

Material Safety Data Sheet

Effective Date: 05-MAR-2003
Product: PERMETHRIN 3.2EC

I. IDENTIFICATION

Chemical Name: Permethrin
Chemical Family: Pyrethroid Pesticide
Formula: Not applicable, formulated mixture.
Synonyms: None
CAS Number: 52645-53-1 (active ingredient)
EPA Number: 279-3014-5905

II. PHYSICAL DATA

Boiling Point: Not determined
Freezing Point: Not determined
Spec Gravity: 1.002 gms/cc
Vapor Pressure: Not applicable
Vapor Density: >1 (air=1)
Solubility: Emulsifies
Volatiles: Not determined
Evaporation: Not determined
Melting Point: Not applicable
Appearance: Amber liquid with aromatic solvent odor.

III. INGREDIENTS

Material	CAS Number	Percent	TLV	Hazard
Permethrin	52645-53-1	38.40	None	Skin & eye irritant
Aromatic Hydrocarbons	64742-95-6	<32.20	100 ppm	Skin & eye irritant
1,2,4-trimethylbenzene	95-63-6	<16.40	25 ppm	Skin & eye irritant
Xylene	1330-20-7	<10.20	100 ppm	Flammable
Surfactant Blend		<7.00	None	Non-hazardous
Ethylbenzene	100-41-1	<2.00	100 ppm	Skin & eye irritant
Cumene	98-82-8	<1.00	50 ppm (skin)	Eye irritant
1-Butanol	71-36-3	<1.00	50 ppm (skin) (ceiling)	Eye irritant

IV. FIRE AND EXPLOSION HAZARD

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Flash Point: 108 Degrees F. (CC)
Autoignition Temp: Not determined
Flammable Limit: Not determined
Extinguishing Media: Use foam, carbon dioxide or dry chemical
extinguishing media. Use soft stream water fog
only if necessary. Contain all runoff.
Special Fire Fight Proc: Isolate fire area. Evacuate downwind. Wear
full protective clothing and self-contained
breathing apparatus. Do not breathe smoke,
gases, or vapors generated from fire.
Fire and Expl Hazard: When heated above the flash point, vapors are
released which, when mixed with air, can burn
or be explosive.

V. HEALTH HAZARD

Carcinogen Information: Not listed by IARC, NTP, or OSHA.

ACUTE EFFECTS OF OVER EXPOSURE

Swallowing: Acute Oral LD50 = 1,030 mg/kg (rat). May cause
diarrhea, excessive salivation, tremors,
convulsions, hyperactivity and hypersensitivity
if ingested.
Skin Absorption: Acute Dermal LD50 > 2,000 mg/kg (rabbit).
Moderately irritating with skin contact.
Inhalation: Acute Inhalation LC50 > 25.7 mg/L/4 hr (rat).
Inhalation of aromatic hydrocarbons may cause
dizziness, visual disturbances, drowsiness,
respiratory irritation, and eye, skin, and
mucous membrane irritation.
Skin contact: Moderately irritating with skin contact. May
produce skin sensations such as numbing,
burning, or tingling. Sensations usually
subside within 12 hours.
Eye Contact: May be moderately irritating upon contact with
eyes.
Chronic Effects: None currently known.
Other Hazard: Vomiting after ingestion may cause aspiration
of aromatic hydrocarbons into the lungs,
resulting in fatal pulmonary edema.

EMERGENCY AND FIRST AID PROCEDURES

Swallowing: DO NOT INDUCE VOMITING! Rinse mouth with
water. Dilute by drinking 1 or 2 glasses of
water. Never give anything by mouth to an
unconscious person. Seek immediate medical

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attention.

Skin: Remove contaminated clothing and thoroughly wash with soap and water. If irritation occurs or persists, seek medical attention.

Inhalation: Remove to fresh air. If breathing becomes difficult or if discomfort occurs and persists, seek medical attention.

Eyes: Flush eyes with water for at least 15 minutes, holding eyelids wide open. If irritation persists, consult a physician.

Notes to Physician: This product has low oral, dermal and inhalation toxicity. It is moderately irritating to skin and eyes. Reversible skin sensations (paresthesia) may occur and ordinary skin salves have been found useful in reducing discomfort. Contains aromatic hydrocarbons that may produce pneumonitis if aspirated during vomiting. Consideration should be given to gastric lavage with an endotracheal tube in place. Treatment is otherwise controlled removal of exposure followed by symptomatic and supportive care.

VI. REACTIVITY

Stability: Stable

Conditions to Avoid: Excessive heat and fire.

Polymerization: Will Not Occur

Conditions to Avoid: Excessive heat and fire.

Incompatibility material: None currently known.

Hazardous Combustion: May produce carbon monoxide, carbon dioxide, chlorine and hydrogen chloride under fire conditions.

VII. SPILL OR LEAK PROCEDURES

Spill or Leak Proc: Keep spilled material out of lakes, streams, ponds, and storm drains. Dike spilled material and absorb with a non-combustible absorbent, such as clay, sand, or soil. Vacuum, shovel, or pump material into a chemical waste container for proper disposal.

Waste Disposal Method: This material must be disposed of according to Federal, State, or Local procedures under the Resource Conservation and Recovery Act.

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VIII. SPECIAL PROTECTION INFORMATION

Respiration: Use air-purifying respirator approved for pesticides (NIOSH/MSHA).
Ventilation: Local exhaust normally sufficient.
Gloves: Chemical resistant gloves, such as nitrile.
Eyes: Chemical goggles or face shield.
Other: Safety shower, eyewash station, coveralls, impervious apron and footwear. PVC suit may be needed for large exposures.

IX. SPECIAL PRECAUTIONS

Special precaution: Keep out of reach of children. Do not store with food, feed or other material to be used or consumed by humans or animals. Store in a cool, dry, well-ventilated area. Do not use or store near heat, open flame or hot surfaces. Store in original containers only.
Other precaution: None currently needed.

X. SHIPPING INFORMATION

Shipping name: Not regulated by DOT in less than bulk quantities.
Hazard Class: None
Identification No: None
Labels Required: None Required
Placarding: None
Freight Class: Insecticides, N.O.I., (Permethrin), Other than Poison (NMFC Item 102120, Class 60)
Chemical Name: Equivalent R.Q.

Not applicable Not applicable

TRANSPORTATION NOTE:

Use the following description for water, air or bulk shipments:
Flammable Liquid, n.o.s. (contains Xylene), 3, UN1993, PG III "ERG # 128"

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XI. GENERAL PRODUCT INFORMATION

National Fire Protection Association Rating:
(Rating level: 4-Extreme, 3-High, 2-Moderate, 1-Slight, 0-Minimum)

Health: 2 Fire: 2 Reactivity: 0

S.A.R.A. Title III Hazard Classification: (Yes/No)

Immediate (Acute) Health: Y Delayed (Chronic) Health: Y
Sudden Release of pressure: N Fire: Y
Reactive: N

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