

VectoMax® FG Biological Larvicide Fine Granules

SDS# VBC-0018 Revision 1

ISSUED 04/14/15

[Classification according to OSHA; 29 CFR § 1910.1200, (3/12/2012)]

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY**1.1 Product Identifier****MATERIAL NAME:** VectoMax® FG**Synonyms:** VectoMax® G; VectoMax® WSP**EPA Reg No.:** 73049-429**Code Number:** N/A**List Number:** 05750**Chemical Family:** Not applicable; microbial product**Substance Registration Number(s)[REACH]:** N/A**1.2 Relevant Identified Uses and Uses Advised Against****Identified Uses:** Biological mosquito larvicide**Uses Advised Against:** It is a violation of Federal law to use this product in a manner inconsistent with its FIFRA pesticide labeling.**1.3 Details of the supplier of the Safety Data Sheet****Supplied By:** Valent BioSciences Corporation
870 Technology Way
Libertyville, Illinois 60048**1.4 EMERGENCY TELEPHONE NUMBERS****Emergency Health or Spill:**

Outside the United States: 651-632-6184

Within the United States: 877-315-9819

2. HAZARDS IDENTIFICATION**2.1 Classification of the Substance or Mixture**

Not Classified

2.2 Labeling Elements**Symbol(s)**

Symbols not required

Signal Word

WARNING

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Hazard Statement(s)

None

2.3 Precautionary Statement:

Prevention

- Avoid breathing dust
- Wear dust mask when handling
- Wash thoroughly after handling
- Contaminated work clothing should not be allowed out of the workplace.
- Wear protective clothing and eye protection

Response

- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- If eye irritation persists: Get medical advice/ attention.
- IF ON SKIN: Wash with soap and water.
- Take off contaminated clothing and wash it before reuse.

Disposal

Dispose of contents/container in accordance with local/regional/national regulations.

Safety

Avoid contact with skin and eyes

2.4 Other Hazards

None identified.

3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS #	Component Name	EC No.	(Classification)	Percent
None	<i>Bacillus sphaericus</i> 2362, strain ABTS-1743		Not classified	2.7%
None	<i>Bacillus thuringiensis</i> subsp. <i>israelensis</i> , strain AM65-52		Not classified	4.5%
Trade Secret	Other ingredients		Not classified	92.8%

4. FIRST AID MEASURES

4.1 Description of First Aid Measures

GENERAL: In all cases of doubt, seek medical attention.

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EYES: Remove from source of exposure. Flush with copious amounts of water. Remove contact lenses, if present and easy to do, after the first 5 minutes, then continue rinsing. If irritation persists or signs of toxicity occur, seek medical attention. Provide symptomatic /supportive care as necessary.

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

INGESTION: Remove from source of exposure. Move person to fresh air. Do NOT induce vomiting. 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. If person is not breathing, call 911, then give artificial respiration.

4.2 Most important Symptoms and Effects, both Acute and Delayed**Acute**

Possible eye irritation and skin sensitization

Delayed

No information on significant adverse effects

4.3 Indication of any Immediate Medical Attention and Special Treatment Needed

Treat symptomatically and supportively

5. FIRE FIGHTING PROCEDURES**5.1 Extinguisher Media****Suitable Extinguisher Media**

Dry chemical, water spray, foam or carbon dioxide. Use appropriate medium for the underlying cause of the fire.

Unsuitable Extinguisher Media

None known

5.2 Specific Hazards Arising from the Chemical**Thermal decomposition products**

Carbon oxides, nitrogen oxides

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5.3 Advice to Firefighters**Protective Equipment and precautions for firefighters**

Fire fighter should wear full-face, self-contained breathing apparatus and impervious protective clothing. Fire fighters should avoid inhaling combustion products. See Section 8 (Exposure Controls / Personal Protection)

Fire & Explosive hazard

Not expected to be flammable.

6. ACCIDENTAL RELEASE MEASURES**6.1 Personal Precautions, Protective Equipment and Emergency Procedures**

Wear a dust/mist filtering respirator, eye protection and impervious gloves.

6.2 Environmental Precautions

Dispose of excess product and washwaters according to local regulations.

6.3 Methods and Materials for Containment and Cleaning Up

Wear appropriate personal protective equipment. Sweep up material and place in appropriate container for disposal. Avoid generating dust. Do not flush to sewer.

6.4 Reference to Other Sections

See Section 7 for Handling Procedures. See Section 8 for Personal Protective Equipment recommendations. See Section 13 for Disposal Considerations.

US Regulations may require reporting spills of hazardous materials: See Section 15: REGULATORY INFORMATION for details on reportable quantities, if any.

7. HANDLING AND STORAGE**7.1 Precautions for Safe handling**

Avoid contact with eyes, skin or clothing. Wash thoroughly after handling. Do not eat, drink or smoke while working with product, obey reasonable safety precautions and practice good housekeeping.

7.2 Conditions for Safe Storage, Including Incompatibilities

Store in a cool, dry place.

Incompatibilities

None Known

7.3 Specific End Use(s)

Mosquito larvicide

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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control Parameters

Component Exposure Limits

None

Derived No Effect Levels (DNELs)

No DNELs available

Predicted No Effect Concentrations (PNECs)

No PNECs available

8.2 Exposure Controls

Appropriate Engineering Controls

Provide general ventilation.

SKIN PROTECTION:

Wear impervious protective clothing, including boots and gloves. Wear gloves made of impervious materials. Wash thoroughly with soap and water after handling.

EYE PROTECTION:

Wear goggles, safety glasses with side shields or full-face shield when splashing or spraying of materials is likely.

RESPIRATORY PROTECTION:

Use dust/mist filtering respirator (MSHA/NIOSH approved number prefix TC-21C or a NIOSH approved respirator with any N, P, R or HE filter.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on Basic Physical and Chemical Properties

Appearance/Odor:	Yellow/Brown granular solid	Odor Threshold:	None discernible
pH:	≈ 5 (1% dispersion in water)	Boiling Point:	Not Determined
Melting Point:	Not Applicable	Solubility (H ₂ O):	Not Determined
Specific Gravity:	Not Determined	Bulk Density:	32 +/- 3 lbs/cu ft.
Octanol/H ₂ O Coeff:	Not Determined	Evaporation Rate:	Not Determined
Molecular Weight:	Not Applicable	Decomposition Temp.:	Not Determined
Auto Ignition:	Not Determined	LFL:	Not Determined
Flash Point:	Not Determined	UFL:	Not Determined
Vapor Density:	Not Determined	Vapor Pressure:	Not Applicable
VOC:	Not Determined	Flammability Class:	Non-flammable (per similar formulation)
Kinematic Viscosity:	Not Determined		

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10. CHEMICAL STABILITY AND REACTIVITY**10.1 Reactivity**

Material does not pose a significant reactivity hazard.

10.2 Chemical Stability

Stable under ordinary conditions of use and storage. Spontaneous reaction not possible.

10.3 Possibility of Hazardous Reactions

Does not undergo hazardous polymerization

10.4 Conditions to Avoid

None known

10.5 Incompatible Materials

None known

10.6 Hazardous Decomposition Products

Carbon oxides and unidentified organic compounds.

11. TOXICOLOGICAL INFORMATION**11.1 Information on Toxicological Effects**

LIKELY ROUTES OF EXPOSURE

Eye Contact:	Yes
Skin Contact:	Yes
Inhalation:	No
Ingestion:	No

ACUTE EFFECTS Product Toxicology Studies

ORAL TOXICITY: LD₅₀ > 5,000 mg/kg (rat)DERMAL TOXICITY: LD₅₀ > 2,000 mg/kg (rabbit)INHALATION TOXICITY: LC₅₀ > 2.84 mg/L air (rat)

CORROSIVENESS: Not corrosive.

DERMAL IRRITATION: Not-irritating, (Category IV)

OCULAR IRRITATION: Mildly-irritating, (Category IV)

DERMAL SENSITIZATION: Not a sensitizer (guinea pig)

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MUTAGENICITY INFORMATION: Components of this product are not listed as mutagens.
CARCINOGENICITY INFORMATION: Components of this product are not listed as carcinogenic by NTP, IARC or OSHA.
DEVELOPMENTAL/REPRODUCTIVE TOXICITY: This material is not pathogenic
SPECIAL TARGET ORGAN EFFECTS: Eye and mucus membrane Irritation.
ASPIRATION HAZARD: Not Applicable
REPEAT DOSE STUDIES: Not Applicable, Pathogenicity Toxicity testing was all negative

12. ECOLOGICAL INFORMATION**12.1 Ecotoxicity (Data for a Concentrated Bti Technical Powder)**Fish: LC₅₀ >300 mg/L (96-H, Rainbow Trout)Bird: LC₅₀ >3077 mg /kg (6.2 x 10¹¹ cfu/kg) (Acute Oral - Bobwhite Quail)LC₅₀ >3077 mg /kg (6.2 x 10¹¹ cfu/kg) each day for 5 days (Sub-Acute Oral (dietary) - Bobwhite Quail)Invertebrates: EC₅₀ >50 mg/L (48-H) (Daphnia)**(Data for a Concentrated Bsp Technical Powder)**Fish: LC₅₀ >15.5 mg/L (96-H, Rainbow Trout)Bird: LC₅₀ >9000 mg /kg (Acute Oral – Mallard)Invertebrates: EC₅₀ >15.5 mg/L (48-H) (Daphnia)**12.2 Persistence and Degradability**

No data available

12.3 Bioaccumulation potential

No data available

12.4 Mobility in Soil

No data available

12.5 Results of PBT and vPvB assessment

Assessments not performed

12.6 Other adverse effects

None known

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13. DISPOSAL CONSIDERATIONS**13.1 Waste Disposal Methods**

Dispose of product in accordance with federal, state, provincial, and local regulations. Prevent contamination of environment by wastes.

US EPA WASTE NUMBER & DESCRIPTIONS:

There is no applicable EPA waste number. This product, if discarded, is not expected to be a characteristic or listed hazardous waste.

14. TRANSPORTATION INFORMATION

DOT STATUS: Not Regulated as Hazardous by DOT
UN PROPER SHIPPING NAME: ()
HAZARD CLASS:
UN NUMBER:
PACKING GROUP:
MARINE POLLUTANT:
FREIGHT CLASSIFICATION: Insecticide, N.O.S.

IATA/ICAO STATUS: Not Regulated
PROPER SHIPPING NAME: ()
HAZARD CLASS:
UN NUMBER:
PACKING GROUP:
REPORTABLE QUANTITY:

IMO STATUS: Not Regulated
PROPER SHIPPING NAME: ()
HAZARD CLASS:
UN NUMBER:
PACKING GROUP:
REPORTABLE QUANTITY:

15. REGULATORY INFORMATION**15.1 Safety, Health and Environmental Regulations / Specific Legislation**

TSCA STATUS: Exempt
CERCLA STATUS: Not regulated as hazardous
SARA STATUS: Acute: No Chronic: No Fire: No CDT: No
RCRA STATUS: Not regulated as hazardous

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State Right-To-Know: Not Listed

Consult applicable national, state provincial or local laws to determine regulations, laws or ordinances which may be applicable.

OSHA HAZARD COMMUNICATION STANDARD: Not defined by the OSHA Hazard Communication Standard, 29 CFR

15.2 EPA Pesticide Regulations

EPA Registration Number 73049-429

EPA Pesticide Label signal word

CAUTION

Product must have EPA Approved Pesticide Label attached to or accompanying all containers.

This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions and limitations for its use.

PRECAUTIONARY STATEMENTS**HAZARDS TO HUMANS AND DOMESTIC ANIMALS****CAUTION**

Causes moderate eye irritation. Harmful if absorbed through the skin or inhaled. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Avoid contact with skin, eyes, or clothing. Avoid breathing dust. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

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 sensitization.

ENVIRONMENTAL HAZARDS

Do not apply directly to treated, finished drinking water reservoirs or drinking water receptacles when the water is intended for human consumption.

DIRECTIONS FOR USE

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

For use only by federal, state, tribal or local government officials responsible for public health or vector control, or by persons certified in the appropriate category or otherwise authorized by the

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state or tribal lead pesticide regulatory agency to perform mosquito control applications, or by persons under their direct supervision.

IN CALIFORNIA: This product is to be applied by County Health Department, State Department of Health Services, Mosquito and Vector Control or Mosquito Abatement District personnel, or persons under contract to these entities only.

Storage and Disposal

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

PESTICIDE STORAGE: Store in a cool, dry place.

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 (often such programs are run by state or local governments or by industry).

CONTAINER DISPOSAL: Nonrefillable container. Do not reuse or refill this container. Completely empty bag into application equipment. Then offer for recycling if available or dispose of empty bag in a sanitary landfill, or by incineration. Do not burn, unless allowed by state and local ordinances. If burned, stay out of smoke.

16. OTHER INFORMATION**NFPA Hazard Ratings**

Health: 1
Flammability: 0
Instability: 0

HMIS Hazard Ratings

Health: 1
Flammability: 0
Instability: 0

0 = Minimal
1 = Slight
2 = Moderate
3 = Serious
4 = Extreme

REASON FOR ISSUE: Update code #'s, label info and personal protection statements

APPROVAL DATE: 04/14/15

SUPERSEDES DATE: 09/05/14

LEGEND: N/A = Not Applicable

N/L = Not Listed

C = Ceiling

(R) = Registered Trademark of Valent BioSciences Corp.

(TM) = Registered Trademark of Valent BioSciences Corp.

N/D = Not Determined

L = Listed

S = Short-term

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