

VECTOMAX® FG

MSDS# BIO-0451 Rev. 4

ISSUED 10/09/14

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MATERIAL NAME: VECTOMAX® FG

ALTERNATE NAMES: VECTOMAX® G; VECTOMAX® WSP  
 EPA Registration Number 73049-429

MANUFACTURER: Valent BioSciences Corporation  
 870 Technology Way  
 Libertyville, Illinois 60048

EMERGENCY TELEPHONE NUMBERS

Outside the United States: 651-632-6184  
 Within the United States: 877-315-9819

2. COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT NAME: *Bacillus sphaericus* 2362, serotype H5a5b, strain ABTS 1743  
 CONCENTRATION: 2.7%

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

INGREDIENT NAME: *Bacillus thuringiensis* subsp. *isrealensis*, strain AM65-52  
 CONCENTRATION: 4.5%

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 a Trade Secret Information

CONCENTRATION: 92.8%

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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2. COMPOSITION/INFORMATION ON INGREDIENTS, continued  
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EEC (European Community): N/A

Symbol Designation: N/A

Risk Phrases: N/A

Safety Phrases: N/A

3. HAZARDS INFORMATION  
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EMERGENCY OVERVIEW: Harmful if absorbed through the skin. Causes moderate eye irritation. Prolonged or frequent repeated skin contact may cause allergic reactions in some individuals.

SKIN CONTACT: Non-irritant

SKIN SENSITIZATION: Repeated exposure to high concentrations may cause allergic sensitizations.

EYE CONTACT: Causes moderate eye irritation.

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.

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## 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.

## 5. FIRE FIGHTING PROCEDURES

FLASH POINT: N/A

FLASH POINT METHOD: N/A

LOWER EXPLOSIVE LIMIT(%): N/D

UPPER EXPLOSIVE LIMIT(%): N/D

AUTOIGNITION TEMPERATURE: N/D

FIRE & 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

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

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7. HANDLING AND STORAGE  
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HANDLING: N/D.

STORAGE: Store in a cool, dry place.

SPECIAL PRECAUTIONS: N/A

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.

9. PHYSICAL AND CHEMICAL PROPERTIES  
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APPEARANCE/PHYSICAL STATE: Yellow/brown granular solid

ODOR: None discernible

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

DENSITY: 32 ± 3 lbs/cu. ft.

SPECIFIC GRAVITY: N/D

SOLUBILITY: Not soluble in water

pH: ~ 5 (1% dispersion in water)

VISCOSITY: N/A

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10. STABILITY AND REACTIVITY  
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CHEMICAL STABILITY: Stable

INCOMPATIBILITIES: Alkalinity inactivates product.

HAZARDOUS DECOMPOSITION PRODUCTS: N/D.

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION  
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Acute Toxicity

ORAL LD50: N/D           LD50 (rat) &gt; 5,000 mg/kg for a similar formulation.

DERMAL LD50: N/D        LD50 (rabbit) &gt; 5,000 mg/kg for a similar formulation.

INHALATION LC50: N/D.

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

DERMAL IRRITATION: N/D. Transient, slight or mild irritation noted in a dermal toxicity study with a similar formulation.

OCULAR IRRITATION: N/D. A similar formulation was mildly irritating in an eye irritation test in rabbits.

DERMAL SENSITIZATION: Study conducted with this formulation presented no sensitization.

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: Studies conducted on the two active ingredients has not shown adverse effects on birds, fish or bees.

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13. DISPOSAL CONSIDERATIONS

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.

14. TRANSPORTATION INFORMATION

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

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

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## 15. REGULATORY INFORMATION

TSCA STATUS: Exempt

RCRA STATUS: N/D

CERCLA STATUS: N/D

PROP 65 (CA): N/D

SARA STATUS: N/D

## 16. OTHER INFORMATION

REASON FOR ISSUE: Strain number added.

APPROVAL DATE: 10/09/14

SUPERSEDES DATE: 08/20/12

LEGEND: N/A = Not Applicable

N/D = Not Determined

N/L = Not Listed

L = Listed

C = Ceiling

S = Short-term

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