

- INTENDED FOR USE BY PEST MANAGEMENT PROFESSIONALS
- FOR USE INDOORS IN NON-FOOD/NON-FEED AREAS OF RESIDENTIAL AND COMMERCIAL FACILITIES
- BROAD SPECTRUM PEST CONTROL INCLUDING FLEAS AND BED BUGS
- KILLS NEWLY HATCHED BED BUG NYMPHS
- AIDS IN PREVENTING BED BUG EGG HATCH



ACTIVE INGREDIENTS:

Etofenprox (CAS #80844-07-1)	16.2%
Piperonyl butoxide* (CAS #51-03-6)	64.8%
OTHER INGREDIENTS:	19.0%
Total	100.0%

* (Butyl carbityl)(6-propylpiperonyl) ether and related compounds This formulation contains 1.4 lbs of etofenprox and 5.6 lbs of piperonyl butoxide per gallon. End use dilution is 0.25% etofenprox.

EPA Reg No.2724-804 EPA Est. No.

EPA Est. No. 2724-TX-1

KEEP OUT OF REACH OF CHILDREN CAUTION SEE ADDITIONAL PRECAUTIONARY STATEMENTS

PRECAUTIONARY STATEMENTS HAZARDS 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.

	FIRST AID		
Call a poison control center or doctor immediately 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 do so by the poison control center or doctor. (continued on next column) 		

	 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 eye.
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-248- 7763 for emergency medical treatment information.	

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

General Directions: ZENPROX® EC provides effective kill of fleas, cockroaches and other listed pests and can be applied as an indoor broadcast, spot, or crack and crevice treatment in homes, apartment buildings, hotels, schools, day cares, nursing homes, hospitals, office buildings, correctional facilities, commercial and industrial buildings, warehouses, non-food/non-feed handling establishments, modes of transportation, institutions.

Remove pets and birds and cover fish aquariums before spraying. Do not allow children or pets to contact treated surfaces until spray has dried. Do not apply to toys or stuffed animals or related articles. Do not apply this product in occupied patient rooms or in any rooms/areas while occupied by patients, the elderly, or infirm. Do not apply to classrooms while in use. Do not apply in institutions (including libraries, sports facilities, etc.) in the immediate area where occupants are present.

MIXING DIRECTIONS

ZENPROX® EC mixes easily with water (diluent) and may be applied with most application equipment. For best results, partially fill sprayer with water (diluent), add the labeled amount of **ZENPROX® EC** and fill to the required amount of water (diluent). Diluted spray mixture may be stored overnight and used the following day, but mixture should be agitated well prior to use.

ZENPROX® EC in recommended dilutions is generally non-staining and should not stain surfaces that cannot be spotted or damaged by water alone, however in questionable or sensitive surfaces, apply a small amount of dilution in an inconspicuous location to evaluate. Do not apply where electrical short circuits might result. Do not enter or allow others to enter until spray has dried. Do not apply product in a way that will contact workers, other persons, or animals, either directly or through drift.

TANK-MIXING

ZENPROX® EC can be mixed with EPA-registered insect growth regulators in areas where these products are registered to be applied. Please check product-specific label directions before using and the more stringent label directions will apply.

	Indoor	Pests	
Use ZENPROX [®] EC as a broadcast (general surface), spot, or crack and crevice treatment to control pests inside buildings, structures, and modes of transport. This includes homes, apartment buildings, hotels, schools, day cares, nursing homes, hospitals, office buildings, correctional facilities, commercial and industrial buildings, warehouses, non-food/non-feed handling establishments, rail cars, marine vessels, and institutions.			
Treatment	Specific Directions	Use Rate	Pests
Broadcast (General Surface)	Use a coarse, low pressure fan spray to apply the dilution uniformly over surfaces to be treated. Apply to carpets, floors, cabinets, cove base, and other areas where pests are located.	0.25% Etofenprox 2 fl oz/gallon of water (diluent)/1000 ft ²	Ants, Bed Bugs, Carpet beetles, Cockroaches, Confused flour beetles, Centipedes, Crickets, Darkling beetles, Dermestids, Earwigs, Firebrats, Flies, Fleas, Fruit flies, Gnats,
Spot or Crack and Crevice	Use a coarse, low pressure spray or pin stream. Treat entry points such as around water pipes, doors, windows, and eaves. Treat areas where pests normally feed or hide such as baseboards, corners, around water pipes, cracks and crevices. Spot treat floor rugs, beneath furniture, in closets, and storage areas.	0.25% Etofenprox 2 fl oz/gallon of water (diluent)/1000 ft ²	Indian meal moths, Lesser grain borers, Millipedes, Mosquitoes, Moths, Pillbugs, Red flour beetles, Sawtoothed grain beetles, Scorpions, Silverfish, Sowbugs, Spiders (Brown recluse, Black widow, others), Stink Bugs, Ticks, Wasps
Spot or Crack and Crevice for Bed Bugs Infesting Beds, Mattresses, Bedrooms and Sleeping Areas	Disassemble the bed frame and remove bedding. Do not apply product to bedding. Wash bedding and dry using medium to high heat to kill bed bugs. Use a coarse, low- pressure spray to apply to the bed frame, mattress and box spring. Application to mattresses and box springs is intended for treatment of seams, edges, and tufts only. Do not saturate the mattress and box spring. Do not treat the entire surface of the mattress or box spring. Allow spray to dry before using the mattress and/or box spring. Spot treat baseboards, behind pictures/wall hangings, rugs, and other articles in the bedroom or sleeping area.	0.25% Etofenprox 2 fl oz/gallon of water (diluent)/1000 ft ²	Bed Bugs

SPECIFIC INSTRUCTIONS:

Repeat treatments to infested areas as necessary, but not less than 14 days after the initial treatment.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

Pesticide Storage: Store in a cool, dry, and ventilated area away from humans, pets, foodstuffs, and feed. Do not store near heat or open flame. Keep from freezing.

Pesticide Disposal: To avoid wastes, use all material in this container by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste disposal facility or pesticide disposal program (often such programs are run by state or local governments or by industry).

Container Handling: Nonrefillable container. Do not reuse or refill this container. Triple rinse as follows. Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or incinerate, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

To the extent consistent with applicable law, Seller makes no warranty, expressed or implied, concerning the use of this product other than indicated on the label. To the extent consistent with applicable law, Buyer assumes all risks of use and handling of this material when such use and handling are contrary to label instructions.

For information or in case of emergency call 1-800-248-7763.

www.zoecon.com

Wellmark International 1501 East Woodfield Road 200W Schaumburg, Illinois 60173



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April, 2013 Schaumburg, IL

Date Issued: Supersedes:

MATERIAL SAFETY DATA SHEET

Zoecon Zenprox EC

Manufacturer:	Wellmark International
Address:	1501 East Woodfield Road, Suite 200W, Schaumburg, IL 60173
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:	C ₂₅ H ₂₈ O ₃ , C ₁₉ H ₃₀ O ₅ ,
EPA Registration No.:	2724-804
RF Number:	2129 EC

2. COMPOSITION / INFORMATION ON INGREDIENTS

Component (chemical, common name)	<u>CAS</u> <u>Number</u>	Weight	Tolerance
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 EN	NTRY <u>Der</u>	rmal/Eye: Yes.	Oral: No.	Inhalation: Yes.
ACUTE TOXICITY	Oral:	Harmful if swallowed	t	
	Dermal:	No specific hazard i	dentified	
	Inhalation:	No specific hazard i	dentified	

Zoecon Zenprox EC

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

- 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, CO _{2.}	
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 alkalies.

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.

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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 alkalies.
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 is 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.

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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:

xicity:Rainbow trout: $LC_{50} = 6.12 \text{ ppm}$ Bluegill: $LC_{50} = 8.5 \text{ ppb} 5.37 \text{ ppm}$ Sheepshead minnow: $LC_{50} = 3.94 \text{ ppm}$ Mysid shrimp: $LC_{50} = 0.32 \text{ ppm}$

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.

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 On rel administer any first by mouth or induce vorting unless told to do so by the poisson contra retier or do contrartis.
 FON station of contrartis.
 Bite of contannated coshing. IF SWALLOWED. יירט יייוועיו בעייטסב רבט ווטוער Due to racte dermal and primary dermal irritation toxicity. For retail safe t Jonly by Certified Applications or persons under their direct supervision and org, our those uses covered by the Certified Applications Certificate. 5 **TRACKIN** For Indoor Use Only ۲

KILLS HOUSE MICE

KEEP OUT OF REACH OF CHILDREN

DANGER - POISON - PELIGRO C

See back panel for First Aid and additional precautionary statements.

Contains the prosphrapmotizing active. The Phosphile. Phosphile Phosphile and damage naw contraindease the used graphic langer. For animals riggering balt and/or storwing poisoning signs, induces nonling up using photogen perturde. Sodium bushconde can be dynon cally in neutralise the stormal activity. The stronard and institual tack can be exacted, any perturbitioned and cardiac and domaking stimulents given.

DIRECTIONS FOR USE

WOTE TO PHYSICIAN OR VETERINARIAN

TREATMENT FOR PET POISONING If artimal eats bat, call velocitation at onco.

NET WEIGHT: 1.1 Ibs (500g) EPA REG. NO.: 12455-16

LABORATORIES, INC. Manufactured By:

ills a videčno vi Federal kav to use this produci in a manner inconsistent with its latisfing. REELO THIS LABEL: Fead this entire label and know all use directions, mastrictions and prezentions. EPA EST. NO.: 12455-WI-1 3699 Kinsman Blvd. Madison, WI 53704 U.S.A.

 Do not appy this product in a way that will contact workeys or other persons, either dreactly or through dift.
 Oxy protected handless may be in the area during application.
 Keep all other persons out of the theated area during application. USE RESTRICTIONS; 250Z1-2

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 This provide may only be used for the control of house mice (Auss musculud) inside homes, inclusivel and agricultural buildings, and similar man-made structures. The only acception is that the product may also be dusted from the outside of the building the gendural voits. Hate the product contiant or table with your when adding poisson control center or wing the the adding the state of the st Call a posion control center or doctor immediately for treatment articles or transport the patient to the treatest tospital.
 On of drink water.

Apply only in businessection of the housing into stratulate across bor of date last rear or resterentiation out operings.

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APPLOKIDON DRECITIONS. SELECTION OF TREATURINT AREIGS: Determine dy activities acreas where house mines will most selection of the transmission on the kind or und in the studing approving. Generally these areas are abort welds, or proved operings, incorress and concreded places, in spaces between those areas are abort welds, or proved operings, incorress and concreded places. In spaces between those areas areas area barry welds, by abord operings, incorress and concreded places. In space between those and welds, or in locations where houses mise or their syste hale been downed. Difference of the difference on the and place on such as a the difference on the and place on such as spaces between floors and welks.

Mave person to treat ai:
 Mave person to the starting call 911 or and/utorce, then give anticel respiration, preteatly mouth-brouch, if possible.
 Call a possion control conter or door for thirter treatment advice.

Rinse skin immediately with plenty of water for 15-20 minutes.
 Cal a poison control center or obcitor for treatment advice. F INHALED:

Everly strittle 3 b 6 grants by tighely achaining spron (one to two level teaspoontial amounts) of ZP TRACXIMS PONDER in approximately 3 by 24 toch pactores. Using a hand-powered dustsr, data hand walvidds and spaces to hencen floces. The waintry everymond gloves, where accessible, context and discovers of all decara dimmeds. Mainting Privating Privation Private hand and share accessible, context and discovers of all decara dimmeds. Mainting Privating Privation Privating Privating signs of mouse activity forease to appear. Clean up any powder that is accessible, and depose of in accordance with discoversion.

HAZARDS TO HUMANS AND DOUBESTC ANNULUS CONTRACTIONS OF A DESCRIPTION OF A PRECAUTIONARY STATEMENTS

 When mixing and loading, wear a chemical resistant apron
 When dearing equipment, wear a chemical resistant apron Pertoral Protective Eculoment (PPE) All hardlers, holding backers and applicators must wear. • Coretals, brog-seleved shift and long parts. • Chemical resistant shoes plus socies. Waterproof gloves.

use aery nequirements Follow marubaters's structions for cleaning/mati wastables, use detegent and tot water, Keep and marus. Jarately from other kurder, Wash the outside of glows before networing. Henrowe PFE immediately after handing the product. cisting. - Remoe PPE immedaby aternarding this product. Weat the outside of goves before removing. - As scorn as possible, weah throughly and change into dean dorbing. ENVRONABENTA LA LAZARDS This product is externely tack to be and other widdle. Dogs, cats and other animals might be possimed if the disponsioned that have eatien this bail. Do not contaminate water when deyosing of equipment water version. • Wash hards thoroughly with scap and water before eating, driving, chewing gum, using tobacco Remove conting/PPE immediately it postocial gets inside. Then wash throwoghly and put on clean User Safety Recommendations or using the loted

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STORAGE AND DISPOSAL Donot contaminate water, boor or bead per storage or dopsal. Pestoda Bonque: Store only in original container per keep ontrainers offsen and per keep ontrainers offsen and per keep ontrainers offsen on the Pestode Disponat Waters resulting from the en approved wase dopsal lacity. Continuer Handling: Monetizate container. Do ion approved wase dopsal lacity. Continuer Handling: Workitzlate container. Do ion responde on resolved mission of providue and proved of a standary birdfit.	

DISCLAIMLER: for the actient consistent with applicable law select makes no warranty appressed or why applicable law behavior to product other than indicated on the law. To the extent consistent with applicable law, byter assumes all tek of use and/or handing is material when such use and/or handing is contrary to bail trainuctions.

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