



# NATULAR® G

## Mosquito Larvicide Granule

Controls larvae of mosquitoes that may transmit West Nile Virus, Eastern Equine Encephalitis, St. Louis Encephalitis, Zika, Dengue, or Chikungunya.

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%

## KEEP OUT OF REACH OF CHILDREN

### Precautionary Statements

#### 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.

#### Product 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.

#### 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.
- Monitor after application for unexpected target pest survival. If the level of survival suggests the presence of resistance, consult with your local university specialist or Clarke representative.
- 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	3.5 - 6.5 (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	9 (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	6.5 - 9 (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)	3.5 - 6.5 (0.0180 - 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.	3.5 - 9 (0.018 - 0.045)
Landfill containers, salvage yards, abandoned vehicles	
Do not apply to natural or artificial containers of water intended for consumption by people, animals, or livestock.	
	For small to medium size containers, apply 1/8 teaspoon (about 0.37 g) of Natular G per 10-20 gallons of water.  For very small containers, apply a pinch of Natular G (0.02 g) per 1/2 - 1 gallon of water. This is approximately 7 - 9 granules per 1/2 - 1 gallon of water.

#### Agricultural/Crop Sites Where Mosquito Breeding Occurs:

Apply NATULAR® G at the rate of 3.5 to 9 lb per acre (0.018 - 0.045 lb ai/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 a cool dry place in original container only. Keep away from moisture.

**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 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.

#### 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 Registered Trademark of Clarke Mosquito Control Products, Inc.

**IN CASE OF MEDICAL EMERGENCY, CALL THE INTERNATIONAL POISON CONTROL CENTER 1-800-214-7753**

#### Manufactured By:

CLARKE MOSQUITO CONTROL PRODUCTS, INC.  
159 North Garden Avenue  
Roselle, IL 60172, U.S.A.  
1-800-323-5727

EPA Reg. No.: 8329-80

EPA Est. No.: 8329-IL-03

Net Weight: \_\_\_\_\_

Lot: \_\_\_\_\_