

62719-532

10/30/2007

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U.S. ENVIRONMENTAL PROTECTION AGENCY  
Office of Pesticide Programs  
Registration Division (7505C)  
1200 Pennsylvania Avenue NW  
Washington, D.C. 20460

EPA Reg. Number:

62719-532

Date of Issuance:

10/30/07

Term of Issuance:

Conditional

Name of Pesticide Product:

GF-1592

**NOTICE OF PESTICIDE:**  
X Registration  
Reregistration  
(under FIFRA, as amended)

Name and Address of Registrant (Include ZIP Code):

Regulatory Success - Americas  
Dow AgroSciences LLC  
9330 Zionsville Road  
Indianapolis, IN 46268

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

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.

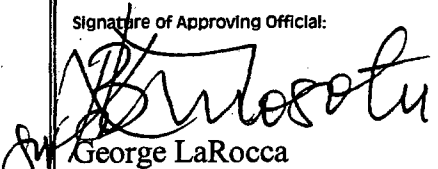
Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of 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 product is conditionally registered in accordance with FIFRA sec 3(c)(7)(b) of the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, subject to the comments and terms listed below:

1. You will make the following label changes:
  - a. Replace all "control claims" with "kills claim" throughout label. You may submit and/or cite data demonstrating residual activity in support of the "control claims", to the Agency for review.

Signature of Approving Official:

Date:

  
George LaRocca  
Product Manager (RM 13)  
Insecticide Branch  
Registration Division (MC 7505P)

October 30, 2007

- b. Under the Directions for Use, add the prohibition, ***"Do not apply to water intended for irrigation"***.
- c. Add the following to the Environmental Hazards statements: ***"Non target aquatic invertebrates may be killed in waters where this pesticide is used. Consult with the state agency with primary responsibility for regulating pesticide before apply to public waters to determine if a permit is needed. Do not contaminate water when cleaning equipment or disposing of equipment washwaters. Do not apply where runoff is likely to occur. 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"***.
- d. For products applied as a foliar or aerial spray, add the following statements: ***"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 the plants during this time period, unless the application is made in response to a public health emergency declared by appropriate state or federal authorities."***
- e. Add the following spray drift management statements: ***"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"***.
- f. Under Warranty Disclaimers, revise the statement "In no case shall Dow AgroSciences be liable . . . losses" to read ***"To the extent consistent with applicable law, Dow AgroSciences shall not be liable . . . losses"***. Also add ***"To the extent consistent with applicable law"*** to the beginning of the statements "Dow AgroSciences makes no - - -"; "The exclusive remedy - - -" and "Dow AgroSciences shall not be liable - - -".
- g. On the front panel, add the following user limitation: ***"For use only by federal, state, tribal or local government officials responsible for public health or vector control or by persons certified in the appropriate category or otherwise authorized by the state or tribal lead pesticide regulatory agency to perform larval mosquito control applications or by persons under their direct supervision"***.
- h. Under application sites and rates, first paragraph – In parenthesis, explain/define the phrase ***"waters high in organic content"***.
- i. The storage and disposal statements must appear on the container label in addition to the label booklet.

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2. You will submit the data listed below conducted in accordance with the 40 CFR 158 test guidelines referred to below:

<u>Guideline Ref. No.</u>	<u>Title of Study</u>	<u>Date Due</u>
OPPTS 830.6317	One-year storage stability testing	10/30/2008
OPPTS 830.6320	Corrosion characteristics study	10/30/2008
OPPTS 850.1735	Whole Sediment Acute Toxicity Invertebrates, Freshwater.	Under Review
OPPTS 850.1740	Whole Sediment Acute Toxicity Invertebrates, Estuarine and Marine	10/30/2008
162-4	Aerobic Aquatic Metabolism	10/30/2009
164-1	Terrestrial Field Dissipation	10/30/2010
164-2	Aquatic Dissipation	10/30/2010
165-4	Fish Accumulation	10/30/2009

For further clarifications and/or additional information on the required labeling revisions and data requirements, please see copy of the Agency's "EFED Risk Assessment for the proposed Use of Spinosad as a mosquito Larvicide" and "Summary of Analytical Chemistry and Residue Data" dated July 27, and August 2, 2006, respectively.

Please note that if you fail to satisfy any of the conditions imposed on this registration (e.g., failure to submit the required data by the specified deadlines, or the data submitted were not generated in accordance with applicable test guidelines) the Agency may issue notice to cancel these uses under FIFRA 6(e). You must also submit the final printed label bearing the above stated revisions prior to releasing this product for sale.

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

Enclosure

[Container Label]

(Logo) Dow AgroSciences

**GF-1592****Naturalyte® Insect Control**

<b>Group</b>	<b>5</b>	<b>INSECTICIDE</b>
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**Active Ingredients:**

spinosad (a mixture of spinosyn A and spinosyn D)	20.6%
Inert ingredients:	79.4%
Total	100.0%

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

Contains 2 lb of active ingredient per gallon.

**Keep Out of Reach of Children****CAUTION PRECAUCION**

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

**Precautionary Statements****Hazards to Humans and Domestic Animals****Causes Moderate Eye Irritation • Harmful If Swallowed**

**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.

**If swallowed:** Call a 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 a poison control center or doctor. Do not give anything by mouth to an unconscious person.

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.

**Refer to label booklet for Directions for Use including Storage and Disposal.**

**ACCEPTED  
with COMMENTS  
In EPA Letter Dated:**

OCT 30 2007

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

62219-532

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## Net Contents

[Label Booklet]

(Logo) Dow AgroSciences

**GF-1592****Naturalyte® Insect Control**

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spinosyn D) .....20.6%

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**Refer to inside of label booklet for additional precautionary information including Personal Protective Equipment (PPE) and User Safety Recommendations, and Directions for Use including Storage and Disposal.**

**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.**

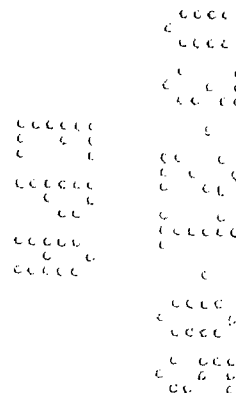
In case of emergency endangering health or the environment involving this product, call 1-800-992-5994. If you wish to obtain additional product information, visit our web site at [www.dowagro.com](http://www.dowagro.com).

**Shake Well Before Using**

EPA Reg. No. 62719-XXX

EPA Est. \_\_\_\_\_

®Trademark of Dow AgroSciences LLC

**Dow AgroSciences LLC • Indianapolis, IN 46268 U.S.A.****Net Contents** \_\_\_\_

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**Precautionary Statements**

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**Hazards to Humans and Domestic Animals****CAUTION****Causes Moderate Eye Irritation • Harmful If Swallowed**

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**Environmental Hazards**

This product is toxic to aquatic invertebrates.

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**Directions for Use**

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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 may be disposed of on site according to label use directions 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 incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

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**General Information**

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GF-1592 is a Naturalyte® insect product for control of 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-1592 may be applied with suitable ground or aerial application equipment.

**General Use Precautions****Integrated Pest Management (IPM) Programs**

GF-1592 is intended to control 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-1592 contains a Group 5 insecticide. Any insect population may contain individuals naturally resistant to insecticides. The resistant individuals may eventually dominate the insect population if appropriate resistance management strategies are not followed. Currently spinosad is the only active ingredient classified as a Group 5 insecticide and 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 programs.
- Do not use less than the labeled rates.
- Routinely evaluate applications for loss of effectiveness.
- Rotate with other labeled mosquito larvicides with different modes 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 resistant pest problems.
- For further information or to report suspected resistance, you may contact your local Dow AgroSciences representative by calling 800-253-3033 or over the internet at [www.dowagro.com](http://www.dowagro.com).

### **Mixing**

GF-1592 should be diluted with water. Shake well before using as GF-1592 may separate on standing and must be thoroughly agitated prior to dilution. Partially fill spray tank with water. Start agitation and add the required amount of GF-1592. Continue agitation while mixing and filling the spray tank to the required spray volume. Maintain sufficient agitation during application to ensure uniformity of the spray mix. Do not allow water or spray mixture to back-siphon into the water source. Do not mix more GF-1592 than can be used in a single application.

**Mixing Formula:** If an application rate of X fl oz of GF-1592 per acre is desired, the spray equipment is calibrated to deliver Y gallons per acre, and a total of Z acres is being treated, the following formula would apply:

$X \text{ fl oz of GF-1592 per acre} \times Z \text{ acres to be treated} = W \text{ total fl oz of GF-1592 required}$

$Y \text{ gallons per acre} \times Z \text{ acres to be treated} = V \text{ total volume of water required}$

To treat Z acres, mix W fl oz of GF-1592 in V gallons of water and apply at a rate of Y gallons per acre.

For example, to treat 10 acres at 2 fl oz of GF-1592 per acre with equipment calibrated at 2 gallons per acre, mix 20 fl oz of GF-1592 into 20 gallons of water and apply at a rate of 2 gallons of finished spray per acre. The addition of GF-1592 to the total volume of water will not significantly affect the total targeted volume of spray mixture.

### **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 determine the potential for spray drift. The applicator is responsible for considering all of these factors when making the decision to apply this product.



The following spray drift management requirements must be followed to avoid off-target drift movement from applications.

1. The boom width must not exceed 75% of the wingspan or 90% of the rotor blade.
2. Nozzles must always point backward, parallel with the air stream, and never be pointed downward more than 45 degrees.
3. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.
4. Do not apply when wind speed favors drift beyond the treatment area.

Where states have more stringent regulations, they must be observed.

## Application

Proper application techniques help ensure adequate coverage and correct dosage necessary to obtain optimum control of mosquito and midge larvae. The following recommendations are provided for ground and aerial application of GF-1592.

### Ground Application

Use conventional ground application equipment with enough water to provide uniform coverage of the target area. Use hand-pump, airblast, mist blower, etc. spray equipment. Apply at the designated rate for the targeted site.

### Spot Treatment

Apply GF-1592 as a spot treatment to areas where mosquitoes are breeding at rates appropriate for the treatment site habitat and conditions.

### Aerial Application

GF-1592 may be aerially applied either undiluted or diluted with water through fixed wing aircraft or helicopter with either conventional boom and nozzle systems or rotary atomizers. Use a nozzle configuration that produces a droplet size distribution that ensures droplet deposition in the targeted area. Apply at the designated rates for the targeted site.

## Application Sites and Rates

The rates listed are typical for efficacious control of mosquito and midge larvae in the listed habitat sites. GF-1592 may be applied at rates up to 6.4 fl oz per acre in waters high in organic content, deep-water mosquito habitats or those with dense surface cover, and where monitoring indicates a lack of control 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.

**For control of mosquito larvae species in the following non-crop sites:**

Non-Crop Site	GF-1592 fl oz/acre (lb ai/acre)
<b>Temporary Standing Water</b> 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	1.1 – 2 (0.018 – 0.033)
<b>Other Freshwater Sites</b> Natural and manmade aquatic sites, edges of lakes, ponds, canals, stream eddies, creek edges, detention ponds	

<b>Freshwater Swamps and Marshes</b> Mixed hardwood swamps, cattail marsh, common reed wetland, water hyacinth ponds, and similar freshwater areas with emergent vegetation	2.8 (0.045)
<b>Marine/Coastal Areas</b> Intertidal areas above the mean high water mark, mangroves, brackish water swamps and marshes, coastal impoundments and similar areas	
<b>Stormwater/Drainage Systems</b> Storm sewers, catch basins, drainage ditches, and similar areas	2 – 2.8 (0.033 – 0.045)
<b>Wastewater</b> 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	
<b>Dormant Rice Fields</b> Impounded water in dormant rice fields (for application only during the interval between harvest and preparation of the field for the next cropping cycle)	1.1 – 2 (0.018 – 0.033)
<b>Natural and Artificial Containers</b> Tree holes, bromeliads, leaf axils, and other similar natural water holding containers  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 control of mosquito larvae species in standing water within agricultural/crop sites where mosquito breeding occurs:**

<b>Agricultural/Crop Site</b>	<b>GF-1592 fl oz/acre (lb ai/acre)</b>
Pastures/hay fields, rangeland, orchards, citrus groves	1.1 – 2.8 (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.

### 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. 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

## Limitation of Remedies

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

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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