cotton; Cucurbit Vegetables (Crop Group 9); Fruiting Vegetables (Crop Group 8-10); Leafy Vegetables (except Brassicas) (Crop Group 4); Leaves of Root and Tuber Vegetables (Crop Group 2); Legume Vegetables (Crop Groups 6 and 7); Low Growing Berries (Crop Subgroup13-07H); Oilseeds (Crop Group 20); Peanuts; Root and Tuber Vegetables (Crop Subgroups 1B and 1C); Tobacco.

- The following crops or crop groups may be planted 30 days following the last application of Fortenza: Cereal Grains (Crop Group 15); Forage, Fodder and Straw of Cereal Grains (Crop Group 16); Grass Forage, Fodder and Hay (Crop Group 17); Nongrass Animal Feeds (forage, fodder, straw and hay) (Crop Group 18); Sugar beets.
- 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**

Store in a cool, dry place. Do not store above 90°F for extended periods. For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes.

# **Pesticide Disposal**

Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility. If these wastes cannot be used according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance in proper disposal methods.

# **Container Handling (less than or equal to 5 gallons)**

Non-refillable 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 ¼ 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 offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

# **Container Handling (greater than 5 gallons)**

**Non-refillable 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 ¼ 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 side

and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use and disposal. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

# **Container Handling (greater than 5 gallons)**

Refillable container. Refill this container with pesticide only. Do not use this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the person refilling. To clean container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

# CONTAINER IS NOT SAFE FOR FOOD, FEED, OR DRINKING WATER!

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Manufactured for: Syngenta Crop Protection, LLC P.O. Box 18300 Greensboro, North Carolina 27419-8300

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