



U.S. ENVIRONMENTAL PROTECTION AGENCY

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

EPA Reg. Number:

264-1141

Date of Issuance:

01/15/2015

NOTICE OF PESTICIDE:

Registration  
 Reregistration  
(under FIFRA, as amended)

Term of Issuance:

Unconditional

Name of Pesticide Product:

Sivanto™ 200 SL

Name and Address of Registrant (include ZIP Code):

Bayer CropScience  
2 T.W. Alexander Drive  
P.O Box 12014  
Research Triangle Park, NC 27709

**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 unconditionally registered in accordance with FIFRA section 3(c)(5) provided that you:

1. Make the following label changes before you release the product for shipment:
  - Revise the EPA Registration Number to read, "EPA Reg. No. 264-1141."
2. Submit one copy of the revised final printed label for the record before you release the product for shipment.

Signature of Approving Official:

Meredith F. Laws, Chief  
Invertebrate-Vertebrate Branch 3, Registration Division (7505P)

Date:

01/15/2015

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 these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6. 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 May 29, 2013

If you have any questions, please contact Jessica Rogala at (703) 347-0263 or [rogala.jessica@epa.gov](mailto:rogala.jessica@epa.gov).

Meredith F. Laws, Chief  
Invertebrate-Vertebrate Branch 3  
Registration Division (7505P)

[Enclosure]

GROUP 4D INSECTICIDE

# SIVANTO™ 200 SL

Intended for use in pest management, suppression of insects which vector diseases and maintenance of plant health.

<b>ACTIVE INGREDIENT:</b>	
Flupyradifurone* .....	17.09%
<b>OTHER INGREDIENTS:</b> .....	<b>82.91%</b>
<b>TOTAL:</b>	100.00%

Contains 1.67 pounds active ingredient per U.S. gallon (200 grams AI/liter)

\*CAS No. 951659-40-8

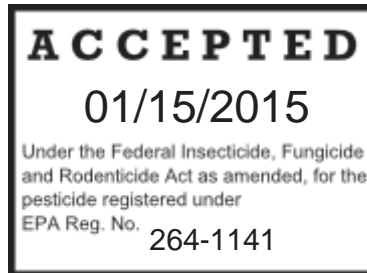
EPA Reg. No. 264-XXXX

EPA Est.

## KEEP OUT OF REACH OF CHILDREN CAUTION

For MEDICAL And TRANSPORTATION Emergencies ONLY Call 24 Hours A Day 1-800-334-7577  
For PRODUCT USE Information Call 1-866-99BAYER (1-866-922-29-37)

Net Contents:



PRODUCED FOR



Bayer CropScience LP  
P.O. Box 12014, 2 T.W. Alexander Drive  
Research Triangle Park, North Carolina 27709  
1-866-99BAYER (1-866-922-2937)

## FIRST AID

<b>If swallowed:</b>	<ul style="list-style-type: none"><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 a poison control center or doctor.</li><li>• Do not give anything by mouth to an unconscious person.</li></ul>
<b>If on skin or clothing:</b>	<ul style="list-style-type: none"><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>
<b>If in eyes:</b>	<ul style="list-style-type: none"><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>
<b>In case of emergency call toll free the Bayer CropScience Emergency Response Telephone No. 1-800-334-7577. Have a product container or label with you when calling a poison control center or doctor, or going for treatment.</b>	
Note to Physician: No specific antidote. Treat the patient symptomatically.	

## PRECAUTIONARY STATEMENTS

### HAZARDS TO HUMAN AND DOMESTIC ANIMALS

#### CAUTION

- Harmful if swallowed or absorbed through skin.
- Causes moderate eye irritation.
- Wash thoroughly with soap and water after handling and before eating, drinking, chewing tobacco, or using the toilet.
- Remove and wash contaminated clothing before reuse.
- Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Follow 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.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

#### Applicators and other handlers must wear:

- Long sleeved shirt and long pants
- Chemical resistant gloves made of any waterproof material such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinyl chloride (PVC) or viton
- Shoes and socks

## USER SAFETY RECOMMENDATIONS

- Users should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Users should remove PPE immediately after handling this product.

### USER SAFETY REQUIREMENTS

Follow 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.

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## ENVIRONMENTAL HAZARDS

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### Terrestrial Use

Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater or rinsate.

### Non-Target Organisms

This pesticide is toxic to aquatic invertebrates. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas.

Toxic to adult bees in laboratory studies via oral exposure, however, not toxic to bees through contact exposure, and field studies conducted with this product have shown no effects on honeybee colony development.

### Ground Water Advisory

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

### Surface Water Label Advisories

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

### Endangered Species Advisory/Protection Requirements

This product may have effects on endangered species. When using this product, you must follow the measures contained in the Endangered Species Protection Bulletin for the county in which you are applying the product. To obtain Bulletins, no more than six months before using this product, consult <http://www.epa.gov/espp/> or call **1-800-447-3813**. You must use the Bulletin valid for the month in which you will apply the product.

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## CONDITIONS OF SALE AND LIMITATIONS OF WARRANTY AND LIABILITY

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Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties and Limitations of Liability.

**CONDITIONS:** The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Bayer CropScience. To the extent consistent with applicable law, all such risks shall be assumed by the user or buyer.

**DISCLAIMER OF WARRANTIES:** TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER CROPSCIENCE MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, THAT EXTEND BEYOND THE STATEMENTS MADE ON THIS LABEL. No agent of Bayer CropScience is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER CROPSCIENCE DISCLAIMS ANY LIABILITY WHATSOEVER FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

**LIMITATIONS OF LIABILITY:** TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, SHALL NOT EXCEED THE PURCHASE PRICE PAID, OR AT BAYER CROPSCIENCE'S ELECTION, THE REPLACEMENT OF PRODUCT.

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## DIRECTIONS FOR USE

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**It is a violation of Federal law to use this product in a manner inconsistent with its labeling.  
Read the entire label before using this product.**

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

### GENERAL POLLINATOR BEST MANAGEMENT PRACTICE

In order to minimize exposure to pollinators, it is recommended that foliar insecticides are applied late in the afternoon, evening, or at night outside of daily peak foraging periods.

**Not for sale, distribution or use in Nassau and Suffolk Counties New York except as permitted under FIFRA Section 24(c),  
Special Local Need Registration.**

### 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, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), notification to workers, 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 4 hours with the following exceptions: **1) the REI is 48 hours when girdling or cane turning in grapes; 2) in California the REI is 12 hours.**

Exception: If the product is soil injected or soil incorporated, the Worker Protection Standard under certain circumstances, allows workers to enter the treated area without restrictions 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 such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinyl chloride (PVC) or viton,
- Chemical resistant footwear plus socks.

## PRODUCT INFORMATION AND INSTRUCTIONS

SIVANTO™ 200 SL:

- is a broad-spectrum insecticide, formulated in a 1.67 lb AI/gallon (200 grams AI/liter) SL (soluble liquid);
- belongs to a new class of chemicals known as the Butenolides;
- is acropetally systemic, moving from roots to the leaves in the case of soil applications;
- is translaminar through the leaf tissue and acropetally systemic, moving from points of contact to leaf tips in the case of foliar applications;
- can provide control of labeled pests on the underside of leaves; and
- is readily absorbed into leaf tissue and is considered “rainfast” within 1 hour after spray dries.

SIVANTO 200 SL may be:

- applied as a foliar application using properly calibrated ground sprayers, fixed or rotary winged aircraft, or through properly designed, sprinkler-type overhead chemigation equipment (See Chemigation – Directions for Use section below); or
- applied as a soil application using low-pressure drip, trickle or micro-sprinkler chemigation, soil shank injection, plant drench, or a planthouse tray drench. For seedling flats or trays, only apply with broadcast, foliar applications or where product is intended to be washed from foliage to soil prior to drying on foliage.

## USE RESTRICTIONS

- Do not tank mix with azole fungicides (FRAC group 3) during bloom period.

Refer to the specific use directions and restrictions in each Crop, Crop Group or Crop Subgroup table.

## INSECTICIDE RESISTANCE MANAGEMENT (IRM) RECOMMENDATIONS

SIVANTO 200 SL contains an active ingredient with a mode of action classified as a Group 4D Insecticide, i.e., a nicotinic acetylcholine receptor agonist. Repeated use of any crop protection product may increase the development of resistant strains of insects. To delay insecticide resistance:

- Where possible, rotate the use of SIVANTO 200 SL or other Group 4 insecticides with different mode of action groups that control the same pests in a field.
- Insecticide use should be based on an Integrated Pest Management (IPM) program that includes scouting and record keeping, and considers cultural, biological, and other chemical control practices.
- Before spraying SIVANTO 200 SL, correctly identify the pest and ensure economic and agronomic thresholds are met as recommended by local provincial or IPM specialists.
- Monitor treated pest populations for resistance development.
- Contact your local extension specialist or certified crop advisors for any additional pesticide IRM and/or IPM recommendations for the specific site and pest problems in your area. Also, for more information on IRM, visit the Insecticide Resistance Action Committee (IRAC) on the web at <http://www.ircac-online.org>.
- For further information or to report suspected resistance contact your local Bayer CropScience representative for additional IRM or IPM recommendations in your area.

## CHEMIGATION

### Types of Irrigation Systems

SIVANTO 200 SL may be applied by chemigation only:

- to those crops with chemigation uses allowed in crop-specific label sections;
- for foliar applications, only through overhead sprinkler-type irrigation systems, including center pivot, lateral move, side roll, or overhead solid-set systems; and
- for soil applications, only through low-pressure drip, trickle or micro-sprinkler systems.

### Uniform Water Distribution and System Calibration

The chemigation system must provide uniform distribution of treated water. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water. The chemigation system must be calibrated to uniformly apply the rates specified in crop-specific label sections. If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

### Chemigation Monitoring

A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

### Required System Safety Devices

The system must contain a functional check valve, vacuum relief valve, and low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops. The irrigation line or water pump must include a functional pressure switch, which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected. Systems must use a metering pump, such as a positive displacement injection pump (e.g. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

### Using Water From Public Water Systems

Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.

Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year. Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, back-flow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and to top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe. The pesticide injection pipeline must contain a functional automatic quick-closing check valve to prevent the flow of fluid back toward the injection. The pesticide injection pipeline must contain a functional normally closed solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected. Systems must use a metering pump such as a positive displacement injection pump (e.g. diaphragm pump) effectively designed and constructed of materials that are compatible with



pesticides and capable of being fitted with a system interlock. Do not apply when wind speed favors drift beyond the area intended for treatment.

### **Injection For Chemigation**

Inject the specified dosage of SIVANTO 200 SL into the irrigation main water stream: (1) through a constant flow, metering device; (2) into the center of the main line flow via a pitot tube or equivalent; (3) at a point ahead of at least one, right-angle turn in the main stream flow such that thorough mixing with the irrigation water is ensured.

### **Center-Pivot and Automatic-Move Linear Systems**

Inject the specified dosage per acre continuously for one complete revolution (center pivot) or move of the system. The system should be run at maximum speed. It is recommended that nozzles in the immediate area of control panels, chemical supply tanks, pumps, and system safety devices be plugged to prevent chemical contamination of these areas. The use of END GUNS is NOT RECOMMENDED. End guns that provide uneven distribution of treated water can result in lack of effectiveness or illegal pesticide residues in or on the crop.

### **Solid Set and Manually Controlled Linear Systems**

Injection should be applied during the regular irrigation period that the product is placed in the root zone.

### **Flushing and Cleaning the Chemical Injection System**

At the end of the application period, allow time for all lines to flush the pesticide through all nozzles or emitters before turning off irrigation water. To ensure the lines are flushed and free of pesticides, a dye indicator may be injected into the lines to mark the end of the application period.

In order to apply pesticides accurately, the chemical injection system must be kept clean, free of chemical or fertilizer residues and sediments. Refer to your owner's manual or ask your equipment supplier for the cleaning procedure for your injection system.

## **SPRAY DRIFT MANAGEMENT**

The interaction of many equipment and weather related factors determine the potential for spray drift. The applicator is responsible for considering all of these factors when making application decisions. Consult the local Cooperative Extension for additional information. Avoiding spray drift is the responsibility of the applicator.

### **Droplet Size**

Use the largest droplet size which provides sufficient control and coverage. Higher flow nozzles and lower pressures will produce larger droplets and minimize drift. Low drift and air induction nozzles will provide lower drift potential. Use larger droplet size when applying in hot, dry conditions (droplet evaporation is higher under these conditions, thus reducing the effective droplet size and increasing drift potential).

### **Wind Speed**

Drift potential increases at wind speeds of less than 3 mph (due to inversion potential) or more than 10 mph. Applications during gusty or calm wind conditions should be avoided. However, many factors, including droplet size, canopy and equipment specifications determine drift potential at any given wind speed. For applications made in-furrow or below soil-level, wind speed restrictions are not applicable.

### **Temperature Inversions**

Drift potential is high during temperature inversions and applications should be avoided under these conditions. Temperature inversions are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog. If fog is not present, inversions can also be identified by the movement of smoke or dust from a ground source -- smoke or dust that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion.

### **Sensitive Areas**

When applying adjacent to residential areas, water bodies, habitats know to have threatened or endangered species, or non-target crops, drift can be minimized to these areas by making application when the wind is direction is away from these areas.

Where states or local authorities have more stringent regulations, they should be observed.

## Aerial Applications

- Mount the spray boom on the aircraft so as to minimize drift caused by wing tip vortices.
- The minimum practical boom length should be used, and should not exceed 75% of the wing span or rotor diameter.
- Applications should not be made at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety.

## COMPATIBILITY TESTING AND TANK MIX PARTNERS

- If SIVANTO 200 SL is to be tank mixed with other pesticides, compatibility should be tested prior to mixing.
- Observe the most restrictive of the labeling limitations and precautions of all products used in mixtures.

### Compatibility

SIVANTO 200 SL is physically and biologically compatible with many registered pesticides and fertilizers or micronutrients. However, it is known that many components, including crop protection products, fertilizers, micronutrients, and spray adjuvants, may be present in a tank mix combination. There is potential for adverse chemical reactions. It is impossible to determine physical, biological, and plant compatibility for all scenarios that may be encountered; therefore, it is recommended that users determine the chemical, physical, biological and plant compatibility of such mixes prior to making applications on a broad commercial scale.

### Order of mixing

SIVANTO 200 SL may be used with other recommended pesticides, fertilizers, and micronutrients. The proper mixing procedure for SIVANTO 200 SL alone or in tank mix combinations with other pesticides is:

1. fill the spray tank 1/4 to 1/3 full with clean water;
2. while recirculating and with the agitator running, add any products in PVA bags (**See Note**). Allow time for thorough mixing;
3. continue to fill spray tank with water until 1/2 full;
4. add any wettable powder (WP), water dispersible granule (WG/WDG) products, or "flowable" (FL/SC) type products;
5. allow enough time for thorough mixing of each product added to tank;
6. add required amount of SIVANTO 200 SL, and;
7. if applicable, add any remaining tank mix components: emulsifiable concentrates (EC), fertilizers and micronutrients;
8. fill spray tank to desired level and maintain constant agitation to ensure uniformity of spray mixture.

**NOTE:** Do not use PVA packets in a tank mix with products that contain boron or release free chlorine. The resultant reaction of PVA and boron or free chlorine is a plastic that is not soluble in water or solvents.

## ROTATIONAL CROPS\*

Treated areas may be replanted with any crop specified on this label, or any crop for which a tolerance exists for the active ingredient, as soon as practical following the last application.

### Immediate plant-back applies to the following crops:

Cereal grains (except rice), cotton, nongrass animal feeds (alfalfa and clover\*\* only), peanut, root vegetables (except sugarbeet), tuberous and corm vegetables, leafy vegetables, brassica (cole) leafy vegetables, legume vegetables (succulent or dried), fruiting vegetables, cucurbit vegetables, hop, citrus fruit, pome fruit, bushberry (except cranberry), low growing berry (except cranberry), small fruit vine climbing (except fuzzy kiwifruit), tree nut (except almond), prickly pear/cactus pear.

Bulb Vegetable (*Allium* Spp.) Group 3-07 including: Chive (fresh leaves), Chinese chive (fresh leaves), Daylily (bulb), Elegans hosta, Fritillaria (bulb and leaves), Garlic (common group, great-headed group, serpent group), Kurrat group, Leek group (including common, lady's, wild), Lily (bulb), Onion (bulb and green leaves including: common group, Beltsville bunching, Chinese bulb, fresh, green, macrostem, Pearl group, potato onion group, tree onion-tops, Welsh-tops), Shallot (bulb, fresh leaves), and cultivars, varieties, and/or hybrids of these

**For crops not listed in the immediate plant-back section of this label, or for crops for which no tolerances for the active ingredient have been established, a 12-month plant-back interval must be observed, except for the following crops:**

### 14-DAY PLANT-BACK:

Sugarcane (Florida, Only\*\*\*)

\* Cover crops for soil building or erosion control may be planted any time, but do not graze or harvest for food or feed.

\*\* Idaho, Oregon, and Washington

\*\*\* Sugarcane: 12-month plant back in all registered states except Florida (14-Day).

## SPECIFIC CROP DIRECTIONS

### CROP USE DIRECTIONS

<b>ALFALFA GROWN FOR SEED <sup>1</sup> – FOLIAR</b>	
Pests Controlled	Product Rate (fl oz/A)
Aphids Leafhoppers	7.0 – 10.5
Threecornered alfalfa hopper Whiteflies	10.5 – 14.0
Pests Suppressed	
Tarnished plant bug ( <i>Lygus lineolaris</i> ) Western plant bug ( <i>Lygus hesperus</i> )	14.0
<b>Foliar Application Restrictions:</b> Pre-Harvest Interval (PHI): <b>7 days</b> – Seed of Alfalfa Minimum interval between applications: <b>10 days</b> Minimum application volumes: <b>10 gallons/Acre</b> (Ground); <b>2 gallons/Acre</b> (Aerial) Maximum SIVANTO 200 SL allowed per year: <b>28.0 fluid ounces/Acre</b> (0.365 lb AI/Acre).	
<sup>1</sup> Idaho, Montana, Nevada, Oregon, and Washington Only	

<b>BRASSICA (COLE) LEAFY VEGETABLES – FOLIAR</b>	
<b>Crops of Crop Group 5 Including:</b> Broccoli, Broccoli raab ( <i>rapini</i> ), Brussels sprouts, Cabbage, Cauliflower, Cavalo broccolo, Chinese broccoli ( <i>gai lan</i> ), Chinese cabbage ( <i>bok choy</i> ), Chinese cabbage ( <i>napa</i> ), Chinese mustard cabbage ( <i>gai choy</i> ), Collards, Kale, Kohlrabi, Mizuna, Mustard greens, Mustard spinach, Rape greens, Turnip greens	
Pests Controlled	Product Rate (fl oz/A)
Leafhoppers	7.0 – 10.5
Aphids	7.0 – 12.0
Whiteflies	10.5 – 14.0
<b>Foliar Application Restrictions:</b> Pre-Harvest Interval (PHI): <b>1 day</b> Minimum interval between applications: <b>7 days</b> Minimum application volumes: <b>10 gallons/Acre</b> (Ground); <b>2 gallons/Acre</b> (Aerial) Maximum SIVANTO 200 SL allowed per crop season: <b>28.0 fluid ounces/Acre</b> (0.365 lb AI/Acre). Maximum crop seasons per year: <b>3</b>	

<b>BUSHBERRY – FOLIAR</b>	
<b>Crops of Crop Subgroup 13-07B (except Cranberry) Including:</b> Aronia berry, Blueberry ( <i>Vaccinium</i> spp. – highbush, lowbush and cultivars and/or hybrids of these [= all blueberry species]), Chilean guava, Currant (black, buffalo, native and red), Elderberry, European barberry, Gooseberry ( <i>Ribes</i> spp.), Honeysuckle (edible), Huckleberry, Jostaberry, Juneberry, Lingonberry, Salal, Sea buckthorn, and cultivars, varieties and/or hybrids of these	
Pests Controlled	Product Rate (fl oz/A)
Aphids	7.0 – 10.5
Blueberry thrips- <i>Frankliniella vaccinii</i> (feeding damage reduction), <i>Scirtothrips citri</i> (control)	10.5 – 14.0
Blueberry maggot	12.0 – 14.0
<b>Foliar Application Restrictions:</b> Pre-Harvest Interval (PHI): <b>3 days</b> Minimum interval between applications: <b>7 days</b> Minimum application volumes: <b>25 gallons/Acre</b> (Ground); <b>2 gallons/Acre</b> (Aerial) Maximum SIVANTO 200 SL allowed per year: <b>28.0 fluid ounces/Acre</b> (0.365 lb AI/Acre).	

**CEREAL GRAINS – FOLIAR**

**Crops of Crop Group 15 (Except Rice) Including:** Barley, Buckwheat, Corn (including: field corn, seed corn, sweet corn and popcorn), Millet (pearl and proso), Oats, Rye, Sorghum, Teosinte, Triticale, and Wheat

Pests Controlled	Product Rate (fl oz/A)
Aphids Leafhoppers	7.0 – 10.5
Whiteflies	10.5 – 14.0

**Foliar Application Restrictions:**

Pre-Harvest Interval (PHI): **7 days** - forage or sweet corn; **21 days** - dried grain, stover or straw

Minimum interval between applications: **7 days**

Minimum application volumes: **10 gallons/Acre** (Ground); **2 gallons/Acre** (Aerial)

Maximum SIVANTO 200 SL allowed per year: **28.0 fluid ounces/Acre** (0.365 lb AI/Acre).

**CITRUS FRUIT – FOLIAR**

**Crops of Crop Group 10-10 Including:** Calamondin, Citrus citron, Citrus hybrids (*Citrus* spp., *Eremocitrus* spp., *Fortunella* spp., *Microcitrus* spp., and *Poncirus* spp.), Grapefruit (including Japanese summer), Kumquat, Lemon, Lime, Lime (Sweet, Australian desert, Australian finger, Australian round, Brown River finger, Mount White, New Guinea wild, Russell River, Tahiti), Mandarin (Mediterranean, Satsuma), Orange (sour, sweet, Tachibana, Trifoliolate), Pummelo, Tangelo, Tangerine [includes Tangerine (mandarin or mandarin orange), Clementine, Mediterranean mandarin, Satsuma mandarin, Tangelo, Tangor, cultivars and varieties], Tangor, Uniq fruit, and cultivars, varieties and/or hybrids of these commodities.

Pests Controlled	Product Rate (fl oz/A)
Aphids Citrus mealybug	7.0 – 10.5
Asian citrus psyllid Citricola scale Citrus thrips- <i>Scirtothrips citri</i> Whiteflies	10.5 – 14.0
Pest Suppressed	
Katydid nymphs	10.5 – 14.0
Citrus leafminer	14.0

**Foliar Application Restrictions:**

Pre-Harvest Interval (PHI): **1 day**

Minimum interval between applications: **10 days**

Minimum application volumes<sup>1</sup>: **50 gallons/Acre** (Ground); **10 gallons/Acre** (Aerial)

Maximum SIVANTO 200 SL allowed per year: **28.0 fluid ounces/Acre** (0.365 lb AI/Acre), regardless of method of application.

<sup>1</sup> For Florida only- minimum application volumes: 2.5 gallons/Acre (Ground); 2 gallons/Acre (Aerial) for control of Asian citrus psyllid.

For control or suppression of other pests, application volumes should be increased to provide thorough and complete coverage to obtain adequate control.

**CITRUS FRUIT – SOIL**

**Crops of Crop Group 10-10 Including:** Calamondin, Citrus citron, Citrus hybrids (*Citrus* spp., *Eremocitrus* spp., *Fortunella* spp., *Microcitrus* spp., and *Poncirus* spp.), Grapefruit (including Japanese summer), Kumquat, Lemon, Lime, Lime (Sweet, Australian desert, Australian finger, Australian round, Brown River finger, Mount White, New Guinea wild, Russell River, Tahiti), Mandarin (Mediterranean, Satsuma), Orange (sour, sweet, Tachibana, Trifoliolate), Pummelo, Tangelo, Tangerine [includes Tangerine (mandarin or mandarin orange), Clementine, Mediterranean mandarin, Satsuma mandarin, Tangelo, Tangor, cultivars and varieties], Tangor, Uniq fruit, and cultivars, varieties and/or hybrids of these commodities.

Pests Controlled	Product Rate (fl oz/A)
Aphids Asian citrus psyllid Whiteflies	21.0 – 28.0
Pest Suppressed	
Citrus canker ( <i>Xanthomonas citri</i> subsp. <i>citri</i> )	28.0

**Soil Application Restrictions:**

Pre-Harvest Interval (PHI): **30 days**

Maximum SIVANTO 200 SL allowed per year: **28.0 fluid ounces/Acre** (0.365 lb AI/Acre) regardless of method of application.

**Soil Application Notes:**

SIVANTO 200 SL may be applied at the specified dosage by the following methods:

- chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment; or
- basal drench in sufficient water to move SIVANTO 200 SL into root-zone.

<b>COTTON – FOLIAR</b>	
<b>Pests Controlled</b>	<b>Product Rate (fl oz/A)</b>
Aphids	7.0 – 10.5
Fleahoppers	
Whiteflies	10.5 – 14.0
<b>Foliar Application Restrictions:</b>	
Pre-Harvest Interval (PHI): <b>14 days</b>	
Minimum interval between applications: <b>10 days</b>	
Minimum application volumes: <b>10 gallons/Acre</b> (Ground); <b>2 gallons/Acre</b> (Aerial)	
Maximum SIVANTO 200 SL allowed per year: <b>28.0 fluid ounces/Acre</b> (0.365 lb AI/Acre).	

<b>CUCURBIT VEGETABLES – FOLIAR</b>	
<b>Crops of Crop Group 9 Including:</b> Chayote (fruit), Chinese waxgourd (Chinese preserving melon), Citron melon, Cucumber, Gherkin, Gourd (edible, includes hyotan, cucuzza, hechima, Chinese okra), <i>Momordica</i> spp. (includes balsam apple, balsam pear, bitter melon, Chinese cucumber), Muskmelon (hybrids and/or cultivars of <i>Cucumis melo</i> including true cantaloupe, cantaloupe, casaba, Crenshaw melon, golden pershaw melon, honeydew melon, honey balls, mango melon, Persian melon, pineapple melon, Santa Claus melon, snake melon), Pumpkin, Squash (includes summer squash types such as: crookneck squash, scallop squash, straightneck squash, vegetable marrow, zucchini, and winter squash types such as acorn squash, butternut squash, calabaza, cushaw, Hubbard squash, spaghetti squash), Watermelon (includes hybrids and/or varieties of <i>Citrullus lanatus</i> )	
<b>Pests Controlled</b>	<b>Product Rate (fl oz/A)</b>
Leafhoppers	7.0 – 10.5
Aphids	7.0 – 12.0
Squash bug	10.5 – 14.0
Whiteflies	
<b>Disease Suppressed</b>	
CYSDV – Cucurbit yellow stunting disorder virus	14.0
<b>Foliar Application Restrictions:</b>	
Pre-Harvest Interval (PHI): <b>1 day</b>	
Minimum interval between applications: <b>7 days</b>	
Minimum application volumes: <b>10 gallons/Acre</b> (Ground); <b>2 gallons/Acre</b> (Aerial)	
Maximum SIVANTO 200 SL allowed per year: <b>28.0 fluid ounces/Acre</b> (0.365 lb AI/Acre).	

<b>CUCURBIT VEGETABLES – SOIL</b>	
<b>Crops of Crop Group 9 Including:</b> Chayote (fruit), Chinese waxgourd (Chinese preserving melon), Citron melon, Cucumber, Gherkin, Gourd (edible, includes hyotan, cucuzza, hechima, Chinese okra), <i>Momordica</i> spp. (includes balsam apple, balsam pear, bitter melon, Chinese cucumber), Muskmelon (hybrids and/or cultivars of <i>Cucumis melo</i> including true cantaloupe, cantaloupe, casaba, Crenshaw melon, golden pershaw melon, honeydew melon, honey balls, mango melon, Persian melon, pineapple melon, Santa Claus melon, snake melon), Pumpkin, Squash (includes summer squash types such as: crookneck squash, scallop squash, straightneck squash, vegetable marrow, zucchini, and winter squash types such as acorn squash, butternut squash, calabaza, cushaw, Hubbard squash, spaghetti squash), Watermelon (includes hybrids and/or varieties of <i>Citrullus lanatus</i> )	
<b>Pests Controlled</b>	<b>Product Rate (fl oz/A)</b>
Aphids	21.0 – 28.0
Leafhoppers	
Whiteflies	
<b>Disease Suppressed</b>	
CYSDV – Cucurbit yellow stunting disorder virus	28.0
<b>Soil Application Restrictions:</b>	
Pre-Harvest Interval (PHI): <b>21 days</b>	
Maximum SIVANTO 200 SL allowed per crop season: <b>28.0 fluid ounces/Acre</b> (0.365 lb AI/Acre), regardless of method of application.	
Maximum crop seasons per year: <b>3</b>	
<b>Soil Application Notes:</b>	
SIVANTO 200 SL may be applied at the specified dosage by the following methods:	
<ol style="list-style-type: none"> <li>1. chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment;</li> <li>2. injection below the eventual seed-line prior to planting. Place SIVANTO 200 SL 3-4 inches below seed-line;</li> <li>3. potting hole drench at transplanting; or</li> <li>4. post-transplant drench following setting and covering.</li> </ol>	

**CUCURBIT VEGETABLES – PLANTHOUSE**

**Crops of Crop Group 9 Including:** Chayote (fruit), Chinese waxgourd (Chinese preserving melon), Citron melon, Cucumber, Gherkin, Gourd (edible, includes hyotan, cucuzza, hechima, Chinese okra), *Momordica* spp. (includes balsam apple, balsam pear, bitter melon, Chinese cucumber), Muskmelon (hybrids and/or cultivars of *Cucumis melo* including true cantaloupe, cantaloupe, casaba, Crenshaw melon, golden pershaw melon, honeydew melon, honey balls, mango melon, Persian melon, pineapple melon, Santa Claus melon, snake melon), Pumpkin, Squash (includes summer squash types such as: crookneck squash, scallop squash, straightneck squash, vegetable marrow, zucchini, and winter squash types such as acorn squash, butternut squash, calabaza, cushaw, Hubbard squash, spaghetti squash), Watermelon (includes hybrids and/or varieties of *Citrullus lanatus*)

<b>Pests Controlled</b>	<b>Product Rate (fl oz/10,000 Plants)</b>
Aphids Leafhoppers Whiteflies	0.34
<b>Disease Suppressed</b>	
CYSDV – Cucurbit yellow stunting disorder virus	0.34

**Cucurbit Vegetables – Planthouse Applications**

Apply specified dosage to seedlings in trays in the planthouse, targeting potting media (tray drench) between 24 hours and 7 days prior to transplanting, in one of the following methods:

- Uniform, broadcast high-volume foliar spray, followed immediately by sufficient overhead irrigation to wash SIVANTO 200 SL from foliage into potting media without loss of gravitational liquid from the bottom of the tray. Failure to wash SIVANTO 200 SL from foliage may result in reduced pest control;
- Injection into overhead irrigation system, using adequate volume to thoroughly saturate potting media without loss of gravitational solution from the bottom of the tray.

The application made in the planthouse will only provide short-term protection and is not intended as a substitution for a field application. An additional field application must be made within 2 weeks following transplanting to provide continuous protection.

Transplants must be handled carefully during setting to avoid dislodging treated potting media from roots.

**Planthouse Application Restrictions:**

Only for use on seedlings intended as transplants.

Not for use in Greenhouses.

Pre-Harvest Interval (PHI): **21 days**

Maximum SIVANTO 200 SL applied in the planthouse: **0.34 fluid ounces/10,000 plants** (0.011 lb AI)

Maximum number of SIVANTO 200 SL applications in planthouse per crop: **1**

Maximum SIVANTO 200 SL allowed per crop season: **28.0 fluid ounces/Acre** (0.365 lb AI/Acre), regardless of method of application.

**Planthouse Application Note:**

Not all varieties of cucurbit vegetables have been tested for tolerance to SIVANTO 200 SL applied to seedling flats. It is therefore recommended to treat a small number of plants and confirm tolerance for 7 days prior to treating entire planthouse.

**FRUITING VEGETABLES – FOLIAR**

**Crops of Crop Group 8-10 Including:** Cocona, Eggplant (including: African, Pea and Scarlet eggplants), Garden huckleberry, Goji berry, Groundcherry, Martynia, Naranjilla, Okra, Pepino, Pepper (including all peppers i.e. bell, non-bell, hot, sweet, etc.), Roselle, Sunberry, Tomatillo, Tomato (including: Bush, Currant, Tree) including cultivars, varieties and/or hybrids of these commodities.

<b>Pests Controlled</b>	<b>Product Rate (fl oz/A)</b>
Leafhoppers	7.0 – 10.5
Aphids	7.0 – 12.0
Colorado potato beetle Psyllid Whiteflies	10.5 – 14.0
<b>Pest/ Disease Suppressed</b>	
Chilli thrips- <i>Scirtothrips dorsalis</i>	12.0-14.0
TYLCV – Tomato yellow leaf curl virus	14.0

**Foliar Application Restrictions:**

Pre-Harvest Interval (PHI): **1 day**

Minimum interval between applications: **7 days**

Minimum application volumes: **10 gallons/Acre** (Ground); **2 gallons/Acre** (Aerial)

Maximum SIVANTO 200 SL allowed per year: **28.0 fluid ounces/Acre** (0.365 lb AI/Acre).

<b>FRUITING VEGETABLES – SOIL</b>	
<b>Crops of Crop Group 8-10 Including:</b> Cocona, Eggplant (including: African, Pea and Scarlet eggplants), Garden huckleberry, Goji berry, Groundcherry, Martynia, Naranjilla, Okra, Pepino, Pepper (including all peppers i.e. bell, non-bell, hot, sweet, etc.), Roselle, Sunberry, Tomatillo, Tomato (including: Bush, Currant, Tree) including cultivars, varieties and/or hybrids of these commodities.	
<b>Pests Controlled</b>	<b>Product Rate (fl oz/A)</b>
Aphids Leafhoppers Psyllid Whiteflies	21.0 – 28.0
<b>Disease Suppressed</b>	
TYLCV – Tomato yellow leaf curl virus	28.0
<b>Soil Application Restrictions:</b> Pre-Harvest Interval (PHI): <b>45 days</b> Maximum SIVANTO 200 SL allowed per crop season: <b>28.0 fluid ounces/Acre</b> (0.365 lb AI/Acre), regardless of method of application. Maximum crop seasons per year: <b>3</b> <b>Soil Application Notes:</b> SIVANTO 200 SL may be applied at the specified dosage by the following methods: <ol style="list-style-type: none"> <li>1. chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment;</li> <li>2. injection below the eventual seed-line prior to planting. Place SIVANTO 200 SL 3-4 inches below seed-line;</li> <li>3. potting hole drench at transplanting; or</li> <li>4. post-transplant drench following setting and covering.</li> </ol>	
<b>FRUITING VEGETABLES – PLANTHOUSE</b>	
<b>Crops of Crop Group 8-10 Including:</b> Cocona, Eggplant (including: African, Pea and Scarlet eggplants), Garden huckleberry, Goji berry, Groundcherry, Martynia, Naranjilla, Okra, Pepino, Pepper (including all peppers i.e. bell, non-bell, hot, sweet, etc.), Roselle, Sunberry, Tomatillo, Tomato (including: Bush, Currant, Tree) including cultivars, varieties and/or hybrids of these commodities.	
<b>Pests Controlled</b>	<b>Product Rate (fl oz/10,000 Plants)</b>
Aphids Leafhoppers Psyllid Whiteflies	0.34
<b>Disease Suppressed</b>	
TYLCV – Tomato yellow leaf curl virus	0.34
<b>Fruiting Vegetables – Planthouse Applications</b> Apply specified dosage to seedlings in trays in the planthouse, targeting potting media (tray drench) between 24 hours and 7 days prior to transplanting, in one of the following methods: <ul style="list-style-type: none"> <li>• Uniform, broadcast high-volume foliar spray, followed immediately by sufficient overhead irrigation to wash SIVANTO 200 SL from foliage into potting media without loss of gravitational liquid from the bottom of the tray. Failure to wash SIVANTO 200 SL from foliage may result in reduced pest control;</li> <li>• Injection into overhead irrigation system, using adequate volume to thoroughly saturate potting media without loss of gravitational solution from the bottom of the tray.</li> </ul> The application made in the planthouse will only provide short-term protection and is not intended as a substitution for a field application. An additional field application must be made within 2 weeks following transplanting to provide continuous protection. Transplants must be handled carefully during setting to avoid dislodging treated potting media from roots.	
<b>Planthouse Application Restrictions:</b> Only for use on seedlings intended as transplants. Not for use in Greenhouses. Pre-Harvest Interval (PHI): <b>45 days</b> Maximum SIVANTO 200 SL applied in the planthouse: <b>0.34 fluid ounces/10,000 plants</b> (0.011 lb AI) Maximum number of SIVANTO 200 SL applications in planthouse per crop: <b>1</b> Maximum SIVANTO 200 SL allowed per crop season: <b>28.0 fluid ounces/Acre</b> (0.365 lb AI/Acre), regardless of method of application.	
<b>Planthouse Application Note:</b> Not all varieties of fruiting vegetables have been tested for tolerance to SIVANTO 200 SL applied to seedling flats. It is therefore recommended to treat a small number of plants and confirm tolerance for 7 days prior to treating entire planthouse.	



<b>HOP – FOLIAR</b>	
<b>Pest Controlled</b>	<b>Product Rate (fl oz/A)</b>
Aphids	7.0 – 10.5
<b>Foliar Application Restrictions:</b> Pre-Harvest Interval (PHI): <b>21 days</b> Minimum application volumes: <b>25 gallons/Acre</b> (Ground); <b>10 gallons/Acre</b> (Aerial) Maximum SIVANTO 200 SL allowed per year: <b>10.5 fluid ounces/Acre</b> (0.137 lb AI/Acre).	

<b>LEAFY VEGETABLES (except Brassica) – FOLIAR</b>	
<b>Crops of Crop Group 4 Including:</b> Amaranth (leafy amaranth, Chinese spinach, tampala), Arugula (Roquette), Cardoon, Celery, Celtuce, Chervil, Chinese celery, Chrysanthemum (edible-leaved and garland), Corn salad, Cress (garden), Cress (upland, yellow rocket, winter cress), Dandelion, Dock (sorrel), Endive, Florence fennel (sweet anise, sweet fennel, Finocchio), Lettuce (head and leaf), Orach, Parsley, Purslane (garden and winter), Radicchio (red chicory), Rhubarb, Spinach [including New Zealand and vine (Malabar spinach, Indian spinach)], Swiss chard, Taro leaves	
<b>Pests Controlled</b>	<b>Product Rate (fl oz/A)</b>
Leafhoppers	7.0 – 10.5
Aphids	10.5 – 12.0
Whiteflies	10.5 – 14.0
<b>Foliar Application Restrictions:</b> Pre-Harvest Interval (PHI): <b>1 day</b> Minimum interval between applications: <b>7 days</b> Minimum application volumes: <b>10 gallons/Acre</b> (Ground); <b>2 gallons/Acre</b> (Aerial) Maximum SIVANTO 200 SL allowed per crop season: <b>28.0 fluid ounces/Acre</b> (0.365 lb AI/Acre). Maximum crop seasons per year: <b>3</b>	

<b>LEGUME VEGETABLES (SUCCULENT OR DRIED) – FOLIAR</b>	
<b>Crops of Crop Group 6 Including:</b> Edible Podded and Succulent Shelled Pea and Bean and Dried Shelled Pea and Bean Bean ( <i>Lupinus</i> spp., including grain lupin, sweet lupin, white lupin, and white sweet lupin) Bean ( <i>Phaseolus</i> spp., including field bean, kidney bean, lima bean, navy bean, pinto bean, runner bean, snap bean, tepary bean, wax bean) Bean ( <i>Vigna</i> spp., including adzuki bean, asparagus bean, blackeyed pea, catjang, Chinese longbean, cowpea, Crowder pea, moth bean, mung bean, rice bean, Southern pea, urd bean, yardlong bean) Pea ( <i>Pisum</i> spp. including dwarf pea, edible-pod pea, English pea, field pea, garden pea, green pea, snow pea, sugar snap pea) Other Beans and Peas (Broad bean (fava bean), Chickpea (garbanzo bean), Guar, Jackbean, Lablab bean (hyacinth bean), Lentil, Pigeon pea, soybean (immature seed), Sword bean) Soybean	
<b>Pests Controlled</b>	<b>Product Rate (fl oz/A)</b>
Aphids	7.0 – 10.5
Leafhoppers	
Whiteflies	10.5 – 14.0
<b>Foliar Application Restrictions:</b> Pre-Harvest Interval (PHI): <b>7 days</b> – Forage, Leaves, Vines, Pods, Cutting for Hay, or Seed (fresh or dry, except dry soybean seed); <b>21 days</b> – dry soybean seed Minimum interval between applications: <b>10 days</b> Minimum application volumes: <b>10 gallons/Acre</b> (Ground); <b>2 gallons/Acre</b> (Aerial) Maximum SIVANTO 200 SL allowed per year: <b>28.0 fluid ounces/Acre</b> (0.365 lb AI/Acre).	

<b>LOW GROWING BERRY – FOLIAR</b>	
<b>Crops of Crop Subgroup 13-07G (except Cranberry) Including:</b> Bearberry, Bilberry, Blueberry (lowbush), Cloudberry, Lingonberry, Muntries, Partridgeberry, Strawberry, plus cultivars, varieties and/or hybrids of these	
<b>Pests Controlled</b>	<b>Product Rate (fl oz/A)</b>
Aphids	7.0 – 10.5
Blueberry thrips- <i>Frankliniella vaccinii</i> (feeding damage reduction), <i>Scirtothrips citri</i> (control)	10.5 – 14.0
Whiteflies	
Blueberry maggot	12.0 – 14.0
<b>Foliar Application Restrictions:</b> Pre-Harvest Interval (PHI): <b>0 day</b> Minimum interval between applications: <b>10 days</b> Minimum application volumes: <b>10 gallons/Acre</b> (Ground); <b>2 gallons/Acre</b> (Aerial) Maximum SIVANTO 200 SL allowed per year: <b>28.0 fluid ounces/Acre</b> (0.365 lb AI/Acre).	

<b>NONGRASS ANIMAL FEEDS (ALFALFA<sup>A</sup> AND CLOVER<sup>1</sup> ONLY) – FOLIAR FORAGE, FODDER, STRAW, AND HAY</b>	
<b>Pests Controlled</b>	<b>Product Rate (fl oz/A)</b>
Aphids	7.0 – 10.5
Leafhoppers	
Threecornered alfalfa hopper	10.5 – 14.0
Whiteflies	
<b>Pests Suppressed</b>	
Tarnished plant bug ( <i>Lygus lineolaris</i> )	14.0
Western plant bug ( <i>Lygus hesperus</i> )	
<b>Foliar Application Restrictions:</b> Pre-Harvest Interval (PHI): <b>7 days</b> – Forage, Silage, Cutting for Hay; <b>14 days</b> – Clover Minimum interval between applications: <b>10 days</b> Minimum application volumes: <b>10 gallons/Acre</b> (Ground); <b>2 gallons/Acre</b> (Aerial) Maximum SIVANTO 200 SL allowed per year: <b>28.0 fluid ounces/Acre</b> (0.365 lb AI/Acre).	
<sup>A</sup> Alfalfa for Forage, Silage, and Cutting for Hay	
<sup>1</sup> Idaho, Oregon, and Washington	

<b>PEANUT – FOLIAR</b>	
<b>Pests Controlled</b>	<b>Product Rate (fl oz/A)</b>
Aphids	7.0 – 10.5
Leafhoppers	
Threecornered alfalfa hopper	10.5 – 14.0
Whiteflies	
<b>Foliar Application Restrictions:</b> Pre-Harvest Interval (PHI): <b>7 days</b> Minimum interval between applications: <b>10 days</b> Minimum application volumes: <b>10 gallons/Acre</b> (Ground); <b>2 gallons/Acre</b> (Aerial) Maximum SIVANTO 200 SL allowed per year: <b>28.0 fluid ounces/Acre</b> (0.365 lb AI/Acre).	

**POME FRUIT – FOLIAR**

**Crops of Crop Group 11-10 Including:** Apple, Azarole, Crabapples (Chinese apple, Chinese crab apple, Chinese flowering apple, Crab apple, Cutleaf crab apple, Florentine crab apple, Hall crab apple, Iowa crab apple, Japanese crab apple, Kai do crab apple, Manchurian crab apple, Paradise apple, Sargent's crab apple, Siberian crab apple, Soulard crab apple, Southern crab apple, Sweet crab apple, Tea crab apple, Toringa crab apple, Western Crabapple, Yunnan crab apple, and varieties and/or hybrids of these), Loquat, Mayhaw, Medlar, Pear, Asian pear, Quince, Chinese quince, Japanese quince, Tejocote, and cultivars, varieties and/or hybrids of these.

Pests Controlled	Product Rate (fl oz/A)
Aphids (except Woolly apple aphid) Leafhoppers	7.0 – 10.5
Oystershell scale Pear psylla San Jose Scale	10.5 – 14.0
Woolly apple aphid	12.0 – 14.0

**Foliar Application Restrictions:**

Pre-Harvest Interval (PHI): **14 day**

Minimum interval between applications: **10 days**

Minimum application volumes: **25 gallons/Acre** (Ground); **10 gallons/Acre** (Aerial)

Maximum SIVANTO 200 SL allowed per year: **28.0 fluid ounces/Acre** (0.365 lb AI/Acre).

**Foliar Application Notes:**

Combine SIVANTO 200 SL with a horticultural oil for early-season applications targeting San Jose scale and pear psylla.

**PRICKLY PEAR / CACTUS PEAR (*Opuntia* spp.), PITAYA – FOLIAR**

Pest Controlled	Product Rate (fl oz/A)
Aphids	7.0 – 10.5
Pest Suppressed	
Cochineal scale	14.0

**Foliar Application Restrictions:**

Pre-Harvest Interval (PHI): **21 days**

Minimum interval between applications: **7 days**

Minimum application volume: **75 gallons/Acre** (Ground); **Do not apply by aerial application.**

Maximum SIVANTO 200 SL allowed per year: **28.0 fluid ounces/Acre** (0.365 lb AI/Acre).

**ROOT VEGETABLES (except Sugarbeet) – FOLIAR**

**Crops of Crop Subgroup 1B Including:** Beet (garden), Burdock (edible), Carrot, Celeriac (celery root), Chervil (turnip-rooted), Chicory, Ginseng, Horseradish, Parsley (turnip-rooted), Parsnip, Radish, Oriental radish (daikon), Rutabaga, Salsify (black), Salsify (oyster plant), Salsify (Spanish), Skirret, Turnip

Pests Controlled	Product Rate (fl oz/A)
Aphids Leafhoppers	7.0 – 10.5
Whiteflies	10.5 – 14.0

**Foliar Application Restrictions:**

Pre-Harvest Interval (PHI): **7 days**

Minimum interval between applications: **10 days**

Minimum application volumes: **10 gallons/Acre** (Ground); **2 gallons/Acre** (Aerial)

Maximum SIVANTO 200 SL allowed per year: **28.0 fluid ounces/Acre** (0.365 lb AI/Acre).

Do not harvest the tops (leaves) from any crop listed under Crop Subgroup 1B for human or livestock consumption.

**SMALL FRUIT VINE CLIMBING (except Fuzzy kiwifruit) – FOLIAR**

**Crops of Crop Subgroup 13-07F Including:** Amur river grape, Gooseberry (*Ribes* spp.), Grape, Kiwifruit (hardy, only), Maypop, Schisandra berry, and cultivars, varieties and/or hybrids of these

Pests Controlled	Product Rate (fl oz/A)
Leafhoppers	7.0 – 10.5
Vine mealybug	12.0 – 14.0

**Foliar Application Restrictions:**

Pre-Harvest Interval (PHI): **0 day**

Minimum interval between applications: **10 days**

Minimum application volumes: **25 gallons/Acre** (Ground); **10 gallons/Acre** (Aerial)

Maximum SIVANTO 200 SL allowed per year: **28.0 fluid ounces/Acre** (0.365 lb AI/Acre) regardless of method of application.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of **4 hours with the following exceptions: 1) the REI is 48 hours when girdling or cane turning in grapes; 2) in California the REI is 12 hours.**

**SMALL FRUIT VINE CLIMBING (except Fuzzy kiwifruit) – SOIL**

**Crops of Crop Subgroup 13-07F Including:** Amur river grape, Gooseberry (*Ribes* spp.), Grape, Kiwifruit (hardy, only), Maypop, Schisandra berry, and cultivars, varieties and/or hybrids of these

Pests Controlled	Product Rate (fl oz/A)
Leafhoppers	21.0 – 28.0
Vine mealybug	

**Soil Application Restrictions:**

Pre-Harvest Interval (PHI): **30 days**

Maximum SIVANTO 200 SL allowed per year: **28.0 fluid ounces/Acre** (0.365 lb AI/Acre), regardless of method of application.

**Soil Application Notes:**

SIVANTO 200 SL may be applied at the specified dosage by the following methods:

1. chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment; or
2. basal drench in sufficient water to move SIVANTO 200 SL into root-zone.

**TREE NUT – FOLIAR**

**Crops of Crop Group 14 (except Almond) Including:** Beech nut, Brazil nut, Butternut, Cashew, Chestnut, Chinquapin, Hazelnut (filbert), Hickory nut, Macadamia nut (bush nut), Pecan, Pistachio, Walnut [including black and English (Persian) walnuts]

Pests Controlled	Product Rate (fl oz/A)
Aphids	7.0 – 10.5
Whiteflies	10.5 – 14.0

**Foliar Application Restrictions:**

Pre-Harvest Interval (PHI): **7 day**

Minimum interval between applications: **14 days**

Minimum application volumes: **25 gallons/Acre** (Ground); **10 gallons/Acre** (Aerial)

Maximum SIVANTO 200 SL allowed per year: **28.0 fluid ounces/Acre** (0.365 lb AI/Acre)

**TUBEROUS and CORM VEGETABLES – FOLIAR**

**Crops of Crop Subgroup 1C Including:** Arracacha, Arrowroot, Artichoke (Chinese and Jerusalem), Canna (edible), Cassava (bitter and sweet), Chayote (root)\*, Chufa, Dasheen (taro), Ginger, Leren, Potato, Sweet potato, Tanier (cocoyam), Turmeric, Yam bean (jicama, manioc pea), Yam (true)

\*See CUCURBIT Vegetable Crop Group for Chayote (fruit)

<b>Pests Controlled</b>	<b>Product Rate (fl oz/A)</b>
Aphids Leafhoppers	7.0 – 10.5
Colorado potato beetle Potato psyllid Whiteflies	10.5 – 14.0

**Foliar Application Restrictions:**

Pre-Harvest Interval (PHI): **7 days**

Minimum interval between applications: **7 days**

Minimum application volumes: **10 gallons/Acre** (Ground); **2 gallons/Acre** (Aerial)

Maximum SIVANTO 200 SL allowed per year: **28.0 fluid ounces/Acre** (0.365 lb AI/Acre).

## STORAGE AND DISPOSAL

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

### **Pesticide Storage**

Store in original container away from feed and food. Store in cool, dry area. Do not store in direct sunlight. Do not allow prolonged storage in temperatures that exceed 105°F (40°C) or in temperatures that fall below 14°F (-10°C).

### **Pesticide Disposal**

To avoid wastes, use all material in this container by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste facility or pesticide disposal program (often such programs are run by state or local governments or by industry).

### **Container Handling**

#### **[Non-Seed Treatment Products in Non-Refillable Containers]**

Rigid, Non-refillable containers (equal to or less than 5 gallons)

Non-refillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Once container is rinsed, offer for recycling if available or puncture and dispose of in a sanitary landfill.

Rigid Non-refillable Containers that are too large to shake (i.e., with capacities greater than 5 gallons or 50 lbs)

Non-refillable container. Do not reuse or refill this container. Refer to Bottom Discharge IBC or Top Discharge IBC, Drums, Kegs information as follows.

#### **Bottom Discharge IBC (e.g. – Schuetz Caged IBC or Snyder Square Stackable)**

Pressure rinsing the container before final disposal is the responsibility of the person disposing of the container. To pressure rinse the container before final disposal, empty the remaining contents from the IBC into application equipment or mix tank. Raise the bottom of the IBC by 1.5 inches on the side which is opposite of the bottom discharge valve to promote more complete product removal.

Completely remove the top lid of the IBC. Use water pressurized to at least 40 PSI to rinse all interior portions. Continuously pump or drain rinsate into application equipment or rinsate collection system while pressure rinsing. Continue pressure rinsing for 2 minutes or until rinsate becomes clear. Replace the lid and close bottom valve.

Top Discharge IBC, Drums, Kegs (e.g.– Snyder 120 Next Gen, Bonar B120, Drums, Kegs)

Triple rinsing the container before final disposal is the responsibility of the person disposing of the container. To triple rinse the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container at least 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Rinse all interior surfaces. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this procedure two more times.

Once container is rinsed, offer for recycling if available or puncture and dispose of in a sanitary landfill or by incineration.

#### **Non-Seed Treatment Products in Non-Refillable Fiber Drums with Liners**

Non-refillable container. Do not reuse or refill this container. Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application equipment, then offer for recycling if available or dispose of in a sanitary landfill or by incineration. If drum is contaminated and cannot be reused, dispose of it in the manner required for its liner.

#### **Non-Seed Treatment Products in Non-Rigid, Non-refillable Containers**

Nonrefillable container. Do not reuse or refill this container. Completely empty container into application equipment. Then offer for recycling if available or dispose of in a sanitary landfill or by other procedures approved by state and local authorities."

#### **[Non-Seed Treatment Products in Refillable Containers]**

Refillable container. Refer to Bottom Discharge IBC or Top Discharge IBC, Drums, Kegs information as follows. Refill this container with pesticide only. Do not reuse this container for any other purpose. Contact your Ag retailer or Bayer CropScience for container return, disposal and recycling information.

#### **Bottom Discharge IBC (e.g. – Schuetz Caged IBC or Snyder Square Stackable)**

Pressure rinsing the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To pressure rinse the container before final disposal, empty the remaining contents from the IBC into application equipment or mix tank. Raise the bottom of the IBC by 1.5 inches on the side which is opposite of the bottom discharge valve

to promote more complete product removal. Completely remove the top lid of the IBC. Use water pressurized to at least 40 PSI to rinse all interior portions. Continuously pump or drain rinsate into application equipment or rinsate collection system while pressure rinsing. Continue pressure rinsing for 2 minutes or until rinsate becomes clear. Replace the lid and close bottom valve.

**Top Discharge IBC, Drums, Kegs (e.g.– Snyder 120 Next Gen, Bonar B120, Drums, Kegs)**

Triple rinsing the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To triple rinse the containers before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container at least 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Rinse all interior surfaces. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this procedure two more times.

Once container is rinsed, offer for recycling if available or puncture and dispose of in a sanitary landfill or by incineration.

End users are authorized to remove tamper evident cables as required to remove the product from the container unless the container is equipped with one way valves and refilling or returning is planned. If this is the case, end users are not authorized to remove tamper evident cables, one way valves or clean container.

**SIVANTO 200 SL (PENDING) 07/24/2012, 02/18/13, 06/24/13, 04/24/14, 05/27/14, 6/24/14, 6/30/14, 08/08/14, 08/20/14, 09/10/14, 09/18/2014, 09/25/2014V2, 10/27/2014, 12/17/2014, 01/05/2015, 01/14/15**