

FORM: 1664-A  
NAME: Clutch 50 WDG Insecticide<sup>1</sup>  
KIND: booklet with base  
DATE: 10-10-07

PRODUCT SIZE: 24 oz  
CLOSED BOOKLET SIZE: 3" x 3.75"  
OPEN BOOKLET SIZE: 6" x 3.75"  
BASE LABEL SIZE: 3.75" x 3.75"  
UCC-EAN: (01) 0 06 53204 08210 7

**BLACK**  
**PANTONE 348**



**LICENSED**

PERIOD 2014-2016 LIC. NO.

**9556.103**

**GROUP 4A INSECTICIDE**



**LICENSED**

PERIOD 2011-2013 LIC. NO.



**LICENSED**

PERIOD 2008-2010 LIC. NO.

**NET CONTENTS 24 OUNCES**  
**FOR USE ON APPLE, GRAPES AND PEAR**



Ingredients	By Wt.
Active Ingredient	
*Clothianidin .....	50.0%
Inert Ingredients .....	50.0%
Total .....	100.0%
* (E)-1-(2-chloro-1,3-thiazol-5-ylmethyl)-3-methyl-2-nitroguanidine.	

EPA Reg. No. 59639-152  
EPA Est. 39578-TX-01<sup>(E)</sup>, 67545-AZ-01<sup>(C)</sup>  
Superscript is first letter in lot number.

**KEEP OUT OF REACH OF CHILDREN**  
**CAUTION**  
SEE INSIDE BOOKLET FOR ADDITIONAL PRECAUTIONARY STATEMENTS.

**CLUTCH<sup>®</sup>**  
**50 WDG INSECTICIDE<sup>1</sup>**



(01) 0 06 53204 08210 7

Form 1664-A

3.75"

3"

3.75"

<b>FIRST AID</b>	
<b>If in eyes:</b>	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 center or doctor for treatment advice.
<b>If swallowed:</b>	Call poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.
<b>If on skin or clothing:</b>	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
<b>If inhaled:</b>	Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
<b>FOR 24-HOUR EMERGENCY MEDICAL ASSISTANCE: CALL 1-800-892-0099</b>	

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**PRECAUTIONARY STATEMENTS**

**HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

**CAUTION.** Causes moderate eye irritation. Harmful if swallowed, absorbed through skin or inhaled. Avoid contact with eyes, skin or clothing. Avoid breathing spray mist. Wash thoroughly with soap and water after handling.

**PERSONAL PROTECTIVE EQUIPMENT (PPE)**

Some of the materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category A on an EPA chemical-resistance category selection chart.

Applicators and other handlers must wear long-sleeved shirt and long pants, socks, shoes and chemical-resistant gloves made of any waterproof material such as polyethylene or polyvinyl chloride (PVC). Follow the manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables are available, use detergent and hot water. Keep and wash PPE separately from other laundry.

**ENGINEERING CONTROLS**

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

**IMPORTANT:** When reduced PPE is worn because a closed system is being used, handlers must be provided all PPE specified above for "applicators and other handlers" and have such PPE immediately available for use in an emergency, such as a spill or equipment break-down.

**USER SAFETY RECOMMENDATIONS**

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

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**ENVIRONMENTAL HAZARDS**

This product is toxic to aquatic invertebrates. Do not apply when weather conditions favor drift from treated areas. Drift and runoff may be hazardous to aquatic organisms in neighboring areas. Do not apply where runoff is likely to occur. 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 cleaning equipment or disposing of equipment washwaters or rinsate.

This product is toxic to bees exposed to treatment and for more than 5 days following treatment. Do not apply this product to blooming, pollen-shedding, or nectar-producing parts of plants if bees may forage on plants during this time period, unless the application is made in response to a public health emergency declared by appropriate state or federal authorities.

**DRIFT MANAGEMENT**

Do not allow this product to drift onto neighboring crops or non-crop areas or use in a manner or at a time other than in accordance with label directions because animal, plant or crop injury, illegal residues or other undesirable results may occur.

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment-and-weather-related factors determine the potential for spray drift. The applicator is responsible for considering all these factors when making decisions. Where states have more stringent regulations, they should be observed.

**DIRECTIONS FOR USE**

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

Carefully read and understand the Directions for Use and restrictions before applying this product.

Do not apply this product in any 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.

**AGRICULTURAL USES**

**AGRICULTURAL USE REQUIREMENTS**

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries and greenhouses and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification and emergency assistance. It also contains specific instructions 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 entry into treated areas during restricted entry interval (REI) of 12 hours.

PPE required for early entry into 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, socks, shoes, chemical-resistant gloves made of any water proof material.

**GENERAL INFORMATION**

Clutch® 50 WDG Insecticide<sup>1</sup> is a broad spectrum insect control product, for control of a wide spectrum of insects infesting apples, grapes and pears. When applied as directed, *Clutch* 50 WDG provides excellent and long residual insect control.

**RESISTANCE MANAGEMENT**

*Clutch* 50 WDG contains a Group 4A<sup>2</sup> insecticide. Insect biotypes with acquired resistance to Group 4A<sup>2</sup> may eventually dominate the insect population if Group 4A<sup>2</sup> insecticides are used repeatedly in the same field or in successive years as the primary method of control for targeted species. This may result in partial or total loss of control of those species by *Clutch* 50 WDG or other Group 4A<sup>2</sup>.

To delay insecticide resistance in insects that are at risk of developing resistance to insecticides consider:

- Avoiding the consecutive use of other Group 4A<sup>2</sup> insecticides that have a similar target site of action, on the same insect species.
- Using tank-mixture or premixes with insecticides from a different target site of action Group as long as the involved products are all registered for the same use and have different sites of action.
- Basing insecticide use on a comprehensive IPM program.
- Monitoring treated insect populations for loss of field efficacy.
- Contacting your local extension specialist, certified crop advisors, and/or manufacturer for insecticide resistance management and/or IPM recommendations for the specific site and resistant pest problems.
- For further information or to report a suspected resistance, you may contact Valent U.S.A. Corporation at 1-800-862-5368.

<sup>2</sup> Not all members of this class have been shown to be cross-resistant. Different resistance mechanisms that are not linked to target site of action, such as enhanced metabolism, are common for this group of chemicals. Alternation of compounds from different subgroups within this class may be an acceptable part of an integrated pest management program.

#### PLANT TOLERANCE

Neither the manufacturer nor the seller has determined whether or not *Clutch* 50 WDG can be used safely on all species and cultivars of plants. *Clutch* 50 WDG has been tested on many cultivars with no phytotoxicity observed at label rates. Since all plant species and their varieties and cultivars have not been tested for tolerance, it is recommended that a small number of plants be sprayed to make certain that no phytotoxicity occurs, prior to any large scale application to plants. The end user assumes all risks arising from application of *Clutch* 50 WDG in a manner consistent with its labeling.

#### COMPATIBILITY OF MIXTURES

To obtain broad-spectrum pest control, *Clutch* 50 WDG can be tank-mixed with other pesticides. However, all plant species and their varieties and cultivars have not been tested with possible tank mix

combinations, sequential pesticide treatments and adjuvants and surfactants. The user should conduct a spray mix compatibility and phytotoxicity trial under local conditions to ensure compatibility prior to any large-scale use.

#### PREPARATION OF SPRAY SOLUTION

Begin with clean equipment. Add sufficient clean water to the spray tank for one-half of the mix load. Start tank agitation. Add and properly suspend the necessary amount of *Clutch* 50 WDG before adding any other products. Agitate to ensure thorough mixing while adding the remaining required water. Maintain agitation during mixing and application. DO NOT allow the spray mixture to stand without agitation. Apply with properly calibrated spray equipment. If agitation is stopped for any reason, the spray solution must be thoroughly re-mixed prior to any further use.

#### GENERAL RESTRICTIONS AND LIMITATIONS FOR AGRICULTURAL USES

- DO NOT use a foliar application of clothianidin (*Clutch* 50 WDG) following an in-furrow or soil application of clothianidin (Belay™ 16 WSG).
- Regardless of formulation or type of application (soil or foliar) DO NOT apply more than a total of 0.2 lbs active ingredient, clothianidin per acre per season for all crops.
- If the maximum season limit of clothianidin as mentioned above has been applied and pest populations require additional treatments, use another registered pesticide that is not in the neonicotinoid class of chemistry.
- Do not apply by air.

#### APPLES AND PEARS (AGRICULTURAL)

*Clutch* 50 WDG should be applied when threshold populations are observed. Do not wait until large insect populations have been established. Apply *Clutch* 50 WDG in sufficient water to ensure uniform and thorough coverage of foliage. Thorough coverage is required for optimum control. To achieve optimum coverage, use proper spray pressures, nozzles, nozzle spacing, and water volume per acre.

3.75"

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3.75"

APPLES (Post-bloom Applications)	
PEST	APPLICATION RATE
Aphids Leafhoppers	2 to 3 oz of product per acre (1 to 1.5 oz ai/A)
Plum curculio Apple maggot Leafminers	3 oz of product per acre (1.5 oz ai/A)
Codling moth Oriental fruit moth Leafrollers (suppression)	3 to 6 oz of product per acre. (1.5 to 3 oz ai/A) <sup>1</sup>

<sup>1</sup> To control Codling moth and Oriental fruit moth, apply *Clutch* 50 WDG in a program of rotational sprays with other labeled insecticides. When using the 3 oz rate of *Clutch* 50 WDG to control Codling moth and/or Oriental fruit moth, do not apply treatments less than a 14 day interval.

PEARS (Post-bloom Applications)	
PEST	APPLICATION RATE
Aphids	2 to 3 oz of product per acre (1 to 1.5 oz ai/A)
Codling moth	3 to 6 oz of product per acre (1.5 oz. to 3 oz ai/A)
Leafrollers (suppression) Oblique-banded Leafminers Spotted tentiform Western tentiform	3 oz of product per acre (1.5 oz ai/A)
Pear psylla	4 to 6 oz of product per acre (2 to 3 oz ai/A)

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#### SPECIAL INSTRUCTIONS AND RESTRICTIONS FOR APPLE AND PEARS

- The amount of *Clutch* 50 WDG per acre will depend on tree size and pest pressure. Choose lower rates for light infestations and/or small trees and the higher rates for heavy infestations and/or larger trees.
- Apply by ground in 100 to 400 gallons per acre as a full coverage spray. Spray volume will depend on tree size and density of canopy. Applications may also be made as a concentrate spray. Maintain the same amount of product per acre as a dilute application using the appropriate amount of concentrate spray volume. Repeat applications as needed to maintain control but do not apply more often than every 10 days.
- For optimum control of Leafminers and Leafrollers, make the first application as soon as pollination is complete and bees are removed from the orchard. Repeat application as necessary to maintain control. A single application may result in suppression only.
- Do not apply more than 6.4 oz of *Clutch* 50 WDG (0.2 lb active ingredient) per acre per season.
- Do not apply treatments less than 10 days apart.
- Do not apply within 7 days of harvest.
- Do not feed or allow livestock to graze on cover crops from treated orchards.
- Do not apply *Clutch* 50 WDG through any type of irrigation system.

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GRAPE		
APPLICATION METHOD	PEST	RATE
Foliar	Grape leafhopper Skeletonizers	1 - 2 oz of product/A (0.5 - 1 oz ai/A)
	Grape mealybug Sharpshooters	2 - 3 oz of product/A (1 - 1.5 oz ai/A)
	Grape berry moth Japanese beetle	3 oz of product/A (1.5 oz ai/A)
<b>SPECIAL INSTRUCTIONS AND LIMITATIONS:</b>		
<ul style="list-style-type: none"> <li>• Maximum number of applications: 2</li> <li>• Pre-harvest interval: 0 days</li> <li>• Application interval: 14 days</li> <li>• Do not apply <i>Clutch</i> 50 WDG following <i>Belay</i> 16 WSG soil application. Apply as soon as pest populations begin to build.</li> </ul>		

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### STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.  
**PESTICIDE STORAGE:** Store in a dry place away from excessive heat. Do not store near food or feed. Store in original container only. To close package, replace and tighten cap to form an airtight seal.  
**PESTICIDE DISPOSAL:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.  
**CONTAINER DISPOSAL:** Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or (if allowed by State and local authorities) by burning. If burned, stay out of smoke.

### CONDITIONS OF SALE

1. Valent U.S.A. Corporation ("Valent") warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in accordance with the directions under normal conditions of use.  
 2. This warranty does not extend to the use of this product contrary to label instructions, or under abnormal use conditions, or under conditions not reasonably foreseeable to Valent. **VALENT DISCLAIMS ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY. TO THE EXTENT PERMITTED BY APPLICABLE LAW, SELLER SHALL NOT BE LIABLE FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM OR IN CONNECTION WITH THE MANUFACTURE, SALE, DELIVERY, USE, HANDLING OR STORAGE OF THIS PRODUCT. TO THE EXTENT PERMITTED BY APPLICABLE LAW, SELLER'S LIABILITY SHALL BE LIMITED TO THE REFUND OF THE PURCHASE PRICE. VALENT DOES NOT AUTHORIZE ANY AGENT OR REPRESENTATIVE TO MAKE ANY OTHER WARRANTY, GUARANTEE OR REPRESENTATION CONCERNING THIS PRODUCT.**  
 3. Critical and unforeseeable factors beyond the control of Valent pre-

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vent Valent from eliminating all risks in connection with the use of this product. Such risks include, but are not limited to, damage to plants and crops to which the product is applied, lack of complete control, and damage caused by drift to other plants or crops. Such risks occur even though the product is reasonably fit for the use stated on the label and even though label directions are followed. Except as stated in 1 above, to the extent permitted by applicable law, Buyer and User acknowledge and assume all risks and liabilities resulting from handling, storage, and use of this product.

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*Clutch* is a registered trademark of Sumitomo Chemical Takeda Agro Company

*Belayis* is a trademark of Sumitomo Chemical Takeda Agro Company

Distributed by

**Valent U.S.A. Corporation**

P.O. Box 8025

Walnut Creek CA 94596-8025

www.valent.com

Made in U.S.A.

Form 1664-A

EPA Reg. No. 59639-152

EPA Est. 39578-TX-01<sup>(E)</sup>, 67545-AZ-01<sup>(G)</sup>

Superscript is first letter in lot number.

3.75"

FORM: 1664-A  
NAME: Clutch 50 WDG Insecticide<sup>1</sup>  
KIND: booklet with base

PRODUCT SIZE: 24 oz  
CLOSED BOOKLET SIZE: 3" x 3.75"  
OPEN BOOKLET SIZE: 6" x 3.75"  
BASE LABEL SIZE: 3.75" x 3.75"  
UCC-EAN: (01) 0 06 53204 08210 7

**BLACK**  
**PANTONE 348**

DATE: 10-10-07

**GROUP 4A INSECTICIDE**

**NET CONTENTS 24 OUNCES**



**FOR USE ON APPLE, GRAPES AND PEAR**

Ingredients	By Wt.
Active Ingredient	
*Clothianidin.....	50.0%
Inert Ingredients.....	50.0%
Total.....	100.0%
* (E)-1-(2-chloro-1,3-thiazol-5-ylmethyl)-3-methyl-2-nitroguanidine.	

EPA Reg. No. 59639-152  
EPA Est. 39578-TX-01<sup>©</sup>, 67545-AZ-01<sup>©</sup>  
Superscript is first letter in lot number.

**KEEP OUT OF REACH OF CHILDREN**

**CAUTION**

SEE INSIDE BOOKLET FOR ADDITIONAL  
PRECAUTIONARY STATEMENTS.

**CLUTCH<sup>®</sup>**  
**50 WDG INSECTICIDE<sup>1</sup>**

Form 1664-A

3.75"

3.75"

# Supplemental Label



**CLUTCH**<sup>®</sup>  
50 WDG INSECTICIDE<sup>1</sup>



**LICENSED**

PERIOD 2011-2013 LIC. NO.

EPA Reg. No. 59639-152  
(Except California and New York)

PERIOD 2014-2016 LIC. NO.

**9556.103**



**LICENSED**

PERIOD 2008-2010 LIC. NO.

**CLUTCH<sup>®</sup> 50 WDG INSECTICIDE<sup>1</sup> FOR USE ON GRAPE  
ADDITIONAL PESTS AND CHEMIGATION**

This label expires on January 27, 2011. Do not distribute or use this supplemental label after this date.

## DIRECTIONS FOR USE

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

**READ ENTIRE LABEL. USE STRICTLY IN ACCORDANCE WITH PRECAUTIONARY STATEMENTS, DIRECTIONS AND RESTRICTIONS AND WITH APPLICABLE STATE AND FEDERAL REGULATIONS.**

**THIS LABELING MUST BE IN THE POSSESSION OF THE USER AT THE TIME OF APPLICATION. READ THE LABEL AFFIXED TO THE CONTAINER FOR *CLUTCH* 50 WDG INSECTICIDE<sup>1</sup> BEFORE APPLYING. USE OF *CLUTCH* 50 WDG INSECTICIDE<sup>1</sup> ACCORDING TO THIS LABELING IS SUBJECT TO THE USE PRECAUTIONS AND LIMITATIONS IMPOSED BY THE LABEL AFFIXED TO THE CONTAINER FOR *CLUTCH* 50 WDG INSECTICIDE<sup>1</sup>.**

## FOLIAR APPLICATION RATE FOR USE ON GRAPE

Pests	<i>Clutch</i> 50 WDG Insecticide <sup>1</sup> Application Rates	Special Instructions
Leafhoppers Grape Leaf Skelotimizer	1 to 2 oz/A (0.5 to 1.0 oz ai/A)	Apply <i>Clutch</i> 50 WDG Insecticide <sup>1</sup> when threshold populations are observed. Do not wait until large insect populations have been established.
Grape Mealybug Multicolored Asian Lady Beetle Sharpshooters Vine Mealybug	2 to 3 oz/A (1.0 to 1.5 oz ai/A)	Apply <i>Clutch</i> 50 WDG Insecticide <sup>1</sup> in sufficient water to ensure uniform and thorough coverage of foliage. Thorough coverage is required for optimum control
Grape Berry Moth Japanese Beetle	3.0 oz/A (1.5 oz ai/A)	
<ul style="list-style-type: none"> <li>Do not apply more than two (2) applications of <i>Clutch</i> 50 WDG Insecticide<sup>1</sup>.</li> <li>Do not apply more than 6.4 oz <i>Clutch</i> 50 WDG Insecticide<sup>1</sup> (0.2 lb ai) per acre per season.</li> <li>Do not apply treatments more often than every fourteen (14) days.</li> <li>May be applied up to harvest (0 days PHI).</li> <li>Do not apply <i>Clutch</i> 50 WDG Insecticide<sup>1</sup> Insecticide following a clothianidin soil application.</li> </ul>		

## SOIL APPLICATION RATE FOR USE ON GRAPE

Pests	<i>Clutch 50 WDG Insecticide</i> <sup>1</sup> Application Rate	Special Instructions
Grape Leafhopper Grape Mealybug Grape Phylloxera spp. (suppression only) Japanese Beetle Vine Mealybug	6.0 oz/A (3.1 oz ai/A)	Apply <i>Clutch 50 WDG Insecticide</i> <sup>1</sup> when threshold populations are observed. Do not wait until large insect populations have been established. Apply specified rate in sufficient carrier volume to insure uniform application and incorporate into the soil using drip or trickle irrigation water.  For Mealybug control, apply between bud break and pea-berry size.
<ul style="list-style-type: none"> <li>• Do not apply more than one (1) application of <i>Clutch 50 WDG Insecticide</i><sup>1</sup>.</li> <li>• Do not apply more than 6.4 oz of <i>Clutch 50 WDG Insecticide</i><sup>1</sup> (0.2 lb ai) per acre per season.</li> <li>• Do not apply treatments more often than every fourteen (14) days.</li> <li>• Do not apply within thirty (30) days of harvest.</li> </ul>		

### MIXING INSTRUCTIONS

1. Begin with clean equipment.
2. Add sufficient clean water to the spray tank for 1/2 of the mix load.
3. Start tank agitation.
4. Add and properly suspend the necessary amount of *Clutch 50 WDG Insecticide*<sup>1</sup> before adding any other products. Agitate to ensure thorough mixing while adding the remaining required water. A high quality wetting agent or other spray adjuvant, approved for use on your crop, may be added to spray solutions according to the manufacturer's use instructions. *Clutch 50 WDG Insecticide*<sup>1</sup> should be properly suspended and diluted prior to the addition of any adjuvant. Consult adjuvant label or manufacturer for crop tolerance and safety information when used with this product.
5. Maintain agitation during mixing and application.
6. Apply with properly calibrated spray equipment.

### APPLICATION PROCEDURES

#### Foliar Application

Spray nozzles should be selected which will provide accurate and uniform spray deposition. Use spray nozzles which provide medium sized droplets and reduce drift. To help insure accuracy, calibrate sprayer before each use. For information on spray equipment and calibration, consult nozzle manufacturers and/or State and County Extension Service.

Apply *Clutch 50 WDG Insecticide*<sup>1</sup> using sufficient water volume to provide thorough and uniform coverage. In situations where a dense canopy exists and/or pest pressure is high, use greater water volumes. The use of a spray adjuvant may improve spray coverage. Do not apply under conditions where excessive spray drift may occur.

#### Application Through Irrigation Systems (Chemigation)

*Clutch 50 WDG Insecticide*<sup>1</sup> alone or in combination with other products which are registered for application through sprinkler irrigation may be applied through irrigation systems. Apply this product only through micro-irrigation (individual spaghetti tube), drip irrigation, overhead irrigation or motorized calibrated irrigation equipment. Do not apply through any other type of irrigation system. Lack of effectiveness can result from non-uniform distribution of treated water. If you have questions about calibration, you should contact your State Extension Service specialist, equipment manufacturer or other experts. 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.

## Using Water from Public Water Systems

- **Do not apply *Clutch 50 WDG Insecticide*<sup>1</sup> through any irrigation system physically connected to a public water system.**

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 per year. *Clutch 50 WDG Insecticide*<sup>1</sup> may be applied through irrigation systems which may be supplied by a public water system only if the water from the public water system is 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. Before beginning chemigation, always make sure that the air gap exists and that there is no blockage of the overflow of the reservoir tank.

Any irrigation system using water supplied from a public water system must also meet the following requirements:

### Operating Instructions for All Recommended Types of Irrigation Systems

1. The system must be calibrated to uniformly apply the rates specified. If you have questions about calibration, you should contact your State Extension Service specialist, equipment manufacturer or other experts.
2. 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.
3. The pesticide injection pipeline must contain a functional, automatic, quick closing check valve to prevent the flow of fluid back toward the injection pump.
4. 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.
5. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
6. 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.
7. 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.
8. Do not apply when wind speed favors drift beyond the area intended.

### Calibration and Application Instructions

*Clutch 50 WDG Insecticide*<sup>1</sup> should be applied under the schedule specified in the specific crop use recommendations, not according to the irrigation schedule, unless the events coincide. In general, set the equipment to apply the minimum amount of water per acre. Run the system at 86 to 90% of the manufacturer's maximum rated travel speed.

The following calibration and application techniques are provided for user reference, but do not constitute a warranty of fitness for application through sprinkler irrigation equipment. Check with state and local regulatory agencies for potential use restrictions before applying any agricultural chemical through sprinkler irrigation equipment.

### Center Pivot Irrigation Equipment

1. Use only drive systems that provide uniform water distribution.
2. Do not use end guns when chemigating *Clutch 50 WDG Insecticide*<sup>1</sup> through center pivot systems because of non-uniform application.
3. Plug the first nozzle closest to the well head to protect the water source.
4. Determine the size of the area to be treated.
5. Determine the time required to apply 0.1 to 0.25 inches of water over the area to be treated when the system and injection equipment are operated at normal pressures as recommended by the equipment manufacturer. Run the system at 80 to 95% of the manufacturer's rated maximum travel speed.

6. Using water, determine the injection pump output when operated at normal line pressure.
7. Determine the amount of *Clutch* 50 WDG Insecticide<sup>1</sup>, and any tank mix partners, required to treat the area covered by the irrigation system.
8. Add the required amount of *Clutch* 50 WDG Insecticide<sup>1</sup>, and any tank mix partners, and sufficient water to meet the injection time requirements to the solution tanks. (See "Mixing Instructions" section of this label.)
9. Make sure the system is fully charged with water before starting injection of the *Clutch* 50 WDG Insecticide<sup>1</sup> solution. Time the injection to last at least as long as it takes to bring the system to full pressure.
10. Maintain constant agitation in the solution tank during the injection period.
11. Inject the specified amount of *Clutch* 50 WDG Insecticide<sup>1</sup> per acre continuously for one complete revolution of the system.
12. Stop the injection equipment after treatment is complete. Continue to operate the system until the *Clutch* 50 WDG Insecticide<sup>1</sup> solution has cleared all of the sprinkler heads.
13. Allow time for all lines to flush the pesticide through all nozzles before turning off irrigation water.

#### **Solid Set, Hand Move and Moving Wheel Irrigation Equipment**

1. Determine the acreage covered by the sprinklers.
2. Fill injector solution tank with plain water and calibrate the flow rate of the system to deliver the contents of the tank over a 20 to 40 minute time interval.
3. Determine the amount of *Clutch* 50 WDG Insecticide<sup>1</sup> required to treat the area covered by the irrigation system.
4. Add the required amount of *Clutch* 50 WDG Insecticide<sup>1</sup>, and any other tank mix partners, into the same quantity of water used to calibrate the injection period. (See "Mixing Instructions" section of this label.)
5. Operate the system at the same pressure and time interval established during the calibration.
6. Inject specified amount of *Clutch* 50 WDG Insecticide<sup>1</sup> per acre for either a 20 to 40 minute period at the end of a regular irrigation set, or as a 20 to 40 minute injection as a separate application not associated with a regular irrigation to maximize retention of the insecticide by the foliage.
7. Stop injection equipment after treatment is completed. Continue to operate the system until the *Clutch* 50 WDG Insecticide<sup>1</sup> solution has cleared the last sprinkler head. To ensure lines are flushed and free from remaining pesticides, a dye indicator may be injected into the lines to mark the end of the application period.

**PLEASE CONTACT VALENT U.S.A. CORPORATION AT 800-6-VALENT (682-5368) TO DETERMINE IF THIS USE IS REGISTERED IN YOUR STATE.**

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Manufactured for  
Valent U.S.A. Corporation  
P. O. Box 8025  
Walnut Creek, CA 94596-8025

Made in U.S.A.

Form 2009-CLU1-0010

# Supplemental Label



Department of Agriculture  
STATE OF HAWAII

**LICENSED**

PERIOD 2014-2016 LIC. NO.

9556.103

## CLUTCH<sup>®</sup> 50 WDG INSECTICIDE<sup>1</sup>

EPA Reg. No. 59639-152  
(Except California)



Department of Agriculture  
STATE OF HAWAII

**LICENSED**

PERIOD 2011-2013 LIC. NO.



Department of Agriculture  
STATE OF HAWAII

**LICENSED**

PERIOD 2008-2010 LIC. NO.

### SOIL APPLICATION RATE FOR USE ON GRAPE

#### DIRECTIONS FOR USE

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

READ ENTIRE LABEL. USE STRICTLY IN ACCORDANCE WITH PRECAUTIONARY STATEMENTS AND DIRECTIONS, AND WITH APPLICABLE STATE AND FEDERAL REGULATIONS.

#### RECOMMENDED SOIL APPLICATION RATE FOR USE ON GRAPE

Pests	Clutch <sup>®</sup> 50 WDG Insecticide <sup>1</sup> Application Rate	Special Instructions
Grape Leafhopper Grape Mealybug Grape Phylloxera spp. (suppression only) Vine Mealybug (suppression only)	6.0 oz/A (3.1 oz ai/A)	Clutch 50 WDG should be applied when threshold populations are observed. Do not wait until large insect populations have been established. Apply specified rate in sufficient carrier volume to insure uniform application and incorporate into the soil using drip or trickle irrigation water.  For Mealybug control, apply between bud break and pea-berry size.
<ul style="list-style-type: none"> <li>Do not apply more than one (1) application of Clutch 50 WDG.</li> <li>Do not apply more than 6.4 oz of Clutch 50 WDG (0.2 lb ai) per acre per season.</li> <li>Do not apply treatments more often than every fourteen (14) days.</li> <li>Do not apply within thirty (30) days of harvest.</li> </ul>		

**THIS LABELING MUST BE IN THE POSSESSION OF THE USER AT THE TIME OF APPLICATION. PLEASE REFER TO CONTAINER LABEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS. FOLLOW ALL APPLICATION DIRECTIONS, RESTRICTIONS AND PRECAUTIONS ON THE EPA REGISTERED LABEL.**

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Made in U.S.A.

Form 2008-CLU1-0012

# Supplemental Label



LICENSED

PERIOD 2014-2016 LIC. NO.

9556.103

# CLUTCH<sup>®</sup>

50 WDG INSECTICIDE<sup>1</sup>

EPA Reg. No. 59639-152  
(Except California)



LICENSED

PERIOD 2011-2013 LIC. NO.



LICENSED

PERIOD 2008-2010 LIC. NO.

## CHEMIGATION LANGUAGE AND ADDITIONAL USE DIRECTION AND PESTS ON GRAPE

### DIRECTIONS FOR USE

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

**READ ENTIRE LABEL. USE STRICTLY IN ACCORDANCE WITH PRECAUTIONARY STATEMENTS AND DIRECTIONS, AND WITH APPLICABLE STATE AND FEDERAL REGULATIONS.**

### MIXING INSTRUCTIONS

1. Begin with clean equipment.
2. Add sufficient clean water to the spray tank for 1/2 of the mix load.
3. Start tank agitation.
4. Add and properly suspend the necessary amount of Clutch<sup>®</sup> 50 WDG before adding any other products. Agitate to ensure thorough mixing while adding the remaining required water. A high quality wetting agent or other spray adjuvant, approved for use on your crop, may be added to spray solutions according to the manufacturer's use instructions. *Clutch* 50 WDG should be properly suspended and diluted prior to the addition of any adjuvant. Consult adjuvant label or manufacturer for crop tolerance and safety information when used with this product.
5. Maintain agitation during mixing and application.
6. Apply with properly calibrated spray equipment.

### APPLICATION PROCEDURES

#### Foliar Application

Spray nozzles should be selected which will provide accurate and uniform spray deposition. Use spray nozzles which provide medium sized droplets and reduce drift. To help insure accuracy, calibrate sprayer before each use. For information on spray equipment and calibration, consult nozzle manufacturers and/or State and County Extension Service.

Apply *Clutch* 50 WDG using sufficient water volume to provide thorough and uniform coverage. In situations where a dense canopy exists and/or pest pressure is high, use greater water volumes. The use of a spray adjuvant may improve spray coverage. Avoid making applications under conditions where uniform coverage cannot be obtained or where excessive spray drift may occur.

## **Application Through Irrigation Systems (Chemigation)**

*Clutch 50 WDG* alone or in combination with other products which are registered for application through sprinkler irrigation may be applied through irrigation systems. Apply this product only through micro-irrigation (individual spaghetti tube), drip irrigation, overhead irrigation or motorized calibrated irrigation equipment. Do not apply through any other type of irrigation system. Lack of effectiveness can result from non-uniform distribution of treated water. If you have questions about calibration, you should contact your State Extension Service specialist, equipment manufacturer or other experts. 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.

## **Using Water from Public Water Systems**

- **Do not apply *Clutch 50 WDG* through any irrigation system physically connected to a public water system.**

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 per year. *Clutch 50 WDG* may be applied through irrigation systems which may be supplied by a public water system only if the water from the public water system is 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. Before beginning chemigation, always make sure that the air gap exists and that there is no blockage of the overflow of the reservoir tank.

Any irrigation system using water supplied from a public water system must also meet the following requirements:

## **Operating Instructions for All Recommended Types of Irrigation Systems**

1. The system must be calibrated to uniformly apply the rates specified. If you have questions about calibration, you should contact your State Extension Service specialist, equipment manufacturer or other experts.
2. 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.
3. The pesticide injection pipeline must contain a functional, automatic, quick closing check valve to prevent the flow of fluid back toward the injection pump.
4. 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.
5. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
6. 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.
7. 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.

8. Do not apply when wind speed favors drift beyond the area intended.

### **Calibration and Application Instructions**

*Clutch 50 WDG* should be applied under the schedule specified in the specific crop use recommendations, not according to the irrigation schedule, unless the events coincide. In general, set the equipment to apply the minimum amount of water per acre. Run the system at 86 to 90% of the manufacturer's maximum rated travel speed.

The following calibration and application techniques are provided for user reference, but do not constitute a warranty of fitness for application through sprinkler irrigation equipment. Users should check with state and local regulatory agencies for potential use restrictions before applying any agricultural chemical through sprinkler irrigation equipment.

### **Center Pivot Irrigation Equipment**

1. Use only drive systems that provide uniform water distribution.
2. Do not use end guns when chemigating *Clutch 50 WDG* through center pivot systems because of non-uniform application.
3. Plug the first nozzle closest to the well head to protect the water source.
4. Determine the size of the area to be treated.
5. Determine the time required to apply 0.1 to 0.25 inches of water over the area to be treated when the system and injection equipment are operated at normal pressures as recommended by the equipment manufacturer. Run the system at 80 to 95% of the manufacturer's rated maximum travel speed.
6. Using water, determine the injection pump output when operated at normal line pressure.
7. Determine the amount of *Clutch 50 WDG*, and any tank mix partners, required to treat the area covered by the irrigation system.
8. Add the required amount of *Clutch 50 WDG*, and any tank mix partners, and sufficient water to meet the injection time requirements to the solution tanks. (See "Mixing Instructions" section of this label.)
9. Make sure the system is fully charged with water before starting injection of the *Clutch 50 WDG* solution. Time the injection to last at least as long as it takes to bring the system to full pressure.
10. Maintain constant agitation in the solution tank during the injection period.
11. Inject the specified amount of *Clutch 50 WDG* per acre continuously for one complete revolution of the system.
12. Stop the injection equipment after treatment is complete. Continue to operate the system until the *Clutch 50 WDG* solution has cleared all of the sprinkler heads.
13. Allow time for all lines to flush the pesticide through all nozzles before turning off irrigation water.

### **Solid Set, Hand Move and Moving Wheel Irrigation Equipment**

1. Determine the acreage covered by the sprinklers.
2. Fill injector solution tank with plain water and calibrate the flow rate of the system to deliver the contents of the tank over a 20 to 40 minute time interval.
3. Determine the amount of *Clutch 50 WDG* required to treat the area covered by the irrigation system.
4. Add the required amount of *Clutch 50 WDG*, and any other tank mix partners, into the same quantity of water used to calibrate the injection period. (See "Mixing Instructions" section of this label.)

5. Operate the system at the same pressure and time interval established during the calibration.
6. Inject specified amount of *Clutch* 50 WDG per acre for either a 20 to 40 minute period at the end of a regular irrigation set, or as a 20 to 40 minute injection as a separate application not associated with a regular irrigation to maximize retention of the insecticide by the foliage.
7. Stop injection equipment after treatment is completed. Continue to operate the system until the *Clutch* 50 WDG solution has cleared the last sprinkler head. To ensure lines are flushed and free from remaining pesticides, a dye indicator may be injected into the lines to mark the end of the application period.

#### RECOMMENDED FOLIAR APPLICATION RATE FOR USE ON GRAPE

Pests	<i>Clutch</i> 50 WDG Application Rates	Special Instructions
Leafhoppers Grape Leaf Skelotimizer	1 to 2 oz/A (0.5 to 1.0 oz ai/A)	<p><i>Clutch</i> 50 WDG should be applied when threshold populations are observed. Do not wait until large insect populations have been established.</p> <p>Apply <i>Clutch</i> 50 WDG in sufficient water to ensure uniform and thorough coverage of foliage. Thorough coverage is required for optimum control</p>
Grape Mealybug Multicolored Asian Lady Beetle Sharpshooters Vine Mealybug (suppression only)	2 to 3 oz/A (1.0 to 1.5 oz ai/A)	
Grape Berry Moth Japanese Beetle	3.0 oz/A (1.5 oz ai/A)	
<ul style="list-style-type: none"> <li>• Do not apply more than two (2) applications of <i>Clutch</i> 50 WDG.</li> <li>• Do not apply more than 6.4 oz <i>Clutch</i> 50 WDG (0.2 lb ai) per acre per season.</li> <li>• Do not apply treatments more often than every fourteen (14) days.</li> <li>• May be applied up to harvest (0 days PHI).</li> <li>• Do not apply <i>Clutch</i> 50 WDG following a clothianidin soil application.</li> </ul>		

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