



# NATULAR™ G

## Mosquito Larvicide Granule

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	99.5%
Total	100.0%
U.S. Patent No. 5,362,634 and 5,496,931	
This product contains 0.2 lb of active ingredient spinosad per 40 lb bag	

Group	5	INSECTICIDE
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**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 1-800-214-7753 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.

#### **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.

#### **General Information**

NATULAR™ G is a 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. NATULAR™ G may be applied with suitable ground or aerial application equipment.

#### **General Use Precautions**

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

NATULAR™ G 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)**

NATULAR™ G 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.
- 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 Clarke representative 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 Clarke representative by calling 800-323-5727.

#### **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. Apply NATULAR™ G prior to flooding as a pre-hatch application to areas that breed mosquitoes, or at any stage of larval development after flooding in listed sites. The following recommendations are provided for ground and aerial application of NATULAR™ G.

##### **Ground Application**

Use conventional ground application equipment and apply NATULAR™ G at the designated rate for the targeted site.

##### **Spot Treatment**

Apply NATULAR™ G 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 NATULAR™ G 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 NATULAR™ G 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. Within this range, use lower rates when water is shallow, vegetation and/or pollution are minimal, and mosquito populations are low. Do not use less than labeled minimum rate. NATULAR™ G 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	NATULAR™ G lb/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 <b>Other Freshwater Sites:</b> Natural and man-made aquatic sites, edges of lakes, ponds, canals, stream eddies, creek edges, detention ponds	3.5 - 6.5 (0.018 - 0.033)
<b>Freshwater Swamps and Marshes:</b> Mixed hardwood swamps, cattail marsh, common reed wetland, water hyacinth ponds, and similar freshwater areas with emergent vegetation <b>Marine/Coastal Areas:</b> Intertidal areas above the mean high water mark, mangroves, brackish water swamps and marshes, coastal impoundments and similar areas	9 (0.045)
<b>Stormwater/Drainage Systems:</b> Storm sewers, catch basins, drainage ditches, and similar areas <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	6.5 - 9 (0.033 - 0.045)
<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)	3.5 - 6.5 (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	3.5 - 9 (0.018 - 0.045)

## Agricultural/Crop Sites Where Mosquito Breeding Occurs:

Apply NATULAR™ G at a rate of 3.5 to 9 lb per acre in standing water within agricultural/crop sites where mosquito breeding occurs: pastures/hay fields, rangelands, orchards, vineyards, and citrus groves. Do not apply to waters intended for irrigation.

## 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 according to label use directions or at an approved waste disposal facility.

**Container Handling for Non-Refillable Bag:** Nonrefillable container. Do not reuse or refill this container. Completely empty bag into application equipment. Offer for recycling, if available, or puncture and dispose of in a sanitary landfill or by incineration, or by other procedures allowed by state and local authorities.

**Container Handling for Rigid Refillable Tote:** Refillable container. Refill this container with granular spinosad pesticide formulation only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment. Use a sprayer with water to quickly and completely rinse the interior of the container. Ensure the top, bottom, and all sides are rinsed. A high pressure sprayer with a rinsing nozzle could provide a thorough rinse of the interior. Drain and collect rinsate from the container into a collection system for later disposal. Drain the container dry so no water remains. Return to point of sale. Then offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill or by incineration, or by other procedures allowed by State and local authorities.

**Warranty:** To the extent consistent with applicable law CLARKE MOSQUITO CONTROL PRODUCTS, INC. makes no warranty, express or implied, concerning the use of this product other than as indicated on the label. Buyer assumes all risk of use/handling of this material when use and/or handling is contrary to label instructions.

Natular™ is a Trademark of Clarke Mosquito Control Products, Inc.

### Manufactured For:

CLARKE MOSQUITO CONTROL PRODUCTS, INC.  
159 North Garden Avenue  
Roselle, IL 60172,  
U.S.A.

EPA Reg. No.: 8329-80

NET WEIGHT: \_\_\_\_\_

EPA Est. No.:

LOT: \_\_\_\_\_