This label has been updated according to the re-evaluation decision of Clothianidin SRD2021-03. While users are encouraged to follow this updated label immediately, the previously approved label is valid until 31/03/2023 in accordance with the phase out period set out in the re-evaluation/special review decision of Clothianidin SRD2021-03. This previously approved label will be provided upon request by emailing hc.pmra.info-arla.sc@canada.ca. In your email please include the product name and Registration number of the label you are requesting.

CLOTHIANIDIN INSECTICIDE

INSECTICIDE

COMMERCIAL

GROUP 4 A INSECTICIDE

A WATER DISPERSIBLE GRANULAR (WDG) INSECTICIDE FOR USE ON TURFGRASS (GOLF COURSES AND SOD ONLY), POTATO, SWEET POTATO, GRAPE, AND CUCURBIT VEGETABLES AND STONE FRUIT TO CONTROL LISTED INSECTS

Warning: Contains the allergen milk

KEEP OUT OF REACH OF CHILDREN

READ THE LABEL BEFORE USING

REGISTRATION NO.: 29384

PEST CONTROL PRODUCTS ACT

CAUTION – EYE IRRITANT

Net Contents: 25g – 10kg

Valent Canada, Inc. 201-230 Hanlon Creek Blvd. Guelph, Ontario N1C 0A1 www.valent.ca 1-800-682-5368

Crop	Pest	Last Date of Use
Stone fruit – apricot, sweet and tart cherry, nectarine, peach, plum, prune and plumcot	Brown marmorated stink bug	April 11, 2022

NOTICE TO USER:

This pest control product is to be used only in accordance with the directions on the label. It is an offence under the *PEST CONTROL PRODUCTS ACT* to use this product in a way that is inconsistent with the directions on the label.

FIRST AID:

IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes.

Remove contact lenses, if present, after the first 5 minutes, then continue rinsing

eye. Call a poison control centre or doctor for treatment advice.

IF ON SKIN

OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for

15-20 minutes. Call a poison control centre or doctor for treatment advice.

IF INHALED: Move the person to fresh air. If the person is not breathing, call 911 or an

ambulance, then give artificial respiration, preferably by mouth-to-mouth, if

possible. Call a poison control centre or doctor for further treatment advice.

IF SWALLOWED: Call a poison control centre or doctor immediately for treatment advice. Have the

person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give anything by mouth to an

unconscious person.

Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

TOXICOLOGICAL INFORMATION:

There is no specific antidote for this product. Treat symptomatically.

ENVIRONMENTAL PRECAUTIONS:

Toxic to aquatic organisms, birds and small wild mammals. Observe spray buffer zones specified under DIRECTIONS FOR USE.

Toxic to bees. Bees can be exposed to direct treatment, drift, or residues on flowering crops or weeds. Bees can be exposed to product residues in flowers, leaves, pollen and/or nectar resulting from soil treatments.

Do not place managed bees in soil treated potato or sweet potato crops during bloom period.

DO NOT apply this product to flowering crops or weeds if bees are visiting the treatment area. Minimize spray drift to reduce harmful effects on bees in habitats close to the application site.

To further minimize exposure to pollinators, refer to the complete guidance "Protecting Pollinators during Pesticide Spraying- Best Management Practices" on the Health Canada website (www.canada.ca/pollinators). Follow crop specific directions for application timing.

Toxic to certain beneficial insects. Minimize spray drift to reduce harmful effects on beneficial insects in habitats next to the application site such as hedgerows and woodland.

Clothianidin is persistent and may carryover. It is recommended that any products containing Clothianidin not be used in areas treated with this product during the previous season.

The use of this chemical may result in contamination of groundwater particularly in areas where soils are permeable (e.g. sandy soil) and/or the depth to the water table is shallow.

To reduce runoff from treated areas into aquatic habitats avoid application to areas with a moderate to steep slope, compacted soil, or clay.

Avoid application when heavy rain is forecast.

Contamination of aquatic areas as a result of runoff may be reduced by including a vegetative strip between the treated area and the edge of the water body.

IN CASE OF EMERGENCY INVOLVING A POISONING OR MAJOR SPILL CALL 1-800-682-5368

PRECAUTIONS:

KEEP OUT OF THE REACH OF CHILDREN.

Causes slight to moderate eye irritation. DO NOT get into eyes. Avoid contact with eyes, skin or clothing. Wash hands thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

During mixing, loading, application, clean-up and repair, wear a long-sleeved shirt, long pants, chemical-resistant gloves made of any waterproof material (such as butyl or nitrile), and shoes plus socks. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Wash hands before eating, drinking, and chewing gum, using tobacco or using the toilet. Remove personal protection equipment (PPE) immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing. Keep and wash PPE separately from other laundry.

Apply only when the potential for drift to areas of human habitation or areas of human activity such as houses, cottages, schools and recreational areas is minimal. Take into consideration wind speed, wind direction, temperature inversions, application equipment and sprayer settings.

Restricted Entry Intervals

For potato, orchard and vineyard crops, and commercial sod farms:

DO NOT enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours after application.

For turf (golf courses):

DO NOT allow public use of treated areas until sprays have dried.

Do not graze treated fields or feed treated forage or hay to livestock.

If this pest control product is to be used on a commodity that may be exported to the U.S. and you require information on acceptable residue levels in the U.S., contact Valent Canada, Inc..

AERIAL APPLICATION USE PRECAUTIONS

Apply only by fixed-wing or rotary aircraft equipment which has been functionally and operationally calibrated for the atmospheric conditions of the area and the application rates and conditions of this label. Label rates, conditions and precautions are product specific. Read and understand the entire label before opening this product. Apply only at the rate stated for aerial application on this label. Where no rate for aerial application appears for the specific use, this product cannot be applied by any type of aerial equipment. Ensure uniform application. To avoid streaked, uneven or overlapped application, use appropriate marking devices. Do not use human flaggers.

Use Precautions

Apply only when meteorological conditions at the treatment site allow for complete and even crop coverage. Apply only under conditions of good practice specific to aerial application as outlined in the National Aerial Pesticide Application Manual developed by the Federal/Provincial/Territorial Committee on Pest Management and Pesticides.

Operator Precautions

Do not allow the pilot to mix chemicals to be loaded onto the aircraft. Loading of premixed chemicals with a closed system is permitted. It is desirable that the pilot have communication capabilities at each treatment site at the time of application. The field crew and the mixer/loaders must wear chemical resistant gloves, coveralls and goggles or face shieldduring mixing/loading, cleanup and repair. Follow the more stringent label precautions in cases where the operator precautions exceed the generic label recommendations on the existing ground boom label. All personnel on the job site must wash hands and face thoroughly before eating and drinking. Protective clothing, aircraft cockpit and vehicle cabs must be decontaminated regularly.

Product Specific Precautions

Read and understand the entire label before opening this product. If you have questions, call the manufacturer at 1-800-682-5368 or obtain technical advice from the distributor or your provincial agricultural representative.

Application of this specific product must meet and/or conform to the following:

Volume: Apply the labelled rate in a minimum spray volume of 45 litres per hectare.

DISPOSAL/DECONTAMINATION:

For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill and for clean up of spills.

Container Disposal

Recyclable container

Do not reuse this container for any purpose. This is a recyclable container, and is to be disposed of at a container collection site. Contact your local distributor/dealer or municipality for the location of the nearest collection site. Before taking the container to the collection site:

- 1. Empty container thoroughly into spray tank. Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank
- 2. Make the empty, rinsed container unsuitable for further use.

If there is no container collection site in your area, dispose of the container in accordance with provincial requirements

STORAGE:

To prevent contamination store this product away from food or feed. Keep pesticide in original container. Store in a cool, dry, secure, well ventilated area. Do not put formulation or dilute spray solution into food or drink containers. Do not store or transport near feed or food. Not for use or storage in or around the home.

RESISTANCE MANAGEMENT:

For resistance management, please note that CLOTHIANIDIN INSECTICIDE contains a Group 4A insecticide. Any insect population may contain individuals naturally resistant to CLOTHIANIDIN INSECTICIDE and other Group 4A insecticides. The resistant individuals may dominate the insect population if this group of insecticides is used repeatedly in the same fields. Other resistance mechanisms that are not linked to site of action but are specific for individual chemicals, such as enhanced metabolism, may also exist. Appropriate resistance-management strategies should be followed. To delay insecticide resistance:

- Where possible, rotate the use of CLOTHIANIDIN INSECTICIDE or other Group 4 or 4A insecticides with different groups that control the same pests in a field.
- Use tank mixtures with insecticides from a different group when such use is permitted.
- Insecticide use should be based on an IPM program that includes scouting, record keeping, and considers cultural, biological and other chemical control practices.
- Monitor treated pest populations for resistance development.
- Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or IPM recommendations for the specific site and pest problems in your area.
- For further information and to report suspected resistance, contact Valent Canada, Inc. at 1-800-682-5368 or at www.valent.ca.

DIRECTIONS FOR USE

GENERAL INFORMATION

CLOTHIANIDIN INSECTICIDE is a broad spectrum insecticide for control of listed insect pests infesting turfgrass (golf courses and sod farms only), potato, grape, and cucurbit vegetables and stone fruit. When applied as directed, CLOTHIANIDIN INSECTICIDE provides residual insect control. The specific length of residual control depends on environmental factors, plant growth, application rate and degree of insect infestation.

As this product is not registered for the control of pests in aquatic systems, DO NOT use to control aquatic pests.

ROTATIONAL CROP RESTRICTIONS

Corn, canola, potato, fruiting vegetables, cucurbit vegetables and sweet potato may be replanted at any time. A one year plantback interval is required for leafy, root and tuber vegetables (except potato and sweet potato). Soybeans may be planted at a 30-day plantback interval.

GENERAL INSTRUCTIONS

- DO NOT use a foliar application of CLOTHIANIDIN INSECTICIDE following a seed piece, in furrow or soil application of a product containing clothianidin or following the use of another insecticide in the neonicotinoid class of chemistry (Group 4 or 4A Insecticide).
- If the maximum seasonal limit of CLOTHIANIDIN INSECTICIDE has been applied and the insect population requires additional treatments, use another registered insecticide that is not in the neonicotinoid class of chemistry (Group 4 or 4A Insecticide).
- DO NOT apply by air except where labeled under crop specific directions for use.

MIXING INSTRUCTIONS

- 1. Prior to mixing, clean the spray tank by following the sprayer clean-up recommendations on the previously sprayed product label.
- 2. Fill the spray tank one-half full of water and start agitation.
- 3. Add the required amount of CLOTHIANIDIN INSECTICIDE to the tank.
- 4. Continue agitation while filling tank to the desired spray volume.
- 5. Maintain agitation during mixing and spraying. DO NOT allow the spray mixture to stand without agitation.
- 6. After use, thoroughly rinse and clean the spray tank. Flush the spray equipment thoroughly following each use and apply the rinsate to a previously treated area.

DO NOT contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.

Field sprayer application: **DO NOT** apply during periods of dead calm. Avoid application of this product when winds are gusty. **DO NOT** apply with spray droplets smaller than the American Society of Agricultural Engineers (ASAE S572.1) fine classification. Boom height must be 60 cm or less above the crop or ground.

Airblast application: **DO NOT** apply during periods of dead calm. Avoid application of this product when winds are gusty. **DO NOT** direct spray above plants to be treated. Turn off outward pointing nozzles at row ends and outer rows. **DO NOT** apply when wind speed is greater than 16 km/h at the application site as measured outside of the treatment area on the upwind side.

Aerial application: **DO NOT** apply during periods of dead calm. Avoid application of this product when winds are gusty. **DO NOT** apply when wind speed is greater than 16 km/h at flying height at the site of application. **DO NOT** apply with spray droplets smaller than the American Society of Agricultural Engineers (ASAE S572.1) fine classification. Reduce drift caused by turbulent wingtip vortices. Nozzle distribution along the spray boom length MUST NOT exceed 65% of the wing- or rotorspan..

When tank-mixes are permitted, read and observe all label directions, including rates and restrictions for each product used in the tank-mix. Follow the more stringent label precautionary measures for mixing, loading and applying stated on both product labels.

Spray buffer zones:

A spray buffer zone is NOT required for:

• uses with hand-held application equipment permitted on this label,

• soil drench or soil incorporation applications.

The spray buffer zones specified in the table below are required between the point of direct application and the closest downwind edge of sensitive freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs and wetlands) and estuarine/marine habitats.

Method of application	Crop		Spray Buffer Zones (metres) Required for the Protection of Freshwater Habitat of Depths:	
			Less than 1 m	Greater than 1 m
Field sprayer	Potato		10	4
	Cucurbit vegetables Grape		10	5
			15	5
Turf			15	10
Airblast	Grape, , stone fruit	Early growth stage	35	25
		Late growth stage	25	15
Aerial		Fixed wing	100	35
		Rotary wing	95	30

When tank mixes are permitted, consult the labels of the tank-mix partners and observe the largest (most restrictive) spray buffer zone of the products involved in the tank mixture and apply using the coarsest spray (ASAE) category indicated on the labels for those tank mix partners.

The spray buffer zones for this product can be modified based on weather conditions and spray equipment configuration by accessing the Spray Buffer Zone Calculator on the Pesticides portion of the Canada.ca website.

DIRECTIONS FOR USE ON TURFGRASS(GOLF COURSES AND SOD FARMS ONLY)		
Pest	Rate (g/100 m ²)	Remarks
European Chafer Japanese Beetle Masked Chafers Asiatic Garden Beetle Oriental Beetle	2.5 (250g/ha)	Make application through peak egg hatch of target species, beginning as early as the first adults appear. The need for an application should consider historical monitoring of the site, previous records or experiences, current season adult trapping or other methods. Ensure an application of CLOTHIANIDIN INSECTICIDE is followed by sufficient irrigation or rainfall to move active ingredient through the thatch.

For use on all areas of golf course turfgrass and sod farms. Apply CLOTHIANIDIN INSECTICIDE in sufficient water (4-8 $L/100~m^2$) to provide optimal distribution in the treated area. DO NOT make more than 1 application per year. Avoid mowing turfgrass until after irrigation or rainfall has occurred so that uniformity of application will not be affected.

DIRECTIONS FOR USE ON POTATO - FOLIAR APPLICATION			
Pest	Rate (g/ha)	Remarks	
Aphids, Colorado Potato Beetle, Leafhoppers	70-105	Apply CLOTHIANIDIN INSECTICIDE by ground in sufficient water volume to ensure thorough and uniform coverage, and to ensure optimal uptake and performance of CLOTHIANIDIN INSECTICIDE. Apply by air in 45-50 L water/ha. Apply as pest populations begin to increase but before damaging populations become established. Do not apply treatment between 50% row closure and petal fall.	

Do not make more than one application per year. Do not make a foliar application of CLOTHIANIDIN INSECTICIDE following a seed piece or in furrow application of a product containing clothianidin or another Group 4 or 4A Insecticide. Do not apply CLOTHIANIDIN INSECTICIDE within 14 days of harvest.

DIRECTIONS FOR USE ON GRAPE			
Pest	Rate (g/ha)	Remarks	
Leafhoppers,	100-140	Make application before insect populations reach damaging thresholds.	
Grape Phylloxera	140-210		
Mealy bug			
Thrips	140		
Brown marmorated stink bug			
(suppression only)	210		

Do not apply CLOTHIANIDIN INSECTICIDE within 1 day of harvest. Apply with ground application equipment in enough water to ensure thorough coverage of the foliage and before pest populations reach damaging levels. Use the higher rate when insect pressure is high.

Do not apply more than 1 application per year and do not exceed 210 g/ha/year.

This product is toxic to bees exposed to direct treatment or residues on blooming crops. Do not apply during bloom or when bees are present.

Avoid applications when bees are foraging in the treatment area in ground cover containing blooming weeds. If bees are foraging in the ground cover and it contains any blooming plants or weeds, always remove flowers before making an application. This may be accomplished by mowing, disking, mulching, flailing, or applying a labelled herbicide.

NOTE TO BUYER/USER: READ THE FOLLOWING BEFORE USING THIS PRODUCT FOR SPECIAL USE APPLICATIONS:

The DIRECTIONS FOR USE for this product for the use described in this section of the label were developed by persons other than Valent Canada Inc. and accepted for registration by Health Canada

under the User Requested Minor Use Label Expansion program. Valent Canada Incorporated itself makes no representation or warranty with respect to performance (efficacy) and/or crop tolerance (phytotoxicity) claims for this product when used in accordance with this label. Accordingly, the buyer and user assumes risk of damage or loss resulting from such use and agrees to hold Valent Canada Inc. harmless from any claims based on efficacy and/or phytotoxicity in connection with the use described on this label.

LAST DAY OF USE: APRIL 11, 2022

DIRECTIONS FOR USE ON STONE FRUIT - APRICOT, SWEET AND TART CHERRY, NECTARINE, PEACH, PLUM, PRUNE AND PLUMCOT

Pest	Rate (g/ha)	Remarks
Brown marmorated stink bug	210-420	Begin applications when insect pest
(suppression only)		populations begin to build but before
		damaging thresholds are reached.

Do not apply CLOTHIANIDIN INSECTICIDE within 7 days of harvest. Apply with ground application equipment in enough water to ensure thorough coverage of the foliage and before pest populations reach damaging levels. Use the higher rate and shortest interval when insect pressure is high. If monitoring indicates the need, a second application may be made 10-14 days after the first application

Do not apply more than 2 applications per year and do not exceed 420 g/ha/year.

This product is toxic to bees exposed to direct treatment or residues on blooming crops. Do not apply during bloom or when bees are present.

DIRECTIONS FOR USE ON SWEET POTATO			
Pest	Rate	Remarks	
Larvae of: European Chafer Japanese Beetle Masked Chafers Asiatic Garden Beetle Oriental Beetle	448 g/ha	Apply CLOTHIANIDIN INSECTICIDE preplant incorporated, prior to transplanting the sweet potato slips. Use sufficient water volume in the pre-mix to ensure optimal uptake and performance of CLOTHIANIDIN INSECTICIDE. Ensure that transplantation is followed by sufficient irrigation or rainfall to ensure optimal uptake and performance of CLOTHIANIDIN INSECTICIDE.	
		The length of control may vary due to climate and soil conditions. If pest pressure begins to increase in the growing season, apply a registered insecticide with an	
		alternate mode of action.	

DO NOT make more than 1 application per year. Do not follow a soil application with a foliar application of a Group 4 or 4A Insecticide.

DIRECTIONS FOR USE ON CUCURBIT VEGETABLES - Acorn Squash, Balsam Apple, Balsam Pear, Bitter Melon, Butternut Squash, Calabaza, Cantaloupe, Casaba, Chayote, Chinese Cucumber, Chinese Okra, Chinese Waxgourd (Chinese Preserving Melon), Citron Melon, Crenshaw Melon, Crookneck Squash, Cucumber, Cucuzza, Edible Gourd, Gherkin, Golden Pershaw Melon, Hechima, Honey Balls, Honeydew Melon, Hubbard Squash, Hyotan, Mango Melon, Momordica spp., Muskmelon, Persian Melon, Pineapple Melon, Pumpkin, Santa Claus Melon, Scallop Squash, Snake Melon, Spaghetti Squash, Straightneck Squash, Summer Squash, True Cantaloupe, Vegetable Marrow, Watermelon, Winter Squash, Zucchini

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Pest	Rate (g/ha)	Remarks
Cucumber Beetles (suppression only)	140	Apply CLOTHIANIDIN Insecticide when target pest(s) threshold populations are observed. Do not wait until population beyond threshold has been established.
Squash Bug Nymphs (suppression only)		Apply CLOTHIANIDIN Insecticide in sufficient water to ensure uniform and thorough coverage of foliage. Thorough coverage is
Tarnished plant bug nymphs (suppression only)		required for optimum efficacy. To achieve optimum coverage, use proper spray pressures, nozzles, nozzle spacing and water volume per hectare.

- Do not apply more than 1 application per year.
- Do not apply more than 140 g/ha/year.
- Do not make application after 4th true leaf on main stem is unfolded.
- This product is toxic to bees exposed to direct treatment or residues on blooming crops. Do not apply during bloom or when bees are present.
- Do not make a foliar application of CLOTHIANIDIN INSECTICIDE following a seed or in furrow application of a product containing clothianidin or another insecticide in the neonicotinoid class of chemistry (Group 4 or 4A Insecticide).