

DiPel® DF

MSDS# BIO-0022 Rev. 1

ISSUED 11/05/03

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 2XDF DiPel PRO DF
DiPel 6.4 WG DiPel 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

Distributed by:
THE INDUSTRIAL FUMIGANT CO.
P.O. Box 1200, Olathe, KS 66051-1200
1-800-477-4432 • (913) 782-6299 FAX

THIS INFORMATION WAS PROVIDED TO THE
INDUSTRIAL FUMIGANT COMPANY
BY THE MANUFACTURER. IFC MAKES
NO CLAIMS OR WARRANTIES TO ITS
ACCURACY.

DiPel® DF

MSDS# BIO-0022 Rev. 1

ISSUED 11/05/03

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.

DiPel® DF

MSDS# BIO-0022 Rev. 1

ISSUED 11/05/03

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.

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 MSHA/NIOSH approved (or equivalent) respirator with a dust/mist filter.

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.

DiPel® DF

MSDS# BIO-0022 Rev. 1

ISSUED 11/05/03

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.

DiPel® DF

MSDS# BIO-0022 Rev. 1

ISSUED 11/05/03

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/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/D

DiPel® DF

MSDS# BIO-0022 Rev. 1

ISSUED 11/05/03

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: Updated Hazard Information (Section 3) and
Toxicological Information (Section 11). Added
synonyms - DiPel PRO DF and DiPel WG

APPROVAL DATE: 11/05/03

SUPERSEDES DATE: 06/11/01

LEGEND: N/A = Not Applicable

N/D = Not Determined

N/L = Not Listed

L = Listed

C = Ceiling

S = Short-term

® = Registered Trademark of Valent BioSciences

(TM) = Registered Trademark of Valent BioSciences

The information and recommendations contained herein are based upon tests believed to be reliable. However, Valent BioSciences does not guarantee their accuracy or completeness nor shall any of this information constitute a warranty, whether expressed or implied, as to the safety of the goods, the merchantability of the goods, or the fitness of the goods for a particular purpose. Adjustment to conform with actual conditions of usage may be required. Valent BioSciences assumes no responsibility for results obtained or for incidental or consequential damages arising from the use of these data. No freedom from infringement of any patent, copyright or trademark is to be inferred.

**VALENT BIOSCIENCES.**
CORPORATION870 Technology Way, Suite 100
Libertyville, IL 60048 - 800-323-9597

November 2003 © Valent BioSciences Corporation