

Product Name: Bioallethrin® Technical
Product Code: B162047
MSDS Number : ENV-0002
Version Date: March 10, 2004

Material Safety Data Sheet

----- 1. CHEMICAL PRODUCT and COMPANY IDENTIFICATION -----

Product Name: Bioallethrin® Technical
Product Code: 15831
MSDS Number : ENV-0002
Chemical Name: d-trans-Allethrin
CAS Number: 28057-48-9
Chemical Family: Pyrethroid
Chemical Formula: C₁₉H₂₆O₃
EPA Registry Number: 73049-359

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

Bioallethrin is a registered trademark of VBC.

PRODUCT USE:

PRODUCT DESCRIPTION: Bioallethrin Technical is for the formulation of insecticides only.

----- 2. COMPOSITION / INFORMATION on INGREDIENTS -----

Component	Cas number	%
Bioallethrin	28057-48-9	93%
Inert ingredients		7%

----- 3. HAZARDS IDENTIFICATION -----

EMERGENCY OVERVIEW:

- A yellow to brown viscous liquid.
- Harmful if swallowed.
- This pesticide is highly toxic to fish.

POTENTIAL HEALTH EFFECTS

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----- **3. HAZARDS IDENTIFICATION (Continued)** -----

ROUTES OF EXPOSURE:

Ingestion, skin and eye contact.

IMMEDIATE EFFECTS

SKIN:

May cause skin irritation.

INGESTION:

Harmful if swallowed.

DELAYED/LONG TERM EFFECTS

CARCINOGENIC:

No known chronic effects.

----- **4. FIRST AID MEASURES** -----

After contact with skin:

Wash contaminated skin promptly with soap and warm water.
Consult a physician if skin rash develops or persists.

After contact with eyes:

Flush eyes for 15 minutes. Consult a physician.

After ingestion:

Call a physician or Poison Control Center immediately. If victim is alert and respiration is not depressed, give syrup of Ipecac, followed by two glasses of water to induce vomiting. Never give anything by mouth to an unconscious person. Do not administer milk, cream or other substances containing vegetable or animal fats which enhance absorption of lipophilic substances.

----- **5. FIRE FIGHTING MEASURES** -----

FLAMMABLE PROPERTIES

Flash point: 201°F 94°C TCC

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----- **5. FIRE FIGHTING MEASURES (Continued)** -----

Advice on protection against fire and explosion:

FIRE AND EXPLOSION HAZARDS: Do not store near heat or open flame.

Suitable extinguishing media:

Foam, dry chemical and carbon dioxide.

Extinguishing media that must not be used for safety reasons:

FIRE FIGHTING INSTRUCTIONS: Smoke from fire may contain irritating vapors of product. Wear self-contained respirator with full face protection and protective clothing.

----- **6. ACCIDENTAL RELEASE MEASURES** -----

Soak up with an absorbent material such as sand, sawdust, earth, fuller's earth, etc. Dispose of with chemical waste.

----- **7. HANDLING and STORAGE** -----

Handling:

- Avoid contact with skin and eyes.
- Avoid contamination of feed and foodstuffs.

Storage:

- Do not contaminate water, food or feed by storage.
- Store in a cool, dry place.

----- **8. EXPOSURE CONTROLS / PERSONAL PROTECTION** -----

Hygiene measures:

- Wash contaminated skin promptly with soap and warm water.

Personal protective equipment

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----- **8. EXPOSURE CONTROLS / PERSONAL PROTECTION (Continued)** -----

Body protection:

Rubber gloves.

Eye protection:

Faceshield or goggles.

----- **9. PHYSICAL and CHEMICAL PROPERTIES** -----

APPEARANCE: A yellow to brown viscous liquid.

BASIC PHYSICAL PROPERTIES

PHYSICAL STATE: Liquid

PH: Not available

VAPOR PRESSURE (mm Hg, Torr, Pa or mbar): 3.3 at 10(-4) mm Hg (25°C)

VAPOR/AIR DENSITY: 10.43

EVAPORATION RATE (BUTYL ACETATE = 1): Not available

SPECIFIC GRAVITY OR DENSITY (G/ML): Not available

PACKING (BULK) DENSITY (LB/GAL): 1.0 to 1.02 g/cm³ at 20°C

BOILING POINT/RANGE: 160°C

MELTING/FREEZING POINT RANGE: Not available

SOLUBILITY (IN WATER): Insoluble in water

SOLUBILITY IN SOLVENTS/OIL (SPECIFIED): Soluble with most organic solvents

DUST EXPLOSION SEVERITY DATA: Not available

MINIMUM IGNITION ENERGY (MJ): Not available

MINIMUM EXPLOSION CONCENTRATION (MEC): Not available

LIMITED OXYGEN CONCENTRATION (LOC): Not available

----- **10. STABILITY and REACTIVITY** -----

CHEMICAL STABILITY:

Stable

CONDITIONS TO AVOID:

Heat or open flame.

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----- **10. STABILITY and REACTIVITY (Continued)** -----

HAZARDOUS POLYMERIZATION:

Will not occur.

----- **11. TOXICOLOGICAL INFORMATION** -----

EYE EFFECTS

Mildly irritating.

SKIN EFFECTS

Irritation: Mildly irritating.

Absorption: LD50 > 3,000 mg/kg

Sensitization: Not a sensitizer.

ACUTE ORAL EFFECTS

Mice: LD50 (males) = 425.5 mg/kg

LD50 (females) = 401.4 mg/kg

Rats: LD50 (males) = 709.0 mg/kg

LD50 (females) = 1,041.9 mg/kg

ACUTE INHALATION EFFECTS

4-hour LC50 = 2.51mg/l

CHRONIC (CANCER INFORMATION)

CARCINOGENICITY: NTP: No IARC: No OSHA: No

----- **12. ECOLOGICAL INFORMATION** -----

ENVIRONMENTAL HAZARDS: This pesticide is highly toxic to fish. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

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----- **13. DISPOSAL CONSIDERATIONS** -----

Do not contaminate water, food or feed by disposal.

Pesticide: Waste resulting from use of this product may be disposed of on site or at an approved waste disposal facility.

Container: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

----- **14. TRANSPORT INFORMATION** -----

D.O.T. PROPER SHIPPING NAME: Environmentally Hazardous Substance, Liquid,
n.o.s. (Bioallethrin), Class 9, UN 3082, PG III,
RQ: NA
D.O.T. HAZARD CLASS: 9, PG III
U.N./N.A. NUMBER: 3082
REMARKS: NA
EXEMPTION REQUIREMENT: NA
NOTE: NA

----- **15. REGULATORY INFORMATION** -----

STATE REGULATIONS

The following chemicals associated with the product are subject to the right-to-know regulations in these states:
Bioallethrin (28057-48-9): NJ

U.S. FEDERAL REGULATIONS

EPA Registration Number: 432-541

SARA TITLE III - NOTIFICATION AND INFORMATION:

Section 302 (EHS) ingredients: None

Section 304 (CERCLA & EHS) ingredients (RQ): None

SARA TITLE III SECTION 311/312 - HAZARD CLASSES:

Acute Health Hazard - Yes

Chronic Health Hazard - No

Fire Hazard - No

Sudden Release of Pressure Hazard - No

Reactivity Hazard - No

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U.S. FEDERAL REGULATIONS (Continued)

TSCA inventory status

These components are not listed:

Inert ingredients 7%
Bioallethrin 93% (28057-48-9)

SARA 313: Bioallethrin 93% (28057-48-9)

16. OTHER INFORMATION

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

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Reason for Issue: Revised D.O.T. information
Approval Date: March 10, 2004
Supersedes Date: February 18, 2004
MSDS Number: ENV-0002



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