

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

## **Adult Mosquito Control Product**

### **"Fyfanon"**

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

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

Fyfanon is an insecticide product that is recommended for mosquito control in New Jersey by Rutgers, The State University of New Jersey. It contains the pesticide malathion. The U.S. Environmental Protection Agency (EPA) "evaluates and registers (licenses) pesticides to ensure they can be used safely", and their current evaluation of products containing malathion shows them to be slightly toxic with minimal potential risk to people when used properly as part of a complete mosquito control program.

Malathion is used for the control of adult mosquitoes in an integrated pest management (IPM) approach to mosquito control. IPM strategy includes habitat management, source reduction, biological control and other measures to control immature mosquitoes, augmented by adult mosquito control when needed. The spraying of adult mosquitoes is called for when biting populations reach critical annoyance levels or when a disease organism is present in adult mosquitoes. A fine mist of malathion is applied during times of peak mosquito activity, since flying mosquitoes must directly contact the pesticide in order for it to be effective.

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

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

- Pay attention to notices about spraying found through newspapers, websites, automated telephone messages or distributed by municipal, county or state agencies.
- Plan your activities to limit time spent outside during times of potential pesticide treatments, usually at sunset and sunrise.
- Move children's toys out of application areas.
- Move animals and their food and water dishes out of application areas.
- Stay away from application equipment, whether in use or not.
- Whenever possible during spraying, remain indoors with windows closed, window air conditioners set on non-vent (closed to the outside air), and window fans turned off.

- Avoid direct contact with surfaces that are wet from pesticide spraying. Do not allow children to play in areas that have been sprayed until they have completely dried (approximately one hour).
- If you must remain outdoors, avoid eye and skin contact with the spray. If you get spray in your eyes or on your skin, flush and rinse with water.

**What are the symptoms of exposure to Fyfanon?**

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

**How long will Fyfanon last in the environment?**

The Fyfanon spray stays in the air for a short time until it settles out and lands on surfaces. Fyfanon has a low persistence and lasts no longer than 25 days in water and soil. Fyfanon breaks down quickly in sunlight.

**Where can I get more information on Fyfanon?**

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

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

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

For pesticide health information & possible exposures – 24 hours:

**NJ Poison Information & Education System**                      **800-222-1222**

For pesticide regulation & misuse complaints:

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

For pesticide regulation:

**USEPA Region 2 Office of Pesticide Programs**                      **732-321-6768**

For pesticide health information:

**Bergen County Department of Health Services**                      **201-634-2600**

For mosquito control insecticide recommendations:

**Rutgers University, Department of Entomology**                      **732-932-9774**

Where can I get more information about local mosquito control?

**Bergen County Mosquito Control**                      **201-634-2880**

For state-wide mosquito control information:

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

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## **Adult Mosquito Control Product**

### **"Zenivex™"**

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

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

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

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

#### **How can I reduce my exposure to Etofenprox?**

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

- Pay attention to notices about spraying found through newspapers, websites, automated telephone messages, or distributed by municipal, county or state agencies.
- Plan your activities to limit time spent outside during times of possible pesticide treatments.
- Move your pets, their food, and water dishes inside during ULV applications. Also bring clothing and children's toys inside.
- Stay away from application equipment, whether or not it is in use.
- Whenever possible, remain indoors with windows closed, window air conditioners on non-vent (closed to the outside air), and window fans turned off during spraying.



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## Adult Mosquito Control Product

### "Scourge®"

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

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

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

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

#### How can I avoid exposure to Scourge?

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

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

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

**What are the symptoms of exposure to Scourge?**

Irritation or sensitization sometimes occurs after exposure, causing an asthmatic condition or skin rash. The chance of experiencing these symptoms of exposure with proper use is low. You should contact your physician, other medical providers or the New Jersey Poison Information and Education System (**NJPIES**) at **1-800-222-1222** if you experience these symptoms following a pesticide spraying. Bring this sheet with you if you visit a physician or other medical provider.

**How long will Scourge last in the environment?**

The **Scourge** spray stays in the air for a short time until it lands on surfaces. **Resmethrin** has a low persistence and lasts no longer than 25 days in water and soil. **Resmethrin** breaks down faster in sunlight.

**Where can I get more information on Scourge?**

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

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

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

For pesticide health information & possible exposures – 24 hours:

**NJ Poison Information & Education System**                      **800-222-1222**

For pesticide regulation & misuse complaints:

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

For pesticide regulation:

**USEPA Region 2 Office of Pesticide Programs**                      **732-321-6768**

For pesticide health information:

**Bergen County Department of Health Services**                      **201-634-2600**

For mosquito control insecticide recommendations:

**Rutgers University, Department of Entomology**                      **732-932-9774**

Where can I get more information about local mosquito control?

**Bergen County Mosquito Control**                      **201-634-2880**

For state-wide mosquito control information:

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

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## **Adult Mosquito Control Product**

### ***"Duet Dual-Action® Adulticide"***

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

#### **What is *Duet Dual-Action®* adulticide and how is it used?**

*Duet Dual-Action®* contains two pesticides called ***Prallethrin*** and ***Sumithrin***, and a synergistic compound called ***piperonyl butoxide*** which increases the effectiveness of the pesticides. Prallethrin and Sumithrin are members of a category of pesticides called ***pyrethroids***, which in turn are synthetic versions of pesticides produced by plants called ***pyrethrins***. Pyrethroid/piperonyl butoxide mixtures have been recommended for Ultra-Low-Volume (ULV) mosquito control in New Jersey by Rutgers, The State University of New Jersey. The U.S. Environmental Protection Agency's (EPA) current evaluation considers pyrethroid-containing products to be slightly toxic with minimal potential risk to people when used properly as part of an integrated mosquito control program.

This pyrethroid-containing product is used for the control of adult mosquitoes. While habitat management and measures to control immature mosquitoes in water are preferred and most used, the spraying of adult mosquitoes is called for when biting populations reach critical levels or when a disease organism is present in adult mosquitoes. A very fine mist is sprayed into the air since flying mosquitoes must directly contact the pesticide in order for it to be effective. The combination of the two pesticides has been shown to produce what the manufacturer calls 'benign agitation'. In other words mosquitoes are agitated from a resting state to a non-biting flying state where they are more vulnerable to pesticide exposure. This makes *Duet Dual-Action®* adulticide more effective against hard-to-control species like *Aedes albopictus* which typically rest during the evening hours when adulticiding usually takes place.

#### **How can I reduce my exposure to *Duet Dual-Action®*?**

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

- Pay attention to notices about spraying found through newspapers, websites, automated telephone messages or distributed by municipal, county or state agencies.
- Plan your activities to limit time spent outside during times of possible pesticide treatments.





For mosquito control insecticide recommendations:

**Rutgers University, Department of Entomology 732-932-9774**

Where can I get more information about local mosquito control?

**Bergen County Mosquito Control 201-634-2880**

For state-wide mosquito control information:

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

Spraying for adult mosquitoes is a last resort. Most mosquito control work goes on "behind the scenes", using water management, fish, and products to control immature mosquitoes in the water where they begin their life cycle. Controlling adult mosquitoes is more difficult because they are spread out and moving.

If you have questions about Duet or any other mosquito control related products or practices, please feel free to call the Bergen County Mosquito Control Division at (201) 634-2880 (Mon-Fri; 7:00 AM – 3:30 PM), or visit our web site at <https://www.co.bergen.nj.us/mosquito-control>.