

# Sumilarv<sup>®</sup> 0.5G

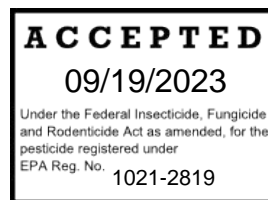
{Note to reviewer: [ ] or indicate optional wording}

Controlled release insect growth regulator formulation to break mosquito life-cycle and prevent their emergence

- Prevents mosquitoes from becoming breeding, biting adults
  - Novel class of chemistry for public health
  - Easy to apply sand granule
  - Non-flushing formulation
  - Works well even in areas that dry out and rewet
  - [Provides up to 150 days (21 weeks) residual control of mosquitoes with an application of (75 gm ) in storm water catch basins]
  - [Provides up to 28 days (4 weeks) residual control of mosquitoes with an application of (25 gm) in storm water catch basins.]
  - [Sumilarv will provide up to 150 days] residual control of mosquitoes with an application of (75g) in storm water catch basins]
  - [Sumilarv will provide up to 28 days (4 weeks) residual control of mosquitos with an application of (25 gm ) in storm water catch basins.]
  - [Extended-release insect growth regulator formulation to stop mosquito life-cycle]
  - Dosing flexibility allows the user to apply varying amounts of product
- for their desired duration of mosquito control.
  - For resistance management, Sumilarv 0.5G can be rotated with Bacillus species Group 11 insecticides for mosquito control.
  - [Prevents adult mosquito emergence, including those which may transmit [West Nile], [Zika], [Yellow Fever], [Dengue], [Eastern Equine Encephalitis], [Western Equine Encephalitis], [Chikungunya], [St. Louis Encephalitis], and [La Crosse Encephalitis] virus[es] and [Dog Heartworm parasites]]
  - [Remains active after large rain events]
  - [Sumilarv's sand granule formulation stays-put and will not flush from application site]
  - [Sumilarv's sand granule formulation is heavy enough to penetrate algae or weed choked sites]
  - **{Note to reviewer: See description below for optional Marketing label images}**
  - [Representative image [Illustration] [picture] of listed use sites [areas] on label]
  - [Representative image [Illustration] [picture] of listed pests [insects]

ACTIVE INGREDIENTS:

2-[1-Methyl-2-(4-phenoxyphenoxy) ethoxy] pyridine.....	0.50%
OTHER INGREDIENTS .....	99.50%
	100.00%



Sumilarv<sup>®</sup> is a registered trademark of Sumitomo Chemical Co., Ltd.  
 MGK<sup>®</sup> is a registered trademark of McLaughlin Gormley King Company.

[See inside booklet for Precautionary Statements, Directions for Use and Storage and Disposal]

## KEEP OUT OF REACH OF CHILDREN CAUTION

FIRST AID	
IF IN EYES:	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For information regarding medical emergencies or pesticide incidents, call 1-888-740-8712.	

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS
<p><b>CAUTION:</b> Causes moderate eye irritation. Avoid contact with eyes. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco.</p>
ENVIRONMENTAL HAZARDS
<p>This pesticide is toxic to fish and aquatic invertebrates. Do not apply directly to treated, finished drinking water reservoirs or drinking water receptacles when the water is intended for human consumption. Do not apply to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater or rinsate.</p>

Manufactured by:  
  
 7325 Aspen Lane North  
 Minneapolis MN 55428

EPA Reg. No. 1021-2819

EPA Est. No. 1021-MN-

Net Weight: \_\_\_\_\_

## DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

### READ ALL DIRECTIONS COMPLETELY BEFORE USE

#### USE RESTRICTIONS:

- Apply this product only as specified the EPA approved label and any supplemental labeling.
- Do not apply more than 0.1 lbs. pyriproxyfen per acre per year or (20 lbs. of Sumilarv® 0.5G/acre/year).
- Do not apply or allow drift onto pastureland or potable water supplies.
- In the treatment of corral lots, feedlots, swine lots and zoos, cover any exposed drinking water, drinking water fountains, and animal feed before application.
- For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

#### PESTICIDE RESISTANCE MANAGEMENT

For resistance-management, Sumilarv 0.5G contains a Group 7 insecticide. Any insect population may contain individuals naturally resistant to Sumilarv 0.5G and other Group 7 insecticides. The resistant individuals may dominate the insect population if this group of insecticides are used repeatedly in the same fields. Appropriate resistance-management strategies should be followed. To reduce the potential for developing insect resistance, rotate to an insecticide with a different mode of action. Monitor treated pest populations for resistance development. Read product label before applying any insecticide and follow label directions.

To delay insecticide resistance, take the following steps:

- Rotate the use of Sumilarv 0.5G or other Group 7 insecticides with different groups that control the same pests. Avoid application of more than the maximum seasonal use rate Sumilarv 0.5G.
- Do not rely on the same mixture repeatedly for the same pest population. Consider any known cross-resistance issues (for the targeted pests) between the individual components of a mixture. In addition, consider the following recommendations provided by the Insecticide Resistance Action Committee (IRAC):
  - Individual insecticides selected for use in mixtures should be highly effective and be applied at the rates at which they are individually registered for use against the target species.
  - Mixtures with components having the same IRAC mode of action classification are not recommended for insect resistance-management.
  - When using mixtures, consider any known cross-resistance issues between the individual components for the targeted pest(s).
  - Mixtures become less effective if resistance is already developing to one or both active ingredients, but they may still provide pest management benefits.
  - The insect resistance-management benefits of an insecticide mixture are greatest if the two components have similar periods of residual insecticidal activity. Mixtures of insecticides with unequal periods of residual insecticide activity may offer an insect resistance management benefit only for the period where both insecticides are active.
- Adopt an integrated pest management program for insecticide use that includes scouting, uses historical information related to pesticide use, record keeping, and which considers cultural, biological and other chemical control practices.

Monitor after application for unexpected target pest survival. The Sumilarv 0.5G only targets juvenile insects. If the level of pest emergence suggests the presence of resistance, consult with your local university specialist or certified pest control advisor.
- Contact your local extension specialist for any additional pesticide resistance-management and/or IPM recommendations for the specific site and pest problems in your area.

For further information or to report suspected resistance contact MGK Company representatives at 1-888-740-8712.

#### MOSQUITO GENERA CONTROLLED:

Pyriproxyfen effectively controls several mosquito species which can vector Zika virus, West Nile virus, Yellow Fever, Dengue, Eastern equine encephalitis (EEE), Western equine encephalitis (WEE), and St. Louis encephalitis (SLE), and dog heartworm in the USA. These include mosquitoes in the following genera:

*Aedes*  
*Culex*  
*Anopheles*

Introduction of Sumilarv 0.5G into larval habitats where mosquitoes breed and develop will prevent adult mosquito emergence and affects reproductive viability of exposed mosquito eggs and adult female mosquitoes. Frequency of application will depend on three factors: dose rate, water quality (e.g. pollution) and dilution caused by rainfall or removal and replenishment of water within the treatment site. Note: presence of actively swimming larvae after a Sumilarv 0.5G treatment is normal. Sumilarv 0.5G does not act

until the pupal stage of a mosquito.

**APPLICATION TO CATCH BASINS**

Individual catch basins are one of the main breeding sites for mosquitoes that can transmit West Nile virus and cause biting nuisance in urban, suburban and rural environments. Sumilarv 0.5G can be applied to catch basins by dropping them in at the rate specified on this label.

The granules may be applied as a pre-treatment to mosquito breeding catch basins or during the season to catch basins containing mosquito larvae. Once applied, Sumilarv 0.5G will be unaffected by dry, hot, cold or sunny conditions and will begin working when the catch basin is flooded during rain events until the active ingredient degrades below effective levels.

For urban or suburban catch basin applications, Sumilarv 0.5G provides up to 21 weeks or 150 days of continuous control with a 75g (2.64 oz.) application, [or up to 4 weeks or 28 days with a 25 gm (0.88 oz.) application.] Sumilarv 0.5G non-flushing sand granule evenly distributes within the catch basin and slowly releases active ingredient (AI) to an elution point. During dry periods, Sumilarv 0.5G remains active and will continue to deliver results once water returns to the catch basin. This non-flushing formulation stays in the catch basin while providing slow and consistent release of the active ingredient (AI). Sumilarv 0.5G is a novel mode of action in Vector control and enhances vector control treatment protocols while providing additional resistance management solutions to their integrated mosquito management programs.

A 75 gm application of Sumilarv 0.5G will provide up to 150 days of continuous control, even when exposed to significant rain events. Simply apply 75 gm of Sumilarv 0.5G through the grate of the catch basin. Application rates can be adjusted for desired duration of mosquito control according to the table below:

Recommended Application per Catch Basin.	Residual Performance Expectations
[25 grams (0.88 oz.)]	[Up to 28 days of control]
75 grams (2.64 oz.)	Up to 150 days of control

**APPLICATION TO WATER RETENTION or WATER DETENTION PONDS**

To determine the volume of water in gallons for a specific treatment site, use the following formulation and calculation method:

Total cu. ft. of target treatment site (ft. <sup>3</sup>) = surface area (ft. <sup>2</sup>) x average depth (ft.)

Note: 7.5 gallons per cu. ft.

Total water volume = Total cu. ft. of treatment site x 7.5 gallons

**Application Rates to Use for the Control of Mosquito Larvae**

Treatment site (Volume of Water in Gallons)	Water Depth Less than or Equal to (ft.)	Amount of Sumilarv 0.5G (grams)	Amount of Sumilarv 0.5G wt. ounces	Lb. AI
0 – 500	1	25	0.88 oz.	0.00028
500 – 1500	2	50	1.75 oz.	0.00056
1500 – 3000	4	75	2.65oz.	0.00083
3000 – 4500	6	100	3.53 oz.	0.00011
4500 – 6000	8	125	4.41 oz.	0.00138

Treatments should be made every 4-5 weeks for water retention or water detention ponds depending on the volume water or frequency of rain events.

**TEMPORARY OR PERMANENT WATER HOLDING SITES:**

Ornamental ponds, fountains, cesspools, abandoned swimming pools, gutters, construction site depressions, septic tanks, flooded basements, gutters, animal waste lagoons, livestock runoff lagoons, sewers, waste water impoundments associated with organic pollutants & industrial runoffs, waste settling ponds, tire tracks, landfills, salvage yards, tire dumps, vehicle impounds, junk yards, manmade depressions and vegetation-choked phosphate pits.

**NATURAL AND ARTIFICIAL WATER HOLDING CONTAINERS:**

Tires, hollow trees and tree holes, potted plants, bird baths, rain barrels, flooded roof tops, flower pots, buckets, and abandoned vehicles.

**STORAGE AND DISPOSAL**

Do not contaminate water, food or feed by storage and disposal.

**PESTICIDE STORAGE:** Keep this product in its tightly closed original container. Store in a cool dry (preferably locked) area that is away from water, other pesticides fertilizers, veterinary supplies, food or feed, in a place that is inaccessible to children and animals.

**PESTICIDE DISPOSAL:** To avoid wastes, use all material in this container by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste disposal facility or pesticide disposal program.

**CONTAINER HANDLING:** Non-refillable container. Do not reuse or refill this container. Offer for recycling if available, or puncture and dispose of empty container in a sanitary landfill, or by other procedures approved by state and local authorities.