

MATERIAL SAFETY DATA SHEET

Certis USA
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1. CHEMICAL PRODUCT AND COMPANY INFORMATION

PRODUCT NAME : BioVector 355 Liquid Formulation
PRODUCT CODE : NEMAT3
PRODUCT FAMILY : Entomogenous Nematodes (*Steinernema riobrave*)
CHEMICAL NAME : N/A
FORMULA : N/A

EMERGENCY TELEPHONE NUMBERS:

Emergency Information Chem Tel (800) 255-3924
Outside North America Call Collect (813) 248-0585

2. COMPOSITION / INFORMATION ON INGREDIENTS

<u>COMPONENT</u>	<u>CAS #</u>	<u>WT.%</u>	<u>OSHA PEL</u>	<u>TLV's TWA</u>	<u>STEL</u>
N/A	N/A	2 billion infective juveniles per 2.5 gallons		N/A	N/A

3. HAZARDOUS IDENTIFICATION

EMERGENCY OVERVIEW

This product is a naturally occurring living organism (nematode) suspended in a liquid which is intended for use as a pesticide to control insects. This nematode has not been genetically modified in any way. This product is exempt from EPA requirements of registration (FIFRA Section 25(b)(1)).

SIGNAL WORD: CAUTION

Potential Health Effects

ROUTE(S) OF ENTRY : oral

HUMAN EFFECTS AND
SYMPTOMS OF OVEREXPOSURE : None Known

ACUTE EYE CONTACT : Non Irritating (EPA Toxicity Category IV)

CHRONIC EYE CONTACT : Chronic exposure not likely from normal use

ACUTE SKIN CONTACT : Non Irritating (EPA Toxicity Category IV)

CHRONIC SKIN CONTACT : Chronic exposure not likely from normal use

ACUTE ORAL : LD₅₀ > 5.0 mg/kg body weight (EPA Toxicity Category IV)

CHRONIC INGESTION : Chronic exposure not likely from normal use

ACUTE INHALATION : Not Available. Avoid breathing spray mist. Dust may be harmful if inhaled.

CHRONIC INHALATION : Chronic exposure not likely from normal use



CARCINOGENICITY

NTP : N/A
IARC : N/A
OSHA : N/A

MEDICAL CONDITIONS

AGGRAVATED BY EXPOSURE : None noted

4. FIRST AID MEASURES:

FIRST AID FOR EYES : Flush eyes with plenty of running water. Get medical attention if irritation persists.

FIRST AID FOR SKIN : Wash with soap and water, including hair and under fingernails. Get medical attention if irritation persists.

FIRST AID FOR INHALATION : Dust may be harmful if inhaled. Move victim to fresh air. Seek medical attention if irritation persists.

FIRST AID FOR INGESTION : If victim is fully conscious, drink 2-3 glasses of water. Seek medical attention for further treatment.

5. FIRE FIGHTING MEASURES:

NFPA HAZARD CLASSIFICATION : HEALTH HAZARD 1 FIRE HAZARD 0
..... REACTIVITY 0

EXTINGUISHING MEDIA : N/A

UNUSUAL FIRE AND EXPLOSION HAZARDS : None known

SPECIAL FIRE FIGHTING PROCEDURES : N/A

6. ACCIDENTAL RELEASE MEASURES:

SPILL OR LEAK PROCEDURES : Spillage is not hazardous and may be cleaned with standard janitorial equipment and supplies. A 0.5% solution of household bleach will kill the nematodes from a spill and disinfect the surface.

7. HANDLING AND STORAGE:

STORAGE TEMPERATURE (MIN. / MAX.) : 45/60 °F 7/16 °C

SHELF LIFE : Stable

SPECIAL SENSITIVITY : Do not freeze. Do not store at temperatures above 85°F. These conditions will destroy the product. Store material in a clean manner to prevent contamination by mold, fungus, or other pathogens.

HANDLING AND STORAGE PRECAUTIONS : Store in a cool, dry location out of direct sunlight. This product should be stored at refrigerated temperatures (40-45°F). Do not expose to extreme temperatures. Freezing temperatures or temperatures exceeding 85°F (29°C) will destroy the product.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION:

EYE PROTECTION REQUIREMENTS : The use of safety goggles and/or splash shield is recommended.

SKIN PROTECTION REQUIREMENTS : The use of chemical-resistant gloves is recommended.



RESPIRATORY / VENTILATION REQUIREMENTS : N/A

EXPOSURE LIMITS : N/A

9. PHYSICAL AND CHEMICAL PROPERTIES:

PHYSICAL FORM : Liquid
COLOR : Cream
ODOR : N/A
BOILING POINT RANGE..... : Not Determined
MELT POINT / FREEZE POINT : Not Determined
FLASH POINT : N/A
AUTO IGNITION : N/A
UPPER EXPLOSIVE LIMITS (UEL)..... : NA
LOWER EXPLOSIVE LIMITS (LEL)..... : NA
pH..... : 7.00
SOLUBILITY IN WATER..... : 100% dispersible
SPECIFIC GRAVITY : 1.037 g/mL
BULK DENSITY : 8.65 Lb./Gal.
% VOLATILE BY WEIGHT..... : 64%
VAPOR PRESSURE at 20 °C : N/A
VAPOR DENSITY : N/A

10. STABILITY AND REACTIVITY:

STABILITY : Stable
HAZARDOUS POLYMERIZATION : Will not occur
INCOMPATIBILITIES : Active ingredient is a living organism. Do not expose to heat or excessive cold or sunlight for an extended period of time.
DECOMPOSITION PRODUCTS..... : None noted.
CONDITIONS TO AVOID : Active ingredient is a living organism. Do not expose to heat or excessive cold or sunlight for an extended period of time.

11. TOXICOLOGICAL INFORMATION:

Acute Oral LD₅₀ (rat) > 5000 mg/kg body weight
Acute Dermal LD₅₀ (rabbit) > 2000 mg/kg body weight
Acute Dermal Irritation (rabbit) = Non Irritating
Acute Eye Irritation (rabbit) = Non Irritating
Dermal Sensitization = Not a Sensitizer
Acute Inhalation = Not Available



12. ECOLOGICAL INFORMATION:

No information available.

13. DISPOSAL CONSIDERATIONS:

WASTE DISPOSAL METHOD..... : No special methods are required. Product and container waste resulting from the use of this product, or unused, outdated product, may be disposed of on site or at any approved waste disposal facility in accordance with federal and local regulations.

14. TRANSPORTATION INFORMATION:

D.O.T. PROPER SHIPPING NAME..... : Not regulated
TECHNICAL SHIPPING NAME..... : BioVector 355
D.O.T. HAZARD CLASS : Not regulated
U.N. /N.A. NUMBER..... : Not regulated
PRODUCT RQ (lbs.)..... : Not regulated
D.O.T. LABEL..... : Not regulated
D.O.T. PLACARD..... : Not regulated

15. REGULATORY INFORMATION:

OSHA STATUS : N/A
TSCA STATUS : N/A
CERCLA REPORTABLE QUANTITY..... : N/A
SARA TITLE III:
SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES..... : N/A
SECTION 311/312 HAZARD CATEGORIES : N/A
SECTION 313 TOXIC CHEMICALS..... : N/A
RCRA STATUS..... : N/A

16. OTHER INFORMATION:

REASON FOR ISSUE..... : Company Change
APPROVAL DATE..... : 6/15/01
SUPERSEDES DATE : 4/1/01
MSDS NUMBER..... : 70051-BioVector355LF

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