


73049-471

05-12-2010

1/2

 <p>U.S. ENVIRONMENTAL PROTECTION AGENCY Office of Pesticide Programs Biopesticides and Pollution Prevention Division 7511P) 1200 Pennsylvania Avenue NW Washington, DC 20460</p>	<p><b>EPA Reg. Number:</b> 73049-471</p>	<p><b>Date of Issuance:</b> MAY 12 2010</p>
	<p><b>Term of Issuance:</b> Unconditional</p>	
	<p><b>Name of Pesticide Product:</b> Foray® WG</p>	
<p><b>NOTICE OF PESTICIDE:</b></p> <p><u>XX</u> Registration  <u>      </u> Reregistration          (under FIFRA, as amended)</p>		

**Name and Address of Registrant (include ZIP Code):**

Valent BioSciences Corporation  
870 Technology Way  
Libertyville, IL 60048

**Note:** Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Biopesticides and Pollution Prevention Division prior to use of the label in commerce. In any correspondence on this product.

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

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. To protect health and the environment, the Administrator, on his or her 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 registration does not eliminate the need for continual reassessment of the pesticide. If the EPA determines at any time, that additional data are required to maintain in effect an existing registration, the Agency will require submission of such data under section 3(c)(2)(B) of FIFRA.

This product is registered in accordance with FIFRA section 3(c)(5) and is subject to the following terms and condition:

1. Submit the one-year storage stability upon completion or within 18 months of the date of registration.
2. Submit two (2) copies of the final printed labeling before you release the product for shipment. Refer to the A-79 enclosure for further description of final printed labeling.

A stamped copy of the label is enclosed for your records.

**Signature of Approving Official:**

**DATE:**



MAY 12 2010

W. Michael McDavit, Acting Director  
Biopesticides and Pollution Prevention Division

2  
(1)



**Foray® WG**  
**Biological Insecticide**  
(Water Dispersible Granule)

**ACTIVE INGREDIENT**

<i>Bacillus thuringiensis</i> , subsp. <i>kurstaki</i> , strain	
ABTS-351, fermentation solids, spores, and insecticidal toxins* .....	76.2%
Other Ingredients .....	23.8%
<b>TOTAL</b> .....	<b>100%</b>

\*Potency: 64,000 Cabbage Looper Units (CLU)/mg of product (equivalent to 29 billion CLU per pound).

The percent active ingredient does not indicate product performance and potency measurements are not federally standardized.

**KEEP OUT OF REACH OF CHILDREN**  
**CAUTION**

Valent BioSciences Corporation  
870 Technology Way  
Libertyville, IL 60048

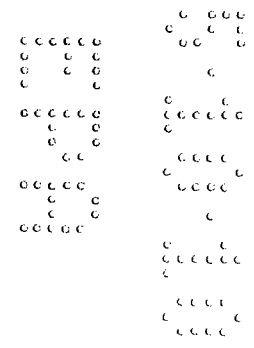
EPA Reg. No. 73049-xxx  
EPA Est. No. 33762-IA-001

Lot No.: \_\_\_\_\_

Net Contents:

**ACCEPTED**  
May 12, 2010

Under the Federal Insecticide, Fungicide,  
and Rodenticide Act, as amended, for  
the pesticide registered under  
EPA Reg. No. 73049-471



<b>FIRST AID</b>	
<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 eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>HOT LINE NUMBER</b>	
<p>Have the product container with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-877-315-9819 for emergency medical treatment and/or transport emergency information. For all other information, call 1-800-323-9597.</p>	

**PRECAUTIONARY STATEMENTS**  
**HAZARDS TO HUMANS AND DOMESTIC ANIMALS**  
**CAUTION**

Causes mild eye irritation. Avoid contact with eyes. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

**Personal Protective Equipment (PPE)**

Applicators and other handlers must wear:

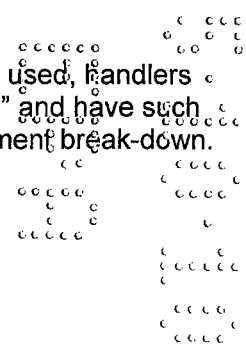
- Long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks

Mixers/loaders and applicators must wear a dust/mist filtering respirator meeting NIOSH standards of at least N-95, R-95, or P-95. Repeated exposure to high concentrations of microbial proteins can cause allergic sensitization. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

**Engineering Controls:**

When handlers use closed systems, enclosed cabs, or aircraft 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 remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- User should remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

**ENVIRONMENTAL HAZARDS**

For terrestrial agricultural uses, 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 wash waters.

This product must not be applied aerially within ¼ mile of any habitats of endangered or threatened lepidoptera species. No manual application can be made within 300 feet of any threatened or endangered lepidoptera species.

**DIRECTION FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

**AGRICULTURAL USE REQUIREMENTS**

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

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.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 4 hours.

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
- Waterproof gloves
- Shoes plus socks.

### STORAGE AND DISPOSAL

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

#### **Pesticide Storage:**

Keep containers tightly closed when not in use. Do not store at temperatures greater than 100° F. Roll or shake the container before dispensing.

#### **Pesticide Disposal:**

Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. Do not contaminate water when disposing of equipment washwaters.

#### **Container Handling:**

*Small Rigid Containers:* Nonrefillable container. Do not reuse or refill this container.

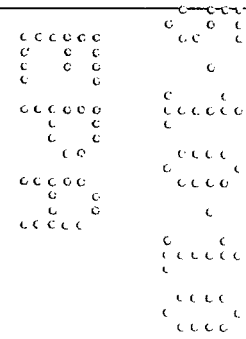
Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Offer for recycling, if available or puncture and dispose of the container in a sanitary landfill, or by other procedures approved by state and local authorities.

*Large Rigid Containers:* Nonrefillable container. Do not reuse or refill this container. 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. Fill the container ¼ full with water. Replace and tighten closure. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Offer for recycling, if available or puncture and dispose of the container in a sanitary landfill, or by other procedures approved by state and local authorities.

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank. 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. Offer for recycling, if available or puncture and dispose of the container in a sanitary landfill, or by other procedures approved by state and local authorities.

*Non-rigid Containers:* Nonrefillable container. Do not reuse or refill this container: Offer for recycling if available, or dispose of empty bag in a sanitary landfill or by incineration. Do not burn, unless allowed by State and local ordinances.



## DIRECTION FOR USE

Do not apply this product through any type of irrigation system.

## APPLICATION

Foray WG can be applied by aerial or ground equipment mixed with quantities of water sufficient to provide thorough coverage to the deciduous or coniferous trees to be protected. The amount of water needed per acre will depend upon crop size, density, forest canopy, spray equipment, and local experience. It is recommended that rotary or other atomizers be used to provide droplet Volume Median Diameters (VMD) of 60-100 microns for needle conifers and 50-150 microns for deciduous hardwoods.

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many spray equipment and weather related factors determines the potential for spray drift. The applicator and the treatment coordinator are responsible for considering all of these factors when making decisions.

## MIXING

Foray WG is designed to be mixed with water as a suspension in a mix tank having the capability of mechanical or hydraulic agitation (in-tank or over-the-top circulation).

Spray mixes should be made in a large enough tank capable of producing moderate to high agitation of the mix to assure complete suspension of Foray WG in the water.

Begin by filling the tank with 50 – 75% of the desired spray volume of water. Start mechanical or hydraulic agitation of the water to provide moderate to high circulation. Slowly add the required amount of Foray WG and then add the remaining volume of water. If foaming of the mix occurs during the mixing operation, reduce circulation and/or add a compatible anti-foaming agent. Continue the agitation until all the Foray WG is suspended. Agitate as necessary to maintain suspension. After mixing with water, the product should be used within 72 hours.

Foray WG may be mixed with water at a central location where a water source and appropriate mixing equipment is available and transported to the use location.

The use of a spreader-sticker is not required for Foray WG. If interested in using commonly used spray-tank adjuvants, it is advisable to test the physical compatibility in a small container using proportionate quantities; consult with the adjuvant manufacturers for further information.

## SPRAY VOLUMES

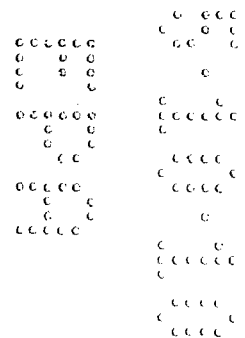
**Ground/Aerial Application:** Use the recommended amount of Foray WG in ground/aerial equipment with quantities of water sufficient for adequate mixing and spray deposition. The amount of water needed per acre will depend upon crop/tree size, meteorological conditions, spray equipment used, and local experience. Consult with manufacturer for further information.

### GENERAL AGRICULTURAL USE INSTRUCTIONS

Foray WG is a biological insecticide for the control of lepidopterous larvae. It contains the spores and endotoxin crystals of *Bacillus thuringiensis* subsp. *kurstaki*. Foray WG must be ingested by the larvae to be effective. Susceptible larvae that ingest Foray WG cease feeding within a few hours and die within 2-5 days. For maximum effectiveness the following is recommended:

- Monitor treatment areas to detect early infestations.
- Apply Foray WG when eggs have completed hatching and larvae are small (early instars) and before significant defoliation occurs. Larvae must be actively feeding to be affected.

In some situations, (high larval populations, extended egg hatch etc.) repeat applications may be required, with a second application scheduled 5-7 days after the first one. to maintain control and protect new plant growth. Factors affecting spray interval include rate of plant growth, weather conditions, and reinfestations. Monitor pest populations and foliage development to determine proper timing of applications. Under conditions of heavy pest pressures or when large larvae are present, use higher rates, shorten the application interval, and/or improve spray coverage to enhance control. Thorough coverage is essential for optimum performance.

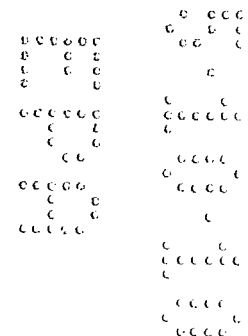


**Table 1**

Crop	Pests	Rate <sup>1</sup> (oz WG/acre)
Forests, Shade Trees, Ornamentals, Sugar Maple Trees, Ornamental Fruit, Nut & Citrus Trees <sup>2</sup>	Gypsy Moth Elm Spanworm	4.4 – 22.0
	Spruce Budworm Browntail Moth Douglas Fir Tussock Moth Coneworm Buck Moth	4.4 – 16.5
	Tussock Moth Pine Butterfly Bagworm Leafroller Tortrix Mimosa Webworm Tent Caterpillar Blackheaded Budworm Saddled Prominent Saddleback Caterpillar Eastern & Western Hemlock Looper Orangestriped Oakworm Satin Moth	3.3 – 8.8
	Redhumped Caterpillar Spring & Fall Cankerworm California Oakworm Fall Webworm	2.2 – 4.4

**Special Instructions**

- <sup>1</sup> Use the higher recommended rates on advanced larval stages or under high density larval populations
- <sup>2</sup> In treating gypsy moth infested trees and shrubs in urban, rural, and semi-rural areas, exposure of non-target vegetation including, but not limited to, native and ornamental species and food or feed crops is permitted.





### NON-AGRICULTURAL USE REQUIREMENTS

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

#### NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries or greenhouses.

Keep unprotected persons out of the treated areas until sprays have dried.

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 and the grower/treatments coordinator are responsible for considering all of these factors when making decisions.

Not for use on plants being grown for sale or other commercial use, or for commercial seed production, or for research purposes. For use on plants intended for aesthetic purposes or climatic modification and being grown in interior plantscapes, ornamental gardens or parks, or on golf courses or lawns and grounds.

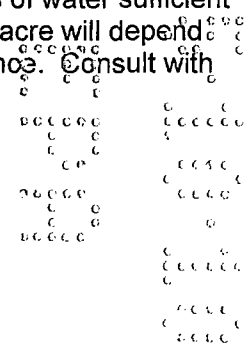
Not for use on trees being grown for sale or other commercial use, or for commercial seed production, or for the production of timber or wood products, or for research purposes except for wide-area public pest control programs sponsored by government entities, such as mosquito abatement, gypsy moth control, and Mediterranean fruit fly eradication.

Do not apply this product through any type of irrigation system.

Foray WG contains the spores and endotoxin crystals of *Bacillus thuringiensis* subsp. *kurstaki*. Foray WG is a stomach poison and is effective against lepidopterous larvae. After ingestion, larvae stop feeding within hours and die 2-5 days later. Maximum activity is exhibited against early instar larvae. Foray WG may be used for both ground and aerial application. The product should be mixed well before use. Agitate as necessary to maintain the suspension. After mixed with water, product should be used within 72 hours.

#### Ground Application:

Use recommended amount of Foray WG in ground equipment with quantities of water sufficient for adequate mixing and spray deposition. The amount of water needed per acre will depend upon crop size, weather conditions, spray equipment used and local experience. Consult with manufacturer for further information.



10  
17

**Aerial Application:**

Use recommended amount of Foray WG in aerial equipment with quantities of water sufficient for adequate mixing and spray deposition. The minimum amount of water needed per acre will depend upon crop size, weather conditions, spray equipment used and local experience. Consult with manufacturer for further information.

**WARRANTY AND DISCLAIMER STATEMENT**

To the fullest extent permitted by law, seller makes no warranty, express or implied, of merchantability, fitness or otherwise concerning use of this product other than as indicated on the label. User assumes all risks of use, storage or handling not in strict accordance with accompanying directions.

*Foray* is a registered trademark of Valent BioSciences Corporation.

@2009

