

MATERIAL SAFETY DATA SHEET

Zoecon Zenprox EC

Manufacturer: Wellmark International
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Emergency Phone: 800-248-7763
Transportation Emergency Phone: CHEMTREC: 1-800-424-9300

1. CHEMICAL PRODUCT INFORMATION

Product Name: Zoecon Zenprox EC

Chemical Name/Synonym: Etofenprox; 2-(4-ethoxyphenyl)-2-methylpropyl 3-phenoxybenzyl ether
Piperonyl Butoxide; 5-[2-(2-butoxyethoxy)ethoxymethyl]-6-propyl-1,3-benzodioxole,

Chemical Family: Pyrethroid and oxidase inhibitor

Formula: C₂₅H₂₈O₃, C₁₉H₃₀O₅,

EPA Registration No.: 2724-804

RF Number: 2129 EC

2. COMPOSITION / INFORMATION ON INGREDIENTS

<u>Component (chemical, common name)</u>	<u>CAS Number</u>	<u>Weight</u>	<u>Tolerance</u>
Etofenprox	80844-07-1	16.20%	Not established
Piperonyl butoxide	51-03-6	64.80%	Not established
Inert Ingredients: (nonhazardous and/or trade secret)		19.0%	

3. HAZARD INFORMATION

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

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

ACUTE TOXICITY

Oral: Harmful if swallowed

Dermal: No specific hazard identified

Inhalation: No specific hazard identified

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OTHER TOXICOLOGICAL INFORMATION

Skin Irritation: Slightly irritating
Eye Irritation: Moderately irritating
Sensitizer: Not a skin sensitizer

4. FIRST AID MEASURES

- 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.
- If swallowed:**
- Call a poison control center or doctor immediately for treatment advice.
 - Have person sip a glass of water if able to swallow.
 - Do not induce vomiting unless told to by a poison control center or doctor.
 - Do not give anything to an unconscious person.

5. FIRE FIGHTING MEASURES

NFPA Rating: **Health:** 1 **Fire:** 1 **Reactivity:** 0

Flammability Class: Class IIIB Liquid

Flash Point: Not available

Explosive Limits (% of Volume): Not available.

Extinguishing Media: Water fog, foam, dry chemical, CO₂.

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

Fire Fighting Procedures: Normal procedures. Do not allow fire fighting water to escape into waterways or sewers.

Combustion Products: Oxides of carbon.

Unusual Fire/Explosion Hazards: None known.

6. ACCIDENTAL RELEASE MEASURES

- Steps to be taken:** Do not allow spill to enter any waterways, particularly those inhabited by aquatic organisms. Soak up spill with absorbent material and place in container for disposal.
- Absorbents:** Clay granules, sawdust, dirt or equivalent.
- Incompatibles:** Strong oxidizers, strong acids, and strong alkalis.

7. HANDLING AND STORAGE

- Handling:** Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove and wash contaminated clothing before reuse.
- Storage:** Store in a cool area away from heat or open flame. Store away from humans, pets, foodstuffs and feed.

8. EXPOSURE CONTROL / PERSONAL MEASURES

- Exposure Limits:** Not available.
- Ventilation:** Use in a well ventilated area. Use local ventilation when necessary.
- Personal Protective Equipment:** Use splash goggles or safety glasses, impervious gloves and appropriate chemical and oil resistant clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor:	Straw colored liquid with faint petroleum solvent odor.
Boiling Point:	Not known.
Melting Point:	Not applicable.
Vapor Pressure (mm Hg):	Not known.
Vapor Density (Air = 1):	Not known.
Specific Gravity:	1.03.
Bulk Density:	8.6 lbs/gal.
Solubility:	Emulsifies in water.
Evaporation Rate:	Not known.
pH:	Not known.

10. STABILITY AND REACTIVITY

Stability:	Stable.
Reactivity:	Not reactive.
Incompatibility w/ Other Materials:	Strong oxidizers, strong acids, and strong alkalis.
Decomposition Products:	Carbon oxides, sulfur oxides.
Hazardous Polymerization:	Will not occur.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY

Acute oral toxicity (rat): LD50 1,750 mg/kg
Acute dermal toxicity: LD50 >5,000 mg/kg
Skin irritation: Slightly irritating
Eye irritation: Moderately irritating
Not a dermal sensitizer

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.

Piperonyl butoxide: An increase in the number of benign liver tumors in mice fed piperonyl butoxide technical at doses which far exceeded any anticipated daily human intake. Independent and industry toxicology experts have reviewed the data and agree that the findings of the study do not indicate a health risk to humans.

Carcinogenicity: NTP: No IARC: No OSHA: No

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

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

Piperonyl butoxide: There were no birth defects or adverse effects on reproductive parameters in tests with rats or rabbits. It is not considered to be teratogenic.

MUTAGENICITY [Specific to Active Ingredient(s)]

Etofenprox is not a mutagen.

Piperonyl butoxide is not genotoxic in several tests including the Ames mutagenicity assay, chromosome aberrations in Chinese hamster ovary (CHO) cells, CHO/HGPRT assay with S9 activation, and in the unscheduled DNA synthesis (UDS) assay in cultured human liver cells.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL FATE

Hydrolysis: Not determined.
Photolysis: Not determined.
Soil half life: Not determined.
Water solubility: Not determined.

ECOTOXICITY [Active Ingredients Only]

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

Piperonyl butoxide **Acute Toxicity:** **Rainbow trout:** LC₅₀ = 6.12 ppm
Bluegill: LC₅₀ = 8.5 ppb 5.37 ppm
Sheepshead minnow: LC₅₀ = 3.94 ppm
Mysid shrimp: LC₅₀ = 0.32 ppm

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.

14. TRANSPORT INFORMATION

DOT49CFR Description: Not applicable.
Freight Classification: Insecticides NOI NMFC 102120 CLASS 60.

15. REGULATORY INFORMATION

CERCLA (Superfund): No reportable quantity listed.
RCRA: This material is not a listed or characteristic hazardous waste in its unused form.

SARA 311/312 HAZARD CATEGORIES

Immediate Health: Yes.
Delayed Health: No.
Fire: No.
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.