

# MATERIAL SAFETY DATA SHEET

## ISOMATE®-CM/LR TT

US EPA Registration No. 53575-31

### 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-CM/LR TT suppresses mating of codling moth (*Cydia pomonella*), obliquebanded leafroller (*Choristoneura rosaceana*), pandemis leafroller (*Pandemis pyrusana*), fruittree leafroller (*Archips argyrospilus*), threelined leafroller (*Pandemis limitata*), European leafroller (*Archips rosanus*) in apples, pears, quince, and other pome fruits; peaches, prunes, plums, nectarines, cherries, and other stone fruits; walnuts, pecans, and other tree nut crops.

**Chemical Name:** Insect pheromone mixture of chemicals below:

### COMPOSITION / INFORMATION ON INGREDIENTS

<b>Components:</b>	<b>Percent</b>	<b>CAS No.</b>	<b>OSHA PEL and AGIH TLV</b>
(E,E)-8,10-Dodecadien-1-ol	38.62	33956-49-9	Not applicable
1-Dodecanol	6.0	112-53-8	Not applicable
1-Tetradecanol	1.40	112-72-1	Not applicable
Z-11-Tetradecen-1-yl Acetate	38.04	20711-10-8	Not applicable
Z-9-Tetradecen-1-yl Acetate	4.34	16725-53-4	Not applicable
Z-11-Tetradecen-1-ol	1.05	34010-15-6	Not applicable
Z-11-Tetradecenal	1.00	35237-64-0	Not applicable
Other Ingredients	9.55		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 colorless or light yellow transparent liquid with an oily-fatty, slightly waxy 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):** 0.964g/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, chlorohydrocarbon, and carbon disulfide at high temperatures.

**Net Contents:** Foil packets at 300 dispensers per packet. A packet is 12x8x3/4 inches. One dispenser contains 362.77 mg of pheromone. Total content of package: 108.83 gm.

### 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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Revision Date: February 2008

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### HEALTH HAZARD DATA

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**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:** LD<sub>50</sub>>5000mg/kg

**Acute Dermal in Rats:** Dermal LD<sub>50</sub>>2000mg/kg

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

**Acute Inhalation in Rats:** Non toxic; LC<sub>50</sub>>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

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### OVER EXPOSURE CONTROLS

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**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

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### FIRST AID MEASURES

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**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. You may also contact Pacific Biocontrol at 1-800-999-8805 for additional information.

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### PERSONAL PROTECTION

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

**Protective Clothing or Equipment:** No special clothing required.

**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, or using tobacco.

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### HANDLING AND STORAGE PROCEDURES

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**Precautions to be Taken in Handling and Storage:** Store original unopened package in a dry location at temperatures below 40°F. Only unopened or unbroken dispenser packages may be stored in cold storage facilities used for food products. Care must be taken to avoid contamination of food or feed items.

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### ACCIDENTAL RELEASE MEASURES

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**Precautions 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):** 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, the Manufacturer makes no warranties, expressed, or implied concerning this product or its use, which extend beyond the description on the label. Read label directions carefully.

**Prepared by:** Kathy Bolan, Registration Agent, Pacific Biocontrol