



# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

September 11, 2008

Kenneth D. Racke, Ph.D. Regulatory Leader Dow AgroSciences LLC 9330 Zionsville Road Indianapolis, IN 46268

Subject:

Miscellaneous Labeling Revisions Per NOR dated 10/30/07

GF-1578 Naturalyte Insect Control

EPA Reg. No. 62719-530

Application dated April 30, 2008

Dear Dr. Racke:

The above referenced labeling, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is acceptable.

Please note that we have approved the amended labeling for the subject product with the understanding that it is based on the Agency's last stamped accepted label dated October 30, 2008.

See enclosed copy of the stamped label for your record. If you have any questions concerning this action please contact Dr. B.A. Akinlosotu at (703) 605-0653.

Sincerely,

George T. LaRocca,

Product Manager 13

Insecticide Branch

Registration Division (7505P)

Enclosure

Page 1

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(Base label for rigid containers 5 gal or less):

# **GF-1578**

# Naturalyte® insect Control

To be used in governmental mosquito control programs, by professional pest control operators, or in other mosquito or midge control operations.

Group	5	INSECTICIDE
Active Ingredient: spinosad (a mixture	e of spinosyn A	and
		0.5%
Other ingredients		99.5%
Total		100.0%

U.S. Patent No. 5,362,634 and 5,496,931

ACCEPTED

SEP 1 1 2008

Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 62719-530

[Editor's note: One of the following statements will be chosen depending upon size of container in which product is marketed.]

This product contains 0.25 lb of the active ingredient spinosad per 50 lb bag. This product contains 0.125 lb of the active ingredient spinosad per 25 lb container.

For Organic Production

# Keep Out of Reach of Children

# **CAUTION**

# **Precautionary Statements**

## Hazards to Humans and Domestic Animals

## **Causes Moderate Eye Irritation**

Avoid contact with eyes or clothing. Wear protective eyewear. Remove and wash contaminated clothing before reuse. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco.

### **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. You may also contact 1-800-992-5994 for emergency medical treatment information.

#### **Environmental Hazards**

This product is toxic to aquatic invertebrates. Non-target aquatic invertebrates may be killed in water where this pesticide is used. Do not contaminate water when cleaning equipment or disposing of equipment washwaters. Do not apply when weather conditions favor drift from treated areas. Drift from treated areas may be hazardous to aquatic organisms in neighboring areas. Apply this product only as

specified on the label.

# Storage and Disposal

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

Pesticide Storage: Store in original container only. In case of leak or spill, contain material with absorbent materials and dispose as waste.

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

Container Reuse: Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available.

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 and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 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. **Pressure rinse** as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. 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.

#### Refer to label booklet for Directions for Use.

Notice: Read the entire label. Use only according to label directions. Before using this product, read Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies at end of label booklet. If terms are unacceptable, return at once unopened.

In case of emergency endangering health or the environment involving this product, call 1-800-992-5994.

EPA Reg. No. 62719-530

EPA Est.	

Trademark of Dow AgroSciences LLC
Produced for
Dow AgroSciences LLC
9330 Zionsville Road
Indianapolis, IN 46268

Net Weight \_\_\_

(Base label for nonrigid containers any size):

# **GF-1578**

# Naturalyte<sup>®</sup> Insect Control

To be used in governmental mosquito control programs, by professional pest control operators, or in other mosquito or midge control operations.

Group	5	INSECTICIDE
Active Ingredient:	ture of spinosyn A a	and
Other ingredients		
Total		100.0%

U.S. Patent No. 5,362,634 and 5,496,931

[Editor's note: One of the following statements will be chosen depending upon size of container in which product is marketed.]

This product contains 0.25 lb of the active ingredient spinosad per 50 lb bag. This product contains 0.125 lb of the active ingredient spinosad per 25 lb container.



# Keep Out of Reach of Children CAUTION

# **Precautionary Statements**

# **Hazards to Humans and Domestic Animals**

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## **Environmental Hazards**

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treated areas may be hazardous to aquatic organisms in neighboring areas. Apply this product only as specified on the label.

# Storage and Disposal

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

**Pesticide Storage:** Store in original container only. In case of leak or spill, contain material with absorbent materials and dispose as waste.

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EPA	Est.	

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Net Weight \_\_\_

(Label booklet cover)

# **GF-1578**

# Naturalyte<sup>®</sup> Insect Control

To be used in governmental mosquito control programs, by professional pest control operators, or in other mosquito or midge control operations.

Active Ingredient:

spinosad (a mixture of spinosyn A and

spinosyn D)	0.5%
Other ingredients	
Total	100.0%

U.S. Patent No. 5,362,634 and 5,496,931

[Editor's note: One of the following statements will be chosen depending upon size of container in which product is marketed.]

This product contains 0.25 lb of the active ingredient spinosad per 50 lb bag.

This product contains 0.125 lb of the active ingredient spinosad per 25 lb container.



For Organic Production

# Keep Out of Reach of Children

# CAUTION

Refer to inside of label booklet for additional precautionary information including Directions for Use.

Notice: Read the entire label. Use only according to label directions. Before using this product, read Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies at end of label booklet. If terms are unacceptable, return at once unopened.

In case of emergency endangering health or the environment involving this product, call 1-800-992-5994.

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Net Weight \_\_\_

# **Precautionary Statements**

# **Hazards to Humans and Domestic Animals**

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#### **Directions for Use**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Read all Directions for Use carefully before applying.

# Storage and Disposal

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

**Pesticide Storage:** Store in original container only. In case of leak or spill, contain material with absorbent materials and dispose as waste.

**Pesticide Disposal:** Wastes resulting from the use of this product must be disposed of on site at an approved waste disposal facility.

# Nonrefillable rigid containers 5 gallons or less:

**Container Reuse:** Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available.

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 and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 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. **Pressure rinse** as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. 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.

## Nonrefillable nonrigid containers:

Container Reuse: Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available.

### **General Information**

GF-1578 is a Naturalyte® insect product for killing mosquito and midge larvae. This product's active ingredient, spinosad, is biologically derived from the fermentation of *Saccharopolyspora spinosa*, a naturally occurring soil organism. GF-1578 may be applied with suitable ground or aerial application equipment.

#### **General Use Precautions**

## **Integrated Pest Management (IPM) Programs**

GF-1578 is intended to kill mosquito and midge larvae. Mosquitoes are best controlled when an IPM program is followed. Larval control efforts should be managed through habitat mapping, active adult and larval surveillance, and integrated with other control strategies such as source reduction, public education programs, harborage or barrier adult mosquito control applications, and targeted adulticide applications.

### Insecticide Resistance Management (IRM)

GF-1578 contains a Group 5 insecticide. Insect biotypes with acquired resistance to Group 5 insecticides may eventually dominate the insect population if appropriate resistance management strategies are not followed. Currently, only spinetoram and spinosad active ingredients are classified as Group 5 insecticides. Resistance to other insecticide groups is not likely to impact the effectiveness of this product. Spinosad may be used in rotation with all other labeled products in a comprehensive IRM program.

To minimize the potential for resistance development, the following practices are recommended:

- · Base insecticide use on comprehensive IPM and IRM programs.
- · Do not use less than the labeled rates.
- Routinely evaluate applications for loss of effectiveness.
- Rotate with other labeled effective mosquito larvicides that have a different mode of action.
- In dormant rice fields, standing water within agricultural/crop sites, and permanent marine and freshwater sites, do not make more than 20 applications per year.
- Use insecticides with a different mode of action (different insecticide group) on adult mosquitoes so that both larvae and adults are not exposed to products with the same mode of action.
- Contact your local extension specialist, technical advisor, and/or manufacturer for insecticide resistance management and/or IPM recommendations for the specific site and area.
- For further information or to report suspected resistance, contact your local Dow AgroSciences representative by calling 800-253-3033 or over the internet at www.dowagro.com.

# **Spray Drift Management**

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 is responsible for considering all these factors when making decisions. Where states have more stringent regulations, they should be observed.

# **Application**

Proper application techniques help ensure adequate coverage and correct dosage necessary to obtain optimum kill of mosquito and midge larvae. The following recommendations are provided for ground and aerial application of GF-1578.

## **Ground Application**

Use conventional ground application equipment and apply GF-1578 at the designated rate for the targeted site.

## **Spot Treatment**

Apply GF-1578 as a spot treatment to areas where mosquitoes are breeding at rates appropriate for the treatment site habitat and conditions.

#### **Aerial Application**

Equipment used in the application of GF-1578 should be carefully calibrated before use and checked frequently during application to be sure it is working properly and delivering a uniform distribution pattern. Avoid overlaps that will increase GF-1578 dosage above recommended limits.

# **Application Sites and Rates**

The rates listed are typical for efficaciously killing mosquito and midge larvae in the listed habitat sites. GF-1578 may be applied at rates up to 20 lb per acre in waters high in organic content (such as polluted water, sewage lagoons, animal waste lagoons, and waters with high concentrations of leaf litter or other organic debris), deep-water mosquito habitats or those with dense surface cover, and where monitoring indicates a lack of kill at typical rates. Do not re-apply within 7 days of the initial application unless monitoring indicates that larval populations have reestablished or weather conditions have rendered initial treatments ineffective. Do not apply to water intended for irrigation.

# For killing mosquito larvae species in the following non-crop sites:

Non-Crop Site	GF-1578 lb/acre (lb ai/acre)
Temporary Standing Water Woodland pools, snow pools, roadside ditches, retention ponds, freshwater dredge spoils, tire tracks and other natural or manmade depressions, rock holes, pot holes and similar areas subject to holding water	3.5 – 6.5 (0.018 – 0.033)
Other Freshwater Sites  Natural and manmade aquatic sites, edges of lakes, ponds, canals, stream eddies, creek edges, detention ponds	
Freshwater Swamps and Marshes Mixed hardwood swamps, cattail marsh, common reed wetland, water hyacinth ponds, and similar freshwater areas with emergent vegetation	9 (0.045)
Marine/Coastal Areas Intertidal areas above the mean high water mark, mangroves, brackish water swamps and marshes, coastal impoundments and similar areas	
Stormwater/Drainage Systems Storm sewers, catch basins, drainage ditches, and similar areas	6.5 – 9 (0.033 – 0.045)
Wastewater Sewage effluent, sewers, sewage lagoons, cesspools, oxidation ponds, septic ditches and tanks, animal waste lagoons and settling ponds, livestock runoff lagoons, wastewater impoundments associated with fruit and vegetable processing, and similar areas	
Dormant Rice Fields Impounded water in dormant rice fields (for application only during the interval between harvest and preparation of the field for the next cropping cycle)	3.5 - 6.5 (0.0180 - 0.033)

Natural and Artificial Containers	3.5 - 9
Tree holes, bromeliads, leaf axils, and other similar natural water holding containers	(0.018 – 0.045)
Cemetery urns, bird baths, flower pots, rain barrels, buckets, single tires, tires stockpiled in dumps, landfills, recycling plants and other similar areas, abandoned swimming pools, ornamental ponds, flooded roof tops and similar water holding sites.	
Landfill containers, salvage yards, abandoned vehicles	

For killing mosquito larvae species in standing water within agricultural/crop sites where mosquito breeding occurs:

Agricultural/Crop Site	GF-1578 lb/acre (lb ai/acre)
Pastures/hay fields, rangeland, orchards, citrus groves	3.5 – 9 (0.018 – 0.045)

## **Terms and Conditions of Use**

If terms of the following Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies are not acceptable, return unopened package at once to the seller for a full refund of purchase price paid. Otherwise, use by the buyer or any other user constitutes acceptance of the terms under Warranty Disclaimer, Inherent Risks of Use and Limitation of Remedies.

Dow AgroSciences acknowledges that this product may be misbranded if one or more of its ingredients, active and/or inert, is reclassified as non-organic and/or removed from the United States Department of Agriculture (USDA) National List of approved substances for use in organic production and handling. If one or more of the ingredients in this pesticide product are so reclassified and/or removed (delisted) from the National List, Dow AgroSciences will take appropriate remedial measures with respect to the labeling for this product.

#### **Warranty Disclaimer**

Dow AgroSciences 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 strict accordance with the directions, subject to the inherent risks set forth below. TO THE EXTENT PERMITTED BY LAW, Dow AgroSciences MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

# Inherent Risks of Use

It is impossible to eliminate all risks associated with use of this product. Crop injury, lack of performance, or other unintended consequences may result because of such factors as use of the product contrary to label instructions (including conditions noted on the label, such as unfavorable temperatures, soil conditions, etc.), abnormal conditions (such as excessive rainfall, drought, tornadoes, hurricanes), presence of other materials, the manner of application, or other factors, all of which are beyond the control of Dow AgroSciences or the seller. All such risks shall be assumed by buyer.

## **Limitation of Remedies**

To the extent permitted by law, the exclusive remedy for losses or damages resulting from this product (including claims based on contract, negligence, strict liability, or other legal theories), shall be limited to, at Dow AgroSciences' election, one of the following:

(1) Refund of purchase price paid by buyer or user for product bought, or

(2) Replacement of amount of product used

To the extent permitted by law, Dow AgroSciences shall not be liable for losses or damages resulting from handling or use of this product unless Dow AgroSciences is promptly notified of such loss or damage in writing. To the extent permitted by law, in no case shall Dow AgroSciences be liable for consequential or incidental damages or losses.

The terms of the Warranty Disclaimer, Inherent Risks of Use, and this Limitation of Remedies cannot be varied by any written or verbal statements or agreements. No employee or sales agent of Dow AgroSciences or the seller is authorized to vary or exceed the terms of the Warranty Disclaimer or this Limitation of Remedies in any manner.

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