



MATERIAL SAFETY DATA SHEET

Section I – PRODUCT AND COMPANY IDENTIFICATION

Product Name: **BotaniGard[®] ES** Issue Date: 11/2012
US EPA Registration No.: 82074-1
Canada Registration No.: 29320
Recommended Use: Biological insecticide

Manufacturer: **Laverlam International Corporation**
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Emergency Phone Number Chemtrec: 800-424-9300
EPA National Response Center: 800- 424-8802

Section II – HAZARDS IDENTIFICATION

Hazard Statement: Causes moderate eye irritation. Harmful if absorbed through the skin, inhaled or swallowed.
Eyes: Causes substantial, but temporary eye damage; eye irritant.
Inhalation: Potential allergen.
Ingestion: Do not ingest. Harmful if swallowed.
Skin Contact: Excessive skin contact may cause itching.

Precautionary Statement: Avoid contact with eyes, skin, or clothing. Avoid breathing spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, and chewing gum using tobacco or using the toilet. Remove contaminated clothing and wash clothing before reuse.

Other Precautions: Potentially pathogenic to honey bees. This product may be toxic to fish.

Section III – COMPOSITION / INGREDIENT INFORMATION

Chemical & Synonyms Names: None

		CAS No.	
Biological Family:	<i>Beauveria bassiana</i> Conidia:	11.3%	Not Applicable
	Inerts (Proprietary):	88.7%	Not Applicable to Mixtures

Section IV – FIRST AID MEASURES

If in eyes	<ul style="list-style-type: none">• Hold eye open and rinse slowly and gently with water for 15 – 20 minutes.• Remove contact lenses, if present, after the first 5 minutes, and then continue rinsing.• Call poison control center or doctor for treatment advice.
If on skin or clothing	<ul style="list-style-type: none">• Take off contaminated clothing.• Rinse skin immediately with plenty of water for 15 – 20 minutes.• Call a poison control center or doctor for treatment advice.
If inhaled	<ul style="list-style-type: none">• Move person to fresh air.• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.• Call a poison control center or doctor for further treatment advice.
If swallowed	<ul style="list-style-type: none">• Immediately call a poison control center or doctor.• Do not induce vomiting unless told to do so by the poison control center or doctor.• Do not give any liquid to the person.• Do not give anything by mouth to an unconscious person.

Note to physician: No specific antidote. Treat symptomatically. Contains petroleum distillate. Vomiting may cause aspiration pneumonia.

Section V - FIRE AND EXPLOSIVE HAZARD DATA

Flash Point: 182°C (360°F)
Lol Flammable Limits: 0.9%
Uol Flammable Limits: 7%
Auto ignition Temperature: Not available
Flammability Classification: Not available
Known hazardous Products of Combustion: Not known

Properties that Initiate/Contribute to Intensity of Fire:	Not known
Potential for Dust Explosion:	None
Reactions that Release Flammable Gases or Vapors:	Not known
Potential for Release of Flammable Vapors:	Not known
Extinguishing Media:	Dry chemical, foam and/or water fog.
Unsuitable Extinguishing Media:	Water. Do not use water jet as an extinguisher, as this will spread the fire.
Specific Fire Fighting Procedures:	Use dry chemical, foam and/or water fog to extinguish the fire. Use water to keep fire-exposed containers cool. Water spray may be used to flush spills away from exposures. Full protective equipment and self-contained breathing apparatus are recommended.
Unusual Fire/Explosion Hazards:	None

Section VI – ACCIDENTAL RELEASE MEASURES

Containment:	Prevent product spillage from entering drinking water supplies or streams.
Clean up:	Wear protective equipment including chemical resistant gloves, chemical dust/splash goggles, and coveralls over long-sleeved shirt, long pants and a NIOSH/MSHA approved respirator for organic vapors. Absorb with inert material (sand, earth or other absorbent.) For small spills, sweep up and dispose of in a D.O.T. approved waste container. For large spills, place into D.O.T. approved waste container. Keep out of sewers, storm drains, surface waters and soil. Water wash with strong detergent or wetting agent; Non-Toxic. Minimize skin contact.
Waste Disposal:	Landfill approved. Dispose of contaminated product and materials used in cleaning up spills or leaks in a manner approved for this material. Comply with all applicable Federal, State and local requirements on spill reporting, handling and waste disposal.

Section VII – HANDLING AND STORAGE

Handling:	Use recommended protective clothing. Avoid breathing vapor and mist. Avoid prolonged contact with skin and eyes. Do not drink, eat, chew gum or use tobacco while handling this product. Wash hands thoroughly with soap and water after manipulation of this product.
Storage:	Store in tightly closed original labeled container at temperatures between 40° F and 85° F. Store in dry, well ventilated area away from heat and ignition sources.

Section VIII – PERSONAL PROTECTIVE EQUIPMENT

Eyes:	Chemical dust/splash goggles. Do not wear contact lenses when handling. Maintain an eye wash fountain and quick drench facilities in work area.
Respiratory:	Use with adequate ventilation. Use dust/mist filtering respirator meeting NIOSH standards of R-95 or P-95. If half-face mask is worn, chemical safety goggles should also be worn.
Ventilation:	A system of local and/or general exhaust is recommended to keep employee exposure to a minimum. No TLV established.
Skin:	Chemical-resistant gloves such as nitrile rubber or butyl rubber, coveralls over long-sleeved shirt and long pants, shoes plus socks.
Work Hygienic Practices:	Wash thoroughly after handling. Minimize rubbing of eyes. Remove contaminated clothing; launder.

Section IX - PHYSICAL DATA

Appearance and Odor:	Amber-colored oil; mild odor
pH:	6.5 – 6.8
Melting Point/Freezing Point:	Not available
Boiling Point:	260°C (500°F)
Flash Point:	182°C (360°F)
Evaporation Rate @ 1 ATM 25°C:	(77°F) < 0.01 (Ethyl Ether = 1)
Flammability:	Not available
Percent Volatile by Volume (%):	1.0 - 1.4
Lol Flammable Limits:	0.9%
Uol Flammable Limits:	7%
Vapor Pressure (mm Hg):	< 0.01 mm Hg @ 20°C
Vapor Density (Air = 1):	> 5
Relative Density:	(H ₂ O = 1) 0.93
Solubility in Water:	Emulsifiable in water
Partition coefficient (n-octanol/water):	Not available
Auto-ignition temperature:	Not available
Decomposition temperature:	Not available
Viscosity:	Not available

Section X – STABILITY AND REACTIVITY

Stability:	Stable Compound. This product is stable and will not react violently with water.
Incompatibility (Materials):	Avoid contact with strong oxidants such as liquid chlorine, concentrated oxygen, sodium hypochlorite, calcium hypochlorite, etc., as this may present an explosion hazard.
Hazardous Decomposition Products:	Carbon monoxide
Hazardous Polymerization:	Will not occur
Conditions to avoid:	Avoid temperatures exceeding the flash point of 182°C (360°F).

Section XI – POTENTIAL HEALTH EFFECTS

Wear proper personal protective equipment to avoid exposure. Use with adequate ventilation.

Routes of Entry:

Eye-Yes	Causes substantial, but temporary eye damage; eye irritant.
Inhalation-Yes	Potential allergen. LD ₅₀ (Rat): Active substance 1.0X10 ⁸ CFU/animal (rat)
Skin-Yes	Excessive skin contact may cause itching. LD ₅₀ (Rabbit): Active substance 1.0X10 ¹¹ CFU/animal (rabbit)
Ingestion-Yes	Harmful if swallowed. Aspiration hazard if swallowed and vomiting occurs. LD ₅₀ (Rat): >5000 mg/kg bw
Chronic Effects:	None known
Carcinogen Status:	No Listing

Section XII - ECOLOGICAL DATA

This product is not classified as dangerous for environment. Spills into or near waterways resulting in a sheen must be reported to the National Response Center (1-800-424-8802).

Ecotoxicity (Aquatic and Terrestrial):	Not available
Persistence and Degradability:	Not available
Bioaccumulative Potential:	None
Mobility in Soil:	Not available
Other Adverse Effects:	Not available

Section XIII – DISPOSAL

Pesticide Disposal:	Offer unused product to a waste disposal facility or pesticide disposal program.
Container Disposal:	Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration. Do not burn, unless allowed by state and local ordinances.

Section XIV - TRANSPORTATION

US D.O.T.:	Not Regulated
Canadian TDG:	Not Regulated
Freight Classification:	Insecticide, NMFC Item 155050, LTL Class 60

Land: ADR/RID Class:	Not controlled under ADR
Water: IMDG Class:	Not controlled under IMDG
Air: ICAO/IATA Class:	Not controlled under IATA

Section XV - REGULATORY

US FIFRA (Federal insecticide, Fungicide and Rodenticide Act):	Regulated
US EPA (Environmental Protection Agency):	Registration No. 82074-1
Canada (Pest Control Products Act):	Registration No. 29320

Section XVI - OTHER

Laverlam International Corporation believes the information and recommendations contained herein are accurate and reliable as of the date issued. Buyers and handlers of this product shall assume all risk and responsibility for potential loss or damage if this product is used, stored, handled or applied in a manner inconsistent with its registered labeling. This information is provided solely for your information and consideration and Laverlam assumes no legal responsibility for use or reliance thereon.
