

Foray 48F

ISSUED 06/11/01

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MATERIAL NAME: Foray 48F
EPA Registration No. 73049-35
Drug Code: 31049
List Number: 60177

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
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

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2. COMPOSITION/INFORMATION ON INGREDIENTS, continued

INGREDIENT NAME: Inert Ingredients - identity withheld as a Trade
 Secret

CAS/RTECS NUMBERS: N/A / N/A

OSHA-PEL 8HR TWA: N/L
 STEL: N/L
 CEILING: N/L

ACGIH-TLV 8HR TWA: 10 ppm for a minor ingredient
 STEL: N/L
 CEILING: N/L

OTHER 8HR TWA: N/A
LIMITS STEL: N/A
 CEILING: N/A

3. HAZARDS INFORMATION

EMERGENCY OVERVIEW: This material is an eye irritant, a skin sensitizer
and may irritate the lungs if inhaled by analogy to a similar
formulation.

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

INGESTION RATING: None

SKIN ABSORPTION RATING: None

INHALATION RATING: None

CORROSIVENESS RATING: None

SKIN CONTACT RATING: None

SKIN SENSITIZATION RATING: Sensitizer

EYE CONTACT RATING: Irritant

TARGET ORGANS: Eyes, skin; possibly lungs

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3. HAZARDS INFORMATION, continued

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

ACGIH: N/L

None

SIGNS AND SYMPTOMS: N/D. Analogy suggests skin or eye irritation and allergic skin reactions are possible. Inhalation may result in respiratory tract irritation.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: N/D. Hypersensitivity to DiPel 6AF or similar formulations. Data suggest pre-existing skin or eye lesions or lung ailments.

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/D

FLASH POINT METHOD: N/D

LOWER EXPLOSIVE LIMIT(%): N/D

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5. FIRE FIGHTING PROCEDURES, continued

UPPER EXPLOSIVE LIMIT(%): N/D

AUTOIGNITION TEMPERATURE: N/D

FIRE & EXPLOSION HAZARDS: N/D.

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. Ventilate and wash spill area.

7. HANDLING AND STORAGE

HANDLING: N/D.

STORAGE: Keep containers tightly closed when not in use. Do not store at temperatures below 0 degree F or above 90 degree F. Roll or shake drum before dispensing.

SPECIAL PRECAUTIONS: Wash hands and face after handling this compound. Keep latex gloves on until all potentially contaminated personal protective equipment is removed.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Use local exhaust.

RESPIRATORY PROTECTION: Air purifying respirator with high efficiency particulate filter (P100).

SKIN PROTECTION: Wear 2 pairs; latex inner, thicker glove outside.

EYE PROTECTION: Goggles or full-face respirator.

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8. EXPOSURE CONTROLS/PERSONAL PROTECTION, continued

OTHER PROTECTION: Wear saranex tyvek coverings if contact may occur.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE/PHYSICAL STATE: Tan to brown suspension

ODOR: N/D

BOILING POINT: N/D

MELTING/FREEZING POINT: N/A

VAPOR PRESSURE (mm Hg): N/A

VAPOR DENSITY (Air=1): N/A

EVAPORATION RATE: N/D

BULK DENSITY: 9.27-9.59 lb/gal

SPECIFIC GRAVITY: N/D

SOLUBILITY: Dispersible in water

pH: 4.6-5.2

VISCOSITY: N/D

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY: N/D

INCOMPATIBILITIES: Alkalinity inactivates product.

HAZARDOUS DECOMPOSITION PRODUCTS: N/D.

HAZARDOUS POLYMERIZATION: N/D.

11. TOXICOLOGICAL INFORMATION

ORAL TOXICITY: N/D. LD50 > 5,000 mg/kg in rats for a similar formulation. No signs of toxicity were observed.

DERMAL TOXICITY: N/D. LD50 > 2,000 mg/kg in rabbits for a similar formulation. No signs of toxicity were observed.

INHALATION TOXICITY: Not lethal in a rat inhalation study at the maximum achievable concentration of 5.47 mg/L/4 hours as an aerosol.

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11. TOXICOLOGICAL INFORMATION, continued

CORROSIVENESS: N/D

DERMAL IRRITATION: N/D. A similar formulation was slightly irritating in a skin irritation test in rabbits; reversible within 9 days.

OCULAR IRRITATION: N/D. A similar formulation was slightly to moderately irritating in an eye irritation test in rabbits; reversible within 7 days.

DERMAL SENSITIZATION: N/D. A similar formulation was considered to be a sensitizer in the modified Buehler skin sensitization study in guinea pigs.

SPECIAL TARGET ORGAN EFFECTS: N/D. In subchronic oral toxicity studies in rats and sheep and a 2-year chronic oral toxicity study in rats with the active ingredient, no significant treatment-related effects were observed at dosages of 500 mg/kg/day or more. In a 4-week inhalation study in guinea pigs, animals receiving 10.35 mg/l nominal (0.23 mg/l gravimetric) exhibited some evidence of inflammation in the lungs.

CARCINOGENICITY INFORMATION: N/D

12. ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: N/D

13. DISPOSAL CONSIDERATIONS

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

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14. TRANSPORTATION INFORMATION

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

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

TSCA STATUS: Exempt

CERCLA STATUS: N/D

SARA STATUS: N/D

RCRA STATUS: N/D

PROP 65 (CA): N/D

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16. OTHER INFORMATION

LEGEND: N/A = Not Applicable
N/D = Not Determined
N/L = Not Listed
L = Listed
C = Ceiling
S = Short-term
(R) = Registered Trademark of Valent BioSciences
(TM) = Registered Trademark of Valent BioSciences

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