

## Biological Larvicide

## VectoLex® CG

## Granules

## ACTIVE INGREDIENT:

<i>Bacillus sphaericus</i> Serotype H5a5b, strain 2362 Technical Powder (670 BslTU/mg)	7.5%
OTHER INGREDIENTS	92.5%
TOTAL	100.0%

Potency: This product contains 50 BslTU/mg or 0.023 Billion BslTU/lb.

The percent active ingredient does not indicate product performance and potency measurements are not federally standardized.

EPA Reg. No. 73049-20

EPA Est. No. 33762-IA-001

List No. 05722

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## KEEP OUT OF REACH OF CHILDREN CAUTION

1.0 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 eye.</li> <li>Call a poison control center for treatment advice.</li> </ul>
If on skin or clothing	<ul style="list-style-type: none"> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-877-315-9819 (24 hours) for emergency medical treatment and/or transport emergency information. For all other information, call 1-800-323-9597.	

## 2.0 PRECAUTIONARY STATEMENTS

2.1 Hazards To Humans and Domestic Animals  
CAUTION

Harmful if absorbed through the skin. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling.

Mixers/loaders and applicators not in enclosed cabs or aircraft, must wear a dust/mist filtering respirator meeting NIOSH standards of at least N-95, R-95, or P-95. Repeated exposure to high concentrations of microbial proteins can cause allergic sensitizations.

## 2.2 Environmental Hazards

Do not contaminate water when disposing of equipment washwaters or rinsate. Do not apply directly to treated, finished drinking water reservoirs or drinking water receptacles when the water is intended for human consumption.

## 3.0 DIRECTIONS FOR USE

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

## 4.0 STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal. Do not contaminate water when disposing of equipment washwaters.

**Pesticide Storage:** Store in a cool, dry place.

**Pesticide Disposal:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

**Container Disposal:** Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

## 5.0 APPLICATION DIRECTIONS

## MOSQUITO CONTROL

VectoLex CG is a selective microbial insecticide for use against mosquito larvae in a variety of habitats. VectoLex CG can be applied to areas that contain fish, other aquatic life, and plants. VectoLex CG can be applied to areas used by or in contact with humans, pets, horses, livestock, birds, or wildlife.

### I. For control of mosquito larvae species\* in the following non-crop sites:

Habitat	Rate Range
<b>Wastewater:</b> Sewage effluent, sewage lagoons, oxidation ponds, septic ditches, animal waste lagoons, impounded wastewater associated with fruit and vegetable processing.	5-20 lbs/acre**
<b>Storm Waters/Drainage Systems:</b> Storm sewers, catch basins, drainage ditches, retention, detention and seepage ponds.	5-20 lbs/acre**
<b>Marine/Coastal Areas:</b> Salt marshes, mangroves, estuaries.	5-20 lbs/acre**
<b>Water Bodies:</b> Natural and manmade aquatic sites such as lakes, ponds, rivers, canals, streams and livestock watering ponds and troughs.	5-20 lbs/acre**
<b>Dormant Rice Fields:</b> Impounded water in dormant rice fields. (For application only during the interval between harvest and preparation of the field for the next cropping cycle.)	5-20 lbs/acre**
<b>Waste Tires:</b> Tires stockpiled in dumps, landfills, recycling plants, and other similar sites.	20-80 lbs/acre <sup>(1)</sup>

(1) 0.5-2 lbs/1000 sq. ft.

CONTINUED

**II. For the control of mosquito larvae species\* in agricultural/ crop sites where mosquito breeding occurs:**

**Habitats:**

**Rate Range**

Rice, pastures/hay fields, orchards,  
citrus groves, irrigated crops.

5-20 lbs/acre\*\*

Apply uniformly by aerial or conventional ground  
equipment. Reapply as needed after 1 to 4 weeks.

\* Mosquito species effectively controlled by VectoLex CG:

*Culex* spp.

*Aedes vexans*

*Ochlerotatus melanimon* (*Aedes melanimon*)

*Ochlerotatus stimulans* (*Aedes stimulans*)

*Ochlerotatus nigromaculis* (*Aedes nigromaculis*)

*Psorophora columbiae*

*Psorophora ferox*

*Ochlerotatus triseriatus* (*Aedes triseriatus*)

*Ochlerotatus sollicitans* (*Aedes sollicitans*)

*Anopheles quadrimaculatus*

*Coquillettia perturbans*

\*\*Use higher rates (10 to 20 lbs/acre) in areas where extended residual  
control is necessary, or in habitats having deep water or dense surface  
cover.

Avoiding spray drift at the application site is the responsibility of  
the applicator. The interaction of many equipment and weather  
related factors determine the potential for spray drift. The  
applicator and the treatment coordinator are responsible for  
considering all these factors when making decisions.

**6.0 NOTICE TO USER**

Seller makes no warranty, express or implied, of merchantability,  
fitness or otherwise concerning use of this product other than  
as indicated on the label. User assumes all risks of use,  
storage or handling not in strict accordance with accompanying  
directions.



VectoLex® CG

MSDS# BIO-0042 Rev. 4

ISSUED 01/02/12

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MATERIAL NAME: VectoLex® CG

VectoLex® G

VectoLex® WSP

VectoLex® 7.5 GR

EPA Registration No. 73049-20

List Number: 5722

MANUFACTURER: Valent BioSciences Corporation

870 Technology Way, Suite 100

Libertyville, Illinois 60048

## EMERGENCY TELEPHONE NUMBERS

Emergency Health or Spill:

Outside the United States: 651-632-6184

Within the United States: 877-315-9819

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT NAME: Bacillus sphaericus Serotype H-5a5b, strain 2362

CONCENTRATION: 7.50 %

CAS/RTECS NUMBERS: N/A / N/A

OSHA-PEL 8HR TWA: N/L

STEL: N/L

CEILING: N/L

ACGIH-TLV 8HR TWA: N/L

STEL: N/L

CEILING: N/L

OTHER 8HR TWA: N/A

LIMITS STEL: N/A

CEILING: N/A

INGREDIENT NAME: Inert Ingredients - identity withheld as Trade Secret

CONCENTRATION: 92.50 %

CAS/RTECS NUMBERS: N/A / N/A

OSHA-PEL 8HR TWA: N/L

STEL: N/L

CEILING: N/L

ACGIH-TLV 8HR TWA: N/L

STEL: N/L

CEILING: N/L

OTHER 8HR TWA: N/A

LIMITS STEL: N/A

CEILING: N/A

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## 3. HAZARDS INFORMATION

EMERGENCY OVERVIEW: Product is non-toxic by ingestion, skin contact, or inhalation. Direct contact with eyes or skin may cause mild irritation.

ROUTE(S) OF ENTRY:           Skin: No  
                                  Inhalation: No  
                                  Ingestion: No

SKIN CONTACT: Non-irritant

SKIN SENSITIZATION: Non-sensitizer

EYE CONTACT: Non-irritant

TARGET ORGANS: N/D

CARCINOGENICITY RATING: NTP: N/L   IARC: N/L   OSHA: N/L   ACGIH: N/L  
None

SIGNS AND SYMPTOMS: Direct contact with eyes or skin may cause mild irritation.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: N/D. Data suggest pre-existing skin or eye lesions.

## 4. FIRST AID MEASURES

EYES: Remove from source of exposure. Flush with copious amounts of water. If irritation persists or signs of toxicity occur, seek medical attention. Provide symptomatic/supportive care as necessary.

SKIN: Remove from source of exposure. Flush with copious amounts of water. If irritation persists or signs of toxicity occur, seek medical attention. Provide symptomatic/supportive care as necessary.

INGESTION: Remove from source of exposure. If signs of toxicity occur, seek medical attention. Provide symptomatic/supportive care as necessary.

INHALATION: Remove from source of exposure. If signs of toxicity occur, seek medical attention. Provide symptomatic/supportive care as necessary.

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5. FIRE FIGHTING PROCEDURES  
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FLASH POINT: N/A

FLASH POINT METHOD: N/A

LOWER EXPLOSIVE LIMIT(%): N/A

UPPER EXPLOSIVE LIMIT(%): N/A

AUTOIGNITION TEMPERATURE: N/D

FIRE &amp; EXPLOSION HAZARDS: Non-flammable and no explosive properties.

EXTINGUISHING MEDIA: Use appropriate medium for underlying cause of fire.

FIRE FIGHTING INSTRUCTIONS: Wear protective clothing and self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES  
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SPILL OR RELEASE PROCEDURES: Recover product. Place into appropriate container for disposal. Avoid dust. Ventilate and wash spill area.

7. HANDLING AND STORAGE  
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HANDLING: N/D.

STORAGE: Store in a cool, dry place.

SPECIAL PRECAUTIONS: Wash thoroughly with soap and water after handling.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION  
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ENGINEERING CONTROLS: Use local exhaust.

RESPIRATORY PROTECTION: Not usually required. However, mixers/loaders and applicators not in enclosed cabs or aircraft must wear a dust/mist respirator meeting NIOSH standards of at least N-95, R-95 or P-95.

SKIN PROTECTION: Impervious gloves, clothing to minimize skin contact.

EYE PROTECTION: Not usually required. If necessary, use safety glasses or goggles.

OTHER PROTECTION: Wash thoroughly with soap and water after handling.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE/PHYSICAL STATE: Granules

ODOR: Characteristic odor

BOILING POINT: N/A

MELTING/FREEZING POINT: N/A

VAPOR PRESSURE (mm Hg): N/A

VAPOR DENSITY (Air=1): N/A

EVAPORATION RATE: N/A

BULK DENSITY: 35 ± 3 lb/cu.ft.

SPECIFIC GRAVITY: N/D

SOLUBILITY: Partially suspends/soluble in water

pH: N/A

VISCOSITY: N/A

## 10. STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable.

INCOMPATIBILITIES: Alkalinity inactivates product.

HAZARDOUS DECOMPOSITION PRODUCTS: N/D.

HAZARDOUS POLYMERIZATION: Will not occur.

## 11. TOXICOLOGICAL INFORMATION

Acute Toxicity

ORAL LD50: N/D. LD50 (rat) &gt; 5,000 mg/kg for Technical Powder.

DERMAL LD50: N/D. LD50 (rabbit) &gt; 2,000 mg/kg for Technical Powder.

INHALATION LC50: N/D. No lethality in rats after a 4-hour exposure at the maximum obtainable inhalation exposure chamber concentration (0.09 mg/l) to VectoLex® Technical Powder.

CORROSIVENESS: N/D. Not expected to have any corrosive properties.

DERMAL IRRITATION: N/D. Transient, slight to mild irritation noted in a dermal toxicity study with VectoLex® Technical Powder.

OCULAR IRRITATION: N/D. VectoLex® Technical Powder caused mild to moderate eye irritation in tests with rabbits.



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11. TOXICOLOGICAL INFORMATION, continued  
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DERMAL SENSITIZATION: N/D. Results from tests with a similar formulated material were negative.

SPECIAL TARGET ORGAN EFFECTS: N/D

CARCINOGENICITY INFORMATION: N/D. None of the components are classified as carcinogens.

12. ECOLOGICAL INFORMATION  
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ECOLOGICAL INFORMATION: N/D

13. DISPOSAL CONSIDERATIONS  
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Do not contaminate potable water, food or feed by storage or disposal. Dispose of product in accordance with federal, state, and local regulations.

## WASTE DISPOSAL METHODS:

**Pesticide Disposal:** Wastes resulting from use of this product may be disposed of on site or at an approved waste disposal facility.

**Container Disposal:** Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

For Water Soluble Pouches, dispose of empty outer foil bag in trash.

14. TRANSPORTATION INFORMATION  
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DOT STATUS: Not Regulated  
PROPER SHIPPING NAME: N/A  
HAZARD CLASS: N/A  
UN NUMBER: N/A  
PACKING GROUP: N/A  
REPORTABLE QUANTITY: N/A

IATA/ICA0 STATUS: Not Regulated  
PROPER SHIPPING NAME: N/A  
HAZARD CLASS: N/A  
UN NUMBER: N/A  
PACKING GROUP: N/A  
REPORTABLE QUANTITY: N/A

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14. TRANSPORTATION INFORMATION, continued  
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IMO STATUS: Not Regulated  
PROPER SHIPPING NAME: N/A  
HAZARD CLASS: N/A  
UN NUMBER: N/A  
PACKING GROUP: N/A  
REPORTABLE QUANTITY: N/A  
FLASH POINT: N/A

15. REGULATORY INFORMATION  
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TSCA STATUS: Exempt RCRA STATUS: N/D  
CERCLA STATUS: N/D PROP 65 (CA): N/D  
SARA STATUS: N/D

16. OTHER INFORMATION  
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REASON FOR ISSUE: MSDS Reviewed.  
APPROVAL DATE: 01/02/12  
SUPERSEDES DATE: 11/24/10

LEGEND: N/A = Not Applicable  
N/D = Not Determined  
N/L = Not Listed  
L = Listed  
C = Ceiling  
S = Short-term

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