

MATERIAL SAFETY DATA SHEET
Zenivex E4 RTU

Manufacturer: Wellmark International
Address: 1501 East Woodfield Road, Suite 200 West, Schaumburg, IL 60173
Emergency Phone: 800-248-7763
Transportation Emergency Phone: CHEMTREC: 1-800-424-9300

1. CHEMICAL PRODUCT INFORMATION

Product Name: Zenivex E4 RTU
Chemical Name/Synonym: Etofenprox
Chemical Family: Non-ester Pyrethroid
Formula: C₂₅H₂₈O₃
EPA Registration No.: 2724-807
RF Number: RF2146

2. COMPOSITION / INFORMATION ON INGREDIENTS

| <u>Component (chemical, common name)</u> | <u>CAS Number</u> | <u>Weight</u> | <u>Tolerance</u> |
|---|-------------------|---------------|--------------------------------|
| Etofenprox: 1-[[2-(4-ethoxyphenyl)-2-methylpropoxy]methyl]-3-phenoxybenzene | 80844-07-1 | 4.0% | None established |
| Other ingredients (non-hazardous and/or trade secret) | | 96.0% | PEL & TLV: 5 mg/m ³ |

3. HAZARD INFORMATION

PRECAUTIONARY STATEMENTS
KEEP OUT OF REACH OF CHILDREN
CAUTION
HAZARDOUS TO HUMANS AND DOMESTIC ANIMALS
HARMFUL IF SWALLOWED. CAUSES MODERATE EYE IRRITATION. AVOID CONTACT WITH EYES, SKIN, OR CLOTHING. WASH THOROUGHLY WITH SOAP AND WATER AFTER HANDLING AND BEFORE EATING, DRINKING, CHEWING GUM, USING TOBACCO, OR USING THE TOILET. REMOVE CONTAMINATED CLOTHING AND LAUNDRER BEFORE REUSE. REPEATED EXPOSURE TO ETOFENPROX CAN CAUSE SKIN IRRITATION.

PRIMARY ROUTE OF ENTRY Dermal/Eye: Yes. Oral: No. Inhalation: Yes.

ACUTE TOXICITY

Oral: No specific hazard identified.
Dermal: No specific hazard identified.
Inhalation: No specific hazard identified.

OTHER TOXICOLOGICAL INFORMATION

Skin Irritation: Repeated exposure to etofenprox can cause skin irritation.
Eye Irritation: Causes moderate eye irritation.
Sensitizer: Not a dermal sensitizer.

4. FIRST AID MEASURES

If swallowed: Immediately call a poison control center or doctor
Do not induce vomiting unless told to by a poison control center or doctor.
Do not give any liquid to the person
Do not give anything by mouth to an unconscious person.

If in 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.
Call a poison control center or doctor for treatment advice.

Note to Physician: May pose aspiration pneumonia hazard. Contains petroleum distillates.

5. FIRE FIGHTING MEASURES

NFPA Rating: Health: 2 Fire: 2 Reactivity: 0

Flammability Class: Class III A Combustible Liquid.

Flash Point: 217° F (103°C).

Explosive Limits (% of Volume): Not available.

Extinguishing Media: Dry chemical, CO₂, foam, water fog. Do not use water jet, handle as an oil fire.

Special Protective Equipment: Firefighters should wear full protective clothing including self-contained breathing apparatus.

Fire Fighting Procedures: Use water fog to cool fire exposed containers. USE WATER CAREFULLY NEAR EXPOSED/BURNING LIQUIDS. May cause frothing and splashing of hot material. Handle as an oil fire. Do not allow run-off to enter waterways or sewers. This product is toxic to aquatic organisms.

Combustion Products: Oxides of carbon.

Unusual Fire/Explosion Hazards: Burning fluid may evolve irritating/noxious fumes.

6. ACCIDENTAL RELEASE MEASURES

Steps to be taken: Use appropriate personal protective equipment. Eliminate sources of ignition. Floor may be slippery: use care to avoid falling. Absorb spill with an inert material. Place in container for disposal. Do not allow spill to enter waterways or sewers. This product is toxic to aquatic organisms.

Absorbents: Clay granules, sawdust, dirt, or equivalent.

Incompatibles: Strong oxidants and acidic agents.

7. HANDLING AND STORAGE

Handling: Wash hands with soap and water after handling material. Avoid contact with skin, eyes, or clothing.

Storage: Do not contaminate water, food, or feed, by storage. Store upright at room temperature. Avoid exposure to extreme temperatures.

8. EXPOSURE CONTROL / PERSONAL MEASURES

Exposure Limits: Severely hydrotreated paraffinic oil. OSHA PEL 5 mg/m³. ACGIH TLV 5 mg/m³.

Ventilation: Use with ventilation adequate to maintain airborne concentrations below recommended exposure limits.

Personal Protective Equipment: Use appropriate precautions to avoid contact with skin, eyes or clothing. Use splash goggles or safety glasses. Chemical resistant gloves are recommended. If ventilation is inadequate, or airborne concentrations exceed recommended exposure limits, respiratory protection suitable for use with oil

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mists may be required.

9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|---------------------------------|----------------------------|
| Appearance and Odor: | Clear, pale yellow liquid. |
| Boiling Point: | Not known. |
| Melting Point: | Not applicable. |
| Vapor Pressure (mm Hg): | Not known. |
| Vapor Density (Air = 1): | Not known. |
| Specific Gravity: | 0.8944 g/ml @ 20°C |
| Bulk Density: | 7.4 lbs per gallon. |
| Solubility: | Not soluble in water. |
| Evaporation Rate: | Not known. |
| pH: | Not applicable. |

10. STABILITY AND REACTIVITY

| | |
|--|---|
| Stability: | Stable. |
| Reactivity: | Not reactive. |
| Incompatibility w/ Other Materials: | No incompatibilities known except with strong oxidants such as hypochlorites. |
| Decomposition Products: | Oxides of carbon from combustion. |
| Hazardous Polymerization: | Will not occur. |

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY

Acute oral toxicity (rat): LD50 >5,000 mg/kg
Acute dermal toxicity: LD50 >5,000mg/kg
Acute inhalation toxicity: 4-hr LC50 >2 mg/L
Skin irritation: Very slight irritation
Eye irritation: Minimally irritating
Dermal Sensitization: Not a sensitizer

SUBCHRONIC TOXICITY [Specific to Active Ingredient(s)]

Etofenprox is a mild skin irritant after 4-weeks of treatment. No systemic toxicity from dermal exposure was observed at doses up to 1000 mg/kg/day.

CHRONIC TOXICITY [Specific to Active Ingredient(s)]

Etofenprox is not listed as a carcinogen by NTP or IARC and is not regulated by OSHA.

In rats the target organs are the liver and thyroid. The NOAEL for chronic toxicity is 3.7 mg/kg/day for male rats. The target organ in mice is the kidney. The NOAEL is 3.1 mg/kg/day for mice.

DEVELOPMENTAL/REPRODUCTIVE TOXICITY [Specific to Active Ingredient(s)]

Etofenprox is not a teratogen. It does not have adverse effects on reproduction.

MUTAGENICITY [Specific to Active Ingredient(s)]

Etofenprox is not a mutagen.

12. ECOLOGICAL INFORMATION

Toxic to aquatic organisms, including fish and invertebrates.

The product is toxic to bees exposed to direct treatment on blooming crops and weeds.

ECOTOXICITY [Active Ingredients Only]

Etofenprox

Acute Toxicity: **Rainbow trout:** LC₅₀ = 3.3 ppb
Bluegill: LC₅₀ = 8.5 ppb

13. DISPOSAL CONSIDERATIONS

Wastes resulting from use of this product should be disposed of in accordance with all federal, state and local requirements. For additional regulatory information, see section 15 of this document.

This pesticide is toxic to aquatic organisms, including fish and aquatic invertebrates. Runoff from treated areas or deposition into bodies of water may be hazardous to fish and other aquatic organisms. Do not apply over bodies of water (lakes, rivers, permanent streams, natural ponds, commercial fish ponds, swamps, marshes or estuaries), except when necessary to target areas where adult mosquitoes are present, and weather conditions will facilitate movement of applied material away from water in order to minimize incidental deposition into the water body. Do not contaminate bodies of water when disposing of equipment rinseate or wash waters.

14. TRANSPORT INFORMATION

DOT49CFR Description: Not Regulated.

Freight Classification: Insecticide NOI NMFC I-155050 SUB 6 CLASS 55

15. REGULATORY INFORMATION

CERCLA (Superfund): Not regulated.

RCRA: Not a characteristic or listed hazardous waste.

SARA 311/312 HAZARD CATEGORIES

Immediate Health: Yes.

Delayed Health: Yes.

Fire: Yes.

Sudden Pressure: No.

Reactivity: No.

The information presented herein, while not guaranteed, was prepared by technically knowledgeable personnel and to the best of our knowledge is true and accurate. It is not intended to be all inclusive and the manner and conditions of use and handling may involve other or additional considerations.