

#### U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs Registration Division (7505P) 1200 Pennsylvania Ave., N.W. Washington, D.C. 20460

Date of Issuance:

100-1556

**EPA Reg. Number:** 

10/19/15

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X Registration Reregistration (under FIFRA, as amended) Term of Issuance: Conditional

Name of Pesticide Product:

Cruiser Maxx Vibrance Potato

Name and Address of Registrant (include ZIP Code):

Patrick McCain Syngenta Regulatory Product Manager P.O. Box 18300 Greensboro, NC 27419

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA section 3(c)(7)(A). You must comply with the following conditions:

1. Submit and/or cite all data required for registration/registration/registration review of your product under FIFRA when the Agency requires all registrants of similar products to submit such data.

Signature of Approving Official:	Date:
Ve	10/19/15
Venus Eagle, Product Manager 01 Invertebrate-Vertebrate Branch 3, Registration Division (7505P)	

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- 2. You are required to comply with the data requirements described in the DCI Order identified below:
  - Thiamethoxam GDCI-060109-1309
  - Fludioxonil GDCI-071503-1243

You must comply with all of the data requirements within the established deadlines. If you have questions about the Generic DCI listed above, you may contact the Chemical Review Manager in the Pesticide Reevaluation Division: <a href="http://www.epa.gov/oppsrrd1/contacts\_prd.htm">http://www.epa.gov/oppsrrd1/contacts\_prd.htm</a>

- 3. Make the following label changes before you release the product for shipment:
  - Revise the EPA Registration Number to read, "EPA Reg. No. 100-1556."
- 4. Submit one copy of the final printed label for the record before you release the product for shipment.

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.

If you fail to satisfy these data requirements, EPA will consider appropriate regulatory action including, among other things, cancellation under FIFRA section 6(e). Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records. Please also note that the record for this product currently contains the following CSFs:

- Basic CSF dated 10/24/2014
- Alternate CSF 1 dated 10/24/2014

If you have any questions, please contact Jacquelyn Marchese by phone at 703-347-0559, or via email at marchese.jacquelyn@epa.gov.

Enclosure: Stamped label

# (Master)

**Note:** Do not use, sell or distribute this product within, or into, Nassau County or Suffolk County, New York.

GROUP	4A			INSECTICIDE		
GROUP	3	7	12	<b>FUNGICIDES</b>		

# **CruiserMaxx® Vibrance Potato**

Insecticide and Fungicide

A seed treatment product for protection against listed insects and diseases in potato tubers.

#### Active Ingredients:

Thiamethoxam*	13.40%
Fludioxonil**	
Difenoconazole***	
Sedaxane****	
Other Ingredients:	69.88%
Total:	100.00%

<sup>\*</sup>CAS No. 153719-23-4

One gallon of CruiserMaxx Vibrance Potato contains 1.28 lb thiamethoxam, 0.32 lb fludioxonil, 0.64 lb difenoconazole, and 0.64 lb sedaxane.

# KEEP OUT OF REACH OF CHILDREN.

# **CAUTION**

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

EPA Reg. No. 100-XXXX EPA Est. XXXXX SCP

Net Contents

ACCEPTED

Oct 19, 2015

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under

EPA Reg. No. 100-1556

<sup>\*\*</sup>CAS No. 131341-86-1

<sup>\*\*\*</sup>CAS No. 119446-68-3

<sup>\*\*\*\*</sup>CAS No. 874967-67-6

FIRST AID						
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>					
Have the product co	Have the product container or label with you when calling a poison control center					

Have the product container or label with you when calling a poison control center or doctor, or going for 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

Harmful if swallowed, absorbed through the skin, or inhaled. Causes moderate eye irritation. Avoid breathing vapors. Wash thoroughly with soap and water after handling, and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

# **Personal Protective Equipment (PPE)**

# **Applicators and other handlers must wear:**

- Long-sleeved shirt and long pants
- Chemical-resistant gloves: barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, polyvinyl chloride [PVC] ≥ 14 mils, or Viton® ≥ 14 mils.
- Shoes plus socks

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

# **Engineering Controls**

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 hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/PPE 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 product is toxic to wildlife and highly toxic to aquatic invertebrates. Do not contaminate water when disposing of equipment washwater or rinsate.

#### **Pollinator Precautions**

Thiamethoxam is highly toxic to bees exposed to direct treatment, and effects may be possible as a result of exposure to translocated residues in blooming crops.

# **Physical and Chemical Hazards**

Do not use, pour, spill or store near heat or open flame. Do not mix or allow coming in contact with oxidizing and reducing agents. Hazardous Chemical reactions may occur.

# **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.

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.

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 the potato seed tuber from treatment with CruiserMaxx Vibrance Potato.

#### **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 (REI). 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 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: barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, polyvinyl chloride [PVC] ≥ 14 mils, 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 AND/OR DISEASE CONTROL, AND/OR ILLEGAL RESIDUES.

Treatment of highly mechanically scarred, excessively sprouted, bruised, or damaged seed or seed pieces, or seed known to be of low vigor, "physiologically old" (that has multiple sprouts) 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 and seed storage conditions beyond the control of Syngenta, no claims are made to quarantee the germination of carry-over seed or propagating material for all crop seed.

#### **USE INFORMATION**

CruiserMaxx Vibrance Potato seed treatment contains thiamethoxam insecticide and fludioxonil, difenoconazole and sedaxane fungicides.

Thiamethoxam is a systemic seed treatment insecticide belonging to the neonicotinoid class of chemistry. Thiamethoxam protects against certain chewing and sucking insects through contact and ingestion. These insects include: aphids, Colorado potato beetles, flea beetles, leafhoppers, leaf miners, and psyllids.

Fludioxonil protects against damage from certain soil-borne and seed-borne diseases of crop plants. Fludioxonil is active against *Fusarium* dry rot seed decay, seed-borne *Rhizoctonia* that causes stem canker and tuber black scurf and seed-borne *Helminthosporium solani*, the causal agent of silver scurf diseases on potato tubers. Difenoconazole is a triazole fungicide added to enhance *Fusarium* control and compliments resistance management of some of these pathogens.

Sedaxane is a SDHI fungicide added to enhance *Rhizoctonia* control.

CruiserMaxx Vibrance Potato does not control bacterial disease or diseases present within the seed or protect against bacteria that may infect and decay the seed after planting.

Use CruiserMaxx Vibrance Potato as an integral part of a potato pest management strategy. This strategy includes the use of high quality certified seed, suitable planting conditions, good sanitation, proper crop rotation, insect population thresholds, appropriate control measures, optimal harvest time for tubers and proper handling of tubers without bruising. Consult your local agricultural extension agent for more detailed information on insect management practices.

The expected length of protection against the labeled pests depends on the accuracy of application of the products to ensure the seed tubers receive the target rate of the active ingredients and also the prevailing weather and other extraneous factors that can impact pest pressure. Consult your local University Extensions Centers or Syngenta representative or dealer for information relative to your area.

#### **CROP USE PRECAUTIONS**

# **Resistance Management**

GROUP 4A INSECTICIDE

CruiserMaxx Vibrance Potato contains thiamethoxam, a Group 4A insecticide. Some insect pests are known to develop resistance to products after repeated use. Because resistance development cannot be predicted, the use of this product should conform to sound resistance management strategies established for the crop and use area. Syngenta encourages responsible product stewardship to ensure effective long-term control of the insects on this label.

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 or pathogen 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 your area.

Insect biotypes with acquired or inherent resistance to Group 4A insecticides may eventually dominate the insect population if Group 4A insecticides are used repeatedly as the predominant method of control for targeted species. This may result in partial or total loss of control of those species by CruiserMaxx Vibrance Potato or other Group 4A insecticides.

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

- Avoid using Group 4A insecticides exclusively for season long control of insect species with more than one generation per crop season.
- For insect species with successive or overlapping generations, apply CruiserMaxx Vibrance Potato and other Group 4A insecticides using a "treatment window" approach. A treatment window is a period of time as defined by the stage of crop development and/or the biology of the pests of concern. Within the treatment window, depending on the length of residual activity, there may either be single or consecutive applications (seed treatment, soil, foliar, unless otherwise stated) of the Group 4A insecticides. Do not exceed the maximum CruiserMaxx Vibrance Potato allowed per growing season.
- Following a treatment window of Group 4A insecticides, rotate to a treatment window of effective products with a different mode of action before making additional applications of Group 4A insecticides.
- A treatment window rotation, along with other IPM practices for the crop and use area, is considered an effective strategy for preventing or delaying a pest's ability to develop resistance to this class of chemistry.
- If resistance is suspected, do not reapply CruiserMaxx Vibrance Potato or any other Group 4A insecticides.

# Other Insect Resistance Management (IRM) practices include:

- Incorporating IPM techniques into your insect control program.
- Monitoring treated insect populations for loss of field efficacy.
- Using tank-mixtures or premixes with insecticides from a different target site of action group as long as the involved products are all registered for the same crop and effective rates are applied.

# For additional information on Insect Resistance Management:

- Contact your local extension specialist, certified crop advisor and/or product manufacturer for additional insect resistance management recommendations.
- Visit the Insecticide Resistance Action Committee (IRAC) on the web at: http://www.irac-online.org

# GROUP 3 7 12 FUNGICIDES

CruiserMaxx Vibrance Potato contains difenoconazole, a Group 3 fungicide; sedaxane, a Group 7 fungicide; and fludioxonil, a Group 12 fungicide. Difenoconazole belongs to the triazole class of chemistry and is a demethylation inhibitor of sterol biosynthesis (DMI). DMI's disrupt membrane synthesis by blocking demethylation. Sedaxane belongs to the carboxamide class of chemistry and is a succinate dehydrogenase inhibitor (SDHI). SDHI's inhibit fungal metabolism by binding to the succinate dehydrogenase enzyme thereby disrupting cellular respiration and energy generation. Fludioxonil belongs to the phenylpyrrole class of chemistry and has a unique mode of action which prevents fungal respiration.

Fungal populations may contain individuals naturally resistant to Group 3, 7 or 12 fungicides. If Group 3, 7 or 12 fungicides are used repeatedly in the same fields, then resistant members may eventually dominate the population. Because resistance development cannot be predicted, the use of this product should conform to sound resistance management strategies established for the crop and use area.

Seed treatment use should be based on an IPM program that includes field sanitation, scouting, historical information related to pesticide use, and crop rotation. The IPM program should also consider cultural, biological, and other chemical control practices.

Where possible, rotate or mix the use of Group 3, 7 or 12 fungicides with different fungicide groups to which resistance has not developed.

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

# For additional information on fungicide resistance management:

- Contact Syngenta representatives at 1-800-334-9481
- Contact your local extension specialist or certified crop advisor
- Visit the Fungicide Resistance Action Committee (FRAC) on the web at: http://www.frac.info

#### ROTATIONAL CROP RESTRICTIONS

 In the event of crop failure or harvest of a crop grown from seed potatoes treated with CruiserMaxx® Vibrance® Potato, crops may be replanted according to the following schedule:

#### **Plantback Interval Table**

Immediate Plantback	Minimum 60-Day Plantback Interval
Chickpeas	Brassica (Cole) Leafy Vegetables
Cotton	Cereal Grains (including barley,
Soybeans	buckwheat, corn, pearl millet, proso millet, oats, popcorn, rice (dry- seeded), rye, sorghum, teosinte,
Sugarbeets	triticale, wheat and wild rice)
	Cucurbit Vegetables
	Dry Bulb Onions
	Fruiting Vegetables
	Root and Tuber Vegetables Crop Group 1
	Strawberry

- No seed potatoes treated with Sedaxane may be planted for a 12-month period following planting of seed potatoes treated with Sedaxane.
- For any other crops, the minimum plantback interval is 8 months from the date
  the seed potatoes treated with CruiserMaxx Vibrance Potato were planted. A
  cover crop other than the crops listed above that is planted for erosion control or
  soil improvement may be planted sooner than the 120 day interval; however, the
  crop may not be grazed or harvested for food or feed.

#### SEED CONTAINER LABEL REQUIREMENTS

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

- This seed has been treated with thiamethoxam insecticide and fludioxonil, difenoconazole and sedaxane fungicides.
- Do not use for feed, food, or oil purposes.

In addition, the U.S. Environmental Protection Agency requires the following statements on containers containing potato tuber seed treated with CruiserMaxx Vibrance Potato:

- Ground Water Advisory: Thiamethoxam has properties and characteristics associated with chemicals detected in ground water. This chemical may leach into the ground water if used in areas where soils are permeable, particularly where the water table is shallow.
- Pollinator Precautions: Thiamethoxam is highly toxic to bees exposed to direct treatment, and effects are possible as a result of exposure to translocated residues in blooming crops.
- Store away from feeds and foodstuffs.
- Do not store CruiserMaxx Vibrance Potato treated seed in burlap bags or impervious bags/containers or in areas that are poorly ventilated.
- Wear long-sleeved shirt, long pants and chemical resistant gloves: barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, polyvinyl chloride [PVC] ≥ 14 mils, or Viton® ≥ 14 mils when handling treated seed.
- Treated seeds exposed on soil surface may be hazardous to wildlife. Cover or collect treated seeds spilled during loading.
- Do not contaminate water bodies when disposing of planting equipment wash waters.
- In the event of crop failure or harvest of a crop grown from seed potatoes treated with CruiserMaxx® Vibrance® Potato, crops may be replanted according to the following schedule:

#### **Plantback Interval Table**

Immediate Plantback	Minimum 60-Day Plantback Interval
Chickpeas	Brassica (Cole) Leafy Vegetables
Cotton	Cereal Grains (including barley,
Soybeans	buckwheat, corn, pearl millet, proso millet, oats, popcorn, rice (dry- seeded), rye, sorghum, teosinte,
Sugarbeets	triticale, wheat and wild rice)
	Cucurbit Vegetables
	Dry Bulb Onions
	Fruiting Vegetables
	Root and Tuber Vegetables Crop Group 1
	Strawberry

 No seed potatoes treated with Sedaxane may be planted for a 12-month period following planting of seed potatoes treated with Sedaxane.

- For any other crops, the minimum plantback interval is 8 months from the date
  the seed potatoes treated with CruiserMaxx Vibrance Potato were planted. A
  cover crop other than the crops listed above that is planted for erosion control or
  soil improvement may be planted sooner than the 120 day interval; however, the
  crop may not be grazed or harvested for food or feed.
- Do not allow children, pets, or livestock to have access to treated seed.
- Dispose of all excess treated seed. Leftover treated seed may be doublesown around the headland or buried away from water sources in accordance with local requirements. Do not contaminate water bodies when disposing of planting equipment washwaters.
- Treated seed must be planted into the soil at a depth greater than 2 inches.
- Do not use at a seed treatment rate that will result in more than 0.1 lb ai sedaxane per acre per 24 months. Therefore, CruiserMaxx Vibrance Potato treated seed potatoes cannot be planted to the same field in successive years. A sedaxane application rate of 0.1 lb ai per acre is equal to 4000 lb of potato planted per acre and treated with 0.5 fl oz of CruiserMaxx Vibrance Potato product per 100 lb of potato seed.
- Regardless of type of application (seed treatment, soil or foliar), do not apply more than 0.46 lb difenoconazole per acre (208.7 grams ai/A) per calendar year.
- Do not use at a seed treatment rate that will result in more than 0.188 lb fludioxonil per acre (85.3 grams ai/A) per year. Regardless of type of application (seed treatment, soil or foliar), do not apply more than 0.9 lb fludioxonil per acre (408.2 grams ai/A) per calendar year.
- Regardless of type of application (seed treatment, soil or foliar), do not apply more than 0.125 lb thiamethoxam per acre (56.7 grams ai/A) per calendar year.

# MIXING PROCEDURES

**Important:** Always re-circulate CruiserMaxx Vibrance Potato thoroughly before using.

Apply CruiserMaxx Vibrance Potato seed treatment using only Syngenta-approved equipment that is designed to apply liquid seed treatments to potatoes. Follow the equipment manufacturers' instructions for set-up and calibration.

CruiserMaxx Vibrance Potato will require dilution prior to atomization and application to potatoes. Consult the manufacturer of the application equipment you plan to use for instructions on operation and calibration of the equipment.

Thoroughly mix the specified amount of CruiserMaxx Vibrance Potato and any additional Maxim® 4FS, Dynasty® or Cruiser® 5FS into the required amount of water for the dilution rate required and following the most restrictive label language and the most restrictive rates for each chemical.

Other tank mix partners may be used with CruiserMaxx Vibrance Potato; however, the user must consider the use rate, formulation, seed and crop safety factors and compatibility of each product to be mixed when determining total application volume.

The total quantity of water and product volume must be adjusted based upon the amount of seed to be treated. It is mandatory that the equipment be calibrated to deliver a maximum of 2 - 4 fluid ounces of mixture per 100 pounds of seed consistently. Applying excess moisture may predispose the seed to rotting, resulting in poor emergence and stand.

#### **APPLICATION PROCEDURES**

Apply CruiserMaxx Vibrance Potato 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 labeled rate of CruiserMaxx Vibrance Potato 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 out of the treated seed.

If inert dust (fir bark, talc, etc.) or a dust-based fungicide is to be applied, apply the CruiserMaxx Vibrance Potato seed treatment before applying the dust.

Registered dust based fungicides can be applied as a supplemental treatment after the CruiserMaxx Vibrance Potato application. Follow label instructions for these products and ensure that the maximum allowable rates for an active ingredient are not exceeded.

Apply CruiserMaxx Vibrance Potato seed treatment only in well ventilated areas. In high humid areas it is advisable to use drying fans on the treated potato seeds.

Ensure that spray nozzles are properly hooded and shielded to prevent spray from moving off target.

Apply the mixture as a fine spray over the cut or whole seed tubers.

#### **CROP USE DIRECTIONS**

#### **POTATOES**

Target Pest	Use Rate
Diseases	
Black scurf and stem and stolon canker (Rhizoctonia solani) Fusarium dry rot (Fusarium spp. including fludioxonil-resistant strains) Silver scurf (Helminthosporium solani)	0.5 fl oz/100 lb seed
Insects	
Colorado potato beetle Aphids (including green peach, potato, buckthorn and foxglove aphid) Potato leafhopper Leafminers Psyllids Flea Beetles	0.5 fl oz/100 lb seed

**Application Restrictions:** Shake or mix CruiserMaxx Vibrance Potato well before using. Apply using standard seed treatment equipment that provides uniform seed coverage. Uneven or incomplete seed coverage may not give the desired level of disease control. Follow the manufacturer's application instructions for the seed treatment equipment being used.

Where necessary for additional control of certain seed- and soil-borne pathogens, CruiserMaxx Vibrance Potato may be combined with Maxim® 4FS, Maxim-MZ or Maxim PSP. For additional insect protection, CruiserMaxx Vibrance Potato may be tank mixed with Cruiser® 5FS. In all cases the total product applied must stay within the maximum rates for each active ingredient listed below. Always follow label procedures.

#### Restrictions:

- Do not use at a seed treatment rate that will result in more than 0.1 lb ai sedaxane per acre per 24 months. Therefore, CruiserMaxx Vibrance Potato treated seed potatoes cannot be planted to the same field in successive years. A sedaxane application rate of 0.1 lb ai per acre is equal to 4000 lb of potato planted per acre and treated with 0.5 fl oz of CruiserMaxx Vibrance Potato product per 100 lb of potato seed.
- Regardless of type of application (seed treatment, soil or foliar), do not apply more than 0.46 lb difenoconazole per acre (208.7 grams ai/A) per calendar year.

- Do not use at a seed treatment rate that will result in more than 0.188 lb fludioxonil per acre (85.3 grams ai/A) per year. Regardless of type of application (seed treatment, soil or foliar), do not apply more than 0.9 lb fludioxonil per acre (408.2 grams ai/A) per calendar year.
- Regardless of type of application (seed treatment, soil or foliar), do not apply more than 0.125 lb thiamethoxam per acre (56.7 grams ai/A) per calendar year.

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, then treat a small sample batch of the same potato seed load with CruiserMaxx Vibrance Potato using specified rates, equipment an 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 the data with local experts in the region or conduct the test with University or area experts. Only if the data confirms that the seed treated with CruiserMaxx Vibrance Potato is acceptable then proceed treating the rest of the seed lot from which the sample was taken.

# DO NOT BAG POTATO SEED THAT IS TREATED WITH ANY LIQUID SEED TREATMENTS.

# **Treated Seed Storage**

If the treated seed needs to be stored or held for a few days, make sure that the seed is stored in well ventilated areas that would allow air to move through and out the treated seed. An ideal air temperature is 60 degrees Fahrenheit at a relative humidity of 85 to 90 percent. Avoid free moisture to form within or around the treated seed during the storage time.

Note: Best results are obtained if treated potatoes are allowed 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 CruiserMaxx Vibrance Potato prior to applying the dust treatments. In high humid areas it is advisable to use drying fans on the treated potato seeds.

#### STORAGE AND DISPOSAL

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

# **Pesticide Storage**

Store in a cool, dry place. Storage for extended periods above 90°F is not recommended.

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 may be disposed of on site or at an approved waste disposal facility. If these wastes cannot be disposed of by use 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.

# **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 – mini-bulk]

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 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 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 – bulk]

**Refillable container.** Refill this container with pesticide only. Do not reuse 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!

CruiserMaxx®, Cruiser®, Dynasty®, Maxim®, Vibrance® the ALLIANCE FRAME, the SYNGENTA Logo, and the PURPOSE ICON are Trademarks of a Syngenta Group Company

Viton® is a registered trademark of E.I. DuPont de Nemours and Company

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For non-emergency (e.g., current product information), call Syngenta Crop Protection at 1-800-334-9481.

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

SCP

# (Non-detachable Container Label)

**Note:** Do not use, sell or distribute this product within, or into, Nassau County or Suffolk County, New York.

GROUP	4A			INSECTICIDE		
GROUP	3	7	12	<b>FUNGICIDES</b>		

#### CruiserMaxx® Vibrance Potato

Insecticide and Fungicide

A seed treatment product for protection against listed insects and diseases in potato tubers.

Active	Ingredient	ς.
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Thiamethoxam*	13.40%
Fludioxonil**	
Difenoconazole***	6.69%
Sedaxane****	
Other Ingredients:	69.88%
Total:	100.00%

<sup>\*</sup>CAS No. 153719-23-4

One gallon of CruiserMaxx Vibrance Potato contains 1.28 lb thiamethoxam, 0.32 lb fludioxonil, 0.64 lb difenoconazole, and 0.64 lb sedaxane.

# KEEP OUT OF REACH OF CHILDREN.

# **CAUTION**

See additional precautionary statements and directions for use in booklet.

#### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to supplemental labeling under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.

EPA Reg. No. 100-XXXX EPA Est. XXXXX

SCP

**Net Contents** 

<sup>\*\*</sup>CAS No. 131341-86-1

<sup>\*\*\*</sup>CAS No. 119446-68-3

<sup>\*\*\*\*</sup>CAS No. 874967-67-6

#### PRECAUTIONARY STATEMENTS

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

#### CAUTION

Harmful if swallowed, absorbed through the skin, or inhaled. Causes moderate eye irritation. Avoid breathing vapors. Wash thoroughly with soap and water after handling, and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

	T II/OT AID					
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>					
·	Have the product container or label with you when calling a poison control center or doctor, or going for treatment.					
HOT LINE NUMBER						
For 24-Hour Medical Emergency Assistance (Human or Animal) Or Chemical Emergency Assistance (Spill, Leak, Fire or Accident) Call						

FIRST AID

# **Environmental Hazards**

This product is toxic to wildlife and highly toxic to aquatic invertebrates. Do not contaminate water when disposing of equipment washwater or rinsate.

1-800-888-8372

# **Pollinator Precautions**

Thiamethoxam is highly toxic to bees exposed to direct treatment, and effects may be possible as a result of exposure to translocated residues in blooming crops.

# **Physical and Chemical Hazards**

Do not use, pour, spill or store near heat or open flame. Do not mix or allow coming in contact with oxidizing and reducing agents. Hazardous Chemical reactions may occur.

#### STORAGE AND DISPOSAL

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

# **Pesticide Storage**

Store in a cool, dry place. Storage for extended periods above 90°F is not recommended.

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 may be disposed of on site or at an approved waste disposal facility. If these wastes cannot be disposed of by use 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.

# **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 – mini-bulk]

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 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 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 – bulk]

**Refillable container.** Refill this container with pesticide only. Do not reuse 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

SCP

# (Non-detachable Container Label -BULK)

**Note:** Do not use, sell or distribute this product within, or into, Nassau County or Suffolk County, New York.

GROUP	4A		INSECTICIDE
GROUP	3 7	12	FUNGICIDES

#### CruiserMaxx® Vibrance Potato

Insecticide and Fungicide

A seed treatment product for protection against listed insects and diseases in potato tubers.

Active	Ingredients	٠.
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\*CAS No. 153719-23-4

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\*\*\*\*CAS No. 874967-67-6

One gallon of CruiserMaxx Vibrance Potato contains 1.28 lb thiamethoxam, 0.32 lb fludioxonil, 0.64 lb difenoconazole, and 0.64 lb sedaxane.

# KEEP OUT OF REACH OF CHILDREN.

# **CAUTION**

See additional precautionary statements and directions for use in booklet.

#### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to supplemental labeling under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.

EPA Reg. No. 100-1444 EPA Est. XXXXX

SCP

Product ID XXXXX

**Net Contents** 

#### PRECAUTIONARY STATEMENTS

#### Hazards to Humans and Domestic Animals

#### CAUTION

Harmful if swallowed, absorbed through the skin, or inhaled. Causes moderate eye irritation. Avoid breathing vapors. Wash thoroughly with soap and water after handling, and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

FIRST AID		
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>	
Have the product container or label with you when calling a poison control center or doctor, or going for 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

# **Environmental Hazards**

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#### **Pollinator Precautions**

Thiamethoxam is highly toxic to bees exposed to direct treatment, and effects may be possible as a result of exposure to translocated residues in blooming crops.

# **Physical and Chemical Hazards**

Do not use, pour, spill or store near heat or open flame. Do not mix or allow coming in contact with oxidizing and reducing agents. Hazardous Chemical reactions may occur.

# **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.

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.

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 the potato seed tuber from treatment with CruiserMaxx Vibrance Potato.

#### DIRECTIONS FOR USE

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

#### STORAGE AND DISPOSAL

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

# **Pesticide Storage**

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