Ms. Christine A. Dively Certis U.S.A., L.L.C. 9145 Guilford Road, Suite 175 Columbia, MD 21046

JUN 2 2 2011

Re: Thuricide®HPWP EPA Reg. No. 70051-53 Submission dated October 15, 2010

Dear Ms. Dively:

The Agency has reviewed your request to amend the subject product registration to allow applications to labeled crops in accordance with National Organic Program Labeling requirements. The revisions that you have made to remove seed treatments from the label and other minor changes to meet current Agency pesticide requirements for labeling are acceptable.

The basic Confidential Statement of Formula, dated 10/15/2010, is acceptable and a copy has been placed in the file jacket for this registration.

The amendment referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) section 3(c)(5) is acceptable provided that you:

- 1. Submit and/or cite all data required for registration of your product under FIFRA section 3(c)(5) when the Agency requires all registrants of similar products to submit such data.
- 2. Submit two (2) copies of your final printed labeling before you release the product for shipment. Refer to the A-79 enclosure for a further description of a final printed label.

If you have any questions regarding this matter, email Shanaz Bacchus at bacchus shanaz@epa.gov or call her on 703-308-8097.

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

Shery Reilly, Ph.D., Chief

Microbial Pesticides Branch

Biopesticides and Pollution Prevention Division

Cc: File 70051-23

SB: 7511P:062011:70051-53:NOP

	CONCURRÊNCES	
3YMBOL ▶7511P 7511P		
SURNAME Bacchus Reynors		
DATE 6/20/11 6/22/11		
EPA Form 1320–1A (1/90)	Printed on Recycled Paper	OFFICIAL FILE COPY

# Thuricide<sub>®</sub> HPWP

# BIOLOGICAL INSECTICIDE

Bacillus thuringiensis subspecies kurstaki strain SA-12 solids,	
spores and Lepidopteran active toxins*70	.0%
Other Ingredients: 30	.0%
Total:100	0.0%

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

# KEEP OUT OF REACH OF CHILDREN CAUTION



# FOR ORGANIC PRODUCTION

**Precautionary Statements** 

Hazards to Humans and Domestic Animals: CAUTION Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling.

#### 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 center or doctor for treatment advice.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. Hot Line Number: 1-800-255-3924.

#### **ENVIRONMENTAL HAZARDS**

For Terrestrial 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 disposing of equipment washwater or rinsate.

This product must not be applied aerially within 1/4 mile of any habitats of endangered or threatened lepidoptera. No manual application can be made within 300 feet of any threatened or endangered lepidoptera.

Personal Protective Equipment:
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, and P-95. Repeated exposure to high concentrations of microbial proteins can cause allergic sensitization.

Net Contents: 1 kg.

EPA Reg. No. 70051-53 EPA Est. No. 70051-CA-001

Lot No .:

Manufactured by:: Certis USA, L.L.C. 9145 Guilford Road Suite 175 Columbia, MD 21046

# **CERTIS**

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.

User Safety Recommendations: Users should:

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

### DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Do not apply this product through any type of irrigation system.

Thorough coverage is essential when using Thuricide® HPWP.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.

For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

# **ACCEPTED**

JUN 2 2 2011

Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 70051-53

#### 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 apply to uses of this product that are covered by the Worker Protection Standard.

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

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

#### **GENERAL**

Apply at first sign of infestation when larvae are small and repeat at weekly intervals as needed to maintain control. Thuricide® HPWP attacks the larval gut and must be eaten by the insect to be effective. Thorough underleaf coverage is therefore, essential for best results. After eating Thuricide® HPWP, larvae stop feeding and die within 2-3 days. Since the active ingredient, Bacillus thuringiensis, is exempt from tolerance requirements, Thuricide® HPWP may be applied up to the day of harvest.

#### MIXING

Pour application rate amount of Thuricide® HPWP onto the surface of partially filled spray tank. Maintain agitation until tank is filled to desired level. Spray tanks equipped with bypass agitation only should maintain pump circulation at full capacity until mixing is complete.

Use the higher rates against very heavy larvae infestations or where it is difficult to get good coverage due to rank foliage. Do not allow dilute sprays to stand in the tank for more than 12 hours. Combinations with chemical insecticides, fungicides, spreader-stickers, and stickers in the tank are generally not deleterious to Thuricide® HPWP if the mix is used promptly.

Compatibility Check-Before mixing in the spray tank, test physical compatibility by mixing all components in a small container in proportionate quantities. Use tank mixes only in States where the tank mix products and application site are registered. Read and follow label directions for use for other pesticides used as tank mix partners with name of pesticide for specific application rates, application timing, and precautions. Observe the most restrictive of the labeling limitations and precautions of all products used in mixtures.

## **GROUND APPLICATION**

Use application rate amount of Thuricide® HPWP in a minimum of 5 to 50 gallons of water, depending on the type of crop and requirements of state regulations. Add a sticker, adhesive or deposit builder whorenesses, we great its encountered.

GROUND APPLICATION TREES

Use application rate amount of Thuricide® HPWP in 100 gallons of water in high pressure, high gallonage, hydraulic sprayers. Wet foliage thoroughly with spray but not to the point of excessive runoff. For mist blowers use application, rate, amount in 10 gallons of waterb Toppowent washoff by rain add a sticker to the finished spray.

AERIAL APPLICATION

Use application rate amount of Thuricide® HPWP in 5 to 20 gallons of water. A sticker should be added under conditions of heavy dew or rain. Apply early morning or evening when the air is calm.

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

#### APPLICATION RATES

	I .	
Crop	Pest	Lbs. per acre
ALFALFA	Alfalfa Caterpillar	1/6-1/4
ALMONDS <sup>1</sup>	Redhumped Caterpillar	1/2- 1
ALMONDS\ CHERRIES <sup>1</sup> Apply when caterpillars are actively feeding (2nd - 4th instar).	Tent Caterpillar	1/2- 1
APPLES <sup>1</sup> , PEARS Apply when eggs or newly hatched larvae first appear. Continue applying as a part of the normal cover spray program until pest is adequately controlled.	Redbanded Leafroller Tufted Apple Budmoth Variegated Leafroller Tent Caterpillar Fruit Tree Leafroller Gypsy Moth	1/2- 1
BROCCOLI, BRUSSELS SPROUTS, CABBAGE, CAULIFLOWER COLLARDS, KALE, MUSTARD GREENS, TURNIP GREENS	Diamondback Moth Imported Cabbage Worm Green Cloverworm Cabbage Looper	1/4- 1/2 1/4- 3/4 1/4- 3/4 1/2-1
BEANS, BEETS, CARROTS, CELERY, CHARD, CHINESE CABBAGE (Choysum), COS LETTUCE, ENDIVE, ESCAROLE, GARLIC, KOHLRABI, LENTILS, LETIUCE, ONIONS, PARSLEY, RADISHES, SPINACH, SQUASH, PEAS	Cabbage Looper	1/2- 1
CUCUMBERS, MELONS Begin treatment when larvae are small to avoid damage and scarring to the crop.	Cabbage Looper	1/2- 1
EGGPLANT, PEPPERS	Tomato Homworm Tomato Fruitworm <sup>2</sup> Cabbage Looper	1/4- 1/2 1/2- 1
CURRANTS, BLUEBERRIES, CANEBERRIES (BLACKBERRIES, DEWBERRIES, RASPBERRIES) Apply by ground equipment only. Begin treatment as soon as possible after hatching and before larvae are protected by leaf folds.	Omnivorous Leafroller	1/2 -1
COTTON	Tobacco Budworm Cotton Bollworm	1/2- 1

4-5

For the suppression of light to moderate infestations, apply at first sign of egg laying or newly hatched larvae (1st and 2nd instar larvae). Reapply at 3-5 day intervals to sustain larvae suppression or until adequate reduction of larvae population is achieved. Use Thuricide® HPWP under a pest management program that includes close scouting. If heavy larvae populations occur, it may be necessary to apply an insecticide with rapid knockdown and good larvicidal activity as a replacement. Apply from 5-15 gallons total spray per acre with ground equipment and from 2-5 gallons total spray per acre with aerial equipment.

Crop	Pest	Lbs. per acre
COTTON	Cabbage Looper	1/2- 1
PEANUTS	Cabbage Looper Velvetbean Caterpillar Podworm <sup>2</sup>	1/4- 3/4 1/4 -3/4 1/2- 1
POTATOES	Cabbage Looper	1/2- 1
SOYBEANS	Soybean Looper Cabbage Looper Green Cloverworm Velvetbean Caterpillar Podworm²	1/2- 3/4 1/2- 3/4 1/4- 3/4 1/4- 3/4 1/2- 1
SUGARBEETS	Cabbage Looper Omnivorous Leafroller	1/2- 1
TOBACCO	Cabbage Looper Tobacco Budworm Tobacco Homworm	1/2- 3/4 1/4- 3/4 1/4- 3/4
TOMATOES	Tomato Hornworm Cabbage Looper Tomato Fruitworm <sup>2</sup>	1/4- 1/2 1/2- 1 1/2- 1
WATERMELONS (Florida)	Rindworm Complex	1/4- 3/4
GRAPES Start treating as soon as possible after hatching and before larvae are protected by leaf folds. Apply by ground equipment in up to 200 gallons total spray per acre to obtain thorough coverage of leaf surfaces.	Grape Leaf Folder	1/2- 1
GRAPES	Omnivorous Leafroller	1/2- 1
MINT	Cabbage Looper	1/2- 1
STRAWBERRIES Use 20 gallons water minimum per acre when using ground equipment and 5 gallons water minimum per acre by aircraft.	Cabbage Looper 1/2- 1 Roughskinned Cutworm	
SUGAR MAPLE	Spring & Fall Cankerworm Fall Webworm Tent Caterpillar Gypsy Moth	1/2- 1
PEACHES, NECTARINES	Redhumped Caterpillar Tent Caterpillar Omnivorous Leafroller	1/2- 1

	· · · · · · · · · · · · · · · · · · ·	
Crop	Pest	Lbs.
		per acre
BANANAS (Hawaii) Use calibrated ground equipment with adequate water to apply to point of runoff.	Banana Skipper	1/2 - 1
ORANGES	Fruit Tree Leafroller Orange Dog	1/2- 1 1/4- 1/2
ORANGES Use 50 gallons water minimum to 600 gallons maximum per acre when using ground equipment, and 10 gallons water minimum per acre by aircraft.	Citrus Cutworm	1/2- 1
FILBERTS' *Apply at 10% egg hatch. • Apply when caterpillars are actively feeding (2nd-4th instar.)	Tent Caterpillar** Filbert Leafroller*	1/2- 1

Pest	Lbs. per acre	
Redhumped Caterpillar FallWebworm Tent Caterpillar	·	
Redhumped Caterpillar Tent Caterpillar FallWebworm Omnivorous Leafroller	1/4- 1 1/2- 1	
Spring & Fall Cankerworm FallWebworm Tent Caterpillar Redhumped Caterpillar Oakmoth Larvae Gypsy Moth <sup>3</sup>	1/4- 1/2 1/4- 1 1/2- 1	
	Redhumped Caterpillar FallWebworm Tent Caterpillar Redhumped Caterpillar Tent Caterpillar FallWebworm Omnivorous Leafroller  Spring & Fall Cankerworm FallWebworm Tent Caterpillar Redhumped Caterpillar Oakmoth Larvae	Redhumped Caterpillar FallWebworm Tent Caterpillar Redhumped Caterpillar I/2- 1 Redhumped Caterpillar I/4- 1 Tent Caterpillar FallWebworm Omnivorous Leafroller  Spring & Fall Cankerworm FallWebworm Tent Caterpillar Redhumped Caterpillar Redhumped Caterpillar Oakmoth Larvae

(continued next column)

- 1 To achieve adequate coverage of large trees or dense foliage, aerial application of not less than 15 gallons per acre is preferred.
- 2 Suppression only.

# Gypsy Moth: Aerial Application

Thuricide® HPWP may also be applied by air to prevent excessive defoliation by Gypsy Moth. For best results, spray when leaf expansion reaches 40%–50%, and respray 14 days later. Use one pound of Thuricide® HPWP in 1-4 gallons finished spray per acre. Incorporate in the spray mix an evaporation retardant, such as molasses, Cargill's Insecticide Base, polyethylene glycol E-400, and a film forming sticker. To obtain thorough coverage use spray equipment suitable to deliver droplets with an average diameter of less than 300 microns.

#### **Greenhouse Application**

Thuricide® HPWP may also be used in the greenhouse and on flowers for control of specified insects. Use a rate of 1/4- 1/2 lb. Thuricide® HPWP per 100 gallons of water.

# STORAGE AND DISPOSAL

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

#### PESTICIDE STORAGE

Store in a cool place. Activity may be impaired by storage at temperatures above 90° F.

### PESTICIDE DISPOSAL

Wastes resulting from the use of this product must be disposed of on site or at an approved waste facility.

#### CONTAINER HANDLING

Nonrefillable container. Do not reuse or refill this container. Completely empty bag into application equipment. Then offer for recycling if available or dispose of empty bag in a sanitary landfill, or by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

#### WARRANTY

Certis USA ,L.L.C. warrants that the material contained herein conforms to the description on the label and is reasonably fit for the purposes referred t in the directions for use. Timing and method of application, weather, watering practices, mature of soil, the insect problem, condition of the crop, incompatibility with other chemical not specifically recommended, and other influencing factors in the use of this product are beyond the control of the seller. Buyer assumes all risks of use, storage or handling of this material not in strict accordance with directions given herein. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, NO OTHER EXPRESS OR IMPLIED WARRANTY OF THE FITNESS OR MERCHANTABILITY IS

Certis USA, L.L.C.
Customer Service: 800-250-5024
customerservice@certisusa.com
Open Monday-Friday
8:00 a.m. to 6 p.m.