Biomist

Biomist is appropriate for residential and recreational areas. The active ingredient in Biomist is permethrin, a synthetic pyrethroid. The toxicity of Biomist in mammals is very low, and it is practically nontoxic to birds. Additionally, it should be emphasized that mosquito applications should be made at dusk or dawn when bees will be in their hives and thus will not be directly exposed to permethrin. The Biomist label, though, specifically states the following: "Do not apply this product or allow it to drift to blooming crops or weeds while bees are actively visiting the treatment area." Such precautions should always be adhered to.

Biomist is applied in an ultra-low volume (ULV) mist in extremely small amounts – typically less than an ounce per acre, or less than a gram of permethrin per acre.

The ULV mist will disperse over a large area before depositing on grass or other surfaces, resulting in deposition that is less than a gram per acre.

Mosquito control formulations of permethrin break down in the environment, and high temperatures and sunlight accelerate this process. Biomist breaks down rapidly in sunlight, moisture and oxygen – even on cloudy days.

According to the Centers for Disease Control and Prevention and the US Environmental Protection Agency, products like Biomist "do not pose unreasonable health risks to humans, wildlife, or the environment when used according to the label." The U.S. EPA has reviewed possible risks of Biomist and approved it for pest control in outdoor residential, recreational areas, and other areas.

There are no reentry restrictions for Biomist and residents do not need take any special steps (closing windows, remaining indoors, etc.) when the product is applied. In addition, the ingredients of Biomist are not corrosive or staining and therefore should cause no chemical harm to the finish of a car and/or house.

Mosquito populations are not static. Instead, they are constantly regenerating. Clarke takes an integrated approach to mosquito control. Source reduction (reducing unnecessary standing water), surveillance, and larviciding (controlling the mosquito population before adulthood) are not alone sufficient to control mosquito populations. To control the spread of disease, adulticiding, or spraying, is necessary.

The pesticide is effective in controlling mosquitoes. A specific problem area is identified and sprayed, but the spraying in this targeted area is not reaching an entire habitat of mosquitoes. Sometimes mosquitoes move into the spray zone from outside of it **after** an application is made, which is called re-infestation, (i.e., they drift in on wind currents from upwind areas that have not been treated). When mosquito re-infestation occurs, additional sprayings may be considered. Effectively controlling an adult mosquito population through spraying also depends on a number of external factors, including timing, the level of re-infestation, methodology used during the spraying, and weather conditions.