

# MATERIAL SAFETY DATA SHEET



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## 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

**PRODUCT CODE:** 0027522 **EPA REG. NO. :** 1021-1734-8536  
**PRODUCT NAME:** ENDURE™ ULV  
**PRODUCT DESCRIPTION:** An insecticide product for Commercial and Industrial Use Only.  
**CHEMICAL NAME:** Mixture

**DISTRIBUTOR:** Cardinal Professional Products P.O. Box 782, Hollister, CA 95024

**TELEPHONE M-F, 8:00-5:00 PST** (800) 548-2223

**MSDS & Product Information, 8:00-5:00 PST** (800) 548-2223

**24 HOUR EMERGENCY PHONE (INFO-TRAC)** (800)-535-5053

**For information regarding medical emergencies or pesticide incidents, call the International Poison Center at:**  
1-888-740-8712

## 2. COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENT(s)	CAS #	EINECS	EXPOSURE LIMITS	% BY WEIGHT
Esfenvalerate [(S)-Cyano (3-phenoxyphenyl) methyl 4-chloro-alpha-(1-methylethyl) benzeneacetate]	066230-04-4	None	2 mg/m <sup>3</sup> (TWA, skin) (supplier recommended)	0.25
Paraffinic, Naphthenic solvent (Supplier recommended PEL) PEL = Permissible Exposure Limits. TLV = Threshold Limit Value.	064742-47-8	265-149-8	100ppm (525mg/m <sup>3</sup> ) TWA TWA = Time Weighted Average (8 hr). STEL = Short Term Exposure Limit (15 min.).	50.00 - 99.75

## 3. HAZARDS IDENTIFICATION

### POTENTIAL HEALTH EFFECTS:

**HUMAN:** CAUTION  
Causes eye irritation. Harmful if Absorbed through skin  
Avoid contact with skin, eyes or clothing. COMBUSTIBLE LIQUID, Do not use near heat or open flame or any ignition source.

**EYES:** Can cause irritation with discomfort, tearing and blurred vision.

**SKIN:** Overexposure by skin contact may initially include a transient (several minutes up to approximately 24 hours) persistent burning or prickling sensation which may be accompanied by visible irritation or rash.

**INGESTION:** Can be harmful if swallowed. Small amounts of this product aspirated into the respiratory system during ingestion or vomiting, may causes lung inflammation or other lung injury.

**INHALATION:** Excessive inhalation may cause nasal and respiratory irritation, nausea and nervous system disorders, such as fatigue, dizziness and a lack of coordination.

**SAFETY:** ALWAYS Wear safety glasses with sides shields and all other appropriate personal protective equipment when handling this material. KEEP OUT OF REACH OF CHILDREN

See TOXICOLOGICAL INFORMATION (section 11)

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## 4. FIRST-AID MEASURES

### FIRST AID PROCEDURES:

- EYES:** Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eyes. Call a poison control center for treatment advice.
- SKIN:** 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.
- INHALATION:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.
- INGESTION:** Call a poison control center or doctor immediately for treatment advice. Do not induce vomiting unless told to do so by a poison control center or a doctor. Do not give any liquid to the person. Do not give anything by mouth to an unconscious person.

**NOTE TO PHYSICIANS:** The product may pose an aspiration pneumonia hazard. Contains petroleum distillates.

## 5. FIRE FIGHTING MEASURES

### FLAMMABLE PROPERTIES:

**FLASH POINT:** 185 °F / 85 °C **METHOD:** Tag CC

This product is classified as combustible.

### FLAMMABLE LIMITS:

**LOWER FLAMMABLE LIMIT:** not established.

**UPPER FLAMMABLE LIMIT:** not established.

**AUTOIGNITION TEMPERATURE:** not established.

**HAZARDOUS COMBUSTION PRODUCTS:** Small amounts of Hydrogen cyanide may be produced by thermal degradation. Oxides of carbon.

**EXTINGUISHING MEDIA:** Foam, carbon dioxide, or dry chemical.

**FIRE FIGHTING INSTRUCTIONS:** Treat as a oil fire. Keep personal removed and upwind of fire. Use a full-faced self-contained breathing apparatus along with full protective gear. Keep nearby containers and equipment cool with a water spray. Contain the run-off, if possible, for proper disposal.

## 6. ACCIDENTAL RELEASE MEASURES:

**SMALL SPILL:** Shut off ignition sources. Stop release, if possible without risk. Dike or contain release, if possible, and if immediate response can prevent further damage or danger. Isolate and control access to the release area. Take actions to reduce vapors. Absorb with appropriate absorbent. Clean spill area of residues and absorbent.

**LARGE SPILL:** Shut off ignition sources. Stop release, if possible without risk. Dike or contain release, if possible, and if immediate response can prevent further damage or danger. Isolate and control access to the release area. Take actions to reduce vapors. Collect product into drums, etc. via drains, pumps, etc. Absorb with appropriate absorbent. Clean spill area of residues and absorbent.

**WASTE DISPOSAL METHOD:** Contaminated absorbent and wash water should be disposed of according to local, state and federal regulations.

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## 7. HANDLING AND STORAGE

- HANDLING:** Wear chemically impervious gloves such as neoprene and nitrile. Wear an OSHA-approved safety glasses with side shields, goggles or face shield. Mechanical ventilation should be used when handling this product in enclosed spaces. Wearing a respirator is not normally required when handling this material but recommended in absence of good mechanical ventilation. Do not contaminate water, feed or food by storage, handling or disposal. Read and observe all precautions and instructions on the label
- STORAGE:** Store containers upright and closed. Store in areas that are cool, dry and well-ventilated. Keep away from heat, ignition sources and strong oxidizers. Emptied containers may retain product residues.
- WORK HYGIENIC PRACTICES:** DO NOT SMOKE, EAT, DRINK OR APPLY COSMETICS IN WORK AREA! Wash Promptly if skin becomes contaminated. Wash at the end of each work shift and before eating, smoking and using the toilet.
- ELECTROSTATIC ACCUMULATION:** This product contains petroleum distillate for which there is the potential for electrostatic accumulation. Proper grounding procedures should be used when transferring this material.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

- ENGINEERING CONTROLS:** Mechanical ventilation should be used when handling this product in enclosed spaces. Local exhaust ventilation may be necessary.
- RESPIRATORY PROTECTION:** Wear an OSHA approved respirator with organic vapor cartridge in absence of proper mechanical ventilation.
- SKIN PROTECTION:** Wear chemically impervious gloves and protective clothing. Do not allow contact with skin.
- EYE PROTECTION:** Wear OSHA-approved safety glasses with side shields , goggles or face shield.

## 9. PHYSICAL AND CHEMICAL PROPERTIES (This section refers to the non-volatile portion of this product)

- APPEARANCE:** Clear liquid
- ODOR:** Sweet, almond-like odor
- PHYSICAL STATE:** Liquid.
- VAPOR PRESSURE:** Not established
- VAPOR DENSITY:** Not established
- BOILING POINT:** Not established
- MELTING POINT:** Not applicable.
- SOLUBILITY:** Soluble with most organic solvents.
- SPECIFIC GRAVITY @ 20°F:** Not established
- COLOR, (GARDENER):** 1.0
- pH:** Not applicable

## 10. STABILITY AND REACTIVITY

- CHEMICAL STABILITY:** Stable.
- INCOMPATIBILITY:** Strong acidic or alkaline materials.
- HAZARDOUS DECOMPOSITION PRODUCTS:** Small amounts of hydrogen cyanide may be formed by thermal decomposition or by contact with alkaline substances such as soda ash & lye.
- HAZARDOUS POLYMERIZATION:** Will not occur.

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## 11. TOXICOLOGICAL INFORMATION

### ACUTE STUDIES:

<b>EYE:</b>	Primary eye irritation (rabbit):	All ocular irritation cleared within 72 hours. EPA Toxic Category III.
<b>SKIN:</b>	Primary Skin Irritation	Slightly irritating to the skin. No irritation noted at 72 hours. EPA Toxic Category IV.
	Dermal Sensitization (guinea pig):	Not considered to be a dermal sensitizer. (Data from 2752 Conc. 2.5% Esfenvalerate)
	Acute Dermal LD <sub>50</sub>	> 2,000 mg / kg. EPA Toxic Category III. (Data from EVERCIDE 2752 Conc. 2.5% Esfenvalerate)
<b>INGESTION:</b>	Acute Oral LD <sub>50</sub> (rat)	> 5,000 mg / kg EPA Toxic Category IV. (Data from EVERCIDE 2752 Conc. 2.5% Esfenvalerate)
<b>INHALATION:</b>	Acute Inhalation LC <sub>50</sub> (rat) (4 hour)	EPA Toxic Category IV. (Data from EVERCIDE 2752 Conc. 2.5% Esfenvalerate)

<b>CRONIC(NOEL):</b>	Not available
<b>ONCOGENICITY(NOEL):</b>	Not available
<b>SUBCRONIC(NOEL):</b>	Not available
<b>CARCINOGENICITY:</b>	None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA or ACGIH as being carcinogens.
<b>TERATOGENICITY(NOEL):</b>	Not available
<b>REPRODUCTION(NOEL):</b>	Not available
<b>MUTAGENICITY:</b>	Not available

## 12. ECOLOGICAL INFORMATION

### PERSISTENCE IN THE ENVIRONMENT

<b>BIODEGRADATION:</b>	Not available
<b>CHEMICAL DEGRADATION:</b>	Not available

**TOXIC EFFECTS ON ORGANISMS::** This pesticide is highly toxic to fish. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public waters unless this product is specifically identified and addressed in an NPDES permit. Do not discharge effluent containing this product to sewer systems without previously notifying the sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA..

**TOXICITY TO USEFUL INSECTS:** Unknown

## 13. DISPOSAL CONSIDERATIONS

### RCRA / CERCLA HAZARDOUS WASTE:

**INGREDIENT**  
none

**RCRA ID#: CERCLA RQ-VALUE**

**DISPOSAL METHOD:** Product should be disposed of according to local, state and federal regulations. When disposing of waste or surplus avoid contact with eyes and skin. Wear impervious gloves/clothing and chemical safety goggles. Do not wash into drains Do not mix with other waste materials.

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## 14. TRANSPORT INFORMATION

**U.S. DEPARTMENT OF TRANSPORTATION(DOT) INFORMATION:** Regulated as a hazardous material according to the Department of Transportation in bulk quantities (greater than 119 gallons) only:

**PROPER SHIPPING NAME:** Combustible Liquid, N.O.S. (Petroleum Distillates)

**HAZARD CLASS:** Combustible Liquid

**IDENTIFICATION NUMBER(UN or NA):** NA 1993

**PACKING GROUP:** III

**INTERNATIONAL TRANSPORTATION REGULATIONS:**

**ICAO / IATA DESCRIPTION:** Not considered hazardous by IATA Regulations for transportation via air.

**IMO DESCRIPTION (IMDG CODE):** Not Available.

## 15. REGULATORY INFORMATION

**U.S. FEDERAL REGULATIONS:**

**SARA TITLE III:**

**SECTION 302:** Not listed

**SECTION 313:** This product contains the following toxic chemicals of the subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372:

<b>CAS#:</b>	<b>CHEMICAL NAME:</b>	<b>% BY WEIGHT:</b>
066230-04-4	<b>Esfenvalerate [(S)-Cyano (3-phenoxyphenyl) methyl 4-chloro-alpha-(1 - methylethyl) benzeneacetate]</b>	.25

## 16. OTHER INFORMATION

We assign HMIS ratings to this product based on the hazards of its ingredient(s). Since the customer is most aware of the applications and conditions of use, he must ensure that the proper personal protective equipment is provided consistent with information contained in sections 7 and 8 of this MSDS.

**HMIS RATINGS:**

Health	1
Flammability	2
Reactivity	1

*The data contained herein is based on information currently available to Cardinal Professional Products, and believed to be factual and the opinions expressed to be those of qualified experts; however, this data is not to be taken as a warranty or representation for which Cardinal Professional Products assumes legal responsibility.*

Material Safety Data Sheet prepared by Ed Hosoda

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