



U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs
Registration Division (7505P)
1200 Pennsylvania Ave., N.W.
Washington, D.C. 20460

EPA Reg. Number:

8329-106

Date of Issuance:

4/28/16

NOTICE OF PESTICIDE:

☒ Registration
☐ Reregistration
(under FIFRA, as amended)

Term of Issuance:

Conditional

Name of Pesticide Product:

Natular 20EC

Name and Address of Registrant (include ZIP Code):

Mr. Jonathan Ostrowski
Clarke Mosquito Control Products, Inc
675 Sidwell Court
St. Charles, Illinois 60174

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 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 section 3(c)(7)(A). You must comply with the following conditions:

1. Submit and/or cite all data required for registration/reregistration/registration review of your product under FIFRA when the Agency requires all registrants of similar products to submit such data.

Signature of Approving Official:

Michael Walsh, Product Manager 11
Invertebrate & Vertebrate Branch #2, Registration Division (7505P)

Date:

4/28/16

2. You are required to comply with the data requirements described in the DCI identified below:

- a. Spinosad GDCI-110003-1217
- b. Spinosad GDCI-110003-1141

You must comply with all of the data requirements within the established deadlines. If you have questions about the Generic DCI listed above, you may contact the Chemical Review Manager in the Pesticide Reevaluation Division: <http://iaspub.epa.gov/apex/pesticides/f?p=chemicalsearch:1>

3. Make the following label changes before you release the product for shipment:

- Revise the EPA Registration Number to read, "EPA Reg. No. 8329-106."

4. Submit one copy of the final printed label for the record before you release the product for shipment.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

If you fail to satisfy these data requirements, EPA will consider appropriate regulatory action including, among other things, cancellation under FIFRA section 6(e). Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records. Please also note that the record for this product currently contains the following CSFs:

- Basic CSF dated December 16, 2016
- Alternate CSF 1 dated December 16, 2016

If you have any questions, please contact Carlyn Petrella by phone at 703-347-0439, or via email at petrella.carlyn@epa.gov.

Enclosure

Text in [brackets] indicates optional text.

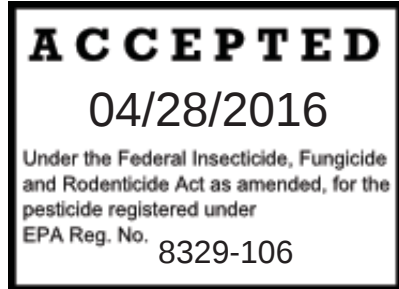
Natular™ 20EC

(Alternate Brand Name: Novus™ 20EC)

[Mosquito Larvicide]

[Liquid Emulsifiable Concentrate]

[An insecticide for the control of mosquito larvae]



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)*	20.6%
Other ingredients:	<u>79.4%</u>
Total	100.0%

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

[* Naturalyte® Insect Control]

Contains 2 lb of active ingredient per gallon.

Group	5	INSECTICIDE
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Keep Out of Reach of Children
CAUTION

Precautionary Statements

Hazards to Humans and Domestic Animals

Harmful if swallowed. 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, using tobacco or using the toilet.

First Aid	
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 to an unconscious person.
If in eyes:	• Hold eye open and rinse slowly and gently with warm water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. • 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.

This product is toxic to bees exposed to treatment and for 3 hours 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.

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™ 20EC is a [Naturalyte®] 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™ 20EC may be applied with suitable ground or aerial application equipment.

Use Precautions

Integrated Pest Management (IPM) Programs

NATULAR™ 20EC 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™ 20EC 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.

Mixing

NATULAR™ 20EC should be diluted with water. Shake well before using as NATULAR™ 20EC 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 NATULAR™ 20EC. 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 NATULAR™ 20EC than can be used in a single application.

Mixing Formula: If an application rate of X fl oz of NATULAR™ 20EC 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:

$$X \text{ fl oz of NATULAR™ 20EC per acre} \times Z \text{ acres to be treated} =$$

$$W \text{ total fl oz of NATULAR™ 20EC required}$$

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

To treat Z acres, mix W fl oz of NATULAR™ 20EC 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 NATULAR™ 20EC per acre with equipment calibrated at 2 gallons per acre, mix 20 fl oz of NATULAR™ 20EC into 20 gallons of water and apply at a rate of 2 gallons of finished spray per acre. The addition of NATULAR™ 20EC 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. Nozzle placement may be extended to 100% of rotor blade diameter when very coarse droplets of VMD 400-500 microns (ASABE Standard 572) are used.
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 kill of mosquito and midge larvae. The following recommendations are provided for ground and aerial application of NATULAR™ 20EC.

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 NATULAR™ 20EC as a spot treatment to areas where mosquitoes are breeding at rates appropriate for the treatment site habitat and conditions.

Aerial Application

NATULAR™ 20EC 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 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 rates. NATULAR™ 20EC may be applied at rates up to 6.4 fl oz 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.

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

Non-Crop Site	NATULAR™ 20EC fl oz/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	1.1 – 2 (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	2.8 (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	2 – 2.8 (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)	1.1 – 2 (0.018 – 0.033)
Natural and Artificial Containers 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 Do not apply to natural or artificial containers of water intended for consumption by people, animals, or livestock.	1.1 – 2.8 (0.018 – 0.045)

Agricultural/Crop sites where mosquito breeding occurs:

Apply NATULAR™ 20EC at the rate of 1.1 to 2.8 fl.oz./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.

[Blending Instructions and Directions for Use as a Custom Blend on Sand and application by standard ground and aerial granular dispersal equipment.]

[NATULAR™ 20EC may be blended on site following the preparation instructions below and applied as a sand mixture using standard granular dispersal equipment. Apply at a rate of 8.5 to 12 pounds of the blended sand per acre to areas with dense vegetation or heavy canopy or to other areas where a granular formulation will aid in insuring the active ingredient reaches the target water and is released from the sand.]

[BLENDING INSTRUCTIONS

The following materials are required to prepare a 100-lb batch of NATULAR™ 20EC blended sand:

96.5 lbs	Washed, dry sand (20-45 mesh)
23.8 fl.oz.	NATULAR™ 20EC
12.3 fl.oz.	Water
0.9 lbs	HiSil 233 (silicon dioxide)
	Tumbling mixer
	Spray apparatus (such as a hand pump or other low pressure sprayer)

HiSil 233 is added to achieve a dry, free-flowing mixture. The amount required for on-site blending may vary depending on the particle size distribution and moisture content on the sand.

1. Measure the time required for a level funnel of (unblended) sand to empty
2. Load the sand into a tumbling mixer such as a cement mixer
3. Shake or agitate NATULAR™ 20EC well
4. In a separate mix tank, add NATULAR™ 20EC to water and blend well
5. While the mixer is rotating, spray the mixed NATULAR™ 20EC solution onto the tumbling sand until all liquid is used
6. Mix (tumble) the sand until sand is uniformly wet (usually five to ten minutes). Turn off mixer.
7. Dig a hole in the center of the sand, and add HiSil. Cover the mixture with sand from the tumbler to minimize dusting. Start the mixer and tumble until free flowing (approximately 5 minutes).
8. Measure the time required for a level funnel of NATULAR™ 20EC blended sand to empty. If the flow rate is significantly slower than measured in Step No. 1, repeat step 6, adding incrementally more HiSil. If it flows at a faster rate or is excessively dusty, reduce the amount of HiSil in subsequent batches.

Do not allow NATULAR™ 20EC blended granules to drift.

Store unused NATULAR™ 20EC blended sand in a covered, secure, dry storage area away from wind and precipitation. Store in containers only (e.g., tumbler, hopper, tote, drum). Do not store for long periods. Avoid blending more material than may be used in 72 hours.]

{Storage & Disposal statement for rigid, non-refillable container, 5 gallons or less}

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 Handling: Non-refillable 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 ¼ 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. Offer for recycling if available, or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities. **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. Offer for recycling if available, or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

{Storage & Disposal statement for rigid, non-refillable container, greater than 5 gallons }

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 Handling: Non-refillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse container (or equivalent) promptly after emptying. **Triple rinse** as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Offer for recycling if available, or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

{Storage & Disposal statement for rigid, refillable container}

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 Handling: Refillable container. Refill this container with pesticide 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 or mix tank. Fill the container about 10% full with water and, if possible, spray all sides while adding water. If practical, agitate vigorously or recirculate water with the pump for two minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Offer for recycling if available, or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved 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.

**Manufactured [for] [by]
Clarke Mosquito Control Products, Inc.
159 North Garden Avenue
Roselle, IL 60172
U.S.A.**

EPA Reg. No. 8329-XXXX

EPA Est. No. 8329-IL-XX

Lot: _____

Net Contents: _____

[Naturalyte® is a Trademark of Dow AgroSciences LLC]

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