



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

"FYFANON® EW INSECTICIDE"

This sheet answers some basic questions about a mosquito control product in use in your county. The Monmouth 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. Fyfanon® contains the pesticides called "**Malathion.**" The U.S. Environmental Protection Agency's (EPA) current evaluation considers Malathion containing products to be slightly toxic. Malathion when applied according to the label, can be used for public health mosquito control without posing unreasonable risks to the general population.

Fyfanon® is used for the control of adult mosquitoes. While habitat management and measures to control immature mosquitoes in water are preferred, 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. As reported on EPA pesticide fact sheets, ULV applications involve small quantities of active ingredient in relation to the size of the treated area which minimizes exposure and risks to people and the environment.

How can I reduce my exposure to Fyfanon®?

While risk to the general public from the use of **Fyfanon®** may be minimal, avoiding exposure is always the safest course of action. Any possible exposure risk can be reduced by following some common sense actions:



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:

**New Jersey 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

877-251-4575

For state-wide mosquito control information:

NJDEP Office of Mosquito Control Coordination

609-292-3649

For mosquito control recommendations:

Rutgers University, Department of Entomology

848-932-9774

For local mosquito control information:

Monmouth County Mosquito Control Division

732-542-3630

For health related pesticide information:

The Monmouth County Health Department

732-431-7456



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“Merus 3.0[™] Adulticide”

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

What is *Merus 3.0[™]* adulticide and how is it used?

Merus 3.0[™] contains botanical insecticides called **pyrethrins**, a class of organic compounds extracted from *Chrysanthemum* flowers. Unlike most pyrethroids (the synthetic equivalent of pyrethrins that are more commercially available), ***Merus 3.0[™]*** does not contain additional chemical synergists such as piperonyl butoxide. ***Merus 3.0[™]*** is Organic Materials Review Institute (OMRI) listed and meets National Organic Program (NOP) standards for adult mosquito control in and around organic gardens, farms and crops. It poses a low risk to human health and the environment when used properly as part of an integrated mosquito control program. Pyrethrins are considered non-carcinogenic at exposure relevant to human use, and no data is available to indicate the product or any components present at greater than 0.1% are mutagenic or teratogenic.

Merus 3.0[™] 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 *Merus 3.0[™]*?

Because of the very small amounts of active ingredients released per acre, the risk to the general public from the use of pyrethrin-containing products is minimal. Avoiding exposure is always the safest course of action.



Where can I get more information on this adulticide?

The following are resources for more information regarding **Merus 3.0™** and mosquito control in your area (unless otherwise noted, available during normal business hours):

For overall pesticide-specific information

9:30am to 7:30pm:

National Pesticide Information Center

800-858-7378

For pesticide health information

& possible exposures – 24 hours:

**New Jersey Poison Information
& Education System**

800-222-1222

For pesticide regulation & misuse complaints:

NJDEP Pesticide Control Program

609-984-6568

For pesticide regulation:

USEPA Region 2 Office of Pesticide Programs

877-251-4575

For state-wide mosquito control information:

NJDEP Office of Mosquito Control Coordination

609-292-3649

For mosquito control recommendations:

Rutgers University, Department of Entomology

848-932-9774

For local mosquito control information:

Monmouth County Mosquito Control Division

732-542-3630

For health related pesticide information:

The Monmouth County Health Department

732-431-7456



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“Duet[®] Dual-Action Adulticide”

This **Fact Sheet** answers some basic questions about mosquito control products in use in your county. The Monmouth County Mosquito Control Division, 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 long will *Duet Dual-Action*[®] last in the environment?

Pyrethroids have a soil half-life of 12 days. They have an extremely low pesticide movement rating because they bind tightly to the soil. Pyrethroids are unstable in light and air. They rapidly degrade in sunlight at the soil surface and in water. Piperonyl butoxide has a soil half-life of approximately 4 days.

Where can I get more information on this adulticide?

The following are resources for more information regarding *Duet Dual-Action*[®] and mosquito control in your area (unless otherwise noted, available during normal business hours):

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

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

For pesticide health information
& possible exposures – 24 hours:

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

For pesticide regulation & misuse complaints:

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

For pesticide regulation:

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

For state-wide mosquito control information:

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

For mosquito control recommendations:

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

For local mosquito control information:

Monmouth County Mosquito Control Division **732-542-3630**

For health related pesticide information:

The Monmouth County Health Department **732-431-7456**



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“Zenivex[®] Adulticide”

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

What is Zenivex[®] adulticide and how is it used?

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

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

How can I reduce my exposure to Zenivex[®]?

Because of the very small amounts of active ingredients released per acre, the risk to the general public from the use of pyrethroid-containing products is minimal. Avoiding exposure is always the safest course of action.



Where can I get more information on this adulticide?

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

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

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

For pesticide health information
& possible exposures – 24 hours:

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

For pesticide regulation & misuse complaints:

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

For pesticide regulation:

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

For state-wide mosquito control information:

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

For mosquito control recommendations:

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

For local mosquito control information:

Monmouth County Mosquito Control Division **732-542-3630**

For health related pesticide information:

The Monmouth County Health Department **732-431-7456**