

READ SAFETY DIRECTIONS BEFORE OPENING OR USING

BIOPREN[®] 50 LIQUID MOSQUITO LARVICIDE

ACTIVE CONSTITUENT: 50 g/L (S)-METHOPRENE

GROUP 7A INSECTICIDE

FOR THE PREVENTION OF ADULT MOSQUITO EMERGENCE

Contents: 5 L

Distributed by:
Garrards Pty Ltd.
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Phone: (07) 3881 1693

Active constituent manufactured by:
Bábolna Bioenvironmental Centre Ltd
Szállás u. 6.
H-1107 Budapest X,
Hungary

RECTIONS FOR USE

Restriction:

DO NOT apply to dry sites. Biopren 50 Liquid Mosquito Larvicide must be applied directly to water.

SITE	PEST	RATE	CRITICAL COMMENTS
Freshwater swamps and marshes, salt and freshwater lagoons, salt marshes, mangrove swamps, estuarine areas, woodland pools, any natural water holding features.	<i>Aedes</i> , <i>Anopheles</i> , <i>Culex</i> , and <i>Ochlerotatus</i> spp.	220 mL/ha	Use this rate where water is shallow (< 30 cm), clean and where larval mosquito counts are low (< 10 per dip).
		290 mL/ha	Use this rate where water is deep (> 30 cm), is rich in organic matter and/or sediment, and where larval mosquito counts are high (> 10 per dip).
		360 mL/ha	Use this rate when the major target mosquito species is <i>Culex sitiens</i> .

DO NOT BE USED FOR ANY PURPOSE, OR IN ANY MANNER, CONTRARY TO THIS LABEL UNLESS AUTHORISED UNDER APPROPRIATE LEGISLATION

Users in NSW must comply with the NSW Clean Waters Act 1970.

WITHHOLDING PERIOD (MEAT):

NO WITHHOLDING PERIOD IS REQUIRED FOR LIVESTOCK DRINKING TREATED WATER.

GENERAL INSTRUCTIONS

Biopren 50 Liquid Mosquito Larvicide releases (S)-methoprene Insect Growth Regulator into water where mosquitoes breed. BIOPREN 50 Liquid Mosquito Larvicide prevents the emergence of adult mosquitoes including common *Aedes*, *Anopheles*, *Culex* and *Ochlerotatus* spp. from treated sites.

(S)-methoprene has no effect on mosquitoes which have reached the pupal or adult stage prior to treatment.

Treated larvae continue to develop normally to the pupal stage after which they fail to emerge. Biopren 50 Liquid Mosquito Larvicide has sufficient activity to be effective against existing broods when applied to any larval stage at recommended rates. Third and fourth larval stages are more susceptible to the effects of S-methoprene than early stages.

For aerial application, BIOPREN 50 Liquid Mosquito Larvicide is NOT recommended where the water surface is obscured by vegetation.

Application:

SHAKE WELL BEFORE USING. BIOPREN 50 Liquid Mosquito Larvicide may separate on standing and must be thoroughly agitated prior to dilution. Where possible use the mixture on the day of mixing.

Ground: Determine the average total spray volume applied per hectare by individual operators and/or specific equipment. Mix BIOPREN 50 Liquid Mosquito Larvicide in sufficient water to deliver the rate per hectare of BIOPREN 50 recommended on this label (220-360 mL/ha).

Aerial: Low Volume (5-50 L/ha)

Atomiser and nozzle - Use the recommended amount of BIOPREN 50 Liquid Mosquito Larvicide in sufficient water to give good coverage. 5-50 L/ha of total spray volume is usually satisfactory. DO NOT apply when weather conditions favour drift from areas treated. A large droplet size (> 150 microns) is recommended to minimise drift and ensure good canopy penetration.

3. Aerial: Ultra-low Volume (< 5 L/ha)

Rotary atomiser - Use the recommended amount of BIOPREN 50 Liquid Mosquito Larvicide in sufficient water to give good atomisation and coverage. Dilution of 1 part BIOPREN 50 to 2 parts water is the recommended minimum. This results in a total application volume of 660 mL (at the 220 mL/ha BIOPREN 50 rate) to 1080 mL (at the 360 mL/ha rate). The quantity of water may be increased to give a total spray volume of up to 5 L to give better coverage. A large droplet size (>150 microns) is recommended to minimise drift and ensure good canopy penetration.

Mixing:

DO NOT mix with oil. Always use clean equipment. Partially fill spray tank with water, then add the recommended amount of BIOPREN 50 Liquid Mosquito Larvicide, agitate and complete filling. Mild agitation during application is desirable.

GROUP 7A INSECTICIDE

INSECTICIDE RESISTANCE WARNING

For insecticide resistance management Biopren 50 Liquid Mosquito Larvicide is a Group 7A insecticide. Some naturally occurring insect biotypes resistant to Biopren 50 and other Group 7A insecticides may exist through normal genetic variability in any insect population. The resistant individuals can eventually dominate the insect population if Biopren 50 or other Group 7A insecticides are used repeatedly. The effectiveness of Biopren 50 on resistant individuals could be significantly reduced. Since occurrence of resistant individuals is difficult to detect prior to use, Bábolna Bioenvironmental Centre accepts no liability for any losses that may result from the failure of Biopren 50 Liquid Mosquito Larvicide to control resistant insects.

Biopren 50 Liquid Mosquito Larvicide may be subject to specific resistance management strategies. For further information contact your local supplier, Globe Australia Pty Ltd representative or local agricultural department agronomist.

PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS

DO NOT apply when weather conditions favour drift from treated areas.

STORAGE AND DISPOSAL

KEEP OUT OF REACH OF CHILDREN. Store in the closed, original container in a dry, cool, well ventilated area out of direct sunlight. Store above 5°C. Do not freeze.

Triple or preferably pressure rinse container before disposal. Add rinsings to spray tank. Do not dispose of undiluted chemicals on-site. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush or puncture and bury empty containers in a local authority landfill. If no landfill is available, bury the containers below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, vegetation and tree roots. Empty containers and product should not be burnt.

SAFETY DIRECTIONS

Will irritate the eyes and skin. Repeated exposure may cause allergic disorders. Avoid contact with eyes and skin. When preparing spray and using the prepared spray wear cotton overalls buttoned to the neck and wrist and a washable hat and elbow-length PVC gloves. Wash hands after use. After each day's use, wash gloves and contaminated clothing.

FIRST AID

If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 131 126.

MATERIAL SAFETY DATA SHEET

Additional hazard information is listed in the Material Safety Data Sheet.

MANUFACTURER'S WARRANTY AND EXCLUSION OF LIABILITY

This product is warranted fit for the purposes specifically recommended by Bábolna Bioenvironmental Centre Ltd. when used strictly as directed on this label. All other warranties and obligations for liabilities, whether expressed or implied by statute or otherwise, are excluded to the full extent that exclusion is permitted by law.

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Batch Number:

Date of Manufacture: