VECTOBAC® CG

MSDS# BIO-0044 Rev. 3 ISSUED 01/20/04

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MATERIAL NAME: VectoBac® CG

EPA Reg. No.: 73049-19 Code Number: 05094 List Number: 05094 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 thuringiensis, subsp.

israelensis

CONCENTRATION: 4.95 % CAS NUMBER: 68038-71-1 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 LIMITS
8HR TWA: N/A
STEL: N/A
CEILING: N/A

INGREDIENT NAME: Inert Ingredients - identity

withheld as a Trade Secret CONCENTRATION: 95.05 %

CAS NUMBER: 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 LIMITS 8HR TWA: N/A STEL: N/A CEILING: N/A

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: N/D 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.

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/A
UPPER EXPLOSIVE LIMIT(%): N/A
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.

7. HANDLING AND STORAGE

HANDLING: N/D.

STORAGE: Store in a cool, dry place. **SPECIAL PRECAUTIONS:** N/A

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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

APPEARANCE/PHYSICAL STATE: Granular solid.

ODOR: Mild

BOILING POINT: N/A MELTING/FREEZING POINT: N/A

VAPOR PRESSURE (mm Hg): N/A VAPOR DENSITY (Air=1): N/A EVAPORATION RATE: N/D BULK DENSITY: 32 ± 3 lb/cu.ft. SPECIFIC GRAVITY: N/D SOLUBILITY: N/A

pH: N/D 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: LD50 (rat) > 5,000 mg/kg **DERMAL LD50:** LD50 (rabbit) > 5,000 mg/kg

INHALATION LC50: N/D. No lethality was observed in rats after a 4 hour exposure at the highest obtainable inhalation exposure chamber concentration (2.84 mg/l) to VectoBac[®] Technical Powder.

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 VectoBac[®] Technical Powder.

OCULAR IRRITATION: N/D. VectoBac[®] Technical Powder was mildly irritating in an eye irritation test in rabbits

DERMAL SENSITIZATION: N/D SPECIAL TARGET ORGAN EFFECTS: N/D CARCINOGENICITY INFORMATION: N/D. None of the components are classified as carcinogens.

12. ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: N/D

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/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 IMO

STATUS: Not Regulated
PROPER SHIPPING NAME: N/A
HAZARD CLASS: N/A
UN NUMBER: N/A

UN NUMBER: N/A
PACKING GROUP: N/A
REPORTABLE QUANTITY: N/A
FLASH POINT: N/A

15. REGULATORY INFORMATION

TSCA STATUS: Exempt CERCLA STATUS: N/D SARA STATUS: N/D RCRA STATUS: N/D PROP 65 (CA): N/D

16. OTHER INFORMATION

REASON FOR ISSUE: Corrected composition Infor-

mation (Section 2).

APPROVAL DATE: 01/20/04

SUPERSEDES DATE: 08/06/03

LEGEND:

N/A = Not Applicable N/D = Not Determined N/L = Not Listed

L = Listed

C = Ceiling

S = Short-term

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