

# **Salem County Mosquito Control QUESTIONS AND ANSWERS**

**Municipalities are encouraged to share this information with all residents in their community.**

## **What does this government agency do?**

Salem County Mosquito Control Division (under the Department of Public Works) is involved in all aspects of mosquito control. We have full-time inspectors that will inspect known mosquito "hot spots" for the presence of mosquitoes and will treat as necessary. In addition, these inspectors will respond to service requests called in by county residents by inspecting and treating, if necessary, areas in which mosquitoes are found. We also have a biologist who assists in inspections and control, and is responsible for mosquito population and disease surveillance. The biologist is also responsible for public education, and will conduct educational programs for schools, civic groups, and other organizations. Disease surveillance is coordinated by the Office of Mosquito Control Coordination, a division of the New Jersey Department of Environmental Protection. This involves the sampling of mosquitoes from various areas throughout the county and submission to the New Jersey Public Health Laboratory to have them tested for any or all of the following diseases: West Nile virus, Eastern Equine Encephalitis, LaCrosse Encephalitis, St. Louis Encephalitis, Chikungunya, Dengue virus and Zika virus. If any sampled mosquitoes test positive for virus, we will intensify our inspection and control efforts in the areas where these mosquitoes are found in an attempt to minimize possible risk to county residents.

## **How does our agency control mosquitoes?**

Salem County Mosquito Control uses an integrated pest management (IPM) approach to controlling mosquitoes. This approach utilizes several methods of pest control, including mechanical control, biological control, and chemical control. Source reduction is the largest part of our mosquito control program, and in many cases, can permanently affect mosquito population levels. Biological control can also be very effective in mitigating mosquitoes. In this aspect of our program, we identify isolated, permanent bodies of water and introduce minnows or mosquitofish to feed on the mosquito larvae. Our chemical control program consists of the application of larvicides and pupicides to kill the immature mosquito stages, and adulticides to kill the flying adults. Typically, the non-chemical methods are preferred; however, pesticides are necessary if the other methods are ineffective or not feasible.

## **What can the general public do to help us with our mosquito control program?**

It is very important that we get as much help from the general public as possible to make our program a success. It is everyone's responsibility to reduce mosquito habitat in your backyard.

Here are some tips for reducing mosquitoes around your home:

- use screens in windows
- keep rain gutters free of debris
- clean birdbaths at least every three days
- keep yard and surrounding areas free of any artificial containers\* that can collect rainwater
- eliminate standing water from crawl spaces and basements

\*Examples of artificial containers include:

- unused wading pools
- opened trash cans
- tires
- pool covers
- wheel ruts

- toys
- wheelbarrows
- ornamental ponds without proper aeration or fish
- empty planting pots

Anything that can hold water for four days can become a mosquito habitat. If you find a mosquito habitat, or if you think you might have an area conducive to the placement of fish, do not hesitate to call our office.

### **Which pesticides are used to control mosquitoes in Salem County and how are they applied?**

In Salem County we use larvicides, pupicides, and adulticides to control mosquitoes.

The larvicides that we use include:

- Abate – active ingredient is temephos
- Altosid – active ingredient is methoprene
- Vectolex – active ingredient is *Bacillus sphaericus*
- Vectobac – active ingredient is *Bacillus thuringiensis israelensis*
- VectoMax - active ingredients are *Bacillus sphaericus* and *Bacillus thuringiensis israelensis*
- Natular – active ingredient is Spinosad

The pupicides that we use include:

- CocoBear – active ingredient is mineral oil

The adulticides that we use include:

- Fyfanon – active ingredient is malathion
- Zenivex - active ingredient is etofenprox
- Essentria - active ingredients are rosemary and peppermint oils

Abate is used in granular or liquid form and is applied directly to water by hand or applied over large areas by aircraft. Altosid is used as 150-day briquets, as pellets, granules or water soluble packets, which are placed directly in water. Vectolex may be applied as granular or water soluble packet. Natular is applied as a granular

formulation. Cocobear is a mineral oil that is applied to the surface of water bodies with a compressed air sprayer which suffocates larvae or pupae. Fyfanon is applied as Ultra-Low-Volume (ULV) spray either by ground equipment or by aircraft. Zenivex is also applied as an ULV spray by ground equipment. Essentria is applied via backpack sprayer. All products used are registered with both the USEPA and the NJDEP, which means that they are legal for use in New Jersey. In addition, all inspectors, and our biologist are licensed certified pesticide applicators by the NJDEP.

For further information about the pesticides and their use, please refer to the accompanying NJDEP-approved Fact Sheets.

### **How do I contact Salem County Mosquito Control for more information?**

If you would like us to inspect your property, if you want to report a mosquito habitat, or you would like help with anything else that is mosquito-related, please call 856-769-3255, Monday – Friday between 6:00 a.m. - 2:30 p.m. (summer) or 7:00 a.m. - 3:30 p.m. (winter). You may ask for the biologist or the administrative secretary.

For general information:

For overall pesticide-specific information – 9:30am to 7:30pm:

**National Pesticide Information Center** **800-858-7378**

For pesticide health information & possible exposures – 24 hours:

**New Jersey Poison Information & Education System** **800-222-1222**

For New Jersey pesticide regulation & misuse complaints:

**NJDEP Pesticide Control Program** **609-984-6507**

For Federal pesticide regulation:

**USEPA Region 2 Office of Pesticide Programs** **877-251-4575**

For statewide mosquito control information:

**NJDEP Office of Mosquito Control Coordination** **609-292-3649**

For local mosquito control information:  
**Salem County Mosquito Control** **856-769-3255**

For mosquito control recommendations:  
**Rutgers University, Department of Entomology** **848-932-9774**

For local health information:  
**Salem County Health Department** **856-935-7510**

### **Where can I find more specific information on mosquito spraying in Salem County and how will I be notified?**

Call Salem County Mosquito Control at 856-769-3255. Attached is an example of a newspaper notice that is placed in local newspapers throughout the mosquito control treatment season. The municipality, Office of Emergency Management and other agencies are also notified before every spray mission. The spray schedule can also be found on the Salem County website.

A citizen has the right to ask the Salem County Mosquito Control Division for specific information about a planned application in the county prior to the application.



# ABATE® 4-E

## insecticide

### FOR CONTROL OF MOSQUITO LARVAE

**ACTIVE INGREDIENT:**

Temephos (0,0'-(thiodi-4, 1-phenylene) 0,0,0',0'-tetramethyl phosphorothioate) .....	.44.6%
<b>INERT INGREDIENTS*</b> .....	<u>.55.4%</u>
<b>TOTAL</b> .....	100.0%

(1 gallon contains 4 lbs. of Temephos) .....

\*contains petroleum distillate

EPA Reg. No. 8329-60

EPA Est. No. 8329-IL-01

### KEEP OUT OF REACH OF CHILDREN

### WARNING/AVISO

**PRECAUCION AL USUARIO:** Si usted no lee inglés, no use este producto hasta que la etiqueta le haya sido explicada ampliamente.

See Side Panel For Additional Precautionary Statements

#### STATEMENT OF PRACTICAL TREATMENT

**If Swallowed:** Do not induce vomiting. Get medical attention.

**If In Eyes:** Flush with plenty of water. Get medical attention.

**If on Skin:** Wash with plenty of soap and water after handling. Get medical attention if irritation persists.

**NOTE TO PHYSICIANS:** This product may cause cholinesterase inhibition. Atropine is antidotal.

Pralidoxime chloride (2-PAM; PROTOPAM chloride) may be effective as an adjunct to atropine.

Manufactured by

**Clarke Mosquito Control Products, Inc.**

159 N. Garden Ave.

Roselle, IL 60172

Net Contents: 2.5 Gallons

© Registered trademark of American Cyanamid Company

#### PRECAUTIONARY STATEMENTS

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

#### WARNING

Harmful if swallowed or absorbed through skin. Causes skin and eye irritation. Wash thoroughly with soap and water after handling. Avoid breathing spray mist. DO NOT contaminate food or feed products.

#### ENVIRONMENTAL HAZARDS

This product is toxic to birds and fish. Fish and other aquatic organisms in water treated with this product may be killed. You must consult your State Fish and Game Agency before applying this product to waters or wetlands. DO NOT contaminate water when disposing of equipment washwaters. This product is toxic to bees and should not be applied when bees are actively visiting the treatment area.

#### STORAGE AND DISPOSAL

**PROHIBITIONS:** DO NOT contaminate water, food, or feed by storage or disposal. DO NOT use or store near heat or open flame.

**PESTICIDE DISPOSAL:** Wastes resulting from the use of this product may be disposed of on site 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 by incineration or, if allowed by State and local authorities by burning. If burned stay out of smoke.

**GENERAL:** Consult Federal, State or local disposal authorities for approved alternative procedures.

#### DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

#### MOSQUITO LARVAE CONTROL

Apply ABATE 4-E as a uniform spray in sufficient water for good coverage at the rate of 0.5 to 1.5 fluid ounces per acre. Apply to standing water, moist areas, woodland pools, shallow ponds around the edges of lakes, swamps, marshes, tidal waters, and catch basins. Use 0.5 fluid ounce per acre in clean open water and 1.0 to 1.5 fluid ounces per acre in waters high in organic matter content. The higher rate should be used in areas known to have organophosphate resistant mosquitoes. Repeat applications as necessary.

DO NOT use on crops used for food, forage or pasture.

#### DISCLAIMER

The label instructions for the use of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and should be followed carefully. However, it is impossible to eliminate all risks inherently associated with use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the use or application of the product contrary to label instructions, all of which are beyond the control of Clarke Mosquito Control Products, Inc.

Clarke Mosquito Control Products, Inc. warrants only that the material contained herein conforms to the chemical description on the label and is reasonably fit for the use therein described when used in accordance with the directions for use, subject to the risks referred to above.

Any damages arising from a breach of this warranty shall be limited to direct damages and shall not include consequential commercial damages such as loss of profits or values or any other special or indirect damages.

Clarke Mosquito Control Products, Inc. makes no other express or implied warranty, including any other express or implied warranty of FITNESS or of MERCHANTABILITY.

**In case of an emergency endangering life or property involving this product, call  
day or night, 1-800-535-5053.**





# Fact Sheet

## Abate® 4E

This sheet answers some basic questions about a mosquito control product in use in your county. Salem County Mosquito Control, along with several other resources (listed at the end of this sheet), can provide more detailed information.

### What is Abate and how is it used?

**Abate** is an insecticide product that is recommended for mosquito control in New Jersey by Rutgers, The State University of New Jersey. It contains the pesticide called **Temephos**. The U.S. Environmental Protection Agency's (EPA) current evaluation considers **Temephos**-containing products to be slightly toxic with minimal potential risk to people when used properly as part of a complete mosquito control program.

**Abate** is a liquid concentrate pesticide product used to prevent mosquitoes from hatching in lakes, ponds, and other bodies of water. It is diluted and then applied to water where it acts on the larva, or immature stage of the mosquito, in water before the flying mosquito emerges. **Abate** is part of a mosquito management approach using habitat management and other measures to control immature mosquitoes in order to lessen the need to spray for adult mosquitoes.

### How can I avoid exposure to Abate?

Risk to the general public from the use of **Abate** is minimal. Avoiding exposure is always the safest course of action, particularly for populations that may be at higher risk such as pregnant women, children, the elderly, and those with chronic illnesses. Any possible exposure risk can be reduced by following some common sense actions:

- ❖ Plan your activities to limit time spent outside during times of possible pesticide treatments.
- ❖ Avoid direct contact with water bodies that have been treated.
- ❖ Avoid direct contact with the liquid. If there is contact with your eyes or skin, immediately flush and rinse with water.
- ❖ Stay away from application equipment, whether or not it is in use.

### What are the symptoms of exposure to Abate?

Symptoms of exposure can include headache, nausea, dizziness, excessive sweating, salivation, excessive tearing, and a runny nose. The chance of experiencing these symptoms of exposure with proper use is low. You should contact your physician, other medical providers, or the New Jersey Poison Information and Education System (NJPIES) at 1-800-222-1222 if you

experience these symptoms following a pesticide application. Bring this sheet with you if you visit a physician or other medical provider.

### **How long will Abate last in the environment?**

**Temephos** has a low persistence and will break down in water within a few days. In soil, it breaks down in approximately 30 days.

### **Where can I get more information on Abate?**

The following are resources for more information regarding **Abate** and mosquito control in your area (unless otherwise noted, available during normal business hours):

For overall pesticide-specific information – 9:30am to 7:30pm:

**National Pesticide Information Center** 800-858-7378

For pesticide health information & possible exposures – 24 hours:

**New Jersey Poison Information & Education System**  
800-222-1222

For New Jersey pesticide regulation & misuse complaints:

**NJDEP Pesticide Control Program** 609-984-6507

For Federal pesticide regulation:

**USEPA Region 2 Office of Pesticide Programs** 732-321-6759

For statewide mosquito control information:

**NJDEP Office of Mosquito Control Coordination** 609-292-3649

For local mosquito control information:

**Salem County Mosquito Control** 856-769-3255

For mosquito control recommendations:

**Rutgers University, Department of Entomology** 732-932-9437

For local health information:

**Salem County Health Department** 856-935-7510

# ABATE 5BG®

AN INSECTICIDE FOR CONTROL OF MOSQUITO AND MIDGE LARVAE

## ACTIVE INGREDIENT

Temephos (O,O'-thiodi-4, 1-phenylene) O,O,O',O'-tetramethyl phosphorothioate).....	5%
Other Ingredients.....	95%
Total.....	100%

## KEEP OUT OF REACH OF CHILDREN WARNING/AVISO

See Below for Additional Precautionary Statements

PRECAUTIONAL USUARIO: Si usted no lee Ingles, no use este producto hasta que la etiqueta le haya sido explicada ampliamente

### FIRST AID

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For Medical Emergencies, call the International Poison Control Center at 1-800-214-7753.

**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 the eye. Call a poison control center or doctor for treatment advice.

**IF SWALLOWED:** Call a poison control center or doctor immediately for treatment advice. Do not induce vomiting unless told to do so by a poison control center or doctor. Have person sip a glass of water if able to swallow. Do not give anything by mouth to an unconscious person.

**IF ON SKIN OR CLOTHING:** Remove contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

**IF INHALED:** Move person to fresh air. If the person is not breathing, call 911 or ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

**NOTE TO PHYSICIANS:** This product may cause cholinesterase inhibition. Atropine is antidotal. Pralidoxime chloride (2-PAM; PROTOPAM chloride) may be effective as an adjunct to atropine. Probable mucosal damage may contraindicate the use of gastric lavage.

### PRECAUTIONARY STATEMENTS

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Warning. Causes substantial but temporary eye injury. Do not get in eyes, on skin or on clothing. Harmful if swallowed. Harmful if inhaled. Avoid breathing dust. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

**Personal Protective Equipment (PPE):** Loaders, applicators and other handlers involved in ground applications, loaders and applicators involved in backpack blower application must wear long-sleeved shirt and long pants, shoes and socks, chemical-resistant gloves and protective eyewear, such as goggles, or safety glasses. Aerial applicators and flaggers must wear long-sleeved shirt, long pants, shoes plus socks. Flaggers must wear chemical-resistant headgear and protective eyewear. All other loaders, applicators and handlers must wear coveralls over long-sleeved shirt and long pants, chemical-resistant gloves, chemical-resistant footwear plus socks, protective eyewear, such as goggles or safety glasses, and chemical-resistant headgear (if overhead exposure). Loaders supporting aerial applications must wear a dust mist filtering respirator with MSHA/NIOSH approval number prefix TC-21C or a NIOSH-approved respirator with any M, R, P, or HE filter. In addition, loaders and cleaners of equipment must wear a chemical-resistant apron.

**Engineering Controls:** Pilots must use an enclosed cockpit and must wear chemical resistant gloves when entering or leaving an aircraft contaminated by pesticide residues. Used gloves must be stored in a closed chemical resistant container, such as a plastic bag, to prevent contamination of the inside of the cockpit.

**User Safety Requirements:** Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. Discard clothing and other absorbent materials that have been heavily contaminated with this product. Do not reuse them.

### USER SAFETY RECOMMENDATIONS

Users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Users should remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

### ENVIRONMENTAL HAZARDS

This product is toxic to aquatic organisms such as stoneflies, water fleas, and shrimp. Non-target aquatic organisms in waters treated with this product may be killed. Some populations reestablish rapidly, but diversity may be affected. Avoid use of maximum application rate in ecologically sensitive areas. Consult with the State agency with primary responsibility for regulating pes-

ticides before applying to public waters to determine if a permit is needed. Do not contaminate water by cleaning of equipment or disposing of wastes. For information on endangered species consult EPA's website: [www.epa.gov/esppl/](http://www.epa.gov/esppl/).

### DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

**APPLICATION RESTRICTIONS:** 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 aquatic pesticide applications, or by persons under their direct supervision.

This product may be applied to non-potable water, standing water, moist areas, woodland pools, shallow ponds, edges of lakes, swamps, marshes, tidal waters, intertidal zones of sandy beaches, waters high in organic content, highly polluted water, and catch basins. Maximum application rates may be used only in waters high in organic content, mosquito habitats having deep water or dense surface cover, and where monitoring has confirmed a lack of control at typical rates. This product may not be reapplied within 7 days of the date of the initial application unless monitoring indicates that larval populations have reestablished, or weather conditions have rendered initial treatments ineffective. This product may be applied as a spot treatment to non-potable water, lakes, and ponds for control of midge larvae when monitoring indicates threshold levels have been exceeded.

For control of mosquito larvae, apply ABATE 5BG® uniformly by conventional air or ground equipment as specified below. Application of this product by Belly-Grinder is prohibited.

Areas of Treatment	Lbs. per Acre	Lbs. a./acre
Non-potable water (stagnant, saline and temporary water bodies), standing water, moist areas, woodland pools, shallow ponds, edges of lakes	2	0.1
Swamps, marshes, tidal waters, intertidal zones, catch basins, and water high in organic content	4	0.2
Highly polluted water, waters high in organic content, areas demonstrated to have resistant mosquitoes, habitats having deep water or dense surface cover, or where monitoring has confirmed a lack of control at recommended application rates, and catch basins.	10	0.5

This product may also be applied prior to flooding as a pre-hatch application to areas which will breed mosquitoes.

Do not mix this product with water.

Application of this product by Belly-Grinder is prohibited.

Do not allow this product to drift.

**AERIAL 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 these factors when making decisions.

Do not use on crops used for food, forage or pasture.

### STORAGE AND DISPOSAL

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

**STORAGE:** Store in a cool, dry place. Reseal opened containers immediately after using. If spill occurs, sweep up and apply product according to labeled directions. Store only in original containers, in a locked area, away from food and feed.

**PESTICIDE DISPOSAL:** Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label directions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

**CONTAINER DISPOSAL:** Nonrefillable container. Do not reuse or refill this container. Completely empty bag into application equipment. Then offer for recycling, if available, or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**GENERAL:** Consult Federal, state or local disposal authorities for approved alternative procedures.

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.

NET CONTENTS: lbs.

LOT NO.

\*Registered trademark of BASF Corp.

CLARKE MOSQUITO CONTROL PRODUCTS, INC.  
159 N. GARDEN AVENUE  
ROSELLE, ILLINOIS 60172  
1-800-323-5727

EPA Reg. No. 8329-15

EPA Est. No. 8329-IL-01

AL0207



# Fact Sheet

## Abate® 2-BG & 5-BG

This sheet answers some basic questions about a mosquito control product in use in your county. Salem County Mosquito Control, along with several other resources (listed at the end of this sheet), can provide more detailed information.

### What is Abate and how is it used?

**Abate** is an insecticide product that is recommended for mosquito control in New Jersey by Rutgers, The State University of New Jersey. It contains the pesticide called **Temephos**. The U.S. Environmental Protection Agency's (EPA) current evaluation considers **Temephos**-containing products to be slightly toxic with minimal potential risk to people when used properly as part of a complete mosquito control program.

**Abate** is a granular pesticide product used to prevent mosquitoes from hatching in lakes, ponds, and other bodies of water. It acts on the larva, or immature stage of the mosquito, in water before the flying mosquito emerges. **Abate** is part of a mosquito management approach using habitat management and other measures to control immature mosquitoes in order to lessen the need to spray for adult mosquitoes.

### How can I avoid exposure to Abate?

Risk to the general public from the use of **Abate** is minimal. Avoiding exposure is always the safest course of action, particularly for populations that may be at higher risk such as pregnant women, children, the elderly, and those with chronic illnesses. Any possible exposure risk can be reduced by following some common sense actions:

- ❖ Plan your activities to limit time spent outside during times of possible pesticide treatments.
- ❖ Avoid direct contact with water bodies that have been treated.
- ❖ Avoid direct contact with the granules. If there is contact with your eyes or skin, immediately flush and rinse with water.
- ❖ Stay away from application equipment, whether or not it is in use.

### What are the symptoms of exposure to Abate?

Symptoms of exposure can include headache, nausea, dizziness, excessive sweating, salivation, excessive tearing, and a runny nose. The chance of experiencing these symptoms of exposure

with proper use is low. You should contact your physician, other medical providers, or the New Jersey Poison Information and Education System (NJPIES) at **1-800-222-1222** if you experience these symptoms following a pesticide application. Bring this sheet with you if you visit a physician or other medical provider.

## **How long will Abate last in the environment?**

**Temephos** has a low persistence and will break down in water within a few days. In soil, it breaks down in approximately 30 days.

## **Where can I get more information on Abate?**

The following are resources for more information regarding **Abate** and mosquito control in your area (unless otherwise noted, available during normal business hours):

For overall pesticide-specific information – 9:30am to 7:30pm:

**National Pesticide Information Center** 800-858-7378

For pesticide health information & possible exposures – 24 hours:

**New Jersey Poison Information & Education System**  
800-222-1222

For New Jersey pesticide regulation & misuse complaints:

**NJDEP Pesticide Control Program** 609-984-6507

For Federal pesticide regulation:

**USEPA Region 2 Office of Pesticide Programs** 732-321-6759

For statewide mosquito control information:

**NJDEP Office of Mosquito Control Coordination** 609-292-3649

For local mosquito control information:

**Salem County Mosquito Control** 856-769-3255

For mosquito control recommendations:

**Rutgers University, Department of Entomology** 732-932-9437

For local health information:

**Salem County Health Department** 856-935-7510



# Altosid<sup>®</sup> PELLETS

## MOSQUITO GROWTH REGULATOR



**A GRANULAR PRODUCT TO PREVENT ADULT MOSQUITO EMERGENCE (INCLUDING THOSE WHICH MAY TRANSMIT WEST NILE VIRUS)**

### SPECIMEN LABEL

**ACTIVE INGREDIENT:**  
 (S)-Methoprene (CAS #65733-16-6) . . . . . 4.25%  
**OTHER INGREDIENTS:** . . . . . 95.75%  
 Total . . . . . 100.00%

EPA Reg No. 2724-448      EPA Est. No. 39578-TX-1

**KEEP OUT OF REACH OF CHILDREN  
 CAUTION**

**PRECAUTIONARY STATEMENTS  
 HAZARDS TO HUMANS  
 AND DOMESTIC ANIMALS  
 CAUTION**

Causes moderate eye irritation. Harmful if absorbed through skin. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling.

<b>FIRST AID</b>	
Call a poison control center or doctor for treatment advice.	
<b>If in eyes</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> </ul>
<b>If on skin or clothing</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> </ul>
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-248-7763 for emergency medical treatment information.	

### ENVIRONMENTAL HAZARDS

Do not contaminate water when disposing of rinsate or equipment washwaters.

### DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

### INTRODUCTION

ZOËCON<sup>®</sup> ALTOSID<sup>®</sup> Pellets (ALTOSID<sup>®</sup> Pellets) release ALTOSID<sup>®</sup> Insect Growth Regulator as they erode. ALTOSID<sup>®</sup> Pellets prevent the emergence of adult standing water mosquitoes, including *Anopheles*, *Culex*, *Culiseta*, *Coquillettidia*, and *Mansonia* spp., as well as adults of the floodwater mosquitoes such as *Aedes*, *Ochlerotatus*, and *Psorophora* spp. from treated sites.

### GENERAL DIRECTIONS

ALTOSID<sup>®</sup> Pellets release effective levels of ALTOSID<sup>®</sup> Insect Growth Regulator for up to 30 days under typical environmental conditions. Continue treatment through the last brood of the season. Treated larvae continue to develop normally to the pupal stage where they die. **NOTE:** This insect growth regulator has no effect on mosquitoes which have reached the pupal or adult stage prior to treatment.

### APPLICATION SITES AND RATES

Use lower application rates when water is shallow, vegetation and/or pollution are minimal, and insect populations are low. Use higher rates when water is deep (>2 ft), vegetation, pollution, and/or organic debris or water flow are high, and insect populations are high. In instances of high organic debris and water flow, residual activity may be diminished.

**MOSQUITO HABITAT** **RATE (LB/ACRE)**

**Floodwater sites**

Pastures, meadows, rice fields, freshwater swamps and marshes, salt and tidal marshes, cattail marshes, woodland pools, floodplains, tires, other artificial water-holding containers 2.5-5

Dredging spoil sites, waste treatment and settling ponds, ditches and other manmade depressions 5-10

**Permanent water sites**

Ornamental ponds and fountains, fish ponds, cattail marshes, water hyacinth beds, flooded crypts, transformer vaults, abandoned swimming pools, construction and other manmade depressions, treeholes, other artificial water-holding containers 2.5-5

Storm drains, catch basins, roadside ditches, cesspools, septic tanks, waste settling ponds, vegetation-choked phosphate pits 5-10

**APPLICATION METHODS**

**Mosquitoes:** Apply **ALTOSID® Pellets** up to 15 days prior to flooding, or at any stage of larval development after flooding or in permanent water sites. Fixed wing aircraft or helicopters equipped with granular spreaders capable of applying rates from 2.5 to 10 lb/acre may be used to apply **ALTOSID® Pellets**. The pellets may also be applied using ground equipment which will achieve good, even coverage at the above rates. Apply **ALTOSID® Pellets** to artificial containers such as tires and catch basins, etc.

**STORAGE AND DISPOSAL**

Do not contaminate water, food, or feed by storage or disposal. Store closed containers of **ALTOSID® Pellets** in a cool, dry place.

**PESTICIDE DISPOSAL**

Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

**CONTAINER HANDLING**

Nonrefillable container. Do not reuse or refill this container. Triple rinse (or equivalent). Then offer for recycling, if available, or puncture and dispose of in a sanitary landfill, or by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**WARRANTY AND CONDITIONS OF SALE**

Seller makes no warranty, expressed or implied, concerning the use and handling of this product other than indicated on the label. Buyer assumes all risks of use and handling of this material when such use and handling are contrary to label instructions.

For information or in case of an emergency, call **1-800-248-7763**.

[www.altosid.com](http://www.altosid.com)

**Wellmark International**  
1501 East Woodfield Road 200W  
Schaumburg, Illinois 60173







# Altosid<sup>®</sup> PELLETS WSP

## MOSQUITO GROWTH REGULATOR



- A GRANULAR PRODUCT TO PREVENT ADULT MOSQUITO EMERGENCE (including those which may transmit West Nile virus)
- IDEAL WHEN TREATING HARD-TO-REACH STORMWATER SITES
- READY-TO-USE WATER SOLUBLE POUCHES (WSP)
- A SINGLE WSP COVERS UP TO 135 FT<sup>2</sup> OF WATER SURFACE AREA

## SPECIMEN LABEL

### ACTIVE INGREDIENT:

(S)-Methoprene (CAS# 65733-16-6)..... 4.25%

OTHER INGREDIENTS:..... 95.75%

TOTAL ..... 100.00%

EPA Reg. No. 2724-448

EPA Est. No. 2724-TX-1

**KEEP OUT OF REACH OF CHILDREN**

**CAUTION**

See additional Precautions

### PRECAUTIONARY STATEMENTS – HAZARDS TO HUMANS & DOMESTIC ANIMALS CAUTION

Causes moderate eye irritation. Harmful if absorbed through skin. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling.

#### FIRST AID

Call a poison control center or doctor for treatment advice.

**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.

**IF ON SKIN** • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-248-7763 for emergency medical treatment information.

### ENVIRONMENTAL HAZARDS

Do not contaminate water when disposing of rinsate or equipment washwaters.

### DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling

### INTRODUCTION

ZOËCON<sup>®</sup> ALTOSID<sup>®</sup> Pellets WSP (ALTOSID<sup>®</sup> Pellets WSP) release ALTOSID<sup>®</sup>, an Insect Growth Regulator as they erode. ALTOSID<sup>®</sup> Pellets WSP prevent the emergence of adult standing water mosquitoes, including *Anopheles*, *Culex*, *Culiseta*, *Coquillettidia*, and *Mansonia* spp., as well as adults of the floodwater mosquitoes, such as *Aedes*, *Ochlerotatus*, and *Psorophora* spp. from treated sites.

### GENERAL DIRECTIONS

ALTOSID<sup>®</sup> Pellets WSP release effective levels of ALTOSID<sup>®</sup> Insect Growth Regulator for up to 30 days under typical environmental conditions. Continue treatment through the last brood of the season. Treated larvae continue to develop normally to the pupal stage where they die.

**NOTE:** This insect growth regulator has no effect on mosquitoes which have reached the pupal or adult stage prior to treatment.

ALTOSID<sup>®</sup> Pellets WSP are convenient ready-to-use pouches for treating mosquito breeding sites. The pouches are water-sensitive and when in contact with water, the pouches dissolve, releasing the pellets. Use care when handling unused pouches so that moisture does not collect on the pouches. Keep pouches sealed in the original package until ready for use. Once outer foil bag containing water soluble pouches is opened, use pouches within one day.

## APPLICATION SITES

**ALTOSID® Pellets WSP** are effective against *Anopheles*, *Culex*, *Culiseta*, *Aedes*, *Ochlerotatus*, *Coquilleltida*, *Mansonia* and *Psorophora* mosquito species. Use pouches to treat small bodies of water such as: catch basins, storm drains, roadside ditches, tree holes, flooded crypts, transformer pits, fish ponds, woodland pools, fountains, septic tanks, ornamental ponds, manmade depressions, animal watering troughs, ditches, and other natural or artificial water-holding containers.

## APPLICATION RATE

Place one pouch into each catch basin. For other mosquito breeding sites, one pouch will treat up to 135 ft<sup>2</sup> of surface area. **ALTOSID® Pellets WSP** will provide up to 30 days control of emerging adult mosquitoes.

## STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal. Store closed containers of **Altosid® Pellets WSP** in a cool, dry place. **Pesticide Disposal:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. **Container Handling:** Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available, or dispose of empty outer foil pouch in the trash as long as **Water Soluble Pouch (WSP)** is unbroken.

## WARRANTY AND CONDITIONS OF SALE

Seller makes no warranty, expressed or implied, concerning the use and handling of this product other than indicated on the label. Buyer assumes all risks of use and handling of this material when such use and handling are contrary to label instructions.

For information or in case of an emergency, call 1-800-248-7763.

[www.altosid.com](http://www.altosid.com)

*Produced for:*

### **Wellmark International**

1501 East Woodfield Road 200W  
Schaumburg, Illinois 60173

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February, 2012  
Schaumburg, IL



# Altosid<sup>®</sup> XR

## EXTENDED RESIDUAL BRIQUETS



**A SUSTAINED RELEASE PRODUCT TO PREVENT ADULT MOSQUITO EMERGENCE  
(INCLUDING THOSE WHICH MAY TRANSMIT WEST NILE VIRUS)**

# SPECIMEN LABEL

**ACTIVE INGREDIENT:**

(S)-Methoprene (CAS #65733-16-6) (Dry Weight Basis): . . . . .	2.1%
<b>OTHER INGREDIENTS:</b> . . . . .	<b>97.9%</b>
Total . . . . .	<b>100.0%</b>

EPA Reg. No. 2724-421  
EPA Est. No. 2724-TX-1

KEEP OUT OF REACH OF CHILDREN  
**CAUTION**  
SEE ADDITIONAL PRECAUTIONARY STATEMENTS

**INTRODUCTION**

**ALTOSID<sup>®</sup> XR BRIQUETS** are designed to release effective levels of (S)-Methoprene insect growth regulator over a period up to 150 days in mosquito breeding sites. Release of (S)-Methoprene insect growth regulator occurs by dissolution of the briquet. Soft mud and loose sediment can cover the briquets and inhibit normal dispersion of the active ingredient. The product may not be effective in those situations where the briquet can be removed from the site by flushing action.

**ALTOSID<sup>®</sup> XR BRIQUETS** prevent the emergence of adult mosquitoes including: *Anopheles*, *Culex*, *Culiseta*, *Coquillettidia*, and *Mansonia* spp., as well as those of the floodwater mosquito complex (*Aedes*, *Ochlerotatus*, and *Psorophora* spp.) from treated water. Treated larvae continue to develop normally to the pupal stage where they die.

**NOTE:** (S)-Methoprene insect growth regulator has no effect on mosquitoes which have reached the pupal or adult stage prior to treatment.

**PRECAUTIONARY STATEMENTS  
HAZARDS TO HUMANS AND DOMESTIC  
ANIMALS - CAUTION**

Causes moderate eye irritation. Harmful if absorbed through skin. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling.

<b>FIRST AID</b>	
Call a poison control center or doctor for treatment advice.	
<b>If in eyes</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> </ul>
<b>If on skin or clothing</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> </ul>
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-248-7763 for emergency medical treatment information.	

**ENVIRONMENTAL HAZARDS**

Do not contaminate water when disposing of unused product.

**DIRECTIONS FOR USE**

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

## APPLICATION TIME

Place **ALTOSID® XR BRIQUETS** at or before the beginning of the mosquito season. Apply **ALTOSID® XR BRIQUETS** prior to flooding when sites are dry, or on snow and ice in breeding sites prior to spring thaw. Under normal conditions, one application will last the entire mosquito season, or up to 150 days, whichever is shorter. Alternate wetting and drying will not reduce their effectiveness.

## APPLICATION RATES

**Aedes, Ochlerotatus, and Psorophora spp.:** For control in non-(or low-) flow shallow depressions ( $\leq 2$  feet in depth), treat on the basis of surface area, placing one **ALTOSID® XR BRIQUET** per 200 ft<sup>2</sup>. Place briquets in the lowest areas of mosquito breeding sites to maintain continuous control as the site alternately floods and dries up.

**Culex, Culiseta and Anopheles spp.:** Place one **ALTOSID® XR BRIQUET** per 100 ft<sup>2</sup>.

**Coquillettidia and Mansonia spp.:** For application to cattail marshes and water hyacinth beds. For control of these mosquitoes, place one **ALTOSID® XR BRIQUET** per 100 ft<sup>2</sup>.

**Culex sp. in storm water drainage areas, sewers, and catch basins:** For catch basins, place one **ALTOSID® XR BRIQUET** into each basin. In cases of large catch basins, follow the chart below to determine the number of briquets to use. For storm water drainage areas, place one briquet per 100 ft<sup>2</sup> of surface area up to two ft deep. In areas that are deeper than two feet, use one additional briquet per two feet of water depth.

Water flow pressure increases the potential dissolution of the briquet. Conduct regular inspections (visual or biological) in areas of water flow to determine if the briquet is still present. Adjust the retreatment interval based on the results of an inspection.

### ALTOSID® XR BRIQUETS Application Chart

Number of Briquets	Catch Basin Size (Gallons)	Surface Area/Water Depth (ft)
1	0 – 1500	0 – 2
2	1500 – 3000	2 – 4
3	3000 – 4500	4 – 6
4	4500 – 6000	6 – 8

## APPLICATION SITES

**ALTOSID® XR BRIQUETS** are designed to control mosquitoes in treated areas. Examples of application sites are: storm drains, catch basins, roadside ditches, fish ponds, ornamental ponds and fountains, other artificial water-holding containers, animal watering troughs, cesspools and septic tanks, waste treatment and settling ponds, flooded crypts, transformer vaults, abandoned swimming pools, tires, construction and other manmade depressions, cattail marshes, water hyacinth beds, vegetation-choked phosphate pits, pastures, meadows, rice fields, freshwater swamps and marshes, salt and tidal marshes, treeholes, woodland pools, floodplains, and dredging spoil sites. For application sites connected by a water system, i.e., storm drains or catch basins, treat all of the water-holding sites in the system to maximize the efficiency of the treatment program.

## STORAGE AND DISPOSAL

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

**STORAGE:** Store in a cool place. Do not reuse empty container.

**PESTICIDE DISPOSAL:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

**CONTAINER DISPOSAL:** Nonrefillable container. Do not reuse or refill this container. Completely empty bag into application equipment. Then offer for recycling, if available, or dispose of empty container in a sanitary landfill or by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

## WARRANTY AND CONDITIONS OF SALE

Seller makes no warranty, expressed or implied, concerning the use and handling of this product other than indicated on the label. To the extent permitted by law, Buyer assumes all risks of use and handling of this material when such use and handling are contrary to label instructions.

For information, or in case of an emergency, call 1-800-248-7763.

[www.altosid.com](http://www.altosid.com)

**Wellmark International**  
1501 East Woodfield Road 200W  
Schaumburg, Illinois 60173



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# Fact Sheet

## Altosid®

This sheet answers some basic questions about a mosquito control product in use in your county. Your Salem County Mosquito Control, along with several other resources (listed at the end of this sheet), can provide more detailed information.

### What is Altosid and how is it used?

**Altosid** is an insecticide product that is recommended for mosquito control in New Jersey by Rutgers, The State University of New Jersey. It contains the pesticide called **Methoprene**. The U.S. Environmental Protection Agency's (EPA) current evaluation considers **Methoprene**-containing products to be very slightly toxic with minimal potential risk to people when used properly as part of a complete mosquito control program.

**Altosid** is used to prevent mosquitoes from hatching in lakes, ponds, and other bodies of water. It acts on the larval or immature stage of the mosquito in water before the flying mosquito emerges. **Altosid** is part of a mosquito management approach using habitat management and other measures to control immature mosquitoes in order to lessen the need to spray for adult mosquitoes.

### How can I avoid exposure to Altosid?

Risk to the general public from the use of **Altosid** is minimal. Avoiding exposure is always the safest course of action, particularly for populations that may be at higher risk such as pregnant women, children, the elderly and those with chronic illnesses. Any possible exposure risk can be reduced by following some common sense actions:

- ❖ Plan your activities to limit time spent outside during times of possible pesticide treatments.
- ❖ Avoid direct contact with water bodies that have been treated.
- ❖ Move children's toys out of application areas.
- ❖ Move animals and their food and water dishes out of application areas.
- ❖ Stay away from application equipment, whether or not it is in use.

### What are the symptoms of exposure to Altosid?

**Methoprene** is not a skin irritant or a sensitizer. The chance of experiencing symptoms of exposure with proper use is very low. You should contact your physician, other medical providers, or the New Jersey Poison Information and Education System (NJPIES) at 1-800-

**222-1222** if you experience any symptoms following a pesticide spraying. Bring this sheet with you if you visit a physician or other medical provider.

### **How long will Altosid last in the environment?**

**Methoprene** has a low persistence and breaks down in water within a few days. In soil, it breaks down in less than 10 days.

### **Where can I get more information on Altosid?**

The following are resources for more information regarding **Altosid** and mosquito control in your area (unless otherwise noted, available during normal business hours):

For overall pesticide-specific information – 9:30am to 7:30pm:

**National Pesticide Information Center** **800-858-7378**

For pesticide health information & possible exposures – 24 hours:

**New Jersey Poison Information & Education System** **800-222-1222**

For New Jersey pesticide regulation & misuse complaints:

**NJDEP Pesticide Control Program** **609-984-6507**

For Federal pesticide regulation:

**USEPA Region 2 Office of Pesticide Programs** **732-321-6759**

For statewide mosquito control information:

**NJDEP Office of Mosquito Control Coordination** **609-292-3649**

For local mosquito control information:

**Salem County Mosquito Control** **856-769-3255**

For mosquito control recommendations:

**Rutgers University, Department of Entomology** **732-932-9437**

For local health information:

**Salem County Health Department** **856-935-7510**

# Essentria® All Purpose Insect Concentrate

**KILLS:** Crawling and Flying Insect Pests

**FOR USE:** Indoors, Outdoors, Fogging, Turf and Ornamental, On Animal and Mosquito Misting Applications, Golf Courses, Vegetables, Fruit Trees (Both Bearing and Non-Bearing), Pasture and Range, Nursery and Greenhouse

## SPECIMEN LABEL

### ACTIVE INGREDIENTS:

Rosemary Oil ..... 10%  
Peppermint Oil ..... 2%

**OTHER INGREDIENTS\*:** ..... 88%

**TOTAL:** ..... 1000%

\*Isopropyl Myristate, Isopropyl Alcohol, Polyglyceryl Oleate, Butyl Lactate and Vanillin

**KEEP OUT OF REACH OF CHILDREN**

**CAUTION**

See Additional Precautionary Statements and  
Directions for Use

**FIFRA 25(b) Exemption**

### PRECAUTIONARY STATEMENTS

**CAUTION** – May cause eye and skin irritation. Avoid contact with eyes, skin and clothing.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE):

Persons handling concentrate are recommended to wear:

- Protective eyewear
- Chemical resistant gloves made of neoprene, nitrile or natural rubber

**USER SAFETY RECOMMENDATIONS:** User should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove clothing immediately if the product gets inside. Wash thoroughly and put on clean clothing. Remove PPE after handling this product. Wash the outside of the gloves before removing.

**PHYSICAL AND CHEMICAL HAZARDS:** Do not use, pour, spill or store near heat or open flame. Store only in original container.

FIRST AID	
<b>IF IN EYES</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a physician if irritation persists.</li> </ul>
<b>IF ON SKIN</b>	<ul style="list-style-type: none"> <li>• Wash exposed area thoroughly with soap and water.</li> </ul>
<b>IF INHALED</b>	<ul style="list-style-type: none"> <li>• Move exposed person to fresh air.</li> <li>• If breathing problems persist, get medical attention.</li> </ul>
<b>IF INGESTED</b>	<ul style="list-style-type: none"> <li>• Rinse mouth out with water.</li> <li>• Do not induce vomiting.</li> <li>• Obtain medical attention if feeling sick or nauseous.</li> </ul>
Seek medical attention if necessary.	

**FOR CHEMICAL SPILL, LEAK, FIRE, OR EXPOSURE CALL:**  
CHEMTREC 1-800-424-9300

**FOR MEDICAL EMERGENCIES ONLY, CALL: 1-800-248-7763**

**KEEP ALL INSECTICIDES OUT OF REACH OF CHILDREN**

### DIRECTIONS FOR USE

#### READ ENTIRE LABEL — USE IN ACCORDANCE WITH LABEL INSTRUCTIONS

Food processing operations may continue when this product is applied as a surface spray with care and in accordance with the directions and precautions given below.

#### SHAKE WELL BEFORE USING

Maintain agitation in all spray systems. Essentria® All Purpose Insect Concentrate is intended for use in and around buildings and structures as well as modes of transport.

**INDOOR USE AREAS:** Includes, but is not limited to, apartment buildings, bakeries, beverage plants, bottling facilities, breweries, cafeterias, candy plants, canneries, cereal processing and manufacturing plants, dairy barns, poultry facilities, flour mills, food processing plants, frozen food plants, homes, hospitals, hotels, houses, industrial buildings, kennels, kitchens, laboratories, manufacturing facilities, mausoleums, meat processing and packaging plants, meat and vegetable canneries, motels, nursing homes, office buildings, restaurants, schools, stores, supermarkets, warehouses and similar structures.

**OUTDOOR AREAS:** Includes, but is not limited to, building foundations, dairy facilities, drive-in restaurants, drive-in theaters, golf courses, parks, playgrounds, poultry houses, recreational areas, schools, urban areas, lawns, landscape areas, trees, turf and zoos.

**MODES OF TRANSPORT:** Aircraft, buses, trucks, trailers, rail cars and marine vessels.

**NOTE:** For sensitive indoor/outdoor surfaces such as vinyl, plastic, fabric, wood floors, etc., test a small non-visible area first before spraying. This includes vinyl siding, outdoor furniture, storm doors and windows, etc. It is possible that Essentria® All Purpose Insect Concentrate may mar some sensitive surfaces. If spray gets on any sensitive surface that is listed, simply rinse with water and wipe off with clean cloth. Essentria® All Purpose Insect

Concentrate may be diluted with water or oil and applied with conventional application equipment including, but not limited to, compressed air sprayers and power sprayers. When diluting with water, prepare only the amount needed for immediate use and maintain agitation during use. Do Not Store Spray Solution Overnight. For oil dilutions that are applied in food handling establishments, a deodorized petroleum oil which conforms to CFR 21 (especially section 172.884) is required (such as Exxon® Isopar® M, Ashland® Low Odor Base Solvent or the equivalents). Tank mix applications must be made in accordance with the more restrictive of label limitations and precautions. No label dosages may be exceeded. This product cannot be tank mixed with any product with label prohibitions against such mixing.

Most effective results are achieved when used as part of a treatment protocol that includes physical, environmental and other chemical pest control measures.

## INDOOR USE

Before applying to house plants, test for phytotoxicity. Cover any aquaria prior to spraying.

**GENERAL PEST CONTROL:** To control accessible, exposed stages of crawling insects including, but not limited to, ants, bed bugs, cockroaches, caddisflies, cigarette beetles, dark mealworms, dried fruit beetles, drugstore beetles, confused flour beetles, fleas, grain mites, fowl mites, mites, nuisance beetles (such as lady beetles), red flour beetles, rice weevils, saw-toothed grain beetles, scorpions, spiders, spider beetles, yellow mealworms in sites that include, but are not limited to, apartments, homes, restaurants, food processing plants, industrial installations and warehouses, dilute at the rate of up to 0.5 to 6 fluid ounces of Essentria® All Purpose Insect Concentrate per gallon of water (use lower rate for maintenance service and higher rates for active infestations). Thoroughly spray non-visible areas where these insects are usually found with special attention to cracks and crevices, niches, dark corners, drains and other harborage sites. Mix Essentria® All Purpose Insect Concentrate at a rate of 1 to 6 fluid ounces per gallon of water, when treating for fleas. Thoroughly apply as a fine particle broadcast spray to infested rugs, carpets, furniture, and other pet resting areas. Remove old pet bedding and replace with clean, fresh bedding after treatment. When treating for bed bugs, thoroughly clean and vacuum all mattresses and springs prior to treatment. When treating for bed bugs, mix Essentria® All Purpose Insect Concentrate at a rate of 1 to 6 fluid ounces per gallon of water. Thoroughly clean, vacuum, and sanitize mattress and bedding. Thoroughly apply as a fine particle broadcast spray, paying special attention to cracks and crevices, around baseboards, floorboards, headboards, nightstands, walls, and other harborage areas. On mattresses, you may apply a broadcast treatment, concentrating on the tufts, seams, folds, and creases. Repeat as necessary.

**FOGGING:** To control crawling and flying insects (moths and flies, including house flies, horse flies, stable flies, horn flies, mosquitoes, gnats, fruit flies, phorid flies, granary weevils, rice weevils, confused flour beetles, saw-toothed grain beetles, spider beetles, cigarette beetles, drugstore beetles, angoumois grain moths, Mediterranean flour moths, Indian meal moths, tobacco moths, yellow mealworms, dark mealworms, grain mites, caddisflies, red flour beetles, etc.) in sites that include, but are not limited to, food processing plants, (INCLUDING USDA INSPECTED FACILITIES), industrial installations, animal quarters (cattle barns, horse barns, poultry barns, swine houses, zoos and warehouses), Essentria® All Purpose Insect Concentrate may be applied as a space spray through conventional fogging equipment misting systems (including mist sprayers and mist blowers), automated spray systems, and/or related application technologies. Cover sensitive surfaces (plastics, etc). Close and shut off air conditioning or ventilating equipment. Mix 4 to 10 fluid ounces of Essentria® All Purpose Insect Concentrate insecticide with sufficient oil to equal 1 gallon of diluted spray. (It is recommended to use lower rates in most food facility applications). Apply at a rate of 1 to 3 fluid ounces per 1,000 cubic feet, filling the room with mist (or fog, if thermal equipment is used). Keep area closed for at least 15 minutes. Vacate treated area. Ventilate before reoccupying. Fogging may create slippery conditions

on painted floor surfaces. Retreat if reinfestation occurs.

The product does contain plant oils that are inherently fragrant. When used in confined spaces, prolonged exposure to the fragrance may be objectionable to some individuals.

## OUTDOOR USE

**PERIMETER TREATMENTS AND RECREATIONAL AREAS:** To control aphids, ants, bees, boxelder bugs, centipedes, cockroaches, crickets, darkling beetles, firebrats, fleas, ground beetles, fowl mites, mites, millipedes, pillbugs, scorpions, silverfish, sowbugs, spiders, ticks and wasps, in compressed air sprayers, dilute 1 to 8 fluid ounces of Essentria® All Purpose Insect Concentrate per gallon of water (use lower rate for maintenance service and higher rates for active infestations) and apply at the rate of 2 gallons per 1,000 square feet or until area is thoroughly wet. Also apply to a band of soil and vegetation 6 to 10 feet wide around and adjacent to buildings. Treat the building foundation to a minimum height of 2 to 3 feet with sufficient water for coverage. Make special efforts to spray areas where pest species congregate such as, but not limited to, waste receptacles, dumpsters, unoccupied picnic tables, the exterior of food handling establishments, and food pavilions. Additionally, apply around potential entry areas such as, but not limited to, eaves, windows, doorways, porches, porch lights, and around utility boxes. For power sprayers, mix approximately 1 to 6 fluid ounces of Essentria® All Purpose Insect Concentrate per gallon of water (use lower rate for maintenance service and higher rates for active infestations) and apply until area is sufficiently covered (usually min. 4 gallons per 1,000 square feet). When power spraying, it may be possible to batch mix 8 to 12 fluid ounces of Essentria® All Purpose Insect Concentrate into 50 gallons of water. When using this method, monitor application for desired performance. Maintain agitation. Repeat as necessary.

**MOUND DRENCH METHOD - FOR CONTROL OF FIRE ANTS AND OTHER MOUNDING ANTS:** Dilute 2 to 4 fluid ounces of Essentria® All Purpose Insect Concentrate per gallon of water. Apply 1 to 2 gallons of emulsion to each mound area by sprinkling the mound until it is wet and treat a 4 foot diameter circle around the mound. Use the higher volume for mounds larger than 12 inches. For best results, apply in cool weather, such as the early morning or late evening hours, but not in the heat of the day.

**MOSQUITO CONTROL AND OTHER BITING FLIES - OUTDOOR YARD OR BARRIER TREATMENT:** To control adult mosquitoes and other biting flies using ground application, dilute 1 to 3 fluid ounces of Essentria® All Purpose Insect Concentrate per gallon of water. Treat harborage areas such as shrubbery and vegetation where mosquitoes/flies may rest. Shrubby and vegetation around stagnant pools, marshy areas, ponds and shorelines may be treated. Repeat as necessary.

**MOSQUITO CONTROL AND OTHER BITING INSECTS - AUTOMATIC SPRAYING SYSTEMS:** Automatic spraying systems must not be programmed to release pesticides where food or feed is directly exposed. To control flies, house flies, horn flies, stable flies, horse flies, mosquitoes and gnats, add concentrate to tank and add water to obtain desired dilution. Agitate well while adding water and maintain thorough agitation while system is in use. In automatic spraying systems like, but not limited to, misting systems used for mosquito and other biting insect control, solutions of Essentria® All Purpose Insect Concentrate may be stored for extended periods of time, as long as the system has agitation and the appropriate quantity of adjuvant is used.

Dispense diluted concentrate through automatic spraying system. Set nozzles to deliver one fluid ounce of liquid per minute. Locate nozzles to cover a maximum of 2,000 cubic feet of space per nozzle. Set timer to operate in accordance with equipment directions. Dilute Essentria® All Purpose Insect Concentrate just prior to use at 0.5 to 3 fluid ounces per gallon of water (Use lower dilution rates for preventative applications).

**TO CONTROL SPIDERS, FLYING INSECTS, AND OTHER NUISANCE PESTS ON AND AROUND BOAT DOCKS:** As an aid in the elimination of their harborage areas, dilute 2 to 8 fluid ounces of Essentria® All Purpose Insect



Concentrate per gallon of water and apply at the rate of 2 gallons per 1,000 square feet or until area is thoroughly wet. Since flying insects can migrate in and out of the treatment area, it is recommended to use this product as part of an Integrated Pest Management (IPM) program. This includes, but is not limited to, eliminating breeding and harborage sites.

**USE ON TURF AND GRASS:** Use alone as a contact spray. To control ants, armyworms, billbugs, chinch bugs, chiggers, crickets, cutworms, earwigs, fleas, grasshoppers, hyperodes weevils (adults), Japanese beetles (adults), mole crickets, sod webworms and ticks, dilute in a compressed air sprayer (or backpack), 2 to 4 fluid ounces of Essentria® All Purpose Insect Concentrate per gallon of water and apply at the rate of 2 to 4 gallons per 1,000 square feet or until area is thoroughly wet. For power sprayers, apply approximately 1 to 6 fluid ounces of Essentria® All Purpose Insect Concentrate per 1,000 square feet in 2 to 4 gallons of water. Apply until area is sufficiently covered. Exceeding rates may create potential phytotoxicity of turf surfaces.

**USE ON NON-BEARING TREES AND SHRUBS:** To control mites, scale insects, mealybugs, aphids, lace bugs, whiteflies, tent caterpillars, bagworms and beetles, dilute up to 1 to 6 fluid ounces of Essentria® All Purpose Insect Concentrate per gallon of water and apply using a compressed air sprayer or power sprayer until foliage is thoroughly wet. Maintain agitation.

Exceeding rates may create potential phytotoxicity on plant surfaces. Dilute with enough water to obtain thorough coverage.

**DIRECTIONS FOR USE IN OUTDOOR RESIDENTIAL MISTING SYSTEMS:**

Use to control or temporarily reduce annoyance from accessible stages of: mosquitoes, flies, house flies, gnats, deer flies, horse flies, hornets, wasps, yellow jackets, firebrats, small flying moths, earwigs, fleas, ticks, crickets, cockroaches, silverfish, spiders and other nuisance insects.

If used in a system with a reservoir tank for the end use dilution, the system reservoir tank must be locked. Securely attach the end-use pesticide label and a dilution statement to the system reservoir tank in a weather protected area or plastic sleeve. The dilution statement must be phrased as follows: This container holds \_\_\_ parts Essentria® All Purpose Insect Concentrate to \_\_\_ parts water.

If used in a direct injection system, the pesticide container must be locked. Securely attach the end-use label to the pesticide container in a weather protected area or plastic sleeve.

Only use this product in residential misting systems that have been calibrated to apply no more than the maximum application rate of 9.5 fluid ounces solution per 1,000 cubic feet per day. Mix ½ gallon to 2 gallons (64 fluid ounces to 256 fluid ounces) of Essentria® All Purpose Insect Concentrate in 55 gallons of water.

In automatic spraying systems like, but not limited to, misting systems used for mosquito and other biting insect control, solutions of Essentria® All Purpose Insect Concentrate may be stored for extended periods of time, as long as the system has agitation and the appropriate quantity of adjuvant is used.

For high populations of insects or when treating species that are difficult to control, mix up to 2 gallons of concentrate in 55 gallons of water. When filling tank, partially fill the system reservoir tank with water, add concentrate to tank, then add water to obtain desired dilution. System nozzles should deliver fine particle size droplets (aerosol or mist). Direct nozzles to spray towards the target area and away from swimming pools, water bodies, or eating and cooking areas. Set system timer to operate in accordance with equipment directions.

**LIVESTOCK USE DIRECTIONS**

USE	INSECTS	DILUTION Essentria® All Purpose Insect Concentrate	REMARKS
Livestock Spray (Beef Cattle, Swine, Goats and Sheep)	To control flying insects, including, but not limited to: Flies, House Flies, Deer Flies, Stable Flies and aids in the control of Face Flies	1 to 3 fl oz per gal of water or mineral oil USP	Dilute as indicated and spray directly on the animal in sufficient amounts for proper coverage. There is no withholding period from last application to slaughter.
	Ticks and Lice	1 to 3 fl oz per gal of water or mineral oil USP	Apply as above
Livestock Spray (Lactating Dairy Cattle)	To control flying insects, including, but not limited to: Flies, House Flies, Deer Flies, Stable Flies and aids in the control of Face Flies	1 to 3 fl oz per gal of water or mineral oil USP	Dilute as indicated. Direct spray to cover thoroughly. Repeat as necessary. No milk discard is required. Take care that the spray does not come in direct contact with the lactating cow's teats unless they are washed with an approved cleansing solution and dried before milking. Apply the spray at least 20 minutes prior to milking or after milking has been completed.
	Ticks and Lice	1 to 3 fl oz per gal of water or mineral oil USP	Apply as above
Horses	To control flying insects, including, but not limited to: Flies, House Flies, Deer Flies, Stable Flies and aids in the control of Face Flies	1 to 3 fl oz per gal of water or mineral oil USP	Dilute as indicated and spray directly on the animal in sufficient amounts for proper coverage.
Poultry	Bed Bugs, Lice, Fleas, All Mites including Northern Fowl Mites	1 to 3 fl oz per gal of water or mineral oil USP	Thoroughly spray roosts, roost poles, walls (especially cracks in walls), and nests or cages. It is not necessary to remove poultry from the housing unit during treatment. This should be followed by spraying over the birds with a fine mist in sufficient amounts for proper coverage.

**PREMISE USE DIRECTIONS FOR LIVESTOCK FACILITIES**

USE	INSECTS	DILUTION Essentria® All Purpose Insect Concentrate	REMARKS
Residual Surface Spray	Flies, Gnats, Litter Beetles, Darkling Beetles (Lesser Mealworms) Mosquitoes, Spiders, Wasps	3 to 6 fl oz per gal of water or mineral oil USP	Apply 1 gallon of dilution per 500 - 1,000 sq ft. Thoroughly cover walls, ceilings or other areas where pests rest or congregate in dairy barns, horse barns, poultry houses, swine buildings, livestock sheds, and other farm buildings.
Larvicide	Maggots (Fly Larvae)	4 to 8 fl oz per gal of water or mineral oil USP	Apply 1 gallon of dilution per 100 sq ft of droppings as a coarse spray. Repeat at 7 - 10 day intervals until droppings begin to come up, then treat only "hot spots" (small areas found to have large number of maggots).

**DIRECTIONS FOR USE IN AUTOMATIC MISTING AND ULV SPRAYING SYSTEMS:**

In areas such as animal quarters, dairy and beef barns, poultry houses, swine housing, warehouses, zoos and other listed livestock or animal housing areas, to kill flies, house flies, horn flies, stable flies, deer flies, horse flies, mosquitoes, gnats, hornets, wasps, yellow jackets, firebrats, small flying moths, earwigs, fleas, ticks, crickets, cockroaches, silverfish, spiders and other listed insects: Mix ½ gallon (64 fluid ounces) of concentrate into 55 gallons of water. For high populations of insects or when treating species that are difficult to control, mix up to 2 gallons (256 fluid ounces) of concentrate in 55 gallons of water.

When filling tank, partially fill the system reservoir tank with water, add concentrate to tank, then add water to obtain desired dilution. System nozzles should deliver fine particle size droplets (aerosol or mist). Nozzles should be rated for a delivery rate not to exceed 1.25 fluid ounces (37 ml) of solution per minute, with one nozzle covering 100 square feet (9.3 m<sup>2</sup>). Set system timer to operate in accordance with equipment directions.

In automatic spraying systems like, but not limited to, misting systems used for mosquito and other biting insect control, solution of Essentria<sup>®</sup> All Purpose Insect Concentrate may be stored for extended periods of time as long as the system has agitation and the appropriate quantity of adjuvant is used.

Personnel should vacate containment treatment areas while treatment is in progress. Thoroughly ventilate treated areas prior to re-entry by personnel.

**AGRICULTURE APPLICATION RATES**

Spray when pests first appear. Repeat application every 7-21 days.

CROPS INCLUDING, BUT NOT LIMITED TO	INSECTS/MITES INCLUDING, BUT NOT LIMITED TO	APPLICATION RATE IN 100 GALLONS PER ACRE FOR GROUND APPLICATIONS
Legume and Fruiting Vegetables Beans, Eggplants, Lentils, Peas, Peanuts, Peppers, Tomatoes	Aphids, Whiteflies, Beetles, Two-Spotted Spider Mites, Plant Bugs, Thrips and Early Stages of Caterpillars	1 - 4 Pints
Bulb, Cole and Leafy Vegetables Broccoli, Cabbage, Cauliflower, Celery, Garlic, Lettuce, Onions, Spinach	Aphids, Whiteflies, Beetles, Two-Spotted Spider Mites, Plant Bugs, Thrips and Early Stages of Caterpillars	1 - 4 Pints For onions: Use 1 - 5 pints
Cucurbits Cantaloupes, Cucumbers, Melons, Squashes, Watermelons	Aphids, Whiteflies, Beetles, Two-Spotted Spider Mites, Plant Bugs, Thrips and Early Stages of Caterpillars	1 - 4 Pints
Root and Tuber Vegetables Carrots, Potatoes, Radishes, Sweet Potatoes, Turnips	Aphids, Plant Bugs, Potato Leafhoppers, Two-Spotted Spider Mites and Thrips	1 - 4 Pints
Alfalfa	Aphids, Leafhoppers, Plant Bugs, Thrips and Early Stages of Caterpillars	1.5 - 4 Pints
Herbs and Spices Anise, Basil, Dill, Mint, Peppermint, Spearmint, Thyme, Wintergreen	Aphids, Leafhoppers, Plant Bugs, Thrips and Early Stages of Caterpillars	1 - 3 Pints
Small Fruits and Berries Blackberries, Blueberries, Cranberries, Raspberries, Strawberries	Aphids, Leafhoppers, Mealybugs, Whiteflies, Lygus Bugs, Thrips, Two-Spotted Spider Mites, Pacific Spider Mites, McDaniel Mites, European Red Mites and Early Stages of Leafrollers and Caterpillars	1 - 4 Pints
Grapes and Hops Grapes (Raisin, Table, Wine)	Leafhoppers, Sharpshooters, Two-Spotted Spider Mites, Pacific Spider Mites, Willamette Mites, Thrips, Mealybugs and Early Stages of Leafrollers and Caterpillars	1 - 4 Pints
Stone Fruits, Pome Fruits Apples, Apricots, Cherries, Peaches, Nectarines, Olives, Pears, Plums, Prunes, Pomegranates and Persimmons	Aphids, Thrips, Leafhoppers, Psylla, Scales, Two-Spotted Spider Mites, Pacific Mites, McDaniel Mites, European Red Mites, Early Stages of Leafrollers and Caterpillars	1 - 4 Pints
Citrus and Sub Tropicals Avocados, Lemons, Grapefruits, Oranges, Papayas, Bananas, Plantains, Mangos	Aphids, Thrips, Scales, Two-Spotted Spider Mites, Pacific Mites, Citrus Red Mites, Citrus Rust Mites, European Red Mites, Early Stages of Leafrollers and Caterpillars	2 - 5 Pints

CROPS INCLUDING, BUT NOT LIMITED TO	INSECTS/MITES INCLUDING, BUT NOT LIMITED TO	APPLICATION RATE IN 100 GALLONS PER ACRE FOR GROUND APPLICATIONS
CONTINUED FROM PREVIOUS PAGE		
Nuts Almonds, Cashews, Pecans, Pistachios, Walnuts	Aphids, Thrips, Two-Spotted Spider Mites, Pacific Mites, McDaniel Mites and European Red Mites	1 - 4 Pints
Field Crops Corn, Cotton, Sorghum, Soybeans, Sweet Corn, Tobacco	Aphids, Soybean Aphids, Beetles, Whiteflies, Two-Spotted Spider Mites, Plant Bugs, Thrips, and Early Stages of Caterpillars	2 - 4 Pints
Christmas Trees Caution: Certain adjuvants may affect coloration of Blue Spruce	Mites and Aphids	1 - 4 Pints
Backyard Fruit and Nut Trees	Mites and Aphids	12 - 48 fl oz Use sufficient water to get thorough coverage.
Mushroom Houses	Mushroom Flies (Phorids and Sciariids)	4 - 8 fl oz per gallon - Spray dilution on outside and inside walls, floors, and sideboards of mushroom houses after compost has been pasteurized by heating. Also spray over the plastic covering the beds and trays after spawning. Retreat as needed.

For aerial applications, use a minimum of 15 gallons of spray volume per acre. Complete coverage of foliage is essential to achieve control. The foliage should be completely WET, but avoid runoff. The use of a spreader and/or penetrant adjuvant improves product performance.

**PESTS CONTROLLED THROUGH DRIP IRRIGATION SYSTEMS** (including but not limited to): cutworms, wireworms, root maggots, symphylans, and crickets.

**CROPS TREATED BY DRIP IRRIGATION** (including but not limited to): Beets, Brussel Sprouts, Cabbage, Chinese Broccoli, Broccoli, Chinese Cabbage, Chinese Mustard, Cauliflower, Collards, Endive, Garlic, Ginseng, Kale, Melons (Cantaloupes, Casabas, Honeydew, Muskmelons, Persians, and Watermelons), Onions (Bulb and Green), Parsnips, Potatoes, Sweet Potatoes, Spinach, Strawberries, Sugar Beets, Sweet Corn, Tomatoes.

Apply Essentria<sup>®</sup> All Purpose Insect Concentrate through the drip irrigation systems at a rate of 2 pints per acre of plant bed as a preventative treatment or when pest infestation is low to moderate and 4 pints per acre of plant bed when pest infestation is high. Apply 2 to 3 applications of Essentria<sup>®</sup> All Purpose Insect Concentrate over a 7 to 14 day schedule. Refer to local extension recommendations for additional information regarding pest populations and thresholds.

Essentria<sup>®</sup> All Purpose Insect Concentrate can be applied at any time during the crop cycle, from the time of planting to the harvest and there are no restrictions on the number of applications per season. For drip irrigation systems, set the emitter spacing and the line pressure to give the best bed coverage and reduce loss of chemigation products through leaching.

BED WIDTH	LINEAR FEET OF BED TO EQUAL ONE ACRE	ESSENTRIA <sup>®</sup> , 2 PTS/ACRE RATE/1000 ROW FEET	ESSENTRIA <sup>®</sup> , 4 PTS/ACRE RATE/1000 ROW FEET
36 inches	14,520 ft	2.2 fl oz	4.4 fl oz
48 inches	10,890 ft	2.9 fl oz	5.9 fl oz
60 inches	8,712 ft	3.7 fl oz	7.3 fl oz
72 inches	7,260 ft	4.4 fl oz	8.8 fl oz

**USE RATES FOR ANY PLANTS GROWN INDOORS OR IN GREENHOUSES, SHADEHOUSES, INTERIORSCAPES, AND NURSERIES**

Spray when pests first appear. Repeat application every 7-21 days.

**PLANT TOLERANCE**

Essentria® All Purpose Insect Concentrate has been evaluated for phytotoxicity on a wide range of ornamental plants. However, due to the large number of species and varieties of ornamental plants, it is impossible to test every one for tolerance to Essentria® All Purpose Insect Concentrate. The professional user should determine if Essentria® All Purpose Insect Concentrate could be used safely prior to commercial use. In a small area, test the recommended rates on a small number of plants for phytotoxicity prior to widespread use. Before using Essentria® All Purpose Insect Concentrate in tank mixture with other products and adjuvants, test the mixture on a small number of plants for phytotoxicity prior to widespread use.

PESTS INCLUDING, BUT NOT LIMITED TO	FL OZ/10 GAL SPRAY SOLUTION	FL OZ/100 GAL SPRAY SOLUTION
APHIDS: Green Peach Aphids, Pea Aphids, Cotton Aphids, Rose Aphids	2 - 4	20 - 40
BEETLES: Flea Beetles, Leaf Beetles	2.0 - 4.8	20 - 48
Early Stages of Caterpillars: Armyworms, Leafrollers, Loopers, Webworms	1.6 - 3.2	16 - 32
FLIES: Fungus Gnats, Shore Flies	1.6 - 3.2	16 - 32
LEAFHOPPERS: Grape Leafhoppers, Potato Leafhoppers	1.6 - 3.2	16 - 32
LEAFMINERS: Azalea Leafminers, Citrus Leafminers, Blotch Leafminers, Boxwood Leafminers	1.6 - 3.2	16 - 32
MEALYBUGS: Citrus Mealybugs, Long-tailed Mealybugs	1.6 - 3.2	16 - 32
MITES: Two-Spotted Spider Mites, Broad Mites, Citrus Budmites, Cyclamen Mites, Rust Mites	1.6 - 4.8	16 - 48
SOFT SCALES (Crawler Stages)	1.6 - 4.8	16 - 48
THRIPS: Western Flower Thrips	3.2 - 6.4	32 - 64
WHITEFLIES: Greenhouse Whiteflies, Silverleaf Whiteflies	1.6 - 3.2	16 - 32

Complete coverage of foliage is essential to achieve control. The foliage should be completely WET, but avoid runoff. The use of a spreader and/or penetrant adjuvant improves product performance.

**USE RATES FOR OUTDOOR PLANTS INCLUDING TREES, LANDSCAPES, NURSERY, AND ALL OUTDOOR ORNAMENTAL PLANTS**

Spray when pests first appear. Repeat application every 7-21 days.

PESTS INCLUDING, BUT NOT LIMITED TO	FL OZ/10 GAL SPRAY SOLUTION	FL OZ/100 GAL SPRAY SOLUTION
APHIDS: Green Peach Aphids, Pea Aphids, Cotton Aphids, Rose Aphids	2 - 4	20 - 40
BEETLES: Colorado Potato Flea Beetles, Japanese Beetles, Leaf Beetles, Mexican Bean Beetles, Rose Chafers, Twig Girdlers	3.2 - 6.4	32 - 64
BUGS: Boxelder Bugs, Chinch Bugs, Lygus Bugs, Spittle Bugs	1.6 - 4.8	16 - 48
Early Stages of Caterpillars: Armyworms, Cutworms, Fruitworms, Gypsy Moths, Hornworms, Leafrollers, Navel Orange Worms, Pine Tip Moths, Sod Webworms, Tent Caterpillars, Tobacco Budworms, Tussock Moths	1.6 - 3.2	16 - 32
FLIES: Cherry Maggots, Crane Flies, Midges	2.0 - 4.0	20 - 40
LEAFHOPPERS: Variegated Leafhoppers and Sharpshooters	3.2 - 6.4	32 - 64
LEAFMINERS: Azalea Leafminers, Citrus Leafminers, Blotch Leafminers, Boxwood Leafminers	1.6 - 4.8	16 - 48

PESTS INCLUDING, BUT NOT LIMITED TO	FL OZ/10 GAL SPRAY SOLUTION	FL OZ/100 GAL SPRAY SOLUTION
<b>CONTINUED FROM PREVIOUS PAGE</b>		
MEALYBUGS: Apple Mealybugs, Citrus Mealybugs, Grape Mealybugs	1.6 - 4.8	16 - 48
MITES: Two-Spotted Spider Mites, Broad Mites, Citrus Bud Mites, Cyclamen Mites, Rust Mites	1.6 - 4.8	16 - 48
PSYLLIDS: Pear psylla	1.6 - 4.8	16 - 48
SAWFLIES: European Pine Sawflies, Pear Sawflies, Red-headed Pine Sawflies, Yellow-headed Pine Sawflies.	1.6 - 3.2	16 - 32
Crawler stages of SCALES: Black Scales, Brown Soft Scales, California Red Scales, Coffee Scales, Olive Scales, San Jose Scales	1.6 - 4.8	16 - 48
THRIPS: Citrus Thrips, Onion Thrips, Western Flower Thrips	3.2 - 6.4	32 - 64
WHITEFLIES: Greenhouse Whiteflies, Silverleaf Whiteflies, Woolly Whiteflies	1.6 - 3.2	16 - 32

Complete coverage of foliage is essential to achieve control. The foliage should be completely WET, but avoid runoff. The use of a spreader and/or penetrant adjuvant improves product performance.

**STORAGE AND DISPOSAL**

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

**STORAGE:** Store in original container in a dry, cool place inaccessible to children and pets.

**DISPOSAL:** Do not reuse container. Discard in trash.

**IMPORTANT: READ BEFORE USE**

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties and Limitations of Liability.

**CONDITIONS:** The Directions for Use of this product are believed to be adequate and must be followed carefully. However, because of manner of use and other factors beyond Central Garden & Pet Company's control, it is impossible for Central Garden & Pet Company to eliminate all risks associated with the use of this product. As a result, crop injury or ineffectiveness is always possible. All such risks shall be assumed by the user or buyer.

**DISCLAIMER OF WARRANTIES:** TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, CENTRAL GARDEN & PET COMPANY MAKES NO OTHER WARRANTIES, EXPRESSED OR IMPLIED, OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, THAT EXTEND BEYOND THE STATEMENTS MADE ON THIS LABEL. No agent of Central Garden & Pet Company is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. Central Garden & Pet Company disclaims any liability whatsoever for special, incidental or consequential damages resulting from the use or handling of this product.

**LIMITATIONS OF LIABILITY:** TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, SHALL NOT EXCEED THE PURCHASE PRICE PAID, OR AT CENTRAL GARDEN & PET COMPANY'S ELECTION, THE REPLACEMENT OF PRODUCT.



Central Garden & Pet Company, 1501 East Woodfield Road, 200W, Schaumburg, Illinois 60173

**NOTE:** This specimen label is for informational purposes only. All uses may not be approved in all states. See product labeling for use directions.

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*Municipalities are encourage to share this information with all residents in their community*

## **Fact Sheet**

### **Essentria All Purpose Insecticide Concentrate®**

This sheet answers some basic questions about a mosquito control product in use in your county. Salem County Mosquito Control, along with several other resources (listed at the end of this sheet), can provide more detailed information.

#### **What is Essentria All Purpose Insecticide Concentrate and how is it used?**

Essentria All Purpose Insecticide Concentrate is an insecticide product recommended for mosquito control in New Jersey by Rutgers, The State University of New Jersey. It contains the pesticides called Rosemary Oil and Peppermint Oil. The U.S. Environmental Protection Agency's (EPA) current evaluation considers Rosemary Oil and Peppermint Oil containing products to be slightly toxic with minimal potential risk to people when used properly as part of a complete mosquito control program.

Essentria All Purpose Insecticide Concentrate is a natural pesticide that provides control to Adult mosquitoes. Using Octopamine Blocker<sup>SM</sup> Technology, the product confuses the insect's nervous system, offering immediate knockdown with long lasting protection, only affecting the target insects. This makes the product great for sensitive areas, organic landscape programs, even near or over bodies of water. Essentria All Purpose Insecticide Concentrate is also National Organics Program (NOP) complaint and is EPA FIFRA 25 (b) exempt product, containing plant oils that leave a nice scent behind as they clear the application area of pest, even in the most difficult situations.

#### **How can I avoid exposure to Essentria All Purpose Insecticide Concentrate?**

Risk to the general public from the use of Essentria All Purpose Insecticide Concentrate is minimal. Avoiding exposure is always the safest course of action, particularly for populations that may be at higher risk, such as pregnant women, children, the elderly, and those with chronic illnesses. Any possible exposure risk can be reduced by following some common sense actions:

- ❖ Pay attention to notices about pesticide applications found through newspapers, websites, automated telephone messages or distributed by municipal, county, or state agencies.
- ❖ Plan your activities to limit time spent outside during times of possible pesticide applications.
- ❖ Move animals and their food and water dishes inside during applications.
- ❖ Move clothing and children's toys inside during applications.
- ❖ Stay away from application equipment, whether or not it is in use.
- ❖ Whenever possible, remain indoors with windows closed, window air conditioners on non-vent (closed to the outside air), and window fans turned off during application of pesticides.
- ❖ Avoid direct contact with surfaces still wet from pesticide applications. Do not allow children to play in treated areas until they have completely dried (approximately one hour).
- ❖ If you must remain outdoors, avoid eye and skin contact with the spray. If you get spray in your eyes or on your skin, immediately flush and rinse with water.

**What are the symptoms of exposure to Essentria All Purpose Insecticide Concentrate?**

Symptoms of exposure can include irritation to skin and eyes. The chance of experiencing these symptoms with proper use is low. You should contact your physician, other medical providers, or the New Jersey Poison Information and Education System (NJPIES) at 1-800-222-1222 if you experience these symptoms following a pesticide application. Bring this sheet with you if you visit a physician or other medical provider.

**How long will Essentria All Purpose Insecticide Concentrate last in the environment?**

It can take anywhere from 6 to 30 days for the product to break down. This is dependent on the conditions when the product was applied

**Where can I get more information on Essentria All Purpose Insecticide Concentrate?**

The following are resources for more information regarding Essentria All Purpose Insecticide Concentrate and mosquito control in your area (unless otherwise noted, available during normal business hours):

For overall pesticide-specific information – 9:30am to 7:30pm:

**National Pesticide Information Center** 800-858-7378  
<http://npic.orst.edu>

For pesticide health information & possible exposures – 24 hours:

**New Jersey Poison Information & Education System** 800-222-1222  
<http://www.njpies.org>

For New Jersey pesticide regulation & misuse complaints:

**NJDEP Pesticide Control Program** 609-984-6568  
<http://www.state.nj.us/dep/enforcement/pcp/>

For Federal pesticide regulations:

**USEPA Region 2 Office of Pesticide Programs** 732-321-6759  
<http://www.epa.gov/ebtpages/pesticides.html>

For state-wide mosquito control information:

**NJDEP Office of Mosquito Control Coordination** 609-292-3649  
<http://www.state.nj.us/dep/mosquito>

For local mosquito control information:

**Salem County Mosquito Control** 856-769-3255  
<http://www.salemcountynj.gov/departments/mosquito-control/>

For local health information:

**Salem County Health Department** 856-935-7510  
<http://health.salemcountynj.gov/>

For mosquito control recommendations:

**Rutgers University, Department of Entomology** 732-932-9437  
<http://www-rci.rutgers.edu/~insects>



# 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.

Controls larvae of mosquitoes which may transmit Dengue, Chikungunya, or Zika.

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	

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.

#### 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.
- 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)
<p><b>Temporary Standing Water:</b> Woodland pools, snow pools, roadside ditches, retention ponds, freshwater dredge spoils, tire tracks and other natural or man-made depressions, rock holes, pot holes and similar areas subject to holding water</p> <p><b>Other Freshwater Sites:</b> Natural and manmade aquatic sites, edges of lakes, ponds, canals, stream eddies, creek edges, detention ponds</p>	<p>3.5 - 6.5 (0.018 - 0.033)</p>
<p><b>Freshwater Swamps and Marshes:</b> Mixed hardwood swamps, caltail marsh, common reed wetland, water hyacinth ponds, and similar freshwater areas with emergent vegetation</p> <p><b>Marine/Coastal Areas:</b> Intertidal areas above the mean high water mark, mangroves, brackish water swamps and marshes, coastal impoundments and similar areas</p>	<p>9 (0.045)</p>
<p><b>Stormwater/Drainage Systems:</b> Storm sewers, catch basins, drainage ditches, and similar areas</p> <p><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</p>	<p>6.5 - 9 (0.033 - 0.045)</p>
<p><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)</p>	<p>3.5 - 6.5 (0.018 - 0.033)</p>
<p><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.</p> <p>Landfill containers, salvage yards, abandoned vehicles</p> <p>Do not apply to natural or artificial containers of water intended for consumption by people, animals, or livestock.</p>	<p>3.5 - 9 (0.018 - 0.045)</p> <p>For small to medium size containers, apply 1/8 teaspoon (about 0.37 g) of Natular G per 10-20 gallons of water.</p> <p>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.</p>

## Agricultural/Crop Sites Where Mosquito Breeding Occurs:

Apply NATULAR® G at the 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.

**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: \_\_\_\_\_

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



## Natular®

This sheet answers some basic questions about a mosquito control product in use in Salem County. Salem County Mosquito Control, along with several other resources (listed at the end of this sheet), can provide more detailed information.

### What is Natular® and how is it used?

**Natular®** is a bacterial larvacide that is in use by Salem County Mosquito Control on a limited basis this year. It contains the active ingredient called "*Spinosad*." Spinosad is made up of the complex organic compounds spinosyn A and spinosyn D, which are created by soil microbes. The U.S. Environmental Protection Agency's (EPA) current evaluation considers **spinosyn**-containing products to be slightly toxic with minimal potential risk to people when used properly as part of a complete mosquito control program.

**Natular®** contains parts of a naturally occurring soil bacterium. When mosquito larvae eat the spores, toxins are released by the mosquito's stomach fluids, which in turn cause the larvae to die. **Natular®** is part of a mosquito management approach using habitat management and other measures to control immature mosquitoes in order to lessen the need to spray for adult mosquitoes.

### How can I avoid exposure to Natular®?

Risk to the general public from the use of **Natular®** is very minimal. The organic compounds that are so lethal to mosquitoes are harmless to mammals. Avoiding exposure is always the safest course of action, particularly for populations that may be at higher risk such as pregnant women, children, the elderly and those with chronic illness. Any possible exposure risk can be reduced by following some common sense actions:

- Plan your activities to limit time spent outside during times of possible pesticide treatments.
- Avoid direct contact with water bodies that have been treated.
- Move children's toys out of application areas.
- Move animals and their food and water dishes out of application areas.
- Stay away from application equipment, whether in use or not.

### What are the symptoms of exposure to Natular®?

Direct contact with eyes or skin may cause mild irritation or discomfort. The chance of experiencing these symptoms of exposure with proper use is low. You should contact your physician, other medical providers or the New Jersey Poison Information and Education System (NJPIES) at **1-800-222-1222** if you experience these symptoms following a pesticide spraying. Bring this sheet with you if you visit a physician or other medical provider.

### How long will Natular® last in the environment?

Because **spynosin A** and **spynosin D** are biological agents, they tend to break down quickly in the environment. Its breakdown in water or soil usually occurs within hours of use.

### Where can I get more information on Natular®?

The following are resources for more information regarding **Natular® XRG** and mosquito control in your area (unless otherwise noted, available during normal business hours):

For overall pesticide-specific information – 9:30am to 7:30pm:

**National Pesticide Information Center**

<http://npic.orst.edu>

**800-858-7378**

For pesticide health information & possible exposures – 24 hours:  
**New Jersey Poison Information & Education System** 800-222-1222  
<http://www.njpies.org>

For New Jersey pesticide regulation & misuse complaints:  
**NJDEP Pesticide Control Program** 609-984-6507  
<http://www.state.nj.us/dep/enforcement/pcp/>

For Federal pesticide regulations:  
**USEPA Region 2 Office of Pesticide Programs** 732-321-6759  
<http://www.epa.gov/ebtpages/pesticides.html>

For state-wide mosquito control information:  
**NJDEP Office of Mosquito Control Coordination** 609-292-3649  
<http://www.state.nj.us/dep/mosquito>

For local mosquito control information:  
**Salem County Mosquito Control** 856-769-3255

For mosquito control recommendations:  
**Rutgers University, Department of Entomology** 732-932-9437  
<http://www-rci.rutgers.edu/~insects>

For general information on the pesticide Natular® XRG and Spinosad:  
**EPA:**  
<http://www.epa.gov/pesticides/health/mosquitoes/larvicides4mosquitoes.htm>  
**Clarke Mosquito Control Products (Distributor):**  
<http://www.clarkemosquito.com>

572), and the minimum mean volume diameter (VMD) for spinning atomizer nozzles.

**Temperature Inversions:** Application is allowed under stable and/or temperature inversion conditions as long as application is done below the point in the atmosphere where the inversion begins and the droplet size meets the dimensions of very coarse or extremely coarse as defined in ASABE Standard 572 (VMD of 400-500 microns).

**Release Height for Ground Applications:** Apply using a nozzle height of no more than 4 feet above the surface.

**Aerial Applications:** Applications must conform to the requirements indicated above regarding wind speed, droplet size, and

temperature inversions and to the additional requirements listed below.

**Release Height:** Aircraft altitude should be maintained at the lowest altitude necessary for aircraft safety in order to reduce the exposure of droplets to evaporation and wind.

**Boom Length:** The boom length must not exceed 75% of the wingspan or 90% of the rotor blade diameter. 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. Orient nozzles to spray backward and parallel to the air stream.

**Swath Adjustment:** When applications are made with a cross-wind, the swath will be displaced downwind. The applicator must compensate for this displacement at the upwind and downwind edges of the application area by adjusting the path of the aircraft upwind.

## STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Store upright at room temperature. In case of spill or leakage, soak up with absorbent material such as sand, sawdust, earth, fuller's earth, etc.

**PESTICIDE DISPOSAL:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

### CONTAINER DISPOSAL:

(REFILLABLE DRUMS & TOTES): 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 the container before refilling is the responsibility of the refiller. To clean the container before disposal, drain the container until it is empty. Add a minimum amount of clean water to allow recirculation through the pump, meter and hoses. A commercial tank-cleaning detergent may be used, if desired. Thoroughly drench the interior sides, ceiling, and floor of the container. Using a steam-cleaning process or a high-pressure/low-water process, clean sides, ceiling, and floor of container. Recirculate wash water through the pump, meter and hoses. Drain the tank. Dispose of wash water or rinsate with pesticide waste. Offer cleaned container for recycling, if available, or puncture and dispose of it in a sanitary landfill, or by other procedures approved by State and local authorities.

(2.5 GALLON JUGS): Nonrefillable container. Do not reuse or refill this container. When container is empty, drain it completely, then puncture and dispose of it in a sanitary landfill or by other procedures approved by State and local authorities.

MANUFACTURED FOR:  
CLARKE MOSQUITO CONTROL PRODUCTS, INC.  
159 N. GARDEN AVENUE  
ROSELLE, ILLINOIS 60172  
For more information call: 1-800-323-5727

EPA REG. NO. 8329-93

Available Packaging: 2.5 GAL, 30 GAL, 55 GAL, 275 GAL, BULK

EPA EST. NO. \_\_\_\_\_

LOT NO: Marked on Container Label

COCOBEAR™ is a trademark of Clarke Mosquito Control Products, Inc.

**NOTICE:** 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. To the extent consistent with applicable law, buyer assumes all risk of use/handling of this material when use and/or handling is contrary to label instructions.



# COCOBEAR™

## Mosquito Larvicide Oil

Kills larvae and pupa stages of mosquitoes. Physical control of mosquito broods: kills by suffocation - mosquitoes do not develop resistance. Prevents mosquito emergence.

Standing water treatment. Use on: ponds, pools, ditches, standing water within irrigated croplands and pastures, flood waters, and other listed areas where mosquitoes develop.

ACTIVE INGREDIENT	
Mineral Oil* .....	10.0%
OTHER INGREDIENTS .....	90.0%
TOTAL .....	100.0%
* Contains petroleum distillate	

### KEEP OUT OF REACH OF CHILDREN

## CAUTION

<b>FIRST AID</b>	
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.	
<b>IF SWALLOWED:</b>	Call a poison control center or doctor immediately for treatment advice. DO NOT induce vomiting unless told to do so by a poison control center or doctor. Do not give ANY liquid to the person. Do not give anything by mouth to an unconscious person.
<b>NOTICE TO PHYSICIANS:</b> This product contains petroleum distillate and may pose an aspiration pneumonia hazard.	

### PRECAUTIONARY STATEMENTS

#### HAZARDS TO HUMANS & DOMESTIC ANIMALS

**CAUTION.** Harmful if swallowed. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

**Personal Protective Equipment (PPE):** Mixers, loaders, applicators, and other handlers must wear long-sleeved shirt and long pants, and shoes plus socks.

**User Safety Requirements:** Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

**User Safety Recommendations:** Users should wash hands before eating, drinking, chewing gum, tobacco, or using the toilet. Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Users should remove PPE immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing.

### ENVIRONMENTAL HAZARDS

Do not apply directly to water, except as directed for use on this label. Aquatic organisms may be killed in waters where this pesticide is used. Consult with the State or tribal agency with primary authority for regulating pesticides before applying this product to public waters to determine if a permit is needed.

### DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

This product may cause injury to plants in the treatment area. Stressed plants may be more susceptible.

COCOBEAR may only be used to control mosquito larvae and pupae. COCOBEAR leaves a thin film on the surface of treated, non-flowing water and kills mosquito larvae and pupae by suffocation. COCOBEAR kills immature mosquitoes where they develop.

This product may be used for surface applications to standing water within irrigated croplands and pastures, drainage areas, ditches, stagnant pools, swamps, marshes, temporary rain pools, sloughs, log ponds, open sewage basins, settling ponds, catch basins, waste tires and intermittently flooded areas.

Apply at uniform rates of 3 gallons per surface acre (for smaller areas, treat at 10 ounces per 1,000 sq. ft. or 1 1/2 quart per 5,000 sq. ft.). Where there is extremely dense vegetation or if the water to be treated is high in organic content, up to 5 gallons per acre (15 ounces per 1,000 sq. ft. or 2 quarts per 5,000 sq. ft.) may be used.

When applying by aerial application, adjust spray volume up to 5 gallons per acre dependent on vegetation and surface conditions. 3 gallons per acre (36 gallons per 100 ft swath mile) is likely to be sufficient for most conditions.

#### Spray Drift Management

A variety of factors including weather conditions (e.g. wind direction, wind speed, temperature, and relative humidity) and method of application (e.g. ground, aerial) can influence pesticide drift. The applicator must evaluate all factors and make appropriate adjustments when applying this product.

**Wind Speed:** Do not apply this product at wind speeds greater than 15 mph at the application site.

**Droplet Size:** Apply as a medium or coarser spray (ASABE Standard

# Fact Sheet

## CocoBear<sup>®</sup>

This sheet answers some basic questions about a mosquito control product in use in your county. Salem County Mosquito Control, along with several other resources (listed at the end of this sheet), can provide more detailed information.

### What is CocoBear and how is it used?

**CocoBear** is an insecticide product that is recommended for mosquito control in New Jersey by Rutgers, The State University of New Jersey. It contains the pesticide called Mineral Oil. The U.S. Environmental Protection Agency's (EPA) current evaluation considers Mineral Oil-containing products to be slightly toxic with minimal potential risk to people when used properly as part of a complete mosquito control program.

**CocoBear** is used to prevent mosquitoes from hatching in lakes, ponds, and other bodies of water. It acts on the pupa, or immature stage, of the mosquito in water immediately before the flying mosquito emerges. **CocoBear** is part of a mosquito management approach using habitat management and other measures to control immature mosquitoes in order to lessen the need to spray for adult mosquitoes.

### How can I avoid exposure to CocoBear?

Risk to the general public from the use of **CocoBear** is minimal. Avoiding exposure is always the safest course of action, particularly for populations that may be at higher risk, such as pregnant women, children, the elderly, and those with chronic illnesses. Any possible exposure risk can be reduced by following some common sense actions:

- ❖ Plan your activities to limit time spent outside during times of possible pesticide treatments.
- ❖ Move children's toys out of application areas.
- ❖ Move animals and their food and water dishes out of application areas.
- ❖ Stay away from application equipment, whether or not it is in use.

## **What are the symptoms of exposure to CocoBear?**

Direct contact with eyes or skin may cause mild irritation or discomfort. The chance of experiencing these symptoms of exposure with proper use is low. You should contact your physician, other medical providers, or the New Jersey Poison Information System (NJPIES) at **1-800-222-1222** if you experience these symptoms following a pesticide spraying. Bring this sheet with you if you visit a physician or other medical provider.

## **Where can I get more information on CocoBear?**

The following are resources for more information regarding **CocoBear** and mosquito control in your area (unless otherwise noted, available during normal business hours):

For overall pesticide-specific information – 9:30am to 7:30pm:

**National Pesticide Information Center** **800-858-7378**

For pesticide health information & possible exposures – 24 hours:

**New Jersey Poison Information & Education System**  
**800-222-1222**

For New Jersey pesticide regulation & misuse complaints:

**NJDEP Pesticide Control Program** **609-984-6507**

For Federal pesticide regulation:

**USEPA Region 2 Office of Pesticide Programs** **732-321-6759**

For statewide mosquito control information:

**NJDEP Office of Mosquito Control Coordination** **609-292-3649**

For local mosquito control information:

**Salem County Mosquito Extermination Commission** **856-769-3255**

For mosquito control recommendations:

**Rutgers University, Department of Entomology** **732-932-9437**

For local health information:

**Salem County Health Department** **856-935-7510**



# Duplex™-G

**A DUAL ACTION extended residual BIOLOGICAL LARVICIDE AND INSECT GROWTH REGULATOR GRANULAR PRODUCT TO KILL MOSQUITO LARVAE AND PREVENT ADULT MOSQUITO EMERGENCE**  
(including those mosquitoes that may transmit diseases, including West Nile virus, Dengue, Chikungunya, and Zika virus)

## SPECIMEN LABEL

### ACTIVE INGREDIENT:

*Bacillus thuringiensis* subspecies *israelensis* Strain BMP 144 solids, spores, and insecticidal toxins\*

..... 5.35%

(S)-Methoprene (CAS # 65733-16-6)..... 1.60%

OTHER INGREDIENTS: ..... 93.05%

**TOTAL:** ..... 100.00%

\*Equivalent to 375 International Toxic Units (ITU/mg).

NOTE: The percent active ingredient does not indicate product performance and potency measurements are not federally standardized.

EPA REG. NO. 89459-93 EPA EST. NO. 39578-TX-1

KEEP OUT OF REACH OF CHILDREN

### CAUTION

#### 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.

**HOTLINE NUMBER:** Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-248-7763 for emergency medical treatment information.

#### PRECAUTIONARY STATEMENTS

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**CAUTION:** Causes moderate eye irritation. Avoid contact with eyes or clothing. Due to the size and abrasiveness of the granule, use protective eyewear and clothing (e.g., waterproof gloves) to minimize exposure during loading and handling. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

Mixers/loaders and applicators not in enclosed cabs must wear a NIOSH-approved particulate respirator with any N, P or R filter with NIOSH approval number prefix TC-84A; or a NIOSH-approved powered air purifying respirator with an HE filter with NIOSH approval number prefix TC-21C. Repeated exposure to high concentrations of microbial proteins can cause allergic sensitization.

#### ENVIRONMENTAL HAZARDS

Do not contaminate water when disposing of equipment washwater or rinsate.

**DIRECTIONS FOR USE:** It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

Do not apply directly to treated, finished drinking water reservoirs or animal watering troughs.

Zoëcon® Duplex™-G (Duplex™-G) is a unique combination of a *Bacillus thuringiensis v. israelensis* (*Bti*) biological larvicide and S-Methoprene Insect Growth Regulator (IGR) that provides dual action control. Duplex™-G provides quick kill of existing mosquito larvae and residual control of subsequent broods. This dual combination larvicide is highly effective against multiple broods of mosquitoes in a variety of habitats. Duplex™-G, when applied to the water column, releases effective levels of *Bti* to begin killing larvae within 24 hrs. after application. Once the *Bti* has killed existing larvae, the IGR in Duplex™-G provides residual control and prevents adult mosquito emergence for up to 28 days when applied at rates of 5 – 20 pounds per acre.

Duplex™-G releases effective levels of the *Bti* biological larvicide for up to 72 hours after application and S-Methoprene insect growth regulator prevents the emergence of adult mosquitoes. Continue applications throughout the entire season to maintain control. IGR treated larvae continue to develop normally to the pupal stage where they die.

Rotary and fixed-wing aircraft equipped with granular spreaders capable of applying rates listed below may be used to apply Duplex™-G. Ground equipment that will achieve even coverage at these rates may also be used.

Apply Duplex™-G uniformly and repeat at intervals of 14 to 28 days.

**NOTE:** Duplex™-G has no effect on mosquitoes that have reached the pupal or adult stage prior to treatment.

**APPLICATION TIMING:** Apply Duplex™-G at any stage of larval mosquito development. Granules may be applied 7 to 14 days prior to flooding (i.e., "pre-hatch" or "pre-flood") in areas which flood. In such areas, one application of Duplex™-G can prevent adult mosquito emergence from several subsequent floodings. The actual length of control depends on the duration and frequency of flooding events.

**APPLICATION RATES:** Duplex™-G controls the major species of mosquitoes including: *Aedes*, *Anopheles*, *Culex*, and *Culiseta*. Apply Duplex™-G at 2.5 - 20 lb/acre (5.6 - 11.2 kg/ha). Within these ranges, use lower rates when water is shallow [ $<6''$ - $12''$ ] and vegetation and/or organic matter are minimal, and use higher rates when water is deep [ $>1$  foot] and vegetation and/or organic matter are heavy. In water depths greater than 2 feet, double the highest application rate for each subsequent foot of water. Depending on water depth and degree of organic matter, lower use rates may provide less IGR residual. Application of Duplex™-G to sites subject to water flow or exchange will diminish the product's effectiveness and may require higher application rates and/or more frequent applications. Lower residual activity may be seen at rates used at 5 pounds per acre or less; for consistent 28-day control, use rates at 7.5 pounds per acre or higher.

**APPLICATION SITES:** Duplex™-G may be applied to both crop and non-crop areas as directed above to temporary and permanent sites that support mosquito larval development. Examples of such sites include: snow pools, salt and tidal marshes, freshwater swamps and marshes (cattail, red cedar, and white maple marshes), woodland pools and meadows, dredging spoil sites, drainage areas, ditches, wastewater treatment facilities, livestock runoff lagoons, retention ponds, harvested timber stacks, swales, storm water drainage areas, sewers, catch basins, tree holes, water-holding receptacles (e.g., tires, urns, flower pots, cans, and other containers), irrigated and non-irrigated pastures, hoof prints and other natural and manmade water-holding sites, containers and depressions. Examples of crop areas include: irrigated croplands; pastures; rangeland; vineyards; rice fields (domestic and wild); date palm, citrus, fruit, and nut orchards; berry fields; bogs and row crops.

**STORAGE AND DISPOSAL:** Do not contaminate water, food or feed by storage or disposal. **Pesticide Storage:** Store closed containers in a cool, dry place. **Pesticide Disposal:** Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility. **Container Handling:** **Plastic Bags:** Nonrefillable container. Do not reuse or refill this container. Completely empty bag into application equipment. Then offer for recycling if available or dispose of empty bag in a sanitary landfill or by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**Refillable Totes (2000 lbs):** Refillable container. Refill this container with this product only. Do not reuse this container for any other purpose. Return empty totes to Central Garden & Pet Company for cleaning and recycling. 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. If the container is not returned, to clean the container before final disposal, completely empty container by tapping sides and bottom to loosen clinging material. Then offer for recycling if available or dispose of in a sanitary landfill or by other procedures approved by state and local authorities.

For information, call 1-800-248-7763 or visit our Web site: [www.centralmosquitocontrol.com](http://www.centralmosquitocontrol.com)

**WARRANTY: IMPORTANT: READ BEFORE USE.** Read the entire Directions for Use, Conditions of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once. By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties and Limitations of Liability. **CONDITIONS:** The Directions for Use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Central Garden & Pet Company. All such risks shall be assumed by the user or buyer. **DISCLAIMER OF WARRANTIES:** To the extent consistent with applicable law, Central Garden & Pet Company makes no other warranties, express or implied, of merchantability or of fitness for a particular purpose or otherwise, that extend beyond the statements made on this label. No agent of Central Garden & Pet Company is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. To the extent consistent with applicable law, Central Garden & Pet Company disclaims any liability whatsoever for special, incidental or consequential damages resulting from the use or handling of this product. **LIMITATIONS OF LIABILITY:** To the extent consistent with applicable law, the exclusive remedy of the user or buyer for any and all losses, injuries, or damages resulting from the use or handling of this product, whether in contract, warranty, tort, negligence, strict liability or otherwise, shall not exceed the purchase price paid or at Central Garden & Pet Company's election, the replacement of product.

Manufactured for:  
**Central Garden & Pet Company**  
1501 East Woodfield Road 200W  
Schaumburg, Illinois 60173



Duplex, Zoëcon and Zoëcon with design are trademarks of Wellmark International.  
2017 Wellmark International.

April, 2017  
Schaumburg, IL



# Fact Sheet

## Duplex-G

This sheet answers some basic questions about a mosquito control product in use in your county. Municipalities are encouraged to share this information with all residents in their community. Salem County Mosquito Control, along with several other resources (listed at the end of this sheet), can provide more detailed information.

### What is Duplex-G and how is it used?

**Duplex-G** contains two pesticides: Methoprene and *Bacillus thuringiensis israelensis (Bti)*. The U.S. Environmental Protection Agency's (EPA) current evaluation considers **Methoprene**-containing products to be slightly toxic with minimal potential risk to people and **Bti** - containing products to be slightly toxic with minimal potential risk to people when used properly as part of a complete mosquito control program.

**Duplex-G** is used to prevent mosquitoes from hatching in lakes, ponds, and other bodies of water. It acts on the larval or immature stage of the mosquito in water before the flying mosquito emerges. **Duplex-G** is part of a mosquito management approach using habitat management and other measures to control immature mosquitoes in order to lessen the need to spray for adult mosquitoes.

### How can I avoid exposure to Duplex-G?

Risk to the general public from the use of **Duplex-G** is minimal. Avoiding exposure is always the safest course of action, particularly for populations that may be at higher risk such as pregnant women, children, the elderly and those with chronic illnesses. Any possible exposure risk can be reduced by following some common sense actions:

- ❖ Plan your activities to limit time spent outside during times of possible pesticide treatments.
- ❖ Avoid direct contact with water bodies that have been treated.
- ❖ Move children's toys out of application areas.
- ❖ Move animals and their food and water dishes out of application areas.
- ❖ Stay away from application equipment, whether or not it is in use.
- ❖ Pay attention to notices about spraying found through newspapers, websites, automated telephone messages, or distributed by municipal, county, or state agencies.



## **What are the symptoms of exposure to Duplex-G?**

**Methoprene** is not a skin irritant or a sensitizer. The chance of experiencing symptoms of exposure with proper use is very low. **Bti** may cause mild irritation or discomfort if you come into direct contact. The chance of experiencing these symptoms of exposure with proper use is low. You should contact your physician, other medical providers, or the New Jersey Poison Information and Education System (NJPIES) at **1-800-222-1222** if you experience any symptoms following a pesticide treatment. Bring this sheet with you if you visit a physician or other medical provider.

## **How long will Duplex-G last in the environment?**

**Methoprene** has a low persistence and breaks down in water within a few days. In soil, it breaks down in less than 10 days. Because **Bti** is a biological agent, it tends to break down quickly in the environment. Its breakdown in water or soil usually occurs within hours of use.

## **Where can I get more information on Duplex-G?**

The following are resources for more information regarding **Duplex-G** and mosquito control in your area (unless otherwise noted, available during normal business hours):

For overall pesticide-specific information – 9:30am to 7:30pm:

**National Pesticide Information Center 800-858-7378**

For pesticide health information & possible exposures – 24 hours:

**New Jersey Poison Information & Education System 800-222-1222**

For New Jersey pesticide regulation & misuse complaints:

**NJDEP Pesticide Control Program 609-984-6568**

For Federal pesticide regulation:

**USEPA Region 2 Office of Pesticide Programs 732-906-6809**

For statewide mosquito control information:

**NJDEP Office of Mosquito Control Coordination 609-292-3649**

For local mosquito control information:

**Salem County Mosquito Control 856-769-3255**

For mosquito control recommendations:

**Rutgers University, Department of Entomology 848-932-9774**

For local health information:

**Salem County Health Department 856-935-7510**



# VectoMax<sup>®</sup> WSP

BIOLOGICAL LARVICIDE

WATER SOLUBLE POUCH



FOR ORGANIC PRODUCTION



## ACTIVE INGREDIENTS:

<i>Bacillus sphaericus</i> 2362, Serotype H5a5b, Strain ABTS 1743 Fermentation Solids, Spores, and Insecticidal Toxins .....	2.7%
<i>Bacillus thuringiensis</i> subsp. <i>israelensis</i> Serotype H-14, Strain AM65-52 Fermentation Solids, Spores, and Insecticidal Toxins .....	4.5%
OTHER INGREDIENTS .....	92.8%
TOTAL .....	100.0%

Potency: This product contains 50 BsITU/mg or 0.023 Billion BsITU/lb.

Expiration Date: (Two years from date of manufacture)

The percent active ingredient does not indicate product performance and potency measurements are not federally standardized.

EPA Reg. No. 73049-429 List No. 05750  
EPA Est. No. 33762-IA-001 (Lot No. Suffix 'N8')  
EPA Est. No. 33967-NJ-1 (Lot No. Suffix 'Q5')

## INDEX:

- 1.0 First Aid
- 2.0 Precautionary Statements
  - 2.1 Hazards to Humans and Domestic Animals
  - 2.2 Environmental Hazards
- 3.0 Directions for Use
- 4.0 Application Directions
- 5.0 Storage and Disposal
- 6.0 Warranty and Disclaimer

**KEEP OUT OF REACH OF CHILDREN  
CAUTION**

1.0

FIRST AID	
If in eyes	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
If on skin or clothing	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-877-315-9819 (24 hours) for emergency medical treatment and/or transport emergency information. For all other information, call 1-800-323-9597.	

## 2.0 PRECAUTIONARY STATEMENTS

### 2.1 HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Causes moderate eye irritation. Harmful if absorbed through the skin. Prolonged or frequent skin contact may cause allergic reactions in some individuals. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling, and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

### 2.2 ENVIRONMENTAL HAZARDS

Do not apply directly to treated, finished drinking water reservoirs or drinking water receptacles when the water is intended for human consumption.

## 3.0 DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

**VectoMax<sup>®</sup> Water Soluble Pouches (WSP):** Once the foil bag containing Water Soluble Pouches is opened, minimize exposure of WSP to humidity.

## 4.0 APPLICATION DIRECTIONS

### MOSQUITO CONTROL

VectoMax WSP is a selective microbial insecticide for use against mosquito larvae in a variety of habitats. VectoMax WSP can be applied to areas that contain fish, other aquatic life, and plants. VectoMax WSP can be applied to areas used by or in contact with humans, pets, horses, livestock, birds or wildlife.

For control of mosquito larvae in the following sites:

Habitat	Rate Range	
<b>Drainage/Drainage Systems<sup>1</sup>:</b>		
Catch basins and storm drains.	1 pouch/50 sq. ft.	
<b>Treatment Areas (For Use In)<sup>2</sup>:</b>		
Ponds	Retention, detention and seepage ponds	Abandoned swimming pools
Lagoons	Animal waste lagoons	Unused swimming pools or spas
Hollow trees and tree holes	Flood water	Flooded basements
Urns	Standing water	Pool covers
Rain barrels	Storm water	Gutters and drains
Livestock watering troughs/ponds/tanks	retention areas	Wheelbarrows
Irrigation ditches	Birdbaths	Garbage cans and covers
Roadside ditches	Fountains	Discarded tires
Water gardens	Flowerpots and planters	
Impounded wastewater associated with fruit and vegetable processing	Snowmelt pools	
	Septic tanks	

Any location where water accumulates and remains standing for periods of time, except treated, finished drinking water for human consumption.

<sup>1</sup> Treat on basis of surface area of potential mosquito breeding sites by placing one (1) VectoMax Water Soluble Pouch for up to 50 square feet of treatment area. Re-apply as needed (after 6-8 weeks under typical environmental conditions).

<sup>2</sup> Treat on basis of surface area of potential mosquito breeding sites by placing one (1) VectoMax Water Soluble Pouch for up to 50 square feet of treatment area. Re-apply as needed (after 1-4 weeks under typical environmental conditions).

Continued

Longer periods of mosquito population suppression may result where sufficient numbers of non-target aquatic invertebrate parasites and predators are present since these are not affected by the product and contribute to mosquito population reduction.

## 5.0 STORAGE AND DISPOSAL

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

**Pesticide Storage:** Store in a cool, dry place.

**Pesticide Disposal:** To avoid wastes, use all material in this container by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste disposal facility or pesticide disposal program (often such programs are run by state or local governments or by industry.)

**Container Handling:** Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available or, dispose of the empty outer foil pouch in the trash as long as WSP is unbroken.

## 6.0 WARRANTY AND DISCLAIMER

To the extent consistent with applicable law, seller makes no warranty, express or implied, of merchantability, fitness or otherwise concerning the use of this product other than as indicated on the label. User assumes all risks of use, storage or handling not in strict accordance with the accompanying directions.

VectoMax is a registered trademark of Valent BioSciences Corporation.

*Municipalities are encouraged to share this information with all residents in their community*

## Fact Sheet

# VectoMax®

This sheet answers some basic questions about a mosquito control product in use in your county. Salem County Mosquito Control, along with several other resources (listed at the end of this sheet), can provide more detailed information.

### **What is VectoMax and how is it used?**

**VectoMax** is an insecticide product with active ingredients that are recommended for mosquito control in New Jersey by Rutgers, The State University of New Jersey. It contains the pesticide called *Bacillus sphaericus (Bs)* and *Bacillus thuringiensis israelensis (Bti)*. The U.S. Environmental Protection Agency's (EPA) current evaluation considers *Bs* and *Bti* -containing products known to be moderately toxic when eaten, absorbed through the skin, inhaled or may cause moderate skin or eye irritation.

**VectoMax** is used to prevent mosquitoes from hatching in lakes, ponds, and other bodies of water. It acts on the larval or immature stage of the mosquito in water before the flying mosquito emerges. **VectoMax** is part of a mosquito management approach using habitat management and other measures to control immature mosquitoes in order to lessen the need to spray for adult mosquitoes.

### **How can I avoid exposure to VectoMax?**

Risk to the general public from the use of **VectoMax** is minimal. Avoiding exposure is always the safest course of action, particularly for populations that may be at higher risk, such as pregnant women, children, the elderly, and those with chronic illnesses. Any possible exposure risk can be reduced by following some common sense actions:

- ❖ Plan your activities to limit time spent outside during times of possible pesticide treatments.
- ❖ Avoid direct contact with water bodies that have been treated.
- ❖ Move children's toys out of application areas.
- ❖ Move animals and their food and water dishes out of application areas.
- ❖ Stay away from application equipment, whether or not it is in use.

### **What are the symptoms of exposure to VectoMax?**

Direct contact with eyes or skin may cause moderate irritation or discomfort. The chance of experiencing these symptoms of exposure with proper use is low. You should contact your physician, other medical providers, or the New Jersey Poison Information and Education System (NJPIES) at **1-800-222-1222** if you experience these symptoms following a pesticide spraying. Bring this sheet with you if you visit a physician or other medical provider.

### **How long will VectoMax last in the environment?**

Because **Bs** and **Bti** are biological agents, it tends to break down quickly in the environment. Its breakdown in water or soil usually occurs within hours of use.

### **Where can I get more information on VectoMax?**

The following are resources for more information regarding **VectoMax** and mosquito control in your area (unless otherwise noted, available during normal business hours):

For overall pesticide-specific information – 9:30am to 7:30pm:

**National Pesticide Information Center** **800-858-7378**

For pesticide health information & possible exposures – 24 hours:

**New Jersey Poison Information & Education System**  
**800-222-1222**

For New Jersey pesticide regulation & misuse complaints:

**NJDEP Pesticide Control Program** **609-984-6568**

For Federal pesticide regulation:

**USEPA Region 2 Office of Pesticide Programs** **732-321-6759**

For statewide mosquito control information:

**NJDEP Office of Mosquito Control Coordination** **609-292-3649**

For local mosquito control information:

**Salem County Mosquito Control** **856-769-3255**

For mosquito control recommendations:

**Rutgers University, Department of Entomology** **732-932-9437**

For local health information:

**Salem County Health Department** **856-935-7510**



# VectoBac<sup>®</sup> G

BIOLOGICAL LARVICIDE

GRANULE

## ACTIVE INGREDIENT:

*Bacillus thuringiensis*, subspecies *israelensis*, strain AM 65-52, fermentation solids, spores, and insecticidal toxins ..... 2.80%

OTHER INGREDIENTS ..... 97.20%

TOTAL ..... 100.00%

Potency: 200 International Toxic Units (ITU) per mg (Equivalent to 0.091 billion potency: ITU per pound)

The percent active ingredient does not indicate product performance and potency measurements are not Federally standardized.

EPA Reg. No. 73049-10  
EPA Est. No. 33762-IA-001

List No. 05108

## INDEX:

- 1.0 First Aid
- 2.0 Precautionary Statements
  - 2.1 Hazard to Humans (and Domestic Animals)
  - 2.2 Environmental Hazards
- 3.0 Directions for Use
- 4.0 Application Directions
- 5.0 Storage and Disposal
- 6.0 Notice to User

**KEEP OUT OF REACH OF CHILDREN  
CAUTION**

1.0

FIRST AID	
If in Eyes	<ul style="list-style-type: none"><li>• Hold eyes open and rinse slowly and gently with water for 15-20 minutes.</li><li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eyes.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-877-315-9819 (24 hours) for emergency medical treatment and/or transport emergency information. For all other information, call 1-800-323-9597.	

## 2.0 PRECAUTIONARY STATEMENTS

### 2.1 HAZARD TO HUMANS (AND DOMESTIC ANIMALS)

#### CAUTION

Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling.

Mixers/loaders and applicators not in enclosed cabs or aircraft must wear a dust/mist respirator meeting NIOSH standards of at least N-95, R-95 or P-95. Repeated exposure to high concentrations of microbial proteins can cause allergic sensitization.

### 2.2 ENVIRONMENTAL HAZARDS

Do not contaminate water when cleaning equipment or disposing of equipment washwaters. Do not apply directly to treated, finished drinking water reservoirs or drinking water receptacles when the water is intended for human consumption.

## 3.0 DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

## 4.0 APPLICATION DIRECTIONS

VectoBac G is an insecticide for use against mosquito larvae.

Mosquitoes Habitat	Suggested Range Rate*
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(Such as the following examples):

Irrigation ditches, roadside ditches, flood water, standing ponds, livestock watering ponds and troughs, woodland pools, snow melt pools, pastures, catch basins, storm water retention areas, tidal water, salt marshes and rice fields	2.5 - 10 lbs. / acre
--	----------------------

In addition, standing water containing mosquito larvae, in fields growing crops such as alfalfa, almonds, asparagus, corn, cotton, dates, grapes, peaches, sugar cane and walnuts may be treated at the recommended rates.

\* Use 10-20 lbs. / acre when late 3rd and early 4th instar larvae predominate, mosquito populations are high, water is heavily polluted (sewage lagoons, animal waste lagoons), and/or algae are abundant.

Apply uniformly by aerial or ground conventional equipment. 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 and the treatment coordinator are responsible for considering all of these factors when making decisions.

A 7 to 14 day interval between applications should be employed.

## 5.0 STORAGE AND DISPOSAL

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

**Storage:** Store in a cool [59-86°F (15-30°C)], dry place.

**Pesticide Disposal:** Completely empty bag into application equipment. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

**Container Disposal:** Nonrefillable container. Do not reuse or refill this container. Once cleaned, some agricultural plastic pesticide containers can be taken to a container collection site or picked up for recycling. To find the nearest site, contact your chemical dealer or manufacturer, or contact Ag Container Recycling Council at 202-861-3144 or [www.acrecycle.org](http://www.acrecycle.org). If recycling is not available dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

## 6.0 NOTICE TO USER

Seller makes no warranty, express or implied, of merchantability, fitness or otherwise concerning the use of this product other than as indicated on the label. User assumes all risks of use, storage or handling not in strict accordance with accompanying directions.

VectoBac is a registered trademark of Valent BioSciences Corporation.

## Fact Sheet

### "Vectobac"

This sheet answers some basic questions about a mosquito control product in use in your county. Your [INSERT NAME HERE] County Mosquito Commission, along with several other resources (listed at the end of this sheet), can provide more detailed information.

#### **What is Vectobac and how is it used?**

**Vectobac** is an insecticide product that is recommended for mosquito control in New Jersey by Rutgers, The State University of New Jersey. It contains the pesticide called "*Bacillus thuringiensis israelensis (Bti).*" The U.S. Environmental Protection Agency's (EPA) current evaluation considers **Bti**-containing products to be very slightly toxic with minimal potential risk to people when used properly as part of a complete mosquito control program.

**Vectobac** is used to prevent mosquitoes from hatching in lakes, ponds and other bodies of water. It acts on the larval or immature stage of the mosquito in water immediately before the flying mosquito emerges. **Vectobac** is part of a mosquito management approach using habitat management and other measures to control immature mosquitoes in order to lessen the need to spray for adult mosquitoes.

#### **How can I avoid exposure to Vectobac?**

Risk to the general public from the use of **Vectobac** is minimal. Avoiding exposure is always the safest course of action, particularly for populations that may be at higher risk such as pregnant women, children, the elderly and those with chronic illnesses. Any possible exposure risk can be reduced by following some common sense actions:

- Plan your activities to limit time spent outside during times of possible pesticide treatments.
- Avoid direct contact with water bodies that have been treated.
- Move children's toys out of application areas.
- Move animals and their food and water dishes out of application areas.
- Stay away from application equipment, whether in use or not.

#### **What are the symptoms of exposure to Vectobac?**



# VectoLex<sup>®</sup> FG

BIOLOGICAL LARVICIDE

FINE GRANULE

**ACTIVE INGREDIENT:**

*Bacillus sphaericus* 2362, Serotype H5a5b, strain ABTS 1743  
 Technical Powder ..... 7.5%  
 OTHER INGREDIENTS ..... 92.5%  
 TOTAL ..... 100.0%

Potency: This product contains 50 BsITU/mg or 0.023 Billion BsITU/lb.  
 Expiration Date: (Two years from the date of manufacture).

The percent active ingredient does not indicate product performance and potency measurements are not federally standardized.

EPA Reg. No.73049-20  
 EPA Est. No. 33762-IA-001

List No. 05722

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- 5.0 Directions for Use - VectoLex FG
  - 5.1 Application Directions
- 6.0 Notice to User

**KEEP OUT OF REACH OF CHILDREN  
 CAUTION**

<b>FIRST AID</b>	
<b>If in eyes</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center for treatment advice.</li> </ul>
<b>If on skin or clothing</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>HOT LINE NUMBER</b>	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-877-315-9819 (24 hours) for emergency medical treatment and/or transport emergency information. For all other information, call 1-800-323-9597.	

**2.0 PRECAUTIONARY STATEMENTS**

**2.1 HAZARDS TO HUMANS AND DOMESTIC ANIMALS  
 CAUTION**

Harmful if absorbed through the skin. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling.

Mixers/loaders and applicators not in enclosed cabs or aircraft, must wear a dust/mist filtering respirator meeting NIOSH standards of at least N-95, R-95, or P-95. Repeated exposure to high concentrations of microbial proteins can cause allergic sensitizations.

**2.2 Environmental Hazards**

Do not contaminate water when disposing of equipment washwaters or rinsate. Do not apply directly to treated, finished drinking water reservoirs or drinking water receptacles when the water is intended for human consumption.

**3.0 DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

**4.0 STORAGE AND DISPOSAL**

Do not contaminate water, food or feed by storage or disposal. Do not contaminate water when disposing of equipment washwaters.

**Pesticide Storage:** Store in a cool, dry place.

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

**Container Disposal:** Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

**5.0 DIRECTIONS FOR USE - VECTOLEX FG**

**5.1 Application Directions**

**MOSQUITO CONTROL**

VectoLex FG is a selective microbial insecticide for use against mosquito larvae in a variety of habitats. VectoLex FG can be applied to areas that contain fish, other aquatic life, and plants. VectoLex FG can be applied to areas used by or in contact with humans, pets, horses, livestock, birds, or wildlife.

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

Habitat	Rate Range
<b>Wastewater:</b> Sewage effluent, sewage lagoons, oxidation ponds, septic ditches, animal waste lagoons, impounded wastewater associated with fruit and vegetable processing.	5-20 lbs/acre**
<b>Stormwater/Drainage Systems:</b> Storm sewers, catch basins, drainage ditches, retention, detention and seepage ponds.	5-20 lbs/acre**
<b>Marine/Coastal Areas:</b> Salt marshes, mangroves, estuaries.	5-20 lbs/acre**
<b>Water Bodies:</b> Natural and manmade aquatic sites such as lakes, ponds, rivers, canals, streams and livestock watering ponds and troughs.	5-20 lbs/acre**
<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.)	5-20 lbs/acre**
<b>Waste Tires:</b> Tires stockpiled in dumps, landfills, recycling plants, and other similar sites.	20-80 lbs/acre <sup>(1)</sup>

(1) 0.5-2 lbs/1000 sq. ft.

CONTINUED

**II. For the control of mosquito larvae species\* in agricultural/ crop sites where mosquito breeding occurs:**

<b>Habitats:</b>	<b>Rate Range</b>
Rice, pastures/hay fields, orchards, citrus groves, irrigated crops.	5-20 lbs/acre**

Apply uniformly by aerial or conventional ground equipment. Reapply as needed after 1 to 4 weeks.

\* Mosquito species effectively controlled by VectoLex FG:

*Culex spp.*

*Aedes vexans*

*Ochlerotatus melanimon* (*Aedes melanimon*)

*Ochlerotatus stimulans* (*Aedes stimulans*)

*Ochlerotatus nigromaculis* (*Aedes nigromaculis*)

*Psorophora columbiae*

*Psorophora ferox*

*Ochlerotatus triseriatus* (*Aedes triseriatus*)

*Ochlerotatus sollicitans* (*Aedes sollicitans*)

*Anopheles quadrimaculatus*

*Coquillettidia perturbans*

\*\*Use higher rates (10 to 20 lbs/acre) in areas where extended residual control is necessary, or in habitats having deep water or dense surface cover.

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 and the treatment coordinator are responsible for considering all these factors when making decisions.

## 6.0 NOTICE TO USER

To the fullest extent permitted by law, seller makes no warranty, express or implied, of merchantability, fitness or otherwise concerning use of this product other than as indicated on the label. User assumes all risks of use, storage or handling not in strict accordance with accompanying directions.

# Fact Sheet

## VectoLex®

This sheet answers some basic questions about a mosquito control product in use in your county. Salem County Mosquito Control, along with several other resources (listed at the end of this sheet), can provide more detailed information.

### What is VectoLex and how is it used?

**VectoLex** is an insecticide product that is recommended for mosquito control in New Jersey by Rutgers, The State University of New Jersey. It contains the pesticide called *Bacillus sphaericus* (Bsph). The U.S. Environmental Protection Agency's (EPA) current evaluation considers *Bsph*-containing products to be very slightly toxic with minimal potential risk to people when used properly as part of a complete mosquito control program.

**VectoLex** is used to prevent mosquitoes from hatching in lakes, ponds, and other bodies of water. It acts on the larval or immature stage of the mosquito in water before the flying mosquito emerges. **VectoLex** is part of a mosquito management approach using habitat management and other measures to control immature mosquitoes in order to lessen the need to spray for adult mosquitoes.

### How can I avoid exposure to VectoLex?

Risk to the general public from the use of **VectoLex** is minimal. Avoiding exposure is always the safest course of action, particularly for populations that may be at higher risk, such as pregnant women, children, the elderly, and those with chronic illnesses. Any possible exposure risk can be reduced by following some common sense actions:

- ❖ Plan your activities to limit time spent outside during times of possible pesticide treatments.
- ❖ Avoid direct contact with water bodies that have been treated.
- ❖ Move children's toys out of application areas.
- ❖ Move animals and their food and water dishes out of application areas.
- ❖ Stay away from application equipment, whether or not it is in use.

### What are the symptoms of exposure to VectoLex?

Direct contact with eyes or skin may cause mild irritation or discomfort. The chance of experiencing these symptoms of exposure with proper use is low. You should contact your physician, other medical providers, or the New Jersey Poison Information and Education





# FYFANON<sup>®</sup> ULV MOSQUITO INSECTICIDE

ULTRA LOW VOLUME CONCENTRATE INSECTICIDE

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 ADULT MOSQUITO CONTROL APPLICATIONS, OR BY PERSONS UNDER THEIR DIRECT SUPERVISION.

EPA Reg. No. 279-3539

EPA Est.4787-DN-1

<b>ACTIVE INGREDIENT:</b>	<b>By Wt.</b>
*Malathion.....	96.5%
<b>OTHER INGREDIENTS:</b> .....	3.5%
<b>Total:</b>	100.0%

\* O,O-dimethyl phosphorodithioate of diethyl mercaptosuccinate.  
Contains 9.9 lbs. malathion per gallon.

**KEEP OUT OF REACH OF CHILDREN  
CAUTION**

SEE BOOKLET FOR ADDITIONAL PRECAUTIONARY STATEMENTS AND USE DIRECTIONS

**IN CASE OF A MEDICAL EMERGENCY INVOLVING THIS PRODUCT, CALL TOLL FREE, DAY OR NIGHT, 1-800-331-3148**

Product of Denmark

© Fyfanon is a registered trademark of FMC Corporation or an affiliate

Sold By



**FMC Corporation**  
2929 Walnut Street  
Philadelphia PA 19104

**NET CONTENTS: 2.5 Gallons**

02-07-17

<b>FIRST AID</b>	
This product is an organophosphate and is a cholinesterase inhibitor.	
<b>IF SWALLOWED:</b>	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to by a poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<b>IF INHALED:</b>	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth if possible.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>
<b>IF ON SKIN OR CLOTHING:</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>IF IN EYES:</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>HOTLINE NUMBER</b>	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-331-3148 for emergency medical treatment information.	
<b>NOTE TO PHYSICIAN</b>	
This product is a cholinesterase inhibitor. Treat symptomatically. Atropine is antidotal.	

**PRECAUTIONARY STATEMENTS**  
**HAZARDS TO HUMANS AND DOMESTIC ANIMALS**  
Harmful by swallowing, inhalation or skin contact. Avoid contact with skin. Avoid breathing spray mist.

**PERSONAL PROTECTIVE EQUIPMENT**  
For all formulations and use patterns - mixers, loaders, applicators, flaggers, and other handlers must wear:  

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of Barrier Laminate, Butyl Rubber > 14 mils, Nitrile Rubber > 14 mils, or Viton > 14 mils.
- Shoes plus socks

Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions exist, use detergent and hot water. Keep and wash PPE separately from other laundry

**ENGINEERING CONTROLS STATEMENTS**  
Pilots must use an enclosed cockpit in a manner that is consistent with the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR 170.240 (d)(4-6)). Pilots must wear the PPE required on this label for applicators.

<b>User Safety Recommendations</b>
<b>Users should:</b>
<ul style="list-style-type: none"> <li>• Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.</li> <li>• Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.</li> <li>• Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.</li> </ul>

## ENVIRONMENTAL HAZARDS

This pesticide is toxic to aquatic organisms, including fish and invertebrates. Use care when applying in or to an area which is adjacent to any body of water, and do not apply when weather conditions favor drift from target area. Poorly draining soils and soils with shallow water tables are more prone to produce runoff that contains this product.

When applying as a wide area mosquito adulticide, before making the first application in a season, it is advisable to consult with the state or tribal agency charged with primary responsibility for pesticide regulation to determine if other regulatory requirements exist.

This product is highly toxic to bees exposed to direct treatment on blooming crops or weeds. Do not apply or allow to drift onto blooming crops or weeds while bees are actively visiting the treatment area, except when applications are made to prevent or control a threat to public and/or animal health determined by a state, tribal or local public health or vector control agency on the basis of documented evidence of disease causing agents in vector mosquitoes or the occurrence of mosquito-borne disease in animal or human populations, or if specifically approved by the state or tribe during a natural disaster recovery effort. When applying as a wide area mosquito adulticide, do not apply over bodies of water (lakes, rivers, permanent streams, natural ponds, commercial fish ponds, swamps, marshes or estuaries), except when necessary to target areas where adult mosquitoes are present, and weather conditions will facilitate movement of applied material away from the water in order to minimize incidental deposition into the water body.

Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

## PHYSICAL OR CHEMICAL HAZARDS

Do not use or store near heat or open flame.

### STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Fyfanon ULV Mosquito should be stored in the original unopened container in a secure, dry place. Do not contaminate with other pesticides or fertilizers. Fyfanon ULV Mosquito should never be heated above 55°C (131°F), and should not be stored for long periods of time at a temperature in excess of 25°C (77°F).

**PESTICIDE DISPOSAL:** To avoid wastes, use all material in this container by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste disposal facility or pesticide disposal program (often such programs are run by state or local governments or by industry).

#### CONTAINER DISPOSAL:

**Refillable containers:** 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 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

**Nonrefillable containers (equal to or less than 5 gallons):** Nonrefillable 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 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.

**Nonrefillable containers (greater than 5 gallons):** Nonrefillable 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.

## DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. For use 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 adult mosquito control applications, or by persons under their direct supervision.

## MOSQUITO CONTROL IN POPULATED AND RURAL AREAS

### PRECAUTIONS AND RESTRICTIONS

Before making the first application in a season, it is advisable to consult with the state or tribal agency with primary responsibility for pesticide regulation to determine if other regulatory requirements exist.

#### RESTRICTIONS

- Do not apply more than 0.23 lb ai /A/day.
- Only treat when mosquitoes are swarming or biting. Do not re-treat a site more than 3 times in any one week. However, more frequent treatments may be made to prevent or control a threat to public and/or animal health determined by a state, tribal or local health or vector control agency on the basis of documented evidence of disease causing agents in vector mosquitoes or the occurrence of mosquito-borne diseases in animal or human populations, or if specifically approved by the state or tribe during a natural disaster effort.
- Apply when wind speed is greater than or equal to 1 mph.
- Do not apply by fixed wing aircraft at height less than 100 feet, or by helicopter at a height less than 75 feet unless specifically approved by the state or tribe based on public health needs.

#### PRECAUTIONS

- **IMPORTANT:** IN AREAS WHERE AUTOMOBILES, TRAILERS, TRUCKS AND PLEASURE BOATS ARE PRESENT, undiluted spray droplets of Fyfanon ULV Mosquito will permanently damage vehicle paint finishes unless the aircraft used for the ultra low volume application meets all of the specifications listed under **AERIAL APPLICATION**.

#### AERIAL APPLICATION

**Adult Mosquitoes on Rangeland, Pasture, and Other Uncultivated Non-Agricultural Areas (Wastelands, Roadsides)**

Apply 1.0 to 3.0 fluid ounces of Fyfanon ULV Mosquito per acre (0.08 to 0.23 lbs AI per acre).

Spray equipment must be adjusted so that the volume median diameter produced is less than 60 microns (Dv 0.5 < 60 um) and that 90% of the spray is contained in droplets smaller than 100 microns (Dv 0.9 < 100 um). The effects of flight speed and, for non-rotary nozzles, nozzle angle on the droplet size spectrum must be considered. Directions from the equipment manufacturer or vendor, pesticide registrant or a test facility using a wind tunnel and laser-based measurement instrument must be used to adjust equipment to produce acceptable droplet size spectra. Application equipment must be tested at least annually to confirm that pressure at the nozzle and nozzle flow rate(s) are properly calibrated. Adult mosquito control over cities, towns, and other areas where automobiles, trailers, trucks, and pleasure boats are present: Apply only when weather conditions are favorable. Wind and rising air currents may cause undesirable spray drift and reduce insect control. See Precautions and Restrictions for additional instructions.

#### GROUND-BASED APPLICATION

Spray equipment must be adjusted so that the volume median diameter is less than 30 microns (Dv 0.3 < 30 um) and that 90% of the spray is contained in droplets smaller than 50 microns (Dv 0.9 < 50 um). Directions from the equipment manufacturer or vendor, pesticide registrant or test facility using laser-based measurement instrument must be used to adjust equipment to produce acceptable droplet size spectra. Application equipment must be tested at least annually to confirm that pressure at the nozzle and nozzle flow rate(s) are properly calibrated.

#### Thermal Aerosols or Fogs

For control of adult mosquitoes with thermal aerosols or fogs. Apply Fyfanon ULV Mosquito at the rate of 3.9 - 5.2 gallons Fyfanon ULV Mosquito in 100 gallons of finished solution by ground equipment delivering 40 gallons per hour at a vehicle speed of 5 miles per hour to treat a swath width of 300 feet (equivalent to 180 acres per hour). At 3.9 gallons Fyfanon per 100 gallons of finished solution this is equivalent to 0.08 lbs active/acre. At 5.2 gallons per 100 gallons of finished solution, this is equivalent to 0.11 lbs active/acre.

\*There is a great variation in the chemical composition of fuel oils which may be used as thermal fog solvents. These differences may cause sludge and/or affect the solubility of the Fyfanon ULV Mosquito.

### Nonthermal Aerosols

Adult Mosquito Control - Control of adult mosquitoes over a 300-foot swath can be obtained with nonthermal aerosols of Fyfanon ULV Mosquito using the following rates at the indicated vehicle speeds:

Rates for Fyfanon ULV Mosquito					
Undiluted Apply as follows:					
Lbs.A.I./Acre/Day	Application Rates Fluid Ounces per Minute at Vehicle Speeds				Fluid Ounces of Fyfanon ULV Mosquito per acre
	5 mph	10 mph	15 mph	20 mph	
0.03 - 0.06*	1.0 - 2.1	2.0 - 4.3	3.0 - 6.3	4.0 - 8.6	0.38 - 0.75

\*Use higher rate of application when vegetation is dense and/or mosquito populations are heavy.

### OPERATING EQUIPMENT

Each nonthermal aerosol generator used for dispersal of Fyfanon ULV Mosquito to control adult mosquitoes must have minimum capability of producing the droplet spectrum described under GROUND-BASED APPLICATION. The initial determination of droplet size is made after the unit is installed in a vehicle and prior to its use in mosquito control operations. Recheck the unit frequently to insure that proper droplet size is maintained for each operation. Determination of droplet size every two months is usually sufficient if the unit has been maintained in good operating condition. Equipment manufacturer's instructions setting forth cleaning and maintenance of the unit must be followed. The unit must be inspected before each operation to correct any leaks or obstructions in the spray system; to detect whether the nozzle, hoses, or other parts are worn and need replacement; to insure that the flow meter is properly calibrated and to determine that the pressure recommended by the manufacturer is being maintained.

- Flow Rate**
- Must be regulated by accurate flow meter
  - Not greater than 1 gallon per hour at 5 mph; 2 gallons per hour at 10 mph; 3 gallons per hour at 15 mph, or 4 gallons per hour at 20 mph
- Nozzle Direction**
- Rear of the vehicle
  - Upward at an angle of 45o or more
- Vehicle Speed**
- Not greater than 20 mph
  - Shut off spray equipment when vehicle is stopped

**IMPORTANT:** Spray droplets of undiluted Fyfanon ULV Mosquito will permanently damage automobile paint unless all the conditions described and recommended in this label are met. If accidental exposure does occur, the vehicle should be washed at once.

### WARRANTY DISCLAIMER

FMC Corporation 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 CONSISTENT WITH APPLICABLE LAW, FMC CORPORATION 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 FMC Corporation or the Seller. All such risks shall be assumed by Buyer and User, and the Seller harmless for any claims related to such factors.

### LIMITATION OF REMEDIES

To the extent consistent with applicable 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 one of the following, at FMC Corporation's election:

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

To the extent consistent with applicable law, FMC Corporation shall not be liable for consequential, incidental, or special damages or losses in any matter.

The terms of the Warranty Disclaimer above and this Limitation of Remedies cannot be varied by any written or verbal statements or agreements. No employee or sales agent of FMC Corporation or the Seller is authorized to vary or exceed the terms of the Warranty Disclaimer or this Limitation of Remedies in any manner.



# Fact Sheet

## Atrapa® and Fyfanon®

This sheet answers some basic questions about a mosquito control product in use in your county. Salem County Mosquito Control, along with several other resources (listed at the end of this sheet), can provide more detailed information.

### What are Atrapa and Fyfanon and how are they used?

**Atrapa** and **Fyfanon** are insecticide products that are recommended for mosquito control in New Jersey by Rutgers, The State University of New Jersey. They contain the pesticide called **Malathion**. The U.S. Environmental Protection Agency's (EPA) current evaluation considers **Malathion**-containing products to be slightly toxic with minimal potential risk to people when used properly as part of a complete mosquito control program.

**Atrapa** and **Fyfanon** are used for the control of adult mosquitoes. While habitat management and measures to control immature mosquitoes in water are the preferred routine approaches, the spraying of adult mosquitoes is called for when biting populations reach critical levels, or when a disease organism is present in adult mosquitoes. A very fine mist is sprayed into the air since flying mosquitoes must directly contact the pesticide in order for it to be effective.

### How can I avoid exposure to Atrapa and Fyfanon?

Risk to the general public from the use of **Atrapa** and **Fyfanon** is minimal. Avoiding exposure is always the safest course of action, particularly for populations that may be at higher risk, such as pregnant women, children, the elderly, and those with chronic illnesses. Any possible exposure risk can be reduced by following some common sense actions:

- ❖ Pay attention to notices about spraying found through newspapers, websites, automated telephone messages, or distributed by municipal, county, or state agencies.
- ❖ Plan your activities to limit time spent outside during times of possible pesticide treatments.
- ❖ Move children's toys out of application areas.
- ❖ Move animals and their food and water dishes out of application areas.
- ❖ Stay away from application equipment, whether or not it is in use.
- ❖ Whenever possible, remain indoors with windows closed and with window air conditioners on non-vent (closed to the outside air) and window fans turned off during spraying.
- ❖ Avoid direct contact with surfaces that are still wet from pesticide spraying. Do not allow children to play in areas that have been sprayed until they have completely dried (approximately one hour).

- ❖ If you must remain outdoors, avoid eye and skin contact with the spray. If you get spray in your eyes or on your skin, immediately flush and rinse with water.

## **What are the symptoms of exposure to Atrapa and Fyfanon?**

Symptoms of exposure can include headache, nausea, dizziness, excessive sweating, salivation, excessive tearing, and a runny nose. The chance of experiencing these symptoms of exposure with proper use is low. You should contact your physician, other medical providers, or the New Jersey Poison Information and Education System (NJPIES) at 1-800-222-1222 if you experience these symptoms following a pesticide spraying. Bring this sheet with you if you visit a physician or other medical provider.

## **How long will Atrapa and Fyfanon last in the environment?**

The **Atrapa** and **Fyfanon** sprays stay in the air for a short time until they land on surfaces. **Malathion** has a low persistence and lasts no longer than 25 days in water and soil. **Malathion** breaks down faster in sunlight.

## **Where can I get more information on Atrapa and Fyfanon?**

The following are resources for more information regarding **Atrapa** and **Fyfanon** and mosquito control in your area (unless otherwise noted, available during normal business hours):

For overall pesticide-specific information – 9:30am to 7:30pm:

**National Pesticide Information Center** 800-858-7378

For pesticide health information & possible exposures – 24 hours:

**New Jersey Poison Information & Education System** 800-222-1222

For New Jersey pesticide regulation & misuse complaints:

**NJDEP Pesticide Control Program** 609-984-6507

For Federal pesticide regulation:

**USEPA Region 2 Office of Pesticide Programs** 732-321-6759

For statewide mosquito control information:

**NJDEP Office of Mosquito Control Coordination** 609-292-3649

For local mosquito control information:

**Salem County Mosquito Control** 856-769-3255

For mosquito control recommendations:

**Rutgers University, Department of Entomology** 732-932-9437

**For local health information:  
Salem County Health Department**

**856-935-7510**





# Zenivex® E4

## RTU

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 adult mosquito control applications, or by persons under their direct supervision.

- **FOR THE CONTROL OF ADULT MOSQUITOES, NON-BITING MIDGES, AND BLACK FLIES**
- **FOR USE AS A SPACE SPRAY BY AIR AND GROUND APPLICATION TO CONTROL ADULT MOSQUITOES**
- **APPROVED FOR USE OVER AGRICULTURAL CROPS (INCLUDING THOSE INTENDED FOR HUMAN CONSUMPTION), PASTURE AND RANGELAND**
- **READY TO USE WITHOUT DILUTION**
- **CONTROLS ADULT MOSQUITOES THAT MAY CARRY WEST NILE VIRUS, EASTERN EQUINE ENCEPHALITIS, ST. LOUIS ENCEPHALITIS**
- **CONTROLS NON-BITING MIDGES, NUISANCE AND BITING FLIES**
- **QUICK, PERMANENT KNOCKDOWN OF ADULT MOSQUITOES**

## SPECIMEN LABEL

<b>ACTIVE INGREDIENT:</b>	
Etofenprox (CAS #80844-07-1) . . . . .	4%
<b>OTHER INGREDIENTS*:</b> . . . . .	96%
Total: . . . . .	100%

\*Contains petroleum distillates  
 Contains 0.30 lbs etofenprox per gallon

EPA Reg. No. 2724-807      EPA Est. No. 2724-TX-1

KEEP OUT OF REACH OF CHILDREN  
**CAUTION**  
 See additional Precautionary Statements,

**PRECAUTIONARY STATEMENTS**  
**HAZARDS TO HUMANS AND**  
**DOMESTIC ANIMALS**  
**CAUTION**

Harmful if swallowed. Causes moderate eye irritation. Avoid contact with eyes, skin, or clothing. Applicators and other handlers must wear long-sleeved shirt, long pants, socks and shoes. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove contaminated clothing and launder before reuse. Repeated exposure to etofenprox can cause skin irritation.

**FIRST AID**

**If swallowed** • Immediately call a poison control center or doctor. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give any liquid to the person. • Do not give anything by mouth to an unconscious person.

**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 eyes. • 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 1-800-248-7763 for emergency medical treatment information.

**NOTE TO PHYSICIAN:** May pose an aspiration pneumonia hazard. Contains petroleum distillate.

### ENVIRONMENTAL HAZARDS

This pesticide is toxic to aquatic organisms, including fish and aquatic invertebrates. Runoff from treated areas or deposition into bodies of water may be hazardous to fish and other aquatic organisms. Do not apply over bodies of water (lakes, rivers, permanent streams, natural ponds, commercial fish ponds, swamps, marshes or estuaries), except when necessary to target areas where adult mosquitoes are

present, and weather conditions will facilitate movement of applied material away from water in order to minimize incidental deposition into the water body. Do not contaminate bodies of water when disposing of equipment rinsate or washwaters.

This product is highly toxic to bees exposed to direct treatment on blooming crops or weeds. Time applications to provide the maximum possible interval between treatment and the next period of bee activity. Do not apply to blooming crops or weeds when bees are visiting the treatment area, except when applications are made to prevent or control a threat to public and/or animal health determined by a state, tribal, or local health or vector control agency on the basis of documented evidence of disease-causing agents in vector mosquitoes or the occurrence of mosquito-borne disease in animal or human populations, or if specifically approved by the state or tribe during a natural disaster recovery effort.

### PHYSICAL/CHEMICAL HAZARDS

Combustible. Do not use or store near heat or open flame.

### DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. **READ AND FOLLOW ALL LABEL DIRECTIONS.** Before making the first application of the season, it is advisable to consult with the state or tribal agency with primary responsibility for pesticide regulation to determine if other regulatory requirements exist.

### GENERAL

**ZENIVEX® E4 RTU** is an effective insecticide used at low volumes to control adult mosquitoes, non-biting midges, biting and non-biting flies. Use **Zenivex® E4 RTU** undiluted as UltraLow Volume (ULV) for the control of pest species in or near residential, industrial, commercial, urban, recreational areas, woodlands, golf courses, and other areas where these pests are a problem. **Zenivex® E4 RTU** may be applied over agricultural areas prior to or following harvest for the control of adult mosquitoes within or adjacent to these areas. In the treatment of corrals, feedlots, swine lots, and zoos, cover any exposed drinking water, drinking water fountains, and animal feed before application. Apply **Zenivex® E4 RTU** aerially (both fixed and rotary aircraft) for low volume applications or through mist-blowers, backpack, and handheld sprayers for ground applications. **Zenivex® E4 RTU** will control mosquitoes and flies and can be used as part of a total integrated pest management program for controlling disease vectors. Apply **Zenivex® E4 RTU** at rates from 0.00175 to 0.0070 pounds of etofenprox per acre by ground ULV. Use this product undiluted only; do not mix with water. Apply when wind is  $\geq 1$  mph. Do not apply when wind speeds exceed 10 mph. A temperature inversion is preferable to keep the fog close to the ground and applications should be made when labeled insects are most active.

Do not spray more than 0.18 lbs etofenprox per acre per site per year. Do not make more than 25 applications per site per year. More frequent treatments may be made to prevent or control a threat to public and/or animal health determined by a state, tribal, or local health or vector control agency on the basis of documented evidence of disease-causing agents in vector mosquitoes or the occurrence of mosquito-borne disease in animal or human populations, or if specifically approved by the state or tribe during a natural disaster recovery effort.

### GROUND APPLICATION

Use a vehicle-mounted cold aerosol ULV sprayer to apply the product. Direct the spray equipment nozzle to provide even distribution of the product. For best results, apply perpendicular to the wind direction using a swath width of 300 ft. Spray equipment must be adjusted so that the volume median diameter (VMD) is between 10-30 microns ( $10\mu \leq D_{v0.5} \leq 30\mu$ ) and that 90% of the spray is contained in droplets smaller than 50 microns ( $D_{v0.9} < 50\mu$ ). Directions from the equipment manufacturer or vendor, pesticide registrant, or test facility using a laser-based measurement instrument must be used to adjust equipment to produce acceptable droplet size spectra. Application equipment must be tested at least annually to confirm that pressure at the nozzle and nozzle flow rate(s) are properly calibrated.

The appropriate application rate can be achieved by using the following table. Refer to the following chart for examples.

Application rate pound A.I. per acre	Flow rates		Vehicle Speed
	Undiluted		
	Oz/Acre	Oz/Minute	
0.00175	0.75	2.25	5
		4.50	10
		7.00	15
0.00350	1.5	4.50	5
		9.00	10
		13.50	15
0.00700	3.0	9.00	5
		18.00	10

Use the higher label rates when spraying areas where dense vegetation is present. Conduct applications when temperatures are between 50-95° F.

### Backpack Sprayer ULV Application

Apply **Zenivex® E4 RTU** undiluted through non-thermal ULV backpack sprayer capable of applying the product in the 10 to 30 micron range. Apply product to the area as evenly as possible. Apply at the rate of 0.00175 to 0.0070 pounds etofenprox per acre.

### Urban ULV Mosquito Control Applications

For control of resting or flying adult mosquitoes, biting flies and non-biting midges in areas such as utility

tunnels, sewers, storm drains and catch basins, pipe chases, underground basements, underground passages, parking decks, crawl spaces or uninhabited buildings, apply **Zenivex® E4 RTU** using mechanical foggers, hand-held or truck-mounted ULV equipment, thermal foggers or other spray equipment suitable for this application. Apply **Zenivex® E4 RTU** at rates up to but not exceeding 0.0070 pounds of etofenprox per acre.

#### **Thermal Fogging Application**

Apply using a truck, dolly mounted, handheld, or other thermal fogging equipment. Following the equipment manufacturer's instructions, apply this product at a rate of 0.00175 to 0.0070 pounds etofenprox per acre. Direct fog to areas where mosquitoes and other pests are located. The volume median diameter (VMD) of droplets produced by thermal foggers is less than 60 microns ( $D_{v0.5} < 60\mu$ ) and 90% of the spray is contained in droplets smaller than 100 microns ( $D_{v0.9} < 100\mu$ ).

#### **AERIAL APPLICATION**

Apply **Zenivex® E4 RTU** aerially, undiluted, by fixed wing or rotary aircraft. Apply at the rate of 0.00175 to 0.0070 pounds of etofenprox per acre. Apply using ULV equipped and capable aircraft. Spray equipment must be adjusted so that the volume median diameter (VMD) produced is less than 60 microns ( $D_{v0.5} < 60\mu$ ) and that 90% of the spray is contained in droplets smaller than 100 microns ( $D_{v0.9} < 100\mu$ ). The effects of flight speed and, for non-rotary nozzles, nozzle angle on the droplet size spectrum must be considered. Directions from the equipment manufacturer or vendor, pesticide registrant, or test facility using a wind tunnel and laser-based measurement instrument must be used to adjust equipment to produce acceptable droplet size spectra. Application equipment must be tested annually to confirm that pressure at the nozzle and nozzle flow rate(s) are properly calibrated. Do not apply **Zenivex® E4 RTU** at altitudes below 100 feet. Apply at altitudes from 100-300 feet. Apply when wind speed on the ground is  $\geq 1$  mph. Apply when labeled insects are most active. For best results, use Global Positioning System (GPS) equipped aircraft.

**IN FLORIDA:** Do not apply by aircraft except with the approval of the Florida Department of Agriculture and Consumer Services.

#### **APPLICATIONS OVER CROPS OR TO AREAS FAVORING DRIFT OVER CROPS**

**Zenivex® E4 RTU** may be applied over crops (including row, tree, fruit, citrus, pasture and other areas where agricultural enterprises take place) or to areas, where drift over cropland could occur. **Zenivex® E4 RTU** can be applied to these areas by either ground or aerial application. Use label rates and follow directions for use as directed in this label. Applications over crops or where drift may occur over crops are limited to 4

applications per month to the same site but no more than two applications within a seven day interval. Do not apply more than 0.028 pounds of active ingredient per month to the same site within a month. Do not spray more than 0.18 lbs etofenprox per acre per site per year. Do not make more than 25 applications per site per year.

#### **PESTICIDE STORAGE AND DISPOSAL**

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

**STORAGE AND SPILL PROCEDURES:** Store upright at room temperature. Avoid exposure to extreme temperatures. In case of spill or leakage, soak up with an absorbent material such as sand, sawdust, earth, fuller's earth, etc. Dispose of with chemical 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 DISPOSAL: Refillable 30 Gallon Drums, 120 Gallon Mini-Tote and 275 Gallon Tote:** 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. If not refilled, offer for recycling if available, or puncture and dispose of in a sanitary landfill, or by incineration. To clean the container before final disposal, triple rinse (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container  $\frac{1}{4}$  full with mineral oil or other suitable oil diluents. 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. **Non-refillable 2.5 gallon containers: Non-refillable container.** Triple rinse (or equivalent), promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or mix tank and drain container for 10 seconds after the flow begins to drip. Fill the container  $\frac{1}{4}$  full of with mineral oil or other suitable oil diluents and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank. Drain container for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Once triple rinsed, recycle if available, or puncture and dispose of in a sanitary landfill, or by incineration.

To the extent consistent with applicable law, seller makes no warranty, expressed or implied, concerning the use of this product other than indicated on the label. Buyer assumes all risks of use and handling of this material when such use and handling are contrary to label instructions.

In case of an emergency or for product use information, call 1-800-248-7763.

[www.zenivex.com](http://www.zenivex.com)

**Wellmark International**  
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## “*Zenivex™*” Adulticide Fact Sheet

**Municipalities are encouraged to share this information with all residents in their community**

This Fact Sheet answers some basic questions about mosquito control products in use in your County. Salem County Mosquito Control, along with several other resources (listed at the end of this sheet), can provide more detailed information.

### **What is *Zenivex™* adulticide and how is it used?**

*Zenivex™* contains a pesticide called *Etofenprox*, a member of the category of pesticides called *non-ester pyrethroids*, which are synthetic versions of pesticides produced by plants called pyrethrins. Traditional pyrethroid/piperonyl butoxide mixtures are recommended for Ultra-Low-Volume (ULV) mosquito control in New Jersey by Rutgers, The State University of New Jersey. *Zenivex™* is a non-ester pyrethroid, and therefore does not require a synergist such as piperonyl butoxide. The U.S. Environmental Protection Agency (EPA) has classified Etofenprox as a reduced risk pesticide. It poses a low risk to human health and the environment when used properly as part of an integrated mosquito control program. As formulated in *Zenivex™* adulticide, Etofenprox is considered a non-carcinogen, non-teratogen and non-mutagen.

This non-ester pyrethroid-containing product is used for the control of adult mosquitoes. While habitat management and measures to control immature mosquitoes in water are preferred and most used, the spraying of adult mosquitoes is necessary when biting populations reach critical levels or when a disease organism is present in adult mosquitoes. A very fine mist is sprayed into the air since flying mosquitoes must directly contact the pesticide in order for it to be effective.

### **How can I reduce my exposure to *Zenivex™*?**

Because of the very small amounts of active ingredients released per acre, the risk to the general public from the use of non-ester pyrethroid-containing products is minimal. Avoiding exposure is always the safest course of action. Any possible exposure risk can be reduced by following some common sense actions:

- Pay attention to notices about spraying found through newspapers, websites, automated telephone messages, or distributed by municipal, county or state agencies.
- Plan your activities to limit time spent outside during times of possible pesticide treatments.
- Move your pets, their food, and water dishes inside during ULV applications. Also bring clothing and children's toys inside.
- Stay away from application equipment, whether or not it is in use.
- Whenever possible, remain indoors with windows closed, window air conditioners on non-vent (closed to the outside air), and window fans turned off during spraying.
- Avoid direct contact with surfaces still wet from pesticide spraying. Do not allow children to play in areas that have been sprayed until they have completely dried (approximately one hour).
- If you must remain outdoors, avoid eye and skin contact with the spray. If you get spray in your eyes or on your skin, immediately flush and rinse with water.

### **What are the symptoms of exposure to *Zenivex*<sup>™</sup>?**

Symptoms of over-exposure can include irritation to skin and eyes. The chance of experiencing these symptoms of over-exposure with proper use is low. You should contact your physician, other medical providers, or the New Jersey Poison Information and Education System (NJPIES) at 1-800-222-1222 if you experience these symptoms following a pesticide spraying.

### **How long will *Zenivex*<sup>™</sup> last in the environment?**

The non-ester pyrethroid in *Zenivex*<sup>™</sup> has a half-life of 1.7 days in water and 4.4 days in soil. *Zenivex*<sup>™</sup> rapidly degrades in sunlight at the soil and water surface into its constituent elements: Carbon, Hydrogen, and Oxygen.

### **Where can I get more information on this adulticide?**

The following are resources for more information regarding *Zenivex*<sup>™</sup> and mosquito control in your area (unless otherwise noted, available during normal business hours):

For overall pesticide-specific information – 9:30am to 7:30pm:

**National Pesticide Information Center** **800-858-7378**

For pesticide health information & possible exposures – 24 hours:

**New Jersey Poison Information & Education System** **800-222-1222**

For New Jersey pesticide regulation & misuse complaints:

**NJDEP Pesticide Control Program** **609-984-6507**

For Federal pesticide regulation:

**USEPA Region 2 Office of Pesticide Programs** **732-321-6759**

For statewide mosquito control information:  
**NJDEP Office of Mosquito Control Coordination**      **609-292-3649**

For local mosquito control information:  
**Salem County Mosquito Control**      **856-769-3255**

For mosquito control recommendations:  
**Rutgers University, Department of Entomology**      **732-932-9437**

For local health information:  
**Salem County Health Department**      **856-935-7510**

