

## DiPel DF Biological Insecticide Dry Flowable

SDS# VBC-0031 Revision 0

ISSUED 04/26/15

**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY****1.1 Product Identifier****MATERIAL NAME:** DiPel DF Biological Insecticide Dry Flowable**Synonyms:** Dipel WG, DiPel WDG, Bactospeine WG, DiPel Pro DF. DiPel 6.4 WG, Bactospeine DF, BioMax DF, BioBit DF**EPA Reg No.:** 73049-39**Code Number:** 80250**List Number:** 12046**Chemical Family:** Microbial, B.t.k. strain ABTS-351**Substance Registration Number(s)[REACH]:** N/A**1.2 Relevant Identified Uses and Uses Advised Against****Identified Uses:** Agricultural Insecticide**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

**Hazard Statement(s)**

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None

**Precautionary Statement:**

**Prevention**

- Avoid breathing dust /mistspray
- Wash thoroughly after handling
- Contaminated work clothing should not be allowed out of the workplace
- Wear protective clothing/eye protection/face protection
- Avoid release to the environment

**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
- In case of contact with skin or eyes, rinse immediately w/ plenty of water and seek medical advice.
- Wear suitable protective clothing and eye/face protection

**2.3 Other Hazards**

None identified.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

CAS #	Component Name	EC No.	(Classification)	Percent
68038-71-1	Btk Fermentation solids		Not classified	54.0
Trade Secret	Other ingredients		Not classified	46.0

**4. FIRST AID MEASURES**

**4.1 Description of First Aid Measures**

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

**EYES:** Remove from source of exposure. Flush with copious amounts of water. Remove contact

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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. Cover irritated skin with an emollient. If irritation persists 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. Give large quantities of water. 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**

Eye irritation, 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**

None known

**Thermal decomposition products**

Carbon oxides, nitrogen oxides

**5.3 Advice to Firefighters****Fire Fighting Measures**

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Areas containing this material should have fire-safe practices and electrical equipment in accordance with applicable governmental regulations for products with the flashpoint as shown in Section 9 (Physical and Chemical Properties).

**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**

Use in a well-ventilated area. Respiratory protection is not needed during normal product use. Wear eye protection appropriate to handling activities. Wear impervious gloves. Wear appropriate body coverings if contact may occur. Where exposure level is not known, wear respirator protection suitable for expected level of exposure, in addition to the personal protection as recommended in Section 8.

**6.2 Environmental Precautions**

Keep out of drains, sewers, ditches and waterways. Avoid runoff to waterways and sewers.

**6.3 Methods and Materials for Containment and Cleaning Up**

Ventilate area. Wear appropriate personal protective equipment. Recover product with inert material (earth, sand, vermiculite), place into appropriate container for disposal. 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**

Ventilate. Avoid breathing dust or vapor 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. For filling operations respiratory

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protection may be recommended particularly in enclosed areas.

**7.2 Conditions for Safe Storage, Including Incompatibilities**

Protect against physical damage. Close containers of unused material. Store in a dry, cool, ventilated place, away from direct sunlight.

**Incompatibilities**

None Known

**7.3 Specific End Use(s)**

Agricultural insecticide.

**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. Where adequate general ventilation is unavailable use process enclosure, local exhaust ventilation, or other engineering controls

**SKIN PROTECTION:**

Wear protective clothing, including boots and gloves. Wear gloves made of Latex or other 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:**

For filling operations if dust/mist is produced respiratory protection is recommended or where respiratory protection is warranted, 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). Wash thoroughly with soap and water after handling.

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**9. PHYSICAL AND CHEMICAL PROPERTIES**

**9.1 Information on Basic Physical and Chemical Properties**

Appearance:	Granule, yellow to brown	Odor:	Organic/Malt
pH:	≈4.1 (10% dilution)	Odor Threshold:	Not determined
Melting Point:	Not Applicable	Boiling Point:	Not Determined
Specific Gravity:	Not Determined	Solubility (H <sub>2</sub> O):	Not Determined
Octanol/H <sub>2</sub> O Coeff:	Not Determined	Bulk Density:	0.473 ± 0.1 g/ml
Molecular Weight:	Not Applicable	Evaporation Rate:	Not Applicable
Auto Ignition:	Not Determined	Decomposition Temp.:	Not Determined
Flash Point:	Not Determined	LFL:	Not Determined
Vapor Density:	Not Determined	UFL:	Not Determined
VOC:	Solid	Vapor Pressure:	Not Determined
Kinematic Viscosity:	Not Determined	Flammability Class:	Not flammable

**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

Inhalation: Yes

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Eye Contact: Yes  
Skin Contact: Yes  
Ingestion: Not likely

**Product (or TGA) where noted) Toxicology****Acute Effects**

Oral Toxicity: LD<sub>50</sub> > 5,050 mg/kg (rat) [EPA Toxicity Category IV]  
Dermal Toxicity: LD<sub>50</sub> > 2,020 mg/kg (rabbit)  
Inhalation Toxicity: Not able to generate sufficient product into the air  
Corrosiveness: Not corrosive.  
Dermal Irritation: Mild to slightly-irritating, [EPA Toxicity Category IV]  
Ocular Irritation: mildly-irritating, (MMTS 14.5, cleared by day-7)  
Dermal Sensitization: not a sensitizer (guinea pig)

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 teratogenic

Special Target Organ: Eye and mucus membrane Irritation.

Aspiration Hazard: Not Applicable

Repeat Dose Studies: Not Applicable, Acute Toxicity testing was all negative

**12. ECOLOGICAL INFORMATION****12.1 Ecotoxicity (Data for a Concentrated Technical Powder)**

Do not allow into waterways or lakes.

Fish: LC<sub>50</sub> >2.87 x 10<sup>7</sup> cfu/L (96-H, Rainbow Trout)

Bird: LC<sub>50</sub> > \_\_\_ mg /kg (6.2 x 10<sup>11</sup> cfu/kg) (Acute Oral - Bobwhite Quail)

LC<sub>50</sub> >2857 mg/kg (5.7 x 10<sup>10</sup> cfu/kg) each day for 5 days (Sub-Acute Oral (dietary) - Bobwhite Quail)

Invertebrates: EC<sub>50</sub> >50 mg/L (48-Hr) (Daphnia)  
21-day NOEC >5.0 mg/L (Daphnia)

Honeybee: Essentially Nontoxic to honeybee

**12.2 Persistence and Degradability**

No data available

**12.3 Bioaccumulation potential**

No data available

**12.4 Mobility in Soil**

No data available

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**12.5 Results of PBT and vPvB assessment**

Assessments not performed

**12.6 Other adverse effects**

None known

**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:



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**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

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: 73049-12

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.

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

Harmful if inhaled or absorbed through the skin. Causes moderate eye irritation. Avoid breathing dust or spray mist. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove contaminated clothing and wash before reuse.

**STORAGE AND DISPOSAL**

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

**Pesticide Storage:** Reclose containers of unused DiPel® DF. Store in a dry place inaccessible to children and out of sunlight.

**Pesticide Disposal:** Do not contaminate food or feed by disposal. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

**Container Disposal:** Nonrefillable container. Do not reuse or refill this container. Completely empty bag into application equipment by shaking and tapping sides and bottom to loosen clinging particles. 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.

**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: New GHS rules  
APPROVAL DATE: 04/23/15  
SUPERSEDES DATE: -

LEGEND: N/A = Not Applicable  
N/L = Not Listed  
C = Ceiling

N/D = Not Determined  
L = Listed  
S = Short-term

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