

**CLUTCH™ 50 WDG
INSECTICIDE**

INSECTICIDE

COMMERCIAL

GROUP

4 A

INSECTICIDE

A WATER DISPERSIBLE GRANULAR (WDG) INSECTICIDE FOR USE ON POTATO,
POME FRUIT, GRAPE, AND STONE FRUIT TO CONTROL VARIOUS INSECTS

GUARANTEE: Clothianidin..... 50%

**KEEP OUT OF REACH OF CHILDREN
READ THE LABEL BEFORE USING**

REGISTRATION NO.: 29382
PEST CONTROL PRODUCTS ACT

Net Contents: 50g – 25kg

Valent Canada, Inc.
107 Woodlawn Rd West, Suite 502-B
Guelph, ON, N1H 1B4
www.valent.ca
1-800-682-5368

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. The user assumes the risk to persons or property that arises from any such use of this product.

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 HAZARDS:

Toxic to aquatic organisms, birds, small wild mammals and non-target terrestrial plants. Observe buffer zones specified under DIRECTIONS FOR USE.

Toxic to bees exposed to direct treatment, drift, or residues on flowering crops or weeds.

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.

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

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

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., visit CropLife Canada's website at www.croplife.ca

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 recommended 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/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 coveralls over long-sleeved shirt and long pants, chemical-resistant gloves, goggles or face shield, and sock plus shoes during 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. Apply the recommended rate in a minimum spray volume of 50 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 you 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 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 CLUTCH 50 WDG INSECTICIDE contains a Group 4A insecticide. Any insect population may contain individuals naturally resistant to CLUTCH 50 WDG 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 CLUTCH 50 WDG 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

CLUTCH 50 WDG INSECTICIDE is a broad spectrum insecticide for control of a wide spectrum of insect pests infesting potato, pome fruit, grape and stone fruit. When applied as directed, CLUTCH 50 WDG INSECTICIDE provides residual insect control. The specific length of residual control depends on environmental factors, plant growth, dosage 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 and potato may be replanted at any time. A one year plantback interval is required for leafy, root and tuber vegetables (except potato). Soybeans may be planted at a 30-day plantback interval.

GENERAL INSTRUCTIONS

- DO NOT use a foliar application of CLUTCH 50 WDG INSECTICIDE following a seed piece, in furrow or soil application of a product containing clothianidin or following the application of another insecticide in the neonicotinoid class of chemistry (Group 4 or 4A Insecticide).
- If the maximum seasonal limit of CLUTCH 50 WDG 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 CLUTCH 50 WDG 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.

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) 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) fine classification. To reduce drift caused by turbulent wingtip vortices, the nozzle distribution along the spray boom length **MUST NOT** exceed 65% of the wing- or rotorspan.

Buffer zones:

The buffer zones specified in the table below are required between the point of direct application and the closest downwind edge of sensitive terrestrial habitats (such as grasslands, forested areas, shelter belts, woodlots, hedgerows, riparian areas and shrublands), 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		Buffer Zones (metres) Required for the Protection of:				Terrestrial habitat
			Freshwater Habitat of Depths:		Estuarine/Marine Habitats of Depths:		
			Less than 1 m	Greater than 1 m	Less than 1 m	Greater than 1 m	
Field sprayer*	Potato		2	1	1	1	0
Airblast	Pome fruit, grape, stone fruit	Early growth stage	25	15	5	2	1
		Late growth stage	15	5	3	1	1
Aerial	Potato	Fixed wing	40	10	1	1	0
		Rotary wing	35	10	1	1	0

*For field sprayer application, buffer zones can be reduced with the use of drift reducing spray shields. When using a spray boom fitted with a full shield (shroud, curtain) that extends to the crop canopy, the labelled buffer zone can be reduced by 70%. When using a spray boom where individual nozzles are fitted with cone-shaped shields that are no more than 30 cm above the crop canopy, the labelled buffer zone can be reduced by 30%.

DIRECTIONS FOR USE ON POTATO – IN FURROW APPLICATION		
Pest	Rate	Remarks
Colorado Potato Beetle	2.38-4.0 g/100 m row (266-448 g/ha) based on 90 cm row spacing	<p>Apply CLUTCH 50 WDG INSECTICIDE as a narrow band in furrow at planting. For best results, direct spray on the seed pieces or seed potatoes.</p> <p>Use sufficient water volume to ensure thorough and uniform coverage, and to ensure optimal uptake and performance of CLUTCH 50 WDG INSECTICIDE.</p> <p>The length of control may vary due to climate and soil conditions. The higher rate is recommended when extended length of control is needed.</p> <p>If pest pressure begins to increase in the growing season, apply a registered insecticide with an alternate mode of action.</p>
DO NOT make more than 1 application per season. Do not follow a soil application with a foliar application of a Group 4 or 4A Insecticide.		

DIRECTIONS FOR USE ON POTATO - FOLIAR APPLICATION		
Pest	Rate (g/ha)	Remarks
Aphids, Colorado Potato Beetle, Leafhoppers	70-105	<p>Apply CLUTCH 50 WDG INSECTICIDE by ground in sufficient water volume to ensure thorough and uniform coverage, and to ensure optimal uptake and performance of CLUTCH 50 WDG INSECTICIDE. Apply by air in 45-50 L water/ha.</p> <p>Apply as pest populations begin to increase but before damaging populations become established. Scout fields and reapply if necessary.</p>
Application intervals must be at least 10 days apart and must be rotated with an insecticide from a different chemical family. Use the higher rate and the shortest interval when insect pressure is high. A maximum of 3 foliar applications may be made per crop per season. Do not make a foliar application of CLUTCH 50 WDG INSECTICIDE following a seed piece or in furrow application of a product containing clothianidin or another insecticide in the neonicotinoid class of chemistry (Group 4 or 4A Insecticide). Do not apply CLUTCH 50 WDG INSECTICIDE within 14 days of harvest.		

DIRECTIONS FOR USE ON POME FRUIT - APPLE, PEAR, CRABAPPLE, ORIENTAL PEAR, LOQUAT, MAYHAW, AND QUINCE		
Pest	Rate (g/ha)	Remarks

Oriental Fruit Moth Codling moth (suppression only)	210-420	Apply CLUTCH 50 WDG INSECTICIDE when pressure warrants an application and before damage caused by stings or tunneling occurs.
Aphids, Leafhoppers	140-210	Make first application before insect populations reach damaging thresholds.
Plum Curculio	210	Make first application after petal fall, before insect populations reach damaging thresholds.
Leafminers	140-210	Make the first application shortly after petal fall, before insect populations reach economic thresholds.
Pear Psylla	280-420	Make first application before insect populations reach economic thresholds. If pest pressure continues, follow up with a second application 10-14 days later.
<p>Apply CLUTCH 50 WDG INSECTICIDE post-bloom only. Apply with ground application equipment in enough water to ensure thorough coverage of the foliage and when insect populations reach damaging thresholds. 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 for all pests except Oriental fruit moth and codling moth. Observe an interval of 14 days for Oriental fruit moth and codling moth. If making 2 applications in one season, do not exceed a total of 420 g/ha/season. Do not apply CLUTCH 50 WDG INSECTICIDE within 7 days of harvest.</p> <p>Do not apply more than 2 applications per season and do not exceed 420 g/ha/season.</p> <p>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.</p>		

DIRECTIONS FOR USE ON GRAPE

Pest	Rate (g/ha)	Remarks
Leafhoppers,	100-140	Make first application before insect populations reach damaging thresholds. If pest pressure continues, follow up with a second application 14 days later.
Grape Phylloxera Mealy Bug	140-210	
Thrips	140	

Do not apply CLUTCH 50 WDG 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 2 applications per season and do not exceed 420 g/ha/season.

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.

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, Inc. 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 user assumes risk of damage or loss resulting from such use and agrees to hold Valent Canada Incorporated harmless from any claims based on efficacy and/or phytotoxicity in connection with the use described on this label.

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

Pest	Rate (g/ha)	Remarks
Oriental Fruit Moth (suppression only)	210-420	Begin applications when insect pest populations begin to build but before damaging thresholds are reached.
Plum Curculio	210	
Aphids Leafhoppers	140-210	

Do not apply CLUTCH 50 WDG 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 for all pests except Oriental fruit moth. Observe an interval of 14 days for Oriental fruit moth.

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

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.

Clutch is a trademark and/or registered trademark of Sumitomo Chemical Corporation in the United States and elsewhere.