



# COUNTY OF UNION

DEPARTMENT OF ENGINEERING, PUBLIC WORKS & FACILITIES MANAGEMENT  
*Joseph J. Policay, Jr., CPWM, Director*

March 11, 2025  
Municipal Clerks Office  
Union County Municipality  
Union County New Jersey

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COUNTY COMMISSIONERS**

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*County Manager*

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*Deputy County Manager*

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*County Counsel*

**JAMES E. PELLETTIERE**  
*Clerk of the Board*

**JOSEPH J. POLICAY, JR.,  
CPWM,**  
*Division Director*

**Dear Municipal Clerk;**

**In accordance with NJAC 7:30-09.10 (e) 1: "Notification shall be made by mailing or delivering a packet of information annually to the municipality to be sprayed. Notification shall be mailed or delivered to the municipalitie's responsible official..."**

**Area wide notification is required for any application of adulticide used to control adult mosquitoes. This does not include the application of larvicides used for larval mosquito control. The application of adulticides for adult mosquito control is applied using a truck mounted ultra-low-volume misting machine. If an aerial application is warranted by rotor craft, your municipal officials will be notified. Our larval mosquito control measures include; eliminating standing water, applying larvicides in water when and where mosquito breeding is found, and biological measures (stocking with mosquito fish). Visit the Union County Website @ [www.ucnj.org](http://www.ucnj.org) for more information.**

**Pesticide applications for mosquito control may be necessary in your municipality, Mosquito breeding and population is influenced by yearly rainfall and temperature. This packet is being sent to every municipality in Union County. Please note that receipt of this packet does not confirm that spraying will actually take place.**

**Included in this packet is the NJDEP approved question and answer fact sheet and USEPA approved product labels for each adulticide that may be used in Union County for the control of adult mosquitoes during 2025.**

**DIVISION OF PUBLIC WORKS**

2371 South Avenue

Scotch Plains, NJ 07076

(908)789-3660

fax(908)789-3227

[www.ucnj.org](http://www.ucnj.org)

***We're Connected to You!***



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*Division Director*

As required, there will be a “legal” (The Star Ledger) and a “display” (Westfield Leader) advertisement to be published in Union County newspapers from May through October. Municipalities are encouraged to share this information with all residents in their community.

Respectfully;

  
**Sean Devaney, Bureau Chief**  
**Bureau of Union County Mosquito Control**

SD/lg

cc: Ed Oatman, Union County Manager

**Joseph J. Policay, Jr., CPWM, Director**  
**Union County Dept. of Public Works and Facilities**

**DIVISION OF PUBLIC WORKS**

## **Adulticide Information**

The adulticides that Union County will be using this year are;

**Zenivex E-20, Fyfanon EW, Duet, DeltAgard, and ReMoa Tri.** All have been used in the past year with satisfactory results in knocking down the adult Mosquito populations.

The labels for the adulticides, that Union County will be using this year are included in this packet and all required safety information is on the label.

The following Agencies listed below with telephone numbers are for quick reference. They can be contacted for more information.

<b>National Pesticide Information Center</b>	<b>1-800-858-7378</b>
<b>N.J. Poison Information &amp; Education System</b>	<b>1-800-222-1222</b>
<b>NJDEP Pesticide Control Program</b>	<b>1-609-984-6568</b>
<b>USEPA Region 2 Office of Pesticides Program</b>	<b>1-732-321-6759</b>
<b>NJDEP Office of Mosquito Control Coordination</b>	<b>1-609-292-3649</b>
<b>Union County Bureau of Mosquito Control</b>	<b>1-908-654-9834</b>
<b>Rutgers University, Department of Entomology</b>	<b>1-732-932-9437</b>

# Zenivex™ E20

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
- CAN BE USED UNDILUTED OR DILUTED
- 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

### ACTIVE INGREDIENT:

Etofenprox (CAS #80844-07-1).....	20%
OTHER INGREDIENTS*:	80%
Total: .....	100%

Contains 1.48 lbs Etofenprox per gallon

\*Contains petroleum distillates

EPA Reg No. 2724-791

KEEP OUT OF REACH OF CHILDREN

### CAUTION

See additional Precautionary Statements,  
First Aid Treatments, and Directions for Use

PRECAUTIONARY STATEMENTS  
HAZARDS TO HUMANS AND  
DOMESTIC ANIMALS  
CAUTION

Harmful if swallowed. Causes moderate eye irritation. Avoid contact with eyes, skin, or clothing. 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

Call a poison control center or doctor immediately for treatment advice.

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™ is an effective insecticide used at low volumes to control adult mosquitoes, non-biting midges, biting and non-biting flies. Use Zenivex™, either undiluted as Ultra-Low Volume (ULV) or diluted with mineral oil or other suitable oil diluent, 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. Do not spray on or allow drift onto pastureland, cropland, or potable water supplies. 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™ aerially (both fixed and rotary aircraft) for low volume applications or through mist-blowers, backpack, and handheld sprayers for ground applications. Zenivex™ will control flies and mosquitoes and can be used as part of a total integrated pest management program for controlling disease vectors. Apply Zenivex™ at rates from 0.00175 to 0.0070 pounds of etofenprox per acre.

Dilute this product with oil (10-50 cps) 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 retreat a site more than once in three days; make no more than two applications to a site in any one week or 25 applications in one 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 altering the dilution rate of Zenivex™. Refer to the following chart for examples.

Application rate pound A.I. per acre	Vehicle Speed MPH	Flow rates			
		Undiluted	Diluted 1 to 1	Diluted 1 to 2	Diluted 1 to 4.5
		Oz/minute	Oz/minute	Oz/minute	Oz/minute
0.00175	10	0.9	1.8	2.74	4.57
	15	1.4	2.7	5.40	9.90
	20	1.8	3.6	7.20	13.20
0.00350	10	1.8	3.6	5.48	9.14
	15	2.7	5.4	10.80	19.80
	20	3.6	7.2	14.40	26.40
0.00700	10	3.6	7.2	10.78	19.80
	15	5.4	10.8	16.18	39.60
	20	7.2	14.4	21.50	52.80

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™ diluted or 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™ using mechanical foggers, hand-held or truck-mounted ULV equipment, thermal foggers or other spray equipment suitable for this application. Apply Zenivex™ at rates up to but not exceeding 0.007 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™ aerially, either diluted or 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™ 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.

### 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: 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 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. Non-refillable 2.5 gallon containers: Non-refillable container. Do not reuse or refill this 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 water 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.

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

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



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January, 2009  
Schaumburg, IL



# FYFANON<sup>®</sup> ULV MOSQUITO

INSECTICIDE

## ULTRA LOW VOLUME INSECTICIDE CONCENTRATE

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.

ACTIVE INGREDIENT:	
*Malathion.....	96.5%
INERT INGREDIENTS:.....	3.5%
TOTAL:.....	100.0%

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

**KEEP OUT OF REACH OF CHILDREN  
CAUTION**

This is a specimen label intended for use only as a guide in providing general information regarding use of this product. As labels are subject to revisions, always carefully read and follow the label on the product

IN CASE OF A MEDICAL EMERGENCY INVOLVING THIS PRODUCT,  
CALL TOLL FREE, DAY OR NIGHT 1-866-303-6950

FIRST AID	
<b>This product is an organophosphate and is a cholinesterase inhibitor.</b>	
<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 do so 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. 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 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>
<p>Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-866-303-6950 for emergency medical treatment information.</p>	
<p><b>NOTE TO PHYSICIAN:</b> This product is a cholinesterase inhibitor. Treat symptomatically. Atropine is antidotal.</p>	

EPA Reg. No. 67760-34

Chemnova, Inc.  
1700 Route 23  
Wayne, NJ 07470  
Product of Denmark

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 **CHEMINOVA**  
HELPING YOU GROW

COLJ25/7 5/08

## PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Harmful by swallowing, inhalation or skin contact. Avoid contact with skin. Avoid breathing spray mist. Do not contaminate food or feed products.

### PERSONAL PROTECTIVE EQUIPMENT

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category F on an EPA chemical-resistance category selection chart.

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves, such as barrier laminate, butyl rubber, nitrile rubber, or Viton
- Shoes plus socks

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

### ENGINEERING CONTROLS STATEMENTS

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets with requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR 170.240 (d)(4-6)), the handler PPE requirements may be reduced or modified as specified in the WPS.

### USER SAFETY RECOMMENDATIONS

User should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- 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 pesticide is toxic to fish, aquatic invertebrates, and aquatic life stages of amphibians. Runoff from treated areas or deposition of spray droplets into a body of water may be hazardous to aquatic organisms.

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.

This product is highly toxic to bees exposed to direct treatment on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if 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.

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 contaminate bodies of water when disposing of equipment rinsate or washwaters.

### PHYSICAL OR CHEMICAL HAZARDS

Before using, read the directions contained in this labeling for the proper methods and procedures which must be followed to achieve effective insect control and avoid permanent damage to automobile and other paint finishes.

### STORAGE AND DISPOSAL

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

**STORAGE:** Fyfanon ULV Mosquito should be stored at temperatures not exceeding 25° C (77° F). It should never be heated above 65° C (131° F), and also local heating above this temperature should be avoided.

**PESTICIDE DISPOSAL:** Pesticide, spray mixture, or rinse water that cannot be used according to label instructions may be disposed of on site or at an approved waste disposal facility.

#### 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:** Do not reuse or refill this container. Offer for recycling if available. Triple rinse container 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 1/4 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:** Do not reuse or refill this container. Offer for recycling if available. Triple rinse as follows: Empty the remaining contents into application equipment or mix tank. Fill the container 1/4 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 and 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 any requirements specific to your State or tribe, consult the agency responsible for pesticide regulation.

#### GENERAL

Do not apply more than 0.23 lb active ingredient/A/day.

### MOSQUITO CONTROL

#### MOSQUITO CONTROL IN POPULATED AND RURAL AREAS

Do not re-treat a site more than 3 times in any one week when mosquitoes are swarming or biting. 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.

## AERIAL APPLICATION

Adult mosquito control over cities, towns, and other areas where automobiles, trailers, trucks, and pleasure boats are present: Apply 2.6 to 3.0 fluid ounces of Fyfanon ULV Mosquito per acre. Apply only when weather conditions are favorable. Wind and rising air currents may cause undesirable spray drift and reduce insect control.

Spray equipment must be adjusted so that the volume or mass median diameter produced is less than 50 microns ( $Dv\ 0.5 < 50\ \mu m$ ) and that 90% of the spray is contained in droplets smaller than 100 microns ( $Dv\ 0.9 < 100\ \mu m$ ). 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.

**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.**

## GROUND APPLICATION

Spray equipment must be adjusted so that the volume or mass median diameter is less than 17 microns ( $Dv\ 0.5 < 17\ \mu m$ ) and that 90% of the spray is contained in droplets smaller than 32 microns ( $Dv\ 0.9 < 32\ \mu m$ ). Directions from the equipment manufacturer or vendor, pesticide registrant or a 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.

### Thermal Aerosols or Fogs

For control of adult mosquitoes with thermal aerosols or fogs, apply Fyfanon ULV Mosquito at the rate of 6 - 8 oz. actual / gallon (3.9 - 5.2 gallons Fyfanon ULV Mosquito in 100 gallons 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 - 400 feet.

\* 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:

Vehicle Speed - Miles per Hour	Flow Rate of Fyfanon - Fl. oz./Min.	Maximum Flow - Rate per Hour
5	1.0 to 2.1	1 gallon
10	2.0 to 4.3	2 gallons
15	3.0 to 6.3	3 gallons
20	4.0 to 8.6	4 gallons

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

Apply Fyfanon ULV Mosquito at the rate of 2 to 4 fluid ounces per acre for control of adult mosquitoes. Application may be made via ground or aerial equipment. No more than 3 applications should be made to a site in any one week when mosquitoes are swarming or biting. 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.

For enhanced knock-down effects against mosquitoes, Fyfanon ULV Mosquito can be mixed with a synergized pyrethrin emulsifiable concentrate (6% pyrethrin + 60% PBO) in accordance with the most restrictive of label limitations and precautions indicated on both this and the tank-mixed product. Label rates must not be exceeded. This product may not be mixed with any product bearing a label which specifically prohibits such mixing. Prior to tank mixing large quantities mix a small amount in a glass jar to verify that the products are physically compatible.

A tank mix of these may be prepared as follows:

Component	Rapid knock-down	Improved knock-down
Fyfanon ULV Mosquito	107 fl. oz.	117 fl. oz.
Synergized pyrethrin (6%/60%)	21 fl. oz.	11 fl. oz.

Depending upon your operational needs for knock-down, the amount of synergized pyrethrin can be reduced or adjusted. Application rates of Fyfanon ULV Mosquito and droplet distribution requirements remain the same as for Fyfanon ULV Mosquito used alone.

## 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 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. The unit should be rechecked as frequently as necessary 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 45° 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

ChemInova 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 accordance with the directions, subject to the inherent risks set forth below. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, CHEMINOVA 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 Chemnova or the Seller. All such risks shall be assumed by Buyer and User. Buyer and User agree to hold Chemnova and the Seller harmless for any claims related to such factors.

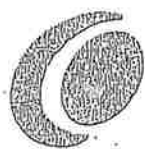
### LIMITATION OF REMEDIES

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 Chemnova'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, Chemnova 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 Chemnova or the Seller is authorized to vary or exceed the terms of the Warranty Disclaimer or this Limitation of Remedies in any manner.

CO/J25/7 5/08



# FYFANON<sup>®</sup> ULV MOSQUITO

INSECTICIDE

## ULTRA LOW VOLUME INSECTICIDE CONCENTRATE

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.

ACTIVE INGREDIENT:	96.5%
*Malathion	3.5%
INERT INGREDIENTS:	100.0%
TOTAL:	
* O,O-dimethyl phosphorodithioate of diethyl mercaptosuccinate	
Contains 9.9 lbs. malathion per gallon	

**KEEP OUT OF REACH OF CHILDREN  
CAUTION**

This is a specimen label intended for use only as a guide in providing general information regarding use of this product. As labels are subject to revisions, always carefully read and follow the label on the product.

IN CASE OF A MEDICAL EMERGENCY INVOLVING THIS PRODUCT,  
CALL TOLL FREE, DAY OR NIGHT 1-866-303-6950

### FIRST AID

This product is an organophosphate and is a cholinesterase inhibitor.

IF SWALLOWED:	<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 do so by a poison control center or doctor.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>
IF INHALED:	<ul style="list-style-type: none"> <li>Move person to fresh air. 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>
IF ON SKIN OR CLOTHING:	<ul style="list-style-type: none"> <li>Take off contaminated clothing.</li> <li>Rinse skin with plenty of water for 15-20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
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>

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-866-303-6950 for emergency medical treatment information.

NOTE TO PHYSICIAN: This product is a cholinesterase inhibitor. Treat symptomatically. Atropine is antidotal.

EPA Reg. No. 67760-34

Chemnova, Inc.  
1700 Route 23  
Wayne, NJ 07470  
Product of Denmark

® Fyfanon is a registered trademark of Chemnova

 **CHEMINOVA**  
HELPING YOU GROW

CO/J25/7 5/08

## PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Harmful by swallowing, inhalation or skin contact. Avoid contact with skin. Avoid breathing spray mist. Do not contaminate food or feed products.

### PERSONAL PROTECTIVE EQUIPMENT

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category F on an EPA chemical-resistance category selection chart.

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves, such as barrier laminate, butyl rubber, nitrile rubber, or Viton
- Shoes plus socks

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

### ENGINEERING CONTROLS STATEMENTS

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets with requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR 170.240 (d)(4-6)), the handler PPE requirements may be reduced or modified as specified in the WPS.

### USER SAFETY RECOMMENDATIONS

User should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- 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 pesticide is toxic to fish, aquatic invertebrates, and aquatic life stages of amphibians. Runoff from treated areas or deposition of spray droplets into a body of water may be hazardous to aquatic organisms.

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.

This product is highly toxic to bees exposed to direct treatment on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if 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.

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 contaminate bodies of water when disposing of equipment rinseate or washwaters.

### PHYSICAL OR CHEMICAL HAZARDS

Before using, read the directions contained in this labeling for the proper methods and procedures which must be followed to achieve effective insect control and avoid permanent damage to automobile and other paint finishes.

### STORAGE AND DISPOSAL

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

**STORAGE:** Fyfanon ULV Mosquito should be stored at temperatures not exceeding 25° C (77° F). It should never be heated above 55° C (131° F), and also local heating above this temperature should be avoided.

**PESTICIDE DISPOSAL:** Pesticide, spray mixture, or rinse water that cannot be used according to label instructions may be disposed of on site or at an approved waste disposal facility.

#### 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 rinseate into application equipment or rinseate collection system. Repeat this rinsing procedure two more times.

**Nonrefillable containers equal to or less than 5 gallons:** Do not reuse or refill this container. Offer for recycling if available. Triple rinse container 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 1/4 full with water and recap. Shake for 10 seconds. Pour rinseate into application equipment or a mix tank or store rinseate 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:** Do not reuse or refill this container. Offer for recycling if available. Triple rinse as follows: Empty the remaining contents into application equipment or mix tank. Fill the container 1/4 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 rinseate into application equipment or a mix tank and store rinseate 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 any requirements specific to your State or tribe, consult the agency responsible for pesticide regulation.

#### GENERAL

Do not apply more than 0.23 lb active ingredient/A/day.

### MOSQUITO CONTROL MOSQUITO CONTROL IN POPULATED AND RURAL AREAS

Do not re-treat a site more than 3 times in any one week when mosquitoes are swarming or biting. 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.

## AERIAL APPLICATION

Adult mosquito control over cities, towns, and other areas where automobiles, trailers, trucks, and pleasure boats are present: Apply 2.6 to 3.0 fluid ounces of Fyfanon ULV Mosquito per acre. Apply only when weather conditions are favorable. Wind and rising air currents may cause undesirable spray drift and reduce insect control.

Spray equipment must be adjusted so that the volume or mass median diameter produced is less than 50 microns (Dv 0.5 < 50 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.

**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.**

## GROUND APPLICATION

Spray equipment must be adjusted so that the volume or mass median diameter is less than 17 microns (Dv 0.5 < 17 um) and that 90% of the spray is contained in droplets smaller than 32 microns (Dv 0.9 < 32 um). Directions from the equipment manufacturer or vendor, pesticide registrant or a 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.

### Thermal Aerosols or Fogs

For control of adult mosquitoes with thermal aerosols or fogs, apply Fyfanon ULV Mosquito at the rate of 6 - 8 oz. actual / gallon (3.8 - 5.2 gallons Fyfanon ULV Mosquito in 100 gallons 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 - 400 feet.

\* 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:

Vehicle Speed - Miles per Hour	Flow Rate of Fyfanon - Fl. oz./Min.	Maximum Flow - Rate per Hour
5	1.0 to 2.1	1 gallon
10	2.0 to 4.3	2 gallons
15	3.0 to 6.3	3 gallons
20	4.0 to 8.6	4 gallons

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

Apply Fyfanon ULV Mosquito at the rate of 2 to 4 fluid ounces per acre for control of adult mosquitoes. Application may be made via ground or aerial equipment. No more than 3 applications should be made to a site in any one week when mosquitoes are swarming or biting. 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.

For enhanced knock-down effects against mosquitoes, Fyfanon ULV Mosquito can be mixed with a synergized pyrethrin emulsifiable concentrate (6% pyrethrin + 60% PBO) in accordance with the most restrictive of label limitations and precautions indicated on both this and the tank-mixed product. Label rates must not be exceeded. This product may not be mixed with any product bearing a label which specifically prohibits such mixing. Prior to tank mixing large quantities mix a small amount in a glass jar to verify that the products are physically compatible.

A tank mix of these may be prepared as follows:

Component	Rapid knock-down	Improved knock-down
Fyfanon ULV Mosquito	107 fl. oz.	117 fl. oz.
Synergized pyrethrin (6%/60%)	21 fl. oz.	11 fl. oz.

Depending upon your operational needs for knock-down, the amount of synergized pyrethrin can be reduced or adjusted. Application rates of Fyfanon ULV Mosquito and droplet distribution requirements remain the same as for Fyfanon ULV Mosquito used alone.

## 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 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. The unit should be rechecked as frequently as necessary 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 45° 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

ChemInova 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, CHEMINOVA 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 Chemnova or the Seller. All such risks shall be assumed by Buyer and User. Buyer and User agree to hold Chemnova and the Seller harmless for any claims related to such factors.

### LIMITATION OF REMEDIES

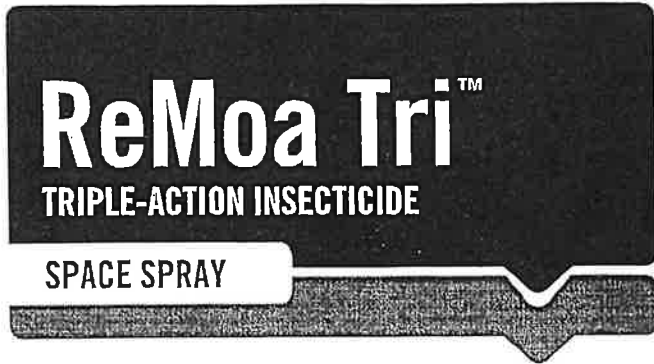
To the extent consistent with applicable law, the exclusive remedy for losses or damages resulting from this product (including claims based on contract, negligence, strict liability, or other legal theories), shall be limited to one of the following, at Chemnova's election:

- (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, Chemnova 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 Chemnova or the Seller is authorized to vary or exceed the terms of the Warranty Disclaimer or this Limitation of Remedies in any manner.

CO/J25/7 5/08

FENPROPATHRIN	GROUP	3A	INSECTICIDE
ABAMECTIN	GROUP	6	INSECTICIDE



**FOR NON-CROP GROUND APPLICATIONS.  
TRIPLE MODE OF ACTION INSECTICIDE TO PROVIDE  
OPERATIONAL CONTROL OF BOTH SUSCEPTIBLE AND  
PERMETHRIN-RESISTANT Aedes AND Culex MOSQUITOES.**

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, or as allowed by State regulations for persons treating private property.

**Active Ingredients:**

Fenpropathrin	4.0%
Abamectin	1.5%
C-8910	1.0%
<b>Other Ingredients</b>	<b>93.5%</b>
<b>Total</b>	<b>100.0%</b>

Contains 0.3 lbs of Fenpropathrin, 0.11 lbs of Abamectin and 0.08 lbs of C-8910 per gallon.

EPA Reg. No. 73049-526  
EPA Est. No. 33762-IA-001

List No. A560205

**INDEX:**

- 1.0 First Aid
- 2.0 Precautionary Statements
  - 2.1 Hazard to Humans and Domestic Animals
  - 2.2 Physical or Chemical Hazards
  - 2.3 Personal Protective Equipment (PPE)
  - 2.4 User Safety Requirements
  - 2.5 User Safety Recommendations
  - 2.6 Environmental Hazards
- 3.0 Directions for Use
- 4.0 Application Instructions
- 5.0 Storage and Disposal
- 6.0 Notice To User: Warranty and Disclaimer Statement

**KEEP OUT OF REACH OF CHILDREN  
CAUTION**

**1.0**

FIRST AID	
<b>If swallowed</b>	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor 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 do so by a poison control center or doctor.</li> <li>• Do not give anything to an unconscious person.</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.</li> <li>• Call a poison control center or doctor for immediate treatment advice.</li> </ul>
HOT LINE NUMBER	
<p>Have the product container label with you when calling a poison control center or doctor or going for treatment. For emergency medical treatment and or transportation emergency information contact 1-877-315-9819 or contact the National Pesticides Information Center (NPIC) at 1-800-858-7378, Monday through Friday, 8 AM to 12 PM PST, or at <a href="http://npic.orst.edu">http://npic.orst.edu</a>. For general information about this product, call 1-800-323-9597.</p>	

**2.0 PRECAUTIONARY STATEMENTS**

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

Harmful if swallowed. Causes moderate eye irritation. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Wear long-sleeved shirt and long pants, socks and shoes. Avoid contact with eyes, skin, or clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

**2.2 Physical or Chemical Hazards**

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

**2.3 Personal Protective Equipment (PPE)**

Mixers, loaders, applicators and other handlers must wear:
 

- Long-sleeved shirt and long pants.
- Shoes plus socks.

**2.4 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.

**2.5 User Safety Recommendations**

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.

**2.6 Environmental Hazards**

This product is extremely toxic to fresh water and estuarine fish and invertebrates. Runoff from treated areas into a body of water may be hazardous to fish and aquatic invertebrates. This pesticide is highly toxic to bees exposed to direct treatment on blooming crops or weeds. Do not apply this product or allow drift when bees are foraging 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.

### 3.0 DIRECTIONS FOR USE

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

Before making the first application in a season, consult with the State or Tribal agency with primary responsibility for pesticide regulation to determine if other regulatory requirements exist.

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 contaminate water when disposing of equipment rinsate or wash waters.

#### Resistance Management:

For resistance management, please note that ReMoa Tri, TRIPLE ACTION INSECTICIDE SPACE SPRAY (from here on simply indicated as ReMoa Tri) contains both Group 3A and Group 6 insecticides. Any insect population may contain individuals naturally resistant to ReMoa Tri and other Group 3A and Group 6 insecticides. The resistant individuals may dominate the insect population if these insecticides are used repeatedly in the same fields. Hence appropriate resistance-management strategies should be followed.

To delay insecticide resistance, take the following steps: Avoid application of more than 30 applications and consecutive sprays of ReMoa Tri or other insecticides in the same group in a year.

Adopt an integrated pest management program for insecticide use that includes scouting, uses historical information related to pesticide use, record keeping, and which considers cultural, biological and other chemical control practices.

Monitor after application for unexpected target pest survival. If the level of survival suggests the presence of resistance, consult with your local university specialist or certified pest control advisor.

Note: When applications require dilution, ReMoa Tri can only be diluted with manufacturer-provided diluent. ReMoa Tri cannot be diluted with water or any other diluent.

### 4.0 APPLICATION INSTRUCTIONS

ReMoa Tri can be applied as an Ultra-Low Volume (ULV), or non-thermal aerosol spray (cold fog) in mosquito adulticiding programs involving outdoor residential, urban, industrial, and recreational areas, to control adult mosquitoes.

#### Wide Area and Space Spray Application for Mosquito Control Over Non-Crop Areas

Do not apply more than 1.018 fl oz of ReMoa Tri per acre in any two-day period. Do not make more than 30 applications

per site per year (For a maximum rate 30.54 fl oz of ReMoa Tri per acre per year). More frequent applications per site 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.

Apply the product through a **ULV Fogger** (also known as ULV cold fogger), which is a piece of equipment designed to disperse pesticide chemicals in the air as a mist or fog.

Use ReMoa Tri for control of mosquitoes in: residential areas, industrial areas, urban areas (utility tunnels, sewers, storm drains and catch basins, pipe chases, basements, underground passages, parking decks, crawl spaces, or uninhabited buildings), parks, campsites, woodlands, athletic fields, golf courses, playgrounds, recreational and overgrown waste areas, roadsides, swamps, marshes, tidal areas, corrals, feed lots, swine lots, poultry ranges, zoos, animal quarters, barns, dumps, junkyards, tire dumps, and other areas where adult mosquitoes may be found. For best results, apply when insects are most active and meteorological conditions are conducive to keeping the spray cloud in the air column close to the ground. An inversion of air temperatures and a light breeze is preferable. Apply during the cooler hours of the night or early morning. Apply when wind speed is equal to or greater than 1 mph.

#### Droplet Size Determination for Ground Application Equipment

Spray equipment must be adjusted so that the volume median diameter (VMD) is between 8-30 microns ( $8\mu \leq Dv_{0.5} \leq 30\mu$ ) and that 90% of the spray volume is contained in droplets smaller than 50 microns ( $Dv_{0.9} < 50\mu$ ). A laser-based measurement instrument, or a 'hot wire' based droplet analyzer such as KLD labs DC-IV system, 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.

#### Ground ULV Application

Create an optimum swath when possible. An optimum swath width can be achieved when ReMoa Tri is applied from a truck that is being driven perpendicular to the wind direction. Direct the spray head of equipment to ensure even distribution of the spray cloud throughout the area.

- FOR BEST RESULTS treat when mosquitoes or insects are most active and weather conditions are conducive to keeping the spray cloud in the air column close to the ground.
- An inversion of air temperatures and a light breeze is preferable. Application during the cooler hours of the night or early morning is recommended.

To control mosquitoes and other listed insects, apply ReMoa Tri at a flow rate of 2.02 to 6.08 fluid ounces per minute at an average vehicle speed of 10 mph using a swath width of 300 feet for acreage calculations (see chart below). For best results, apply when mosquitoes are most active and meteorological conditions are conducive to keeping the spray cloud close to the ground. Do not apply in calm air conditions. Apply only when ground wind speed is greater than or equal to 1 mph. Conduct all types of applications at temperatures above 50°F. When targeting permethrin-resistant *Aedes* and *Culex* mosquitoes use a flow rate of 4.03 fluid ounces per minute at an average vehicle speed of 10 mph. If a different vehicle speed is used, adjust rate

accordingly. These rates are equivalent to 0.00080/0.00030/0.00020 to 0.00239/0.00089/0.00060 pounds of Fenpropathrin/Abamectin/C8910 respectively per air column acre. Vary flow rate according to vegetation density and mosquito population. Use higher flow rate in heavy vegetation or when populations are high. ReMoa Tri may also be diluted with the manufacturer's provided diluent (water or mineral oil should not be used as a diluent for ReMoa Tri) and applied by ground ULV equipment. Do not exceed 0.00239/0.00089/0.00060 pounds of Fenpropathrin/Abamectin/C8910 respectively per air column acre. Refer to the dilution tables on this label for flow rate calculations for diluted end-use formulations of ReMoa Tri. Use the following tables to calculate application rates:

**Flow Rate Based on a 300-Foot Swath Width (Fluid Ounces Per Minute)**

Application Rates (Pounds of Fenpropathrin AI per Air Column Acre)	Application Rates (Pounds of Abamectin AI per Air Column Acre)	Application Rates (Pounds of C-8910 AI per Air Column Acre)	ReMoa Tri (fl oz Per Air Column Acre)	Vehicle Speed (MPH)	Undiluted	Diluted 1:0.5	Diluted 1:1	Diluted 1:2
0.0008	0.0003	0.0002	0.341 (Low)	5	1.03	1.55	2.07	3.10
				10	2.07	3.10	4.13	6.20
				15	3.10	4.65	6.20	9.29
				20	4.13	6.20	8.26	12.39
0.00157	0.00059	0.00039	0.669 (Mid)	5	2.03	3.04	4.05	6.08
				10	4.05	6.08	8.11	12.16
				15	6.08	9.12	12.16	18.24
				20	8.11	12.16	16.21	24.32
0.00239	0.00089	0.0006	1.018 (High)	5	3.09	4.63	6.17	9.26
				10	6.17	9.26	12.34	18.51
				15	9.26	13.88	18.51	27.77
				20	12.34	18.51	24.68	37.02

When targeting permethrin-resistant *Aedes* and *Culex* mosquitoes, or other difficult to control species of mosquitoes, use the mid to high label rate. ReMoa Tri can not exceed the maximum rates of active ingredient per air column acre listed above.

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## 5.0 STORAGE AND DISPOSAL

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

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

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

**Container Disposal:** Non-refillable container. Do not reuse or refill this container. 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 1/4 full with mineral oil and recap. Shake for 10 seconds. Pour rinsate into application equipment or a rinse tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities.

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## 6.0 NOTICE TO USER: WARRANTY AND DISCLAIMER STATEMENT

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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. To the extent consistent with applicable law, user assumes all risks of use, storage or handling not in strict accordance with accompanying directions.

*ReMoa Tri* is a trademark of Valent BioSciences LLC  
©2023

Registrant:  
**Valent BioSciences LLC**  
1910 Innovation Way, Suite 100  
Libertyville, IL 60048, U.S.A.  
1-800-323-9597

44-1044/R1 (Pkg. 99-1803/R2 B)

SPECIMEN



# DUET® Dual-Action Adulticide

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.

A Quick Knockdown, Oil Soluble Synergized Synthetic Pyrethroid for Effective Control of Adult Mosquitoes, Gnats, Biting and Non-Biting Midges, and Blackflies in Outdoor Residential and Recreational Areas.

### ACTIVE INGREDIENTS:

Prallethrin: (RS)-2-methyl-4-oxo-3-(2-propenyl) cyclopent-2-enyl-(1RS)-cis, trans-chrysanthemate .....	1.00%
Sumithrin®: 3-Phenoxybenzyl-(1RS, 3RS, 1RS, 3SR)-2,2-dimethyl-3-(2-methylprop-1-enyl) cyclopropanecarboxylate .....	5.00%
* Piperonyl Butoxide .....	5.00%
** OTHER INGREDIENTS .....	89.00%
	100.00%

Contains 0.0717 pounds of Prallethrin/Gallon, 0.359 pounds of Sumithrin®/Gallon and 0.359 pounds of Piperonyl Butoxide (PBO)/Gallon

\*(butylcarbityl)(6-propylpiperonyl) ether and related compounds

\*\*Contains petroleum distillate

## KEEP OUT OF REACH OF CHILDREN

## CAUTION

PRECAUCION AL USUARIO: Si usted no lee ingles, no use este producto hasta que la etiqueta haya sido explicado ampliamente

### 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 a doctor.
- Do not give any liquid to the person.
- Do not give anything by mouth to an unconscious person.

NOTE TO PHYSICIAN: Contains petroleum distillates - vomiting may cause aspiration pneumonia.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For information regarding medical emergencies or pesticide incidents, call 1-888-740-8712.

### PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**CAUTION-Harmful if swallowed.** Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove and wash contaminated clothing before reuse.

**PERSONAL PROTECTIVE EQUIPMENT (PPE)** Mixers, loaders, applicators, and other handlers must wear the following: long-sleeved shirt, long pants, shoes and socks. See engineering controls for additional requirements.

**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 material that have been drenched or heavily contaminated with the product's concentrate. 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. As soon as possible, wash thoroughly and change into clean clothing.

**ENGINEERING CONTROLS** Pilots must use an enclosed cockpit that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(6)]. Human flagging is prohibited. Flagging to support aerial applications is limited to the use of the Global Positioning System (GPS) or mechanical flaggers.

### ENVIRONMENTAL HAZARDS

This pesticide is highly toxic to aquatic organisms, including fish and aquatic invertebrates. Runoff from treated areas or deposition of spray droplets into a body of water may be hazardous to fish and aquatic invertebrates. 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. 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 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. Do not

apply to or allow drift onto blooming crops or weeds when bees are foraging in 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 OR CHEMICAL HAZARDS

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.

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

IN CALIFORNIA: This product is to be applied by County Health Department, State Department of Health Services, Mosquito and Vector Control or Mosquito Abatement District personnel only.

IN FLORIDA: Aerial applications of this product require trained personnel to perform industry accepted assays to monitor resistance formation in targeted mosquitoes.

Do not treat a site with more than 0.0036 lb. of each a.i., Sumithrin and piperonyl butoxide and 0.00072 lbs. prallethrin per acre in a single application or in any 24-hour period. Do not apply more than 0.0108 lb. each of Sumithrin and piperonyl butoxide and 0.0022 lb. prallethrin to the same treatment area in a 7 day period. Do not apply more than 0.0216 lb. each of Sumithrin and piperonyl butoxide and 0.0043 lb. prallethrin to the same treatment area in 1 month. Do not exceed 0.1 lb. of Sumithrin or piperonyl butoxide or 0.02 lb. prallethrin per acre in any site in one year. More frequent applications 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.

NOTE: When rotating products with other insecticides containing piperonyl butoxide, do not exceed 2 lbs. PBO per acre per year.

Not for use in outdoor residential misting systems. Not for use in metered release systems.

DUET cannot be diluted in water. Dilute this product with light mineral oil if dilution is preferred.

### USE INFORMATION

DUET is approved for application as a thermal aerosol and as an Ultra Low Volume (ULV) nonthermal aerosol (cold fog) in mosquito adulticiding programs involving outdoor residential, urban, industrial, and recreational areas where adult mosquitoes are present in annoying numbers, and in vegetation surrounding parks, woodlands, swamps, marshes, overgrown areas and golf courses.

DUET may be applied over crops or to areas favoring drift over crops, including row, tree, fruit, citrus, pasture and other areas where agricultural enterprises take place.

### SPRAY DROPLET SIZE DETERMINATION

**Ground-based, wide area mosquito abatement application:** Spray equipment must be adjusted so that the volume median diameter (VMD) is less than 30 microns (Dv 0.5 < 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 a 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.

**Aerial Equipment, wide area mosquito abatement application:** 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 115 microns (Dv 0.9 < 115 um). The effects of flight speed and, for non-rotary atomizers, 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.

### GROUND ULV APPLICATION

To control Mosquitoes and other listed insects, apply DUET at a flow rate of 2.6 to 7.8 fluid ounces per minute at an average vehicle speed of 10 mph using a swath width of 300 feet for acreage calculations (see chart below). For best results, apply when mosquitoes are most active and meteorological conditions are conducive to keeping the spray cloud close to the ground. Certain mosquito species such as *Aedes aegypti* and *Aedes albopictus*, are most active during the day. Application in calm air conditions is to be avoided. Apply only when ground wind speed is greater than or equal to 1 mph. All types of applications should be conducted at temperatures above 50 °F. Under normal residential conditions a flow rate of 4.8 fluid ounces per minute at an average vehicle speed of 10 mph is recommended. If a different vehicle speed is used, adjust rate accordingly. These rates are equivalent to 0.00024 to 0.00072 pounds of Prallethrin and 0.0012 to 0.0036 pounds of Sumithrin® and Piperonyl Butoxide per acre. Vary flow rate according to vegetation density and mosquito population. Use higher flow rate

In heavy vegetation or when populations are high, DUET may also be diluted with a suitable solvent such as mineral oil and applied by GROUND ULV equipment so long as 1.28 fluid ounces per acre of DUET is not exceeded. Refer to the dilution tables on this label for flow rate calculations for diluted end-use formulations of DUET. Use the following tables to calculate application rates:

Pounds a.i./Acre			DUET Fl.oz./Acre	Flow Rates in fluid oz./minute at truck speeds of:			
Prallethrin	Sumithrin®	PBO		5 MPH	10 MPH	15 MPH	20 MPH
0.00072	0.0036	0.0036	1.28	3.9	7.8	11.7	15.6
0.00044	0.0022	0.0022	0.79	2.4	4.8	7.1	9.5
0.00036	0.0018	0.0018	0.64	1.9	3.9	5.8	7.8
0.00024	0.0012	0.0012	0.43	1.3	2.6	3.9	5.2

DUET may be applied through truck mounted thermal fogging equipment. Do not exceed the maximum rates listed above. May be applied at speeds of 5 to 20 mph. To reduce oil requirement and sludge buildup in equipment, use a 60-100-second viscosity mineral "fog" oil or other fuel-type oil. Use a clean, well-maintained and properly calibrated fogger. Do not wet foliage since oil base formulations may be phytotoxic.

**Urban ULV Mosquito Control:** DUET may be applied for control of resting or flying adult mosquitoes in urban and industrial areas such as utility tunnels, pipe chases, underground basements, underground passages, parking decks, open parking garages, abandoned warehouses, crawl spaces, uninhabited buildings, rail yards, waste yards, junkyards, tire dumps, and other areas where adult mosquitoes may be found. Apply using mechanical-foggers, or truck-mounted ULV equipment, or other spray equipment suitable for this application. Apply at rates up to but not exceeding 0.0036 lb of each a.i., Sumithrin and piperonyl butoxide and 0.0072 lbs. prallethrin per acre in a single application or in any 24-hour period.

#### AERIAL APPLICATION

DUET may be applied at rates of 0.43 to 1.28 fluid ounces of DUET per acre by fixed wing or rotary aircraft equipped with suitable ULV application equipment. Appropriate spray systems include rotary atomizers, flat fan, high pressure, and high pressure impaction nozzles characterized and oriented to achieve the droplet characteristics specified in this label. DUET may also be diluted with a suitable solvent such as mineral oil and applied by aerial ULV equipment so long as 1.28 fluid ounces per acre of DUET is not exceeded. Refer to the dilution tables on this label for flow rate calculations for diluted end-use formulations of DUET. Do not apply by fixed wing aircraft at a height less than 100 feet above the ground or canopy, or by helicopter at a height less than 75 feet above the ground or canopy unless specifically approved by the state or tribe based on public health needs. When making aerial application at an altitude of less than 100 feet, apply only when wind speed at altitude is greater than or equal to 5 mph. When making application at an altitude of 100 feet or greater, apply only when wind speed at altitude is greater than or equal to 3 mph.

## STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Store in a cool, dry place. Keep container closed.

**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:

[For 2.5-gallon Jugs]: Non-refillable container. Do not reuse or refill this container. 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 1/4 full with mineral oil and recap. Shake for 10 seconds. Pour rinsate into application equipment or a rinse tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

[For refillable drums & totes]: Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. 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 rinsate collection system. Repeat this rinsing procedure two more times. Offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

FOR MORE INFORMATION CALL 1-800-323-5727

NOTICE: To the extent provided by law, Seller makes no warranty, expressed or implied, concerning the use of this product other than as indicated on the label. Buyer assumes all risk of use and/or handling of this material when use and/or handling is contrary to label instructions.

Sumithrin® - Registered Trademark of Sumitomo Chemical Company, Ltd.

Dual® - Registered Trademark of Clarke Mosquito Control Products, Inc.

MANUFACTURED FOR:  
CLARKE MOSQUITO CONTROL PRODUCTS, INC.  
169 N. GARDEN AVENUE  
ROSELLE, ILLINOIS 60172

## DILUTION CALCULATIONS

For a 4% Sumithrin product, dilute 1 gallon DUET with 0.25 gallon oil. Finished spray contains 0.29 lbs Sumithrin & PBO and 0.06 pounds Prallethrin per gallon.

Dosage Description	Pounds a.i./Acre			Fluid oz. Finished spray/Acre	Flow Rates in fluid oz./minute at truck speeds of:			
	Prallethrin	Sumithrin	PBO		5 MPH	10 MPH	15 MPH	20 MPH
High Population	0.00072	0.0036	0.0036	1.61	4.9	9.7	14.6	19.5
Recommended	0.00044	0.0022	0.0022	0.98	3.0	5.9	8.9	11.9
Light Population	0.00036	0.0018	0.0018	0.80	2.4	4.9	7.3	9.7
	0.00024	0.0012	0.0012	0.54	1.6	3.2	4.9	6.5

For a 2.5% Sumithrin product, dilute 1 gallon DUET with 1 gallon oil. Finished spray contains 0.179 lbs Sumithrin & PBO and 0.036 pounds Prallethrin per gallon.

Dosage Description	Pounds a.i./Acre			Fluid oz. Finished spray/Acre	Flow Rates in fluid oz./minute at truck speeds of:			
	Prallethrin	Sumithrin	PBO		5 MPH	10 MPH	15 MPH	20 MPH
High Population	0.00072	0.0036	0.0036	2.57	7.8	15.6	23.4	31.1
Recommended	0.00044	0.0022	0.0022	1.57	4.8	9.5	14.3	19.0
Light Population	0.00036	0.0018	0.0018	1.28	3.9	7.8	11.7	15.6
	0.00024	0.0012	0.0012	0.86	2.6	5.2	7.8	10.4

For a 2% Sumithrin product, dilute 1 gallon DUET with 1.5 gallons oil. Finished spray contains 0.143 lbs Sumithrin & PBO and 0.029 pounds Prallethrin per gallon.

Dosage Description	Pounds a.i./Acre			Fluid oz. Finished spray/Acre	Flow Rates in fluid oz./minute at truck speeds of:			
	Prallethrin	Sumithrin	PBO		5 MPH	10 MPH	15 MPH	20 MPH
High Population	0.00072	0.0036	0.0036	3.21	9.7	19.5	29.2	38.9
Recommended	0.00044	0.0022	0.0022	1.96	5.9	11.9	17.8	23.0
Light Population	0.00036	0.0018	0.0018	1.61	4.9	9.7	14.6	19.5
	0.00024	0.0012	0.0012	1.07	3.2	6.5	9.7	13.0

AVAILABLE PACKAGING: 2.5 GAL, 30 GAL, 55 GAL, 275 GAL TOTE

LOT NO.: Marked on Container Label

EPA REG. NO.: 1021-1795-8329

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

AL0477

This document is for informational purposes only. Please read and follow label directions on the product container and verify state registration in your state before using, selling or distributing.



# DeltAGard<sup>®</sup>

## Insecticide

[Mosquito Image]

FOR WIDE AREA MOSQUITO CONTROL 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, OR AS ALLOWED BY STATE REGULATIONS FOR PERSONS TREATING PRIVATE PROPERTY.

FOR THE CONTROL OF FLIES AND MOSQUITOES IN AND AROUND POULTRY AND LIVESTOCK FACILITIES.

- Provides Quick Knockdown and Effective Control of Mosquitoes, Flies, Gnats, and Non-Biting Midges
- A FFAST™ Formulation
- May be Applied Undiluted or Diluted In Water

**ACTIVE INGREDIENT:**

Deltamethrin ..... 2.0 %

OTHER INGREDIENTS : ..... 98.0%

TOTAL : ..... 100.0%

Contains 0.17 pounds of Deltamethrin per gallon

EPA Reg. No. 432-1534

EPA Est. No. \_\_\_\_\_

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

(TO THE USER: If you cannot read English, do not use this product until the label has been fully explained to you.)

**KEEP OUT OF REACH OF CHILDREN  
CAUTION**

See Side Panel For Additional Precautionary Statements

For MEDICAL and TRANSPORTATION Emergencies ONLY Call 24 Hours A Day 1-800-334-7577

For PRODUCT USE Information, Call 1-800-331-2867

### FIRST AID

If swallowed	<ul style="list-style-type: none"><li>• Call a poison control center or doctor 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 do so by a poison control center or doctor.</li><li>• Do not give anything to an unconscious person.</li></ul>
If in eyes	<ul style="list-style-type: none"><li>• 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.</li><li>• Call a poison control center or doctor for immediate treatment advice.</li></ul>

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

# PRECAUTIONARY STATEMENTS

## HAZARDS TO HUMANS AND DOMESTIC ANIMALS

### CAUTION

Harmful if swallowed. Causes moderate eye irritation. Avoid contact with eyes, skin, or clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

## Personal Protective Equipment (PPE)

Mixers, loaders, applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- 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, using tobacco, or using the toilet.

Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

## ENVIRONMENTAL HAZARDS

This product is extremely toxic to fresh water and estuarine fish and invertebrates. Runoff from treated areas into a body of water may be hazardous to fish and aquatic invertebrates.

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 contaminate water when disposing of equipment rinsate or wash waters.

When used for mosquito adulticiding;

This pesticide is highly toxic to bees exposed to direct treatment on blooming crops or weeds. Do not apply this product or allow drift when bees are foraging 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.

When applied outdoors for fly control;

This pesticide is highly toxic to bees exposed to direct treatment on blooming crops or weeds. Do not apply this product or allow drift when bees are foraging the treatment area.

## DIRECTIONS FOR USE

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

Do not apply by aircraft.

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.

**SHAKE OR AGITATE THOROUGHLY BEFORE USE:** Product (either diluted or undiluted) must be thoroughly agitated before use. Avoid prolonged storage of excess formulation in application equipment.

**NOTICE:** This concentrate is for dilution with water only; it cannot be diluted in oil.

## APPLICATION INSTRUCTIONS

This product is recommended for application with hand-held, backpack, portable & truck mounted ULV sprayers and portable and vehicle mounted mist-blowers for wide area applications, to control adult mosquitoes, black flies, gnats, and non-biting midges, stable flies, horse flies, deer flies, sheep flies, horn flies, and nuisance flying insects such as houseflies or blow flies.

### WIDE AREA AND SPACE SPRAY APPLICATION FOR MOSQUITO CONTROL OVER NON CROP AREAS

Do not exceed 0.036 pounds of AI per acre per year to any site. During any three day period do not apply more than 0.00134 lb a.i./A. Do not make more than 25 applications per site per year. More frequent applications and more than 25 applications per site 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.

DeltaGard Insecticide is approved for application as an Ultra-Low Volume (ULV) aerosol to control flying or resting adult mosquitoes in residential, industrial, urban, recreational, and municipal areas where adult mosquitoes are found. This product is used for control of mosquitoes in areas such as residential areas, industrial areas, urban areas (such as utility tunnels, sewers, storm drains and catch basins, pipe chases, basements, underground passages, parking decks, crawl spaces, or uninhabited buildings), parks, campsites, woodlands, athletic fields, golf courses, playgrounds, recreational and overgrown waste areas, roadsides, swamps, marshes, tidal areas, corrals, feed lots, swine lots, poultry ranges, zoos, animal quarters, barns, dumps, junkyards, tire dumps, and other areas where adult mosquitoes may be found.

If treatments are made with animals present, the maximum number of applications per year depends on the application rate used; 10 applications at 0.00134 lb a.i./A, 15 applications at 0.00089 lb a.i./A, or 30 applications at 0.00045 lb a.i./A.

For best results, apply when insects are most active and meteorological conditions are conducive to keeping the spray cloud in the air column close to the ground. An inversion of air temperatures and a light breeze is preferable. Application during the cooler hours of the night or early morning is recommended. Apply when wind speed is equal to or greater than 1 mph.

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

This product may be applied over any and all crops or agricultural areas, (including row, tree, fruit, citrus, pasture, rangeland, and other areas where agricultural enterprises take place) for the control of adult mosquitoes within or adjacent to the treatment areas, or to areas where drift over cropland could occur. 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 0.0134 lb ai per acre per year, with no more than one application in any three day interval. Maximum number of applications per year depends on the application rate used; 10 applications at 0.00134 lb a.i./A, 15 applications at 0.00089 lb a.i./A, or 30 applications at 0.00045 lb a.i./A. More frequent applications and more than 0.0134 lb. ai per acre per year per site 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.

### DROPLET SIZE DETERMINATION FOR GROUND APPLICATION EQUIPMENT

This proprietary FFAST (Film Forming Aqueous Spray Technology) formulation greatly reduces the evaporation rate of water from the sprayed droplets and allows the water-based spray cloud to behave as that produced by a typical oil-based formulation. This enables the spray droplets to maintain optimum size and stability while drifting through the target area.

Spray equipment must be adjusted so that the volume median diameter (VMD) is between 8 - 30 microns ( $8\mu \leq D_{v0.5} \leq 30\mu$ ) 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 or a 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.

### ULV NON-THERMAL AEROSOL (COLD FOG):

Apply through any non-thermal ULV application equipment capable of producing the required droplet spectrum. Base acreage calculations on the equipment manufacturer's recommended swath width. Apply at a rate not to exceed 0.00134 pounds of deltamethrin per acre in any given 3 day interval. An optimum swath is created when this product is applied from a truck that is being driven perpendicular to the wind direction. Direct the spray head of equipment to ensure even distribution of the spray cloud throughout the area.

This product may be applied through ULV Cold Aerosol Generators, or other equipment designed for non-thermal ULV aerosol applications. The desired application rate may be obtained under different conditions by altering the dilution rate of this product, the flow rate of the insecticide from the application equipment and the vehicle speed. Examples are given in the following table:

Flow Rate based on a 300 foot swath width (Fluid Ounces Per Minute)

Application Rate (lb deltamethrin/Acre)	Vehicle Speed (MPH)	Undiluted	Diluted 1 + 1	Diluted 1 + 2	Diluted 1 + 3	Diluted 1 + 4
0.00045	5	1.01	2.02	3.03	4.04	5.05
	10	2.02	4.04	6.06	8.08	10.11
	15	3.03	6.06	9.10	12.13	15.16
	20	4.04	8.08	12.13	16.17	20.21
0.00089	5	2.02	4.04	6.06	8.08	10.11
	10	4.04	8.08	12.13	16.17	20.21
	15	6.06	12.13	18.19	24.25	30.32
	20	8.08	16.17	24.25	32.34	40.42
0.00134	5	3.04	6.09	9.13	12.17	15.22
	10	6.09	12.17	18.26	24.34	30.43
	15	9.13	18.26	27.39	36.52	45.65
	20	12.17	24.34	36.52	48.69	60.86

Where dense vegetation or a public health emergency is present, the use of the highest label rate is recommended.

When targeting organophosphate resistant or other difficult to control species of mosquitoes or flies use of the high label rate is recommended.

**PORTABLE, BACKPACK OR HAND CARRIED ULV APPLICATION:** Apply through non-thermal ULV application equipment and base acreage calculations on a 50 foot swath. At a pace of 2 MPH (2.9 ft/sec) apply 1 ounce per minute of DeltaGard Insecticide diluted as follows: for an application rate of 0.00045 pounds of Deltamethrin per acre dilute 1 to 14, for an application rate of 0.00089 pounds of deltamethrin per acre dilute 1 to 6.5, for an application rate of 0.00134 pounds of deltamethrin per acre dilute 1 to 4. Based on the above dilution and application rates apply 5 ounces of diluted product while walking 870 feet (290 yards).

#### APPLICATION FOR FLY CONTROL

DeltaGard Insecticide is approved for application as an Ultra-Low Volume (ULV) aerosol to control flying or resting adult flies in residential, industrial, urban, recreational, and municipal areas where flies are found. This product is used for control of flies in areas such as residential areas, industrial areas, urban areas (such as utility tunnels, sewers, storm drains and catch basins, pipe chases, basements, underground passages, parking decks, crawl spaces, or uninhabited buildings), parks, campsites, woodlands, athletic fields, golf courses, playgrounds, recreational and overgrown waste areas, roadsides, swamps, marshes, tidal areas, corrals, feed lots, swine lots, poultry ranges, zoos, animal quarters, barns, dumps, junkyards, tire dumps, and other areas where adult mosquitoes and flies may be found.

This product is recommended for application with hand-held, backpack, portable & truck mounted ULV sprayers and portable and vehicle mounted mist-blowers for area applications, to control, black flies, gnats, non-biting midges, stable flies, horse flies, deer flies, sheep flies, horn flies, and nuisance pests such as face flies or blow flies. Spray equipment must be adjusted so that the volume median diameter (VMD) is between 8 - 30 microns ( $8\mu \leq Dv0.5 \leq 30\mu$ ) and that 90% of the spray is contained in droplets smaller than 50 microns ( $Dv 0.9 < 50\mu$ ).

For the treatment of livestock and poultry facilities (e.g., cattle, dairy and livestock barns, goat houses, horse stables/barns, loafing sheds, poultry houses, shade houses, stables, swine houses, feedlots, manure piles, swine yards, corrals, stockyards, holding pens and other animal facilities) where flies become pests and quick knockdown is needed.

This product may be applied undiluted, but to maximize efficacy against larger fly species (e.g., blow flies, filth flies) it is recommended to dilute in water (1 + 1) before application, increasing the droplet density in the ULV cloud.

Indoors, reduce air movement as much as possible before applying by closing doors, windows and other openings; if animals are present, ventilate the treated area immediately following application. When treating indoors, cover any exposed drinking water, drinking fountains, and animal feed before application. Outdoors, apply when insects are most active, usually in late afternoon when there is little wind. Pay particular attention to areas where flies congregate, such as around feed bunks, fences, and on the exterior walls of buildings. Animals may be present during treatment.

If treatments are made with animals present, the maximum number of applications per year depends on the application rate used; 10 applications at 0.00134 lb ai/A, 15 applications at 0.00089 lb ai/A, or 30 applications at 0.00045 lb ai/A.