

MOSQUIRON FACTSHEET

October, 2013

THE PRODUCT

Trade Name – MOSQUIRON, Mosquito Larvacide Active Ingredient – novaluron Chemical Name – difluorobenzamide Mode of Action – Chitin Synthesis Inhibitor Carrier - an inert, food grade wax compound

Formulations & Package Sizes - 0.12CRD, a 0.5oz unit provided in a 22lb case containing 20 foiled pouches each with 36 units, total 720 units

- 0.12P, a 0.035oz unit provided in a 22lb case, approximately 10,055 P per case

FEATURES

MOSQUIRON is a newly E.P.A. registered larvacide for the control of vector and nuisance mosquitoes and midges. This unique larvacide is not a "silver bullet" solution but has certain advantages over current mosquito larvacides and should be a welcomed addition to the arsenal of tools available.

- 1. MOSQUIRON kills all larval instars and inhibits successful adult emergence; this action is an improvement over most other larvacides. Methoprene prevents successful adult emergence with all larval stages remaining active, requiring extra work when confirming efficacy. The application of *B.t.i.* and *B.sphaericus* have no effect on pupae.
- 2. MOSQUIRON disperses throughout the larval habitat water within 2 hours; and remains effective with alternate wetting and drying of the larval habitat even after evidence of the product carrier has disappeared. In this respect MOSQUIRON is unique.
- 3. MOSQUIRON is the fastest acting of the insect growth regulators providing kill usually within 2 hours. Methoprene does not provide quick larval kill.
- 4. MOSQUIRON controls all genera of mosquitoes. *B.t.i.* is associated with the kill of *Aedes, Ochlerotatus* & *Anopheles* & *B. sphaericus* is associated with the kill of *Culex* and *Culiseta*. The more expensive blend of both actives addresses all the genera mentioned.
- 5. MOSQUIRON provides long lasting residual activity, in some larval habitats season long control. When MOSQUIRON units are applied, they sink immediately and lose shape integrity within a few days. The active ingredient disperses throughout the water column and also attaches to the organic matter present as well as container walls in the cases of artificial containers. This sets up an equilibrium where

the novaluron molecule concentration is maintained at approximately 3 ppb. B.t.i., B. sphaericus, temophos and mmf's have a relatively short residual activity.

- 7. MOSQUIRON is the only larvacide to our knowledge that is registered for use in potable water in the United States which demonstrates mammalian safety.
- 8. MOSQUIRON breaks down in larval habitats through digestion by microorganisms. The product is not affected by UV light. Methoprene and *B.t.i.* are affected by UV light.
- 9. MOSQUIRON is very stable and has an unlimited shelf life. *B.t.i.* and *B.sphaericus* have a shelf life of one year according to their labels.
- 10. The MOSQUIRON units sink immediately when applied to mosquito larval habitats and therefore will not float off target which can happen with *B.t.i.* dunks and may happen with *B.t.i.* and *B. sphaericus* granules.

U.S. OPPORTUNITIES & DIRECTION

The MOSQUIRON products provide an opportunity for mosquito control programs to use new and unique formulations.

Application Sites - Catch basins, uncultivated agricultural and non-agricultural non-food areas, dredging spoil sites, drainage areas, ditches, waste water treatment facilities, dairy and poultry lagoons, other animal waste lagoons, livestock runoff lagoons, sewage effluent, retention ponds, harvested timber stacks, swales, storm water drainage areas, sewers, tree holes, bird baths, landfills, rain barrels, flooded roof tops, abandoned swimming pools, gutters, junk yards, abandoned vehicles, water holding receptacles (e.g. tires, urns, flower pots, cans and other containers), potable water containers and other natural and man-made depressions.

To date the Tumaini MOSQUIRON labels are registered in 20 states.

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