This label has been updated according to the re-evaluation decision of Bacillus sphaericus Strain 2362 RVD2023-16. While users are encouraged to follow this updated label immediately, the previously approved label is valid until 26/10/2025 in accordance with the phase out period set out in the re-evaluation of Bacillus sphaericus Strain 2362 RVD2023-16. This previously approved label will be provided upon request by emailing hc.pmra.info- arla.sc@canada.ca. In your email please include the product name and Registration number of the label you are requesting. 2023-6157 2024-06-04

GROUP 11B INSECTICIDE

### VECTOLEX CG BIOLOGICAL LARVICIDE LIVE ORGANISM

RESTRICTED

Granular

READ THE LABEL BEFORE USING PREVENT ACCESS BY UNAUTHORIZED PERSONNEL POTENTIAL SENSITIZER CAUTION EYE IRRITANT

# REGISTRATION NO. 28008 PEST CONTROL PRODUCTS ACT

ACTIVE INGREDIENT: Lysinibacillus sphaericus 2362, serotype H5a5b, strain ABTS 1743 (Formerly known as Bacillus sphaericus strain 2362)......50 Bacillus sphaericus toxic units (BsTUs)/mg

Net Contents: 18.1 kg

Date of Manufacture: Lot No.

Registrant: Valent BioSciences LLC 1910 Innovation Way, Suite 100 Libertyville, IL 60048, USA 1-800-323-9597 Canadian Agent: Valent Canada, Inc. 201-230 Hanlon Creek Blvd Guelph, Ontario N1C 0A1 519-767-9262

# NOTICE TO USER:

This pest control product is to be used only in accordance with the directions on the label. It is an offence under the *Pest Control Products Act* to use this product in a way that is inconsistent with the directions on the label.

# **DIRECTIONS FOR USE:**

### **Use Restrictions:**

This product is to be used only in the manner authorised; consult provincial pesticide regulatory authorities regarding appropriate use permits that may be required.

This authorization is granted under the *Pest Control Products Act* and does not exempt the user from other legislative requirements such as those under the *Fisheries Act*.

DO NOT apply by any type of irrigation system.

**DO NOT** apply directly to treated, finished drinking water reservoirs or drinking water receptacles when the water is intended for human consumption.

# **RESTRICTED USES: DIRECTIONS FOR USE:**

VectoLex CG Biological Larvicide is a mosquito larvicide to be applied, without mixing or dilution, by conventional ground or aerial application equipment. Apply to mosquito breeding sites when sampling indicates that mosquito larvae are present. For best results, apply when young larval stages are present. Reapply at a minimum interval of two weeks as needed, if monitoring indicates that further applications are required. Do not reapply within two weeks of application. Do not apply more than six times per treatment site per season.

# **AERIAL APPLICATION:**

### **Aerial Application Instructions:**

Apply only by fixed-wing, rotary aircraft or RPAS (Remotely Piloted Aircraft Systems) equipment that has been functionally and operationally calibrated for the atmospheric conditions of the area and the application rates and conditions of this label. Label rates, conditions and precautions are product specific. Apply only at the rate recommended for aerial application on this label.

Where no rate for aerial application appears for the specific use, this product cannot be applied by any type of aerial equipment. Ensure uniform application by employing appropriate marking devices and/or electronic guidance equipment.

### **Use Precautions:**

Apply only when meteorological conditions at the treatment site allow for complete and even coverage. Apply only under conditions of good practice specific to aerial application as outlined in the *National Aerial Pesticide Application Manual*, developed by the Federal/Provincial/Territorial Committee on Pest Management and Pesticides. RPAS pilots must operate in compliance with Part IX of the *Canadian Aviation Regulations* (SOR/96-433).

Apply only when the potential for drift beyond the area to be treated is minimal. Take into consideration wind speed, wind direction, temperature inversions, application equipment, and sprayer settings.

### **Operator Precautions:**

DO NOT allow the pilot to mix product to be loaded onto the aircraft. Loading of premixed product with a closed system is permitted. It is desirable that the pilot have communication capabilities at each treatment site at the time of application.

The field crew and the mixer/loaders must wear the personal protective equipment described in the PRECAUTIONS section of this label. All personnel on the job site must wash hands and face thoroughly before eating and drinking. Protective clothing, aircraft cockpit and vehicle cabs must be decontaminated regularly.

### **Product Precautions:**

Read and understand the entire label before opening this product. If you have questions, call the manufacturer at 1-800-323-9597 or obtain technical advice from the distributor or from your provincial agricultural or forestry representative. Application of this specific product must meet and/or conform to the aerial uses and rates on this label. Rinse equipment thoroughly following each use.

# MOSQUITO LARVAL CONTROL

VectoLex CG Biological Larvicide is a mosquito larvicide. It is not effective against mosquito adults and pupae. Apply to mosquito larval breeding sites when sampling indicates that mosquito larvae are present. For best results, apply when young larval stages are present.

For use in:	Mosquito species controlled	Application rate and interval	Application methods
Water bodies: freshwater marshes, salt marshes, flood plains, flooded fields and pastures, wetlands, ponds, storm water detention/retention and seepage ponds, wastewater sewage effluent, sewage lagoons, oxidation ponds, log ponds, impounded waste water, septic ditches, drainage ditches including open storm sewers and irrigation ditches	<i>Culex</i> spp. <i>Culiseta</i> spp. <i>Aedes vexans</i> <i>(Other Aedes</i> spp. and <i>Ochlerotatus</i> spp. have variable degrees of susceptibility to VectoLex CG Biological Larvicide)	<ul> <li>5.6 -16.8 kg product /ha (0.56-1.68 g product /m2) of water surface area.</li> <li>Use the higher rate in water polluted with sewage, water with high organic content and water with a high level of suspended solids.</li> <li>Reapply at a minimum interval of two weeks as needed, if monitoring indicates that further applications are required. Do not reapply within two weeks of application. Do not apply more than six times per treatment site per season.</li> </ul>	Apply by ground or aerial application equipment capable of uniform delivery of VectoLex CG Biological Larvicide over the water surface.
Waste tires <i>Culex</i> spp.	<i>Culiseta</i> spp. <i>Aedes triseriatus</i>	0.56-1.68 g product / m2 of water surface area. Use the higher rate in water with high organic content and water with a high level of suspended solids. Do not reapply within one week of application. Reapply at a minimum interval of one week as needed, if monitoring indicates that further applications are required.	Apply by hand or ground application equipment to individual tires which contain standing water. Use with other mosquito management techniques such as shredding waste tires, removing standing water and covering the stacked tires.

For use in:	Mosquito species controlled	Application rate and interval	Application methods
Water bodies: freshwater marshes, flood plains, flooded fields and pastures, wetlands, ponds, storm water detention/retention and seepage ponds, wastewater sewage effluent, sewage lagoons, oxidation ponds, log ponds, impounded waste water, septic ditches, drainage ditches including open storm sewers and irrigation ditches	Coquillettidia perturbans (may reduce the number of larvae)	<ul> <li>8-16.8 kg product /ha (0.8-1.68 g product /m2)</li> <li>of water surface area.</li> <li>Use the higher rate in water polluted with sewage, water with high</li> <li>organic content and water with a high level</li> <li>of suspended solids.</li> <li>Reapply at a minimum interval of two weeks after application; however, the effects on larval numbers may not be evident for up to three weeks after application.</li> <li>Reapplication should be based on larval monitoring. Do not reapply within two weeks of application.</li> <li>Do not apply more than six times per treatment site per season.</li> </ul>	Apply by ground or aerial application equipment capable of uniform delivery of VectoLex CG Biological Larvicide over the water surface.

# **RESISTANCE MANAGEMENT RECOMMENDATIONS:**

Mosquito populations may contain individuals naturally resistant to VectoLex CG Biological Larvicide. The resistant individuals may dominate the mosquito population if VectoLex CG Biological Larvicide is used repeatedly as the sole means of control in the same geographic location/use area.

To delay/avoid the resistance of mosquito populations to VectoLex CG Biological Larvicide it is recommended that users:

• Rotate the use of VectoLex CG Biological Larvicide with other mosquito larvicides currently registered in Canada, which do not contain *Bacillus sphaericus* as the active ingredient, providing they are registered for use in control of the same pests in the same sites.

• Treat a portion of the target area with a *Bti* formulation or an alternative insecticide ensuring the continual existence of populations of mosquitoes not exposed to VectoLex

CG Biological Larvicide within a given geographic location.

• Insecticide use in mosquito control should be based on an IPM program that includes scouting, record keeping, and considers cultural/habitat, biological and chemical control practices suitable for the area to be treated.

• Monitor treated pest populations for resistance development.

• For further information or to report suspected resistance contact Valent BioSciences

LLC at 1-800-323-9597 or at www.valentbiosciences.com.

2023-6157 2024-06-04

### PRECAUTIONS: PREVENT ACCESS BY UNAUTHORIZED PERSONNEL

May cause sensitization. May irritate eyes. Avoid contact with skin, eyes or clothing. Mixer/loaders and applicators not in enclosed cabs or aircraft must wear a long-sleeved shirt, long pants, shoes plus socks, eye goggles, waterproof gloves and a dust/mist filtering respirator (MSH/NIOSH approval number prefix TC-21C) or a NIOSH approved respirator with an R-95, P-95 or HE filter for biological products when handling, mixing/loading or applying the product and during all clean up/repair activities. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

### FIRST AID

# If swallowed:

Call a poison control centre or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person.

#### If on skin or clothing:

Take off contaminated clothing. Rinse skin immediately with plenty of water for 15–20 minutes. Call a poison control centre or doctor for treatment advice.

#### If inhaled:

Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control centre or doctor for further treatment advice.

#### If in eyes:

Hold eye open and rinse slowly and gently with water for 15–20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control centre or doctor for treatment advice.

Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

**GENERAL**: IMMEDIATELY seek medical attention if irritation or signs of toxicity occur and persist or are severe.

### TOXICOLOGICAL INFORMATION: Treat symptomatically.

**STORAGE:** Store at temperatures between 0°C and 25°C. Store container upright and keep tightly closed when not in use. Material must be used within 12 months of the Date of Manufacture.

#### **DISPOSAL:**

1. Completely empty the bag into the application equipment.

- 2. Follow provincial instruction for any required additional cleaning of the container prior to its disposal.
- 3. Make the empty bag unsuitable for further use.
- 4. Dispose of the bag in accordance with provincial requirements.

5. For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean-up of spills.

**DO NOT** contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.

# NOTICE TO USER:

2023-6157 2024-06-04

This pest control product is to be used only in accordance with the directions on the label. It is an offence under the *Pest Control Products Act* to use this product in a way that is inconsistent with the directions on the label.