

# Passaic County Mosquito Control

## Pesticide Fact Sheet

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

### ***“Duet™ Dual-Action Adulticide”***

This fact sheet answers some basic questions about mosquito control products in use in your county. Passaic 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 Adulticide* contains three (3) active ingredients: ***Prallethrin***, ***Sumithrin***, and a synergistic compound called ***piperonyl butoxide***. Prallethrin and Sumithrin are members of a category of pesticides called *pyrethroids*, which 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.
- Move your pets, their food, and water dishes inside during ULV application. Also bring clothing and children's toys inside.
- Stay away from application equipment, even when not in use.
- Remain indoors with windows closed, window air conditioners closed to the outside air, and window fans turned off during spraying.
- 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 Duet™ Dual-Action?***

Symptoms of over-exposure can include irritation to skin and eyes, respiratory and nasal irritation, irritability to sound or touch, abnormal facial sensation, sensation of prickling, tingling, or creeping of skin, numbness, headache, dizziness, nausea, vomiting, diarrhea, excessive salivation, and fatigue. The chance of experiencing these symptoms of over-exposure with proper use is low. You should contact your physician, other medical providers, or the New Jersey Poison Information and Education System (NJPIES) at **1 (800) 222-1222** if you experience these symptoms following a pesticide spraying.

## ***How long will Duet™ Dual-Action last in the environment?***

Pyrethroids have a soil half-life of twelve (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 four (4) days.

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

The following are resources for more information regarding pesticides and mosquito control in your area.

For pesticide-specific information:

**National Pesticide Information Center**

(800) 858-7378

<http://npic.orst.edu/>

For pesticide health information and possible exposures:

**NJ Poison Information & Education System**

(800) 222-1222

<http://www.njpies.org/>

For New Jersey pesticide regulations and misuse complaints:

**NJDEP Pesticide Control Program**

(609) 984-6568

<http://www.pcpnj.org>

For Federal pesticide regulations:  
**USEPA Region 2 Office of Pesticide Programs**  
(877) 251-4575  
<http://www.epa.gov/pesticides>

For mosquito control insecticide recommendations:  
**Rutgers University, Department of Entomology**  
(848) 932-6853  
[vectorbio.rutgers.edu](http://vectorbio.rutgers.edu)

For information about mosquito control in Passaic County:  
**Passaic County Mosquito Control**  
(973) 305-5754  
[www.passaiccountynj.org/mosquito](http://www.passaiccountynj.org/mosquito)

For state-wide mosquito control information:  
**NJDEP Office of Mosquito Control Coordination**  
(609) 292-3649  
[www.nj.gov/dep/mosquito](http://www.nj.gov/dep/mosquito)

For local health information:  
**Passaic County Department of Health**  
(973) 881-4396  
[www.passaiccountynj.org/health](http://www.passaiccountynj.org/health)