DiPel® DF
MSDS# BIO-0022 Rev. 4 **ISSUED 02/09/10**

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1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MATERIAL NAME: DiPel DF Biological Insecticide
EPA Reg.No.: 73049-39
Code Number: 80250
List Number: 12046

SYNONYMS: DiPel 2X DF DiPel PRO DF Biobit DF
DiPel 6.4 WG Bactospeine DF
DiPel WG Bactospeine WG

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. kurstaki
CONCENTRATION: 54.00 %
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 8HR TWA: N/A
LIMITS STEL: N/A
CEILING: N/A

INGREDIENT NAME: Inert/Other Ingredients - identity a Trade Secret
CONCENTRATION: 46.00 %
CAS NUMBER: N/A
OSHA-PEL 8HR TWA: 15 mg/m3 total dust, 5 mg/m3 respirable fraction
STEL: N/L
CEILING: N/L
ACGIH-TLV 8HR TWA: 2 mg/m3 respirable fraction
STEL: N/L
CEILING: N/L
OTHER 8HR TWA: N/A
LIMITS STEL: N/A
CEILING: N/A

3. HAZARDS INFORMATION

EMERGENCY OVERVIEW: Product is non-toxic by ingestion, skin contact, or inhalation.

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 may cause mild irritation. Inhalation of dust may result in respiratory tract irritation.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Impaired respiratory function.

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/D
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 the underlying cause of the fire.

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

6. ACCIDENTAL RELEASE MEASURES

SPILL OR RELEASE PROCEDURES: Recover product and place in an appropriate container for disposal. Avoid breathing dust. Ventilate and wash the spill area.

7. HANDLING AND STORAGE

HANDLING: N/D

STORAGE: Store product in closed container in a cool and dry place.

SPECIAL PRECAUTIONS: N/D

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Use local exhaust.

RESPIRATORY PROTECTION: Not usually required. If necessary, use 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: Yellow to mustard brown fine granules
ODOR: Faint organic/malt odor
BOILING POINT: N/A
MELTING/FREEZING POINT: N/A
VAPOR PRESSURE (mm Hg): N/D
VAPOR DENSITY (Air=1): N/D
EVAPORATION RATE: N/A
BULK DENSITY: 0.473 g/mL
SPECIFIC GRAVITY: N/D
SOLUBILITY: Suspends readily in water.
pH: 4.1 (10% slurry @ 24° C)
VISCOSITY: N/A

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable. No oxidizing or reducing properties.

INCOMPATIBILITIES: Alkalinity inactivates product.

HAZARDOUS DECOMPOSITION PRODUCTS: None that are known.

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

ORAL LD50: > 5,050 mg/kg (rat) EPA Toxicity Category IV

DERMAL LD50: > 2,020 mg/kg (rabbit) EPA Toxicity Category III

INHALATION LC50: Due to the non-dusty characteristics of the product, the test facility was unable to generate a sufficiently high enough concentration of respirable particles. Animal test not warranted.

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

DERMAL IRRITATION: Transient, slight or mild irritation noted in a dermal irritation study with this product. EPA Toxicity Category IV.

OCULAR IRRITATION: Transient, mild to moderate irritation was observed in test animals in a study with this product. Rinsing the eyes with water dramatically reduced irritation scores. Classified as a non-irritant.

11. TOXICOLOGICAL INFORMATION, continued

DERMAL SENSITIZATION: In a study with this product, no skin sensitization was observed.

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

WASTE DISPOSAL METHODS: Dispose of product in accordance with federal, state and local regulations.

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
PACKING GROUP: N/A
REPORTABLE QUANTITY: N/A
FLASH POINT: N/D

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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

The information given here is not necessarily exhaustive, but is representative of relevant data.

	Health	Flammability	Reactivity
NFPA Rating:	1	1	0
HMIS Rating:	1	1	0

0= Minimal hazard 1= Slight hazard 2= Moderate hazard 3= Severe hazard 4= Extreme hazard

REASON FOR ISSUE: Expired MSDS
APPROVAL DATE: 02/09/10
SUPERSEDES DATE: 01/26/07

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