

MATERIAL SAFETY DATA SHEET

ISOMATE® GRB

US EPA Registration No. 53575-41

PRODUCT AND COMPANY INFORMATION

Registrant: Pacific Biocontrol Corporation
14614 NE 13th Court, Suite A
Vancouver, WA 98685 USA

Emergency Telephone No.: 1-800-999-8805 or
1-360-571-2247

Manufacturer: Shin-Etsu Chemical Co., Ltd-Japan

Product Name and Use: Isomate GRB suppresses mating of grape root borer (*Vitacea polistiformis*) in grapes including raisins, table, juice and wine grapes, and currant borer (*Synanthedon tipuliformis*) in currants.

Chemical Name: Insect pheromone mixture of chemicals below:

COMPOSITION / INFORMATION ON INGREDIENTS

<u>Components:</u>	<u>Percent</u>	<u>CAS No.</u>	<u>OSHA PEL and AGIH TLV</u>
(E,Z)-2,13-Octadecadien-1-yl Acetate	78.69	86252-65-5	Not applicable
(E,Z)-3,13-Octadecadien-1-yl Acetate	3.92	53120-26-6	Not applicable
Other Ingredients	17.93		
Not applicable			

Pacific Biocontrol is unaware of any regulations, which define the ingredients as hazardous.

PHYSICAL AND CHEMICAL CHARACTERISTICS

Appearance and Odor: A long plastic, brown tube that can be separated for application. The pheromone formulation is within the dispenser and has an appearance of a light yellow transparent liquid with a mild waxy and sweet odor. The tube itself is odorless. Since the pheromone formulation is within the dispenser, the following characteristics are for the dispenser tube only:

Melting Point: 132°C

Specific Gravity (Water = 1): 0.92g/ml

Boiling Point: (solid)

Vapor Pressure: (solid)

Evaporation Rate: .035mg/dispenser/hr maximum

pH: 7 (the same as water)

Octanol/Water Partition Coefficient: Insoluble in water or octanol.

Solubility (Oil): Soluble in hydrocarbon and chlorohydrocarbon high temperatures.

Net Contents: Foil packets at 600 dispensers per packet. A packet is 12x8x1 inches. One dispenser contains 97.36 mg of pheromone. Total content of package: 58.42 g.

FIRE FIGHTING MEASURES

Flammability: Flammable

Explosibility Characteristics: None

Special Fire Fighting Procedures: If burned, stay out of smoke. Use standard fire fighting procedures.

Recommended Extinguishing Media: Foam, carbon dioxide, dry chemical, and water fog

STABILITY AND REACTIVITY DATA

Stability: Stable against sunlight and hydrolysis exposing to water.

Incompatibility (Materials to Avoid) or Hazardous Decomposition Products: None

Corrosion or Dielectric Breakdown Voltage Characteristics: None

Oxidizing/Reducing Reaction: Stable

Hazardous Polymerization: Will not occur

ENVIRONMENTAL HAZARD DATA

Precautions for terrestrial uses: Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of this product.

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HEALTH HAZARD DATA

Acute Toxicity Data is determined by the pheromone active ingredient within the dispenser tube. The toxicity of this pheromone will be similar to the toxicity of other Lepidopteran pheromones:

Acute Oral in Rats: LD₅₀>5000g/kg

Acute Dermal in Rats: Dermal LD₅₀>2000mg/kg

Primary Eyes Irritation in Rabbits: Slight to moderate eye irritation.

Acute Inhalation in Rats: Non toxic; LC₅₀>5mg/l

Health Hazard Categories: EPA Toxicity Category III - CAUTION

Chronic Toxicity Data: Not required. Adverse human effects are not expected.

Primary Dermal Irritation in Rabbits: Slight to moderate skin irritation

Dermal Maximization in Guinea Pigs: Not considered a skin sensitizer

Ames Test: No mutagenicity

OVER EXPOSURE CONTROLS

Human Health Effects or Risks from Over Exposure: Harmful if absorbed through skin. Causes moderate eye irritation.

Hazardous Effects from Over Exposure: No known hazardous side effects.

Listed as Carcinogen by NTP, I.A.R.C., or OSHA: No

FIRST AID MEASURES

If on Skin or Clothing: Remove contaminated clothing. Immediately rinse skin for 15-20 minutes using plenty of water. If irritation persists, contact a poison control center or a doctor for treatment advice.

If in Eyes: Immediately hold eyes open, slowly and gently rinse with water for 15-20 minutes. If wearing contact lenses, rinse eyes for 5 minutes, remove contact lenses, and continue rinsing. If irritation persists, contact a poison control center or a doctor for treatment advice.

If Calling or Going to Doctor or Poison Control Center for Treatment: Have the product container or label with you. For emergency information on this product, call the **National Pesticides Information Center** at 1-800-858-7878, 6:30AM to 4:30PM Pacific time (PT), seven days a week. During other times, call the poison control center at 1-800-222-1222. You may also contact Pacific Biocontrol at 1-800-999-8805 for additional information.

PERSONAL PROTECTION

Respiratory Protection/Ventilation/Local Exhaust/Mechanical: Not necessary with this product.

Protective Clothing or Equipment: Wear gloves and protective eyewear when applying product.

Work/Hygienic Practices: Avoid contact with skin, eyes, or clothing. Do not touch eyes while handling or attaching the dispensers. After handling, wash thoroughly with soap and water and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

HANDLING AND STORAGE PROCEDURES

Precautions to be Taken in Handling and Storage: Store original unopened package in a dry location at temperatures below 40°F. Do not store in cold facilities used for food.

ACCIDENTAL RELEASE MEASURES

Steps to be Taken in Case Material is Released or Spilled: Collect dispensers, reseal packet with tape and place in original carton.

Waste Disposal Methods (Consult Federal, State, or Local Regulations): Nonrefillable container. Do not reuse or refill this container. Waste resulting from this product may be disposed of on site or at an approved waste disposal facility. Dispose of empty foil packet in the trash.

Notice: While this information and recommendations set forth are believed to be accurate and must be followed carefully, Pacific Biocontrol Corporation makes no other warranties, and disclaims all other warranties, expressed or implied, including but not limited to warranties of merchantability and fitness for a particular purpose or otherwise, that extend beyond the statements made on this label. Read label directions carefully.

Prepared by: Kathy Bolan, Registration Agent, Pacific Biocontrol
