

DiTera® DF

**MSDS# BIO-0036 Rev. 1**

ISSUED 03/25/03

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1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION  
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MATERIAL NAME: DiTera DF  
Myrothecium verrucaria  
ABG-9022  
EPA Reg. No.: 73049-67  
Drug Code: 84980

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  
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INGREDIENT NAME: Fermentation solids and solubles of Myriotheicum  
verrucaria, strain AARC-0255

CONCENTRATION : 90.00%

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

DiTera® DF

ISSUED 03/25/03

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2. COMPOSITION/INFORMATION ON INGREDIENTS, continued  
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INGREDIENT NAME: Inert Ingredients - identity withheld as a Trade  
Secret

CONCENTRATION : 10.00%

CAS/RTECS NUMBERS: N/D / N/D

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

3. HAZARDS INFORMATION  
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EMERGENCY OVERVIEW: This material may cause eye or skin irritation.

ROUTE(S) OF ENTRY: Skin: Yes  
Inhalation: Yes  
Ingestion: No

INGESTION RATING: None

SKIN ABSORPTION RATING: None

INHALATION RATING: N/D

CORROSIVENESS RATING: None

SKIN CONTACT RATING: None

SKIN SENSITIZATION RATING: N/D

EYE CONTACT RATING: None

TARGET ORGANS: Possibly eyes, skin

CARCINOGENICITY RATING: NTP: N/L IARC: N/L OSHA: N/L  
ACGIH: N/L

3. HAZARDS INFORMATION, continued

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None

SIGNS AND SYMPTOMS: N/D. Contact may cause skin or eye irritation.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Pre-existing skin or eye lesions may be aggravated by contact.

4. FIRST AID MEASURES

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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

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FLASH POINT: N/D

FLASH POINT METHOD: N/D

LOWER EXPLOSIVE LIMIT(%): N/D

UPPER EXPLOSIVE LIMIT(%): N/D

AUTOIGNITION TEMPERATURE: N/D

FIRE & EXPLOSION HAZARDS: N/D.

EXTINGUISHING MEDIA: Use appropriate medium for the underlying cause of the fire.

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5. FIRE FIGHTING PROCEDURES, continued  
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FIRE FIGHTING INSTRUCTIONS: Wear protective clothing and self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES  
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SPILL OR RELEASE PROCEDURES: Recover product and place in an appropriate container for disposal. Ventilate and wash the spill area.

7. HANDLING AND STORAGE  
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HANDLING: N/D.

STORAGE: Keep containers tightly closed when not in use. Store in a cool, dry place. Avoid extreme temperatures.

SPECIAL PRECAUTIONS: Wash hands and face after handling this compound.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION  
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ENGINEERING CONTROLS: Use local exhaust

RESPIRATORY PROTECTION: Air purifying respirator with dust/mist filter, if needed.

SKIN PROTECTION: Impervious.

EYE PROTECTION: Safety glasses or goggles.

OTHER PROTECTION: Wear Tyvek, or similar material, coveralls during dusty operations.

9. PHYSICAL AND CHEMICAL PROPERTIES  
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APPEARANCE/PHYSICAL STATE: Solid  
ODOR: N/D

## 9. PHYSICAL AND CHEMICAL PROPERTIES, continued

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BOILING POINT: N/D  
MELTING/FREEZING POINT: N/D  
VAPOR PRESSURE (mm Hg): N/D  
VAPOR DENSITY (Air=1): N/D  
EVAPORATION RATE: N/D  
BULK DENSITY: N/D  
SPECIFIC GRAVITY: N/D  
SOLUBILITY: N/D  
pH: N/D  
VISCOSITY: N/D

## 10. STABILITY AND REACTIVITY

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CHEMICAL STABILITY: N/D

INCOMPATIBILITIES: N/D.

HAZARDOUS DECOMPOSITION PRODUCTS: N/D.

HAZARDOUS POLYMERIZATION: N/D.

## 11. TOXICOLOGICAL INFORMATION

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ORAL TOXICITY: N/D. LD50 > 5000 mg/kg in rats for DiTera Technical powder.

DERMAL TOXICITY: N/D. LD50 > 2000 mg/kg in rabbits for DiTera Technical powder.

INHALATION TOXICITY: N/D. In an inhalation toxicity study with rats DiTera Technical powder was not lethal at a concentration of 5.99 mg/L/4 hours as an aerosol.

CORROSIVENESS: N/D

DERMAL IRRITATION: N/D. DiTera Technical powder was shown to be slightly irritating to the skin of rabbits.

OCULAR IRRITATION: N/D. DiTera Technical powder produced minimal eye irritation (conjunctival redness and discharge) in rabbits which was resolved by 72 hours.

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ISSUED 03/25/03

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11. TOXICOLOGICAL INFORMATION, continued  
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DERMAL SENSITIZATION: N/D

SPECIAL TARGET ORGAN EFFECTS: N/D. No organ toxicity or changes in blood parameters were observed in repeat-dose studies in rats fed a diet containing 5,000 ppm DiTera Technical powder.

CARCINOGENICITY INFORMATION: N/D

12. ECOLOGICAL INFORMATION  
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ECOLOGICAL INFORMATION: N/D

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

14. TRANSPORTATION INFORMATION  
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DOT STATUS: Not Regulated

PROPER SHIPPING NAME: N/D

HAZARD CLASS: N/D

UN NUMBER: N/D

PACKING GROUP: N/D

REPORTABLE QUANTITY: N/D

IATA/ICAO STATUS: Not Regulated

PROPER SHIPPING NAME: N/D

HAZARD CLASS: N/D

UN NUMBER: N/D

PACKING GROUP: N/D

REPORTABLE QUANTITY: N/D

DiTera® DF

ISSUED 03/25/03

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14. TRANSPORTATION INFORMATION, continued  
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IMO STATUS: Not Regulated  
PROPER SHIPPING NAME: N/D  
HAZARD CLASS: N/D  
UN NUMBER: N/D  
PACKING GROUP: N/D  
REPORTABLE QUANTITY: N/D  
FLASH POINT: N/D

15. REGULATORY INFORMATION  
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TSCA STATUS: Exempt

CERCLA STATUS: N/D

SARA STATUS: N/D

RCRA STATUS: N/D

PROP 65 (CA): N/D

16. OTHER INFORMATION  
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REASON FOR ISSUE	Added EPA Registration number
APPROVAL DATE	3/25/03
SUPERSEDES DATE	7/23/01
MSDS NUMBER	BIO-0036

LEGEND: N/A = Not Applicable

N/D = Not Determined

N/L = Not Listed

L = Listed

C = Ceiling

S = Short-term

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16. OTHER INFORMATION, continued  
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