

Schering-Plough Animal Health Corporation  
556 Morris Avenue  
Summit, NJ 07901

## MATERIAL SAFETY DATA SHEET

Schering-Plough urges each user or recipient of this MSDS to read the entire data sheet to become aware of the hazards associated with this material.

### SECTION 1. IDENTIFICATION OF SUBSTANCE AND CONTACT INFORMATION

**MSDS NAME:** **Saber Pour-On Insecticide**

**SYNONYM(S):** Ectiban L Pour On  
Saber Pour On  
Saber Pour-On Insecticide for Beef Cattle and Calves

**MSDS NUMBER:** SP000913

**EMERGENCY NUMBER(S):** Schering-Plough Security Control Center (908) 820-6921 (24 hours)

Transportation Emergencies - CHEMTREC:  
(800) 424-9300 (Inside Continental USA)  
(703) 527-3887 (Outside Continental USA)

Rocky Mountain Poison Center (For Human Exposure):  
(303) 595-4869

Animal Health Technical Services:  
For Animal Adverse Events: Small Animals and Horses: (800) 224-5318  
For Animal Adverse Events: Livestock: (800) 211-3573  
For Animal Adverse Events: Poultry: (800) 219-9286

**INFORMATION:** Animal Health Technical Services:  
For Small Animals and Horses: (800) 224-5318  
For Livestock: (800) 211-3573  
For Poultry: (800) 219-9286

**SCHERING-PLOUGH MSDS HELPLINE:** (800) 770-8878 (US and Canada)  
(908) 473-3371 (Worldwide)  
Monday to Friday, 9am to 5pm (US Eastern Time) .

### SECTION 2. HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

Solution  
Gold  
Oil odor

Irritating to eyes.  
Harmful by inhalation, skin absorption or if swallowed.

Extremely toxic to fish and aquatic organisms.  
May cause long-term adverse effects in the aquatic environment.

#### POTENTIAL HEALTH EFFECTS:

The toxicological properties of the mixture(s) have not been fully characterized in humans or animals. However, there are data to describe the toxicological properties of the individual ingredients. The following summary is based upon available information about the individual ingredients of the mixture(s), or of the expected properties of the mixture(s).

The U.S. Environmental Protection Agency's (EPA) labeling criteria indicate that this product causes moderate eye irritation and is harmful if swallowed, absorbed through the skin, or inhaled.

Lambda cyhalothrin is a pyrethroid insecticide. Cases of severe pyrethroid poisoning in humans are rare. However, workers who handle or apply large quantities of pyrethroids report the following effects: burning, pricking, tickling, or tingling of the skin, skin irritation, numbness, feeling hot or cold, red eyes, coughing and sneezing.

Corn oil is not expected to produce significant toxicity with workplace practices. Corn oil may cause mild skin irritation upon acute exposures. The inhalation of warm corn oil for prolonged periods may reduce the sensitivity of the nose; however, the effect soon passes upon breathing fresh air.

#### LISTED CARCINOGENS

Not listed as a carcinogen by OSHA, IARC, NTP or ACGIH.

### SECTION 3. COMPOSITION AND INFORMATION ON INGREDIENTS

**PRODUCT USE:** Veterinary product

**CHEMICAL FORMULA:** Mixture.

The formulation for this product is proprietary information. Only hazardous ingredients in concentrations of 1% or greater and/or carcinogenic ingredients in concentrations of 0.1% or greater are listed in the Chemical Composition table. Active ingredients in any concentration are listed. For additional information about carcinogenic ingredients see Section 2.

#### CHEMICAL COMPOSITION

CHEMICAL NAME	CAS NUMBER	PERCENT
Lambda Cyhalothrin.	91465-08-6	1
Corn Oil.	8001-30-7	> 90
Decamethylcyclopentasiloxane.	541-02-6	< 10

**ADDITIONAL INFORMATION:** This MSDS is written to provide health and safety information for individuals who will be handling the final product formulation during research, manufacturing, and distribution. For health and safety information for individual ingredients used during manufacturing, refer to the appropriate MSDS for each ingredient. Refer to the package insert or product label for handling guidance for the consumer.

### SECTION 4. FIRST AID MEASURES

**INHALATION:** Remove to fresh air. If any trouble breathing, get immediate medical attention. Administer artificial respiration if breathing has ceased. If irritation or symptoms occur or persist, consult a physician.

**SKIN CONTACT:** In case of skin contact, while wearing protective gloves, carefully remove any contaminated clothing, including shoes, and wash skin thoroughly with soap and water. If irritation or symptoms occur or persist, consult a physician.

**EYE CONTACT:** In case of eye contact, immediately rinse eyes thoroughly with plenty of water. If wearing contact lenses, remove only after initial rinse, and continue rinsing eyes for at least 15 minutes. If irritation occurs or persists, consult a physician.

**INGESTION:** Rinse mouth and drink a glass of water. Do not induce vomiting unless under the direction of a qualified medical professional or Poison Control Center. If symptoms persist, consult a physician.

**NOTE TO PHYSICIAN:** This mixture contains a pyrethroid insecticide. Treat supportively and symptomatically.

### SECTION 5. FIRE FIGHTING MEASURES

#### FLAMMABILITY DATA:

Flash Point: > 93.3 deg C ( > 200 deg F) (Tag closed cup)

#### SPECIAL FIRE HAZARDS:

DO NOT use water. This material could present a floating fire if water is used as an extinguishing media.

#### SPECIAL FIRE FIGHTING PROCEDURES:

Wear full protective clothing and self-contained breathing apparatus (SCBA).

**SUITABLE EXTINGUISHING MEDIA:**

Foam. Dry chemical. Carbon dioxide (CO<sub>2</sub>). Halon.

**UNSUITABLE EXTINGUISHING MEDIA:**

DO NOT use water.

See Section 9 for Physical and Chemical Properties.

**SECTION 6. ACCIDENTAL RELEASE MEASURES****PERSONAL PRECAUTIONS:**

Keep personnel away from the clean-up area. Wear appropriate personal protective equipment as specified in Section 8.

**SPILL RESPONSE / CLEANUP:**

All spills should be handled according to site requirements and based on precautions cited in the MSDS. In the case of liquids, use proper absorbent materials. For laboratories and small-scale operations, incidental spills within a hood or enclosure should be cleaned by using a HEPA filtered vacuum or wet cleaning methods as appropriate. For large dry or liquid spills or those spills outside enclosure or hood, appropriate emergency response personnel should be notified. In manufacturing and large-scale operations, HEPA vacuuming prior to wet mopping or cleaning is required.

**ENVIRONMENTAL PRECAUTIONS:**

This product is very toxic to aquatic organisms. Do not allow product to reach ground water, water course, sewage or drainage systems.

See Sections 9 and 10 for additional physical, chemical, and hazard information.

**SECTION 7. HANDLING AND STORAGE****HANDLING:**

Avoid contact with eyes. Avoid contact with skin and clothing. Keep containers adequately sealed during material transfer, transport, or when not in use.

Appropriate handling of this material is dependent on many factors, including physical form, duration and frequency of process or task, and effectiveness of engineering controls. Site-specific risk assessments should be conducted to determine the feasibility and the appropriateness of all exposure control measures. See Section 8 (Exposure Controls) for additional guidance.

**STORAGE:**

Store in a cool, dry, well ventilated area.

See Section 8 for exposure controls and additional safe handling information.

**SECTION 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION**

The following guidance applies to the handling of the active ingredient(s) in this formulation.

**EXPOSURE CONTROLS:**

The health hazard risks of handling this material are dependent on many factors, including physical form, duration and frequency of process or task, and effectiveness of engineering controls. Site-specific risk assessments should be conducted to determine the feasibility and the appropriateness of all exposure control measures. Exposure controls for normal operating or routine procedures follow a tiered strategy. Engineering controls are the preferred means of long-term or permanent exposure control. If engineering controls are not feasible, appropriate use of personal protective equipment (PPE) may be considered as alternative control measures. Exposure controls for non-routine operations must be evaluated and addressed as part of the site-specific risk assessment.

**RECOMMENDED PERSONAL PROTECTIVE EQUIPMENT (PPE):**

Respiratory Protection:	Respiratory protective equipment (RPE) may be required for certain laboratory and large-scale manufacturing tasks if potential airborne breathing zone concentrations of substances exceed the relevant exposure limit(s). Workplace risk assessment should be completed before specifying and implementing RPE usage. Potential exposure points and pathways, task duration and frequency, potential employee contact with the substance, and the ability of the substance to be rendered airborne during specific tasks should be evaluated. Initial and ongoing strategies of quantitative exposure measurement should be obtained as required by the workplace risk assessment. All RPE must conform to local and regional specifications for efficacy and performance. Consult your site or corporate health and safety professional for additional guidance.
Skin Protection:	Gloves that provide an appropriate barrier to the skin are recommended if there is potential for contact with this material. Consult your site safety staff for guidance.
Eye Protection:	Safety glasses with side shields. Use of goggles or full face protection may be required based on hazard, potential for contact, or level of exposure. Consult your site safety staff for guidance.

Body Protection: In small-scale or laboratory operations, lab coats or equivalent protection is required. Disposable Tyvek or other dust impermeable suit should be considered based on procedure or level of exposure. Use of additional PPE such as shoe coverings, gauntlets, hood, or head covering may be necessary. Consult your site safety staff for guidance.

In large-scale or manufacturing operations, disposable Tyvek or other dust impermeable suit is recommended and based on level of exposure. Use of additional PPE such as shoe coverings, gauntlets, hood, or head covering may be necessary. Consult your site safety staff for guidance.

#### EXPOSURE LIMIT VALUES

No exposure limits are available for the active ingredient(s) or any other hazardous ingredient in this formulation.

### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

**FORM:** Solution  
**COLOR:** Gold  
**ODOR:** Oil odor  
**SPECIFIC GRAVITY:** 0.924 to 0.974 at 20 deg C  
**SOLUBILITY:**  
Water: Insoluble

**ADDITIONAL INFORMATION:** Viscosity: 57 to 72 cps

See Section 5 for flammability/explosivity information.

### SECTION 10. STABILITY AND REACTIVITY

**STABILITY/ REACTIVITY:**  
Stable under normal conditions.

**INCOMPATIBLE MATERIALS / CONDITIONS TO AVOID:**  
Oxidizers.

**HAZARDOUS DECOMPOSITION PRODUCTS / REACTIONS:**  
No dangerous decomposition is expected if used according to manufacturer's specifications.

### SECTION 11. TOXICOLOGICAL INFORMATION

The information presented below pertains to the formulated product unless indicated otherwise.

#### ACUTE TOXICITY DATA

PRODUCT / CHEMICAL NAME	EXPOSURE ROUTE	STUDY DESCRIPTION	RESULT
Saber Pour-On Insecticide	Inhalation	LC50 (rat)	> 4.1 mg/L
	Oral	LD50 (rat)	> 9500 mg/kg
	Eye	Eye Irritation (rabbit)	Slight Irritant
	Dermal	LD50 (rabbit)	> 1,900 mg/kg
	Skin	Skin Irritation (rabbit)	Slight Irritant
	Skin	Skin Sensitization (guinea pig)	Not Sensitizing

**INHALATION:**  
Prominent in-life observations included decreased activity, lacrimation, nasal discharge, piloerection, polyuria, ptosis, and salivation. Gross necropsy examination did not reveal any treatment-related findings. There were no deaths in the study.

**SKIN:**  
A 50% solution of Saber Pour-On Insecticide did not produce a sensitizing reaction in guinea pigs.

**EYE:**  
The maximum irritation score of 8.3 was obtained at 1 hour after instillation of 0.1 ml Saber Pour-On Insecticide. Conjunctival irritation was reversible within 7 days. Saber Pour-On Insecticide was slightly irritating to rabbit eyes.

#### REPEAT DOSE TOXICITY DATA

**SUBCHRONIC / CHRONIC TOXICITY:**

Lambda Cyhalothrin: Subacute (5-days) to chronic (1-year) oral studies were conducted in mice, rats, rabbits, and dogs. Dosages varied with species ranging from 0.5 to 25 mg/kg/day. Decreased body weight and food consumption, and neurological signs associated with pyrethroid toxicity (e.g. ataxia, unsteady or abnormal gait, and hyperexcitability) were observed. [NOEL: 5 mg/kg/day (rats) and 0.5 mg/kg/day (dogs)]

Decamethylcyclopentasiloxane: Subchronic (28 to 90 days) inhalation studies with decamethylcyclopentasiloxane were conducted in rats at concentrations ranging from 0.44 to 3.53 mg/L. Decreased body weight, minimal changes in red blood cell parameters, increased liver enzymes, increased liver and lung weights, and decreased testes and ovary weights were observed. Target tissues or organs included lungs, nasal cavity, testes, ovary, and vagina. Based on histopathology, there was no NOEL.

**REPRODUCTIVE / DEVELOPMENTAL TOXICITY:**

Cyhalothrin: There were no signs of fetotoxicity or teratogenicity in rats and rabbits. Decreased litter size was noted in a 2-generation reproduction study in rats given oral dosages of 6.1 mg/kg/day.

Decamethylcyclopentasiloxane: No parental, reproductive, neonatal, or developmental effects were observed in a 2-generation reproduction inhalation study rats given concentrations as high as 2.42 mg/L.

**MUTAGENICITY / GENOTOXICITY:**

Lambda Cyhalothrin: Negative in in vitro chromosome aberration assays in human lymphocytes and human HELA cells, in an in vitro mouse lymphoma TK+/- forward gene mutation assay, in an in vivo bonbe marrow cytogenetic assay in mice, and in Ames assays.

**CARCINOGENICITY:**

This material or product has not been evaluated for carcinogenicity.

Lambda Cyhalothrin: No carcinogenic effects were noted in chronic feeding studies in rats and mice.

## SECTION 12. ECOLOGICAL INFORMATION

**ECOTOXICITY DATA****INGREDIENT ECOTOXICITY**

Lambda Cyhalothrin: 48-hr EC50 (daphnid): 0.04 - 0.76 mg/L  
 Lambda Cyhalothrin: 96-hr LC50 (rainbow trout): 0.24 - 11.2 mg/L

**ENVIRONMENTAL DATA**

There are no environmental data available for this product.

## SECTION 13. DISPOSAL CONSIDERATIONS

**MATERIAL WASTE:**

Disposal must be in accordance with applicable federal, state/provincial, and/or local regulations. Incineration is the preferred method of disposal, when appropriate. Operations that involve the crushing or shredding of waste materials or returned goods must be handled to meet the recommended exposure limit(s).

**PACKAGING AND CONTAINERS:**

Disposal must be in accordance with applicable federal, state/provincial, and/or local regulations.

## SECTION 14. TRANSPORT INFORMATION

This material is not subject to the transportation regulations of DOT, IATA, and the IMO. Refer to site-specific procedures and requirements for additional guidance.

**ADR CLASSIFICATION:**

Proper Shipping Name:	Environmentally hazardous substance, solid, n.o.s. (lambda cyhalothrin)
Hazard Class:	9
UN Number:	UN 3077
Packing Group:	III

**ADDITIONAL INFORMATION:**

Although this material is regulated only under the ADR, both the IATA and IMO have special provisions that allow the shipper to transport materials under the shipping name "Environmentally hazardous substance, solid, n.o.s." if the material is being transported under both ADR and either IATA or IMO regulations.

## SECTION 15. REGULATORY INFORMATION

**SECTION 15. REGULATORY INFORMATION****TSCA LISTING**

CHEMICAL NAME	TSCA
Corn Oil.	Listed.
Decamethylcyclpentasiloxane.	Listed.

**U.S. STATE REGULATIONS**

CHEMICAL NAME	PARTK	MNRTK	MIRTK	ILRTK	LARTK	RIRTK
Corn Oil.	Listed.					Listed.

**SECTION 16. OTHER INFORMATION**

Although reasonable care has been taken in the preparation of this document, we extend no warranties and make no representations as to the accuracy or completeness of the information contained therein, and assume no responsibility regarding the suitability of this information for the user's intended purposes or for the consequence of its use. Each individual should make a determination as to the suitability of the information for their particular purpose(s).

**DEPARTMENT ISSUING MSDS:**

Global Safety and Environmental Affairs  
Occupational and Environmental Toxicology  
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Summit, NJ 07901 USA.

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(800) 770-8878 (US and Canada)  
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Monday to Friday, 9am to 5pm (US Eastern Time) .

**MSDS CREATION DATE:**

14-Aug-1998