BIOPREN® 50 LML

Liquid Mosquito Larvicide



BIOPREN® 50 LML Liquid Mosquito Larvicide is an S-methoprene (juvenile hormone analogue) based insect growth regulator (IGR) formulation for prevention of emergence of adult mosquitoes from the pupal stage. The capsule suspension formulation contains free and microencapsulated S-methoprene in order to achieve both immediate and residual effects. BIOPREN 50 LML prevents the emergence of adult mosquitoes including common Aedes, Anopheles, Culex and Ochlerotatus species.

ADVANTAGES:

- Provides immediate and prolonged efficacy against treated mosquito larvae
- Acts against the critical later 3rd and 4th larval instars
- **S-methoprene** in free and microencapsulated forms control the release of the active ingredient, and improves photostability, therefore increasing the residual effectiveness of the treatment
- Classified as non-hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS), and the Work, Health and Safety regulations of Australia.



ACTIVE INGREDIENT:

PRODUCT FOR PROFESSIONAL USE

EXPIRATION PERIOD:

2 years

STORAGE CONDITIONS:

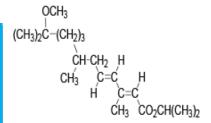
Store in the closed, original container in a dry, well-ventilated area out of direct sunlight. Do not freeze.

PACKING:









w/w 5.00 % (51.50 g/l) S-methoprene (total) comprising microencapsulated and free S-methoprene

Acts as an insect juvenile hormone analogue that inhibits the emergence of adult mosquitoes (imagoes), thus breaking the cycle of reproduction and reducing infestations of vector and nuisance mosquitoes.

PHYSICAL PROPERTIES:

APPEARANCE: Light yellowish liquid

ODOUR: Odourless

SOLUBILITY: Dispersible in water

RELATIVE DENSITY: 1.03 g/cm³



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DOSAGE:

BIOPREN 50 LML Liquid Mosquito Larvicide disrupts the development of mosquito larvae in freshwater swamps and marshes, salt and freshwater lagoons, salt marshes, mangrove swamps, estuarine areas, ponds and

BIOPREN® 50 LML dosage (mL/ha)		
Breeding site type	Water depth	
	<30 cm	>30 cm
Clean water, low larval counts	220 mL/ha	290 mL/ha
Water rich in organic matter	290 mL/ha	290 mL/ha
&/or high larval counts		
Culex sitiens major target	360 mL/ha	360 mL/ha
species		

pools and other bodies of water. The product can be applied by ground or aerial application using water as a diluent. For aerial application BIOPREN 50 Liquid Mosquito Larvicide is NOT recommended where the water surface is obscured by vegetation. For such applications use BIOPREN® 4GR mosquito larvicide granules.

The environment-friendly biorational active ingredient **S-methoprene** breaks the mosquito's life cycle by **preventing the emergence** of adults and is active against a range of species including *Aedes, Anopheles, Culex* and *Ochlerotatus* spp. Larvae treated with **S-methoprene** can continue to develop into the pupal stage but die prior to emergence.

S-methoprene does not pose unreasonable risks to wildlife or the environment. Its toxicity to fish and birds is low, and it is non-toxic to bees. The acute oral toxicity of **S-methoprene** and other toxicological parameters are also very favourable, with extremely low mammalian toxicity.

S-methoprene has no effect on mosquitoes that have already reached the pupal or adult stage prior to treatment, and acts during the 3rd and 4th larval instar stages of the mosquitoes' development. Treated larvae continue to develop normally to the pupal stage after which they

fail to emerge and drown. Death will mostly occur while adults are emerging from the pupae (emergence inhibition). To achieve the best effect, treatment should occur just prior to mosquito breeding and oviposition. Repeated treatments can be made to coincide with breeding cycles or weather/tidal events.

S-methoprene acts on 3rd and 4th larval stages

egg 1" instar 2" instar 3" instar 4" instar pupae NO adult emergence

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