

**MATERIAL SAFETY DATA SHEET**  
**Zoëcon Wasp-X™ Wasp & Hornet Spray**

**Manufacturer:** Wellmark International

**Address:** 1501 East Woodfield Road, Suite 200 West Schaumburg, IL 60173

**Emergency Phone:** 800-347-8272

**Transportation Emergency Phone:** CHEMTREC: 1-800-424-9300

**1. CHEMICAL PRODUCT INFORMATION**

**Product Name:** Zoëcon Wasp-X™ Wasp & Hornet Spray

**Chemical Name/Synonym:** Etofenprox: 2-(4-ethoxyphenyl)-2-methylpropyl 3-phenoxybenzyl ether  
Tetramethrin: cyclohex-1-ene-1,2-dicarboximidomethyl chrysanthemate  
Piperonyl butoxide: 2-(2-butoxyethoxy)ethyl 6-propylpiperonyl ether

**Chemical Family:** Pyrethroid

**Formula:** C<sub>25</sub>H<sub>28</sub>O<sub>3</sub> / C<sub>19</sub>H<sub>25</sub>NO<sub>4</sub> / C<sub>19</sub>H<sub>30</sub>O<sub>5</sub>

**EPA Registration No.:** 2724-786

**RF Number:** 2050

**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	0.50%	not est.
Tetramethrin	7696-12-0	0.20%	not est.
Piperonyl Butoxide	51-03-6	1.00%	not est.
Acetone	67-64-1	10.00%	1000 ppm TWA (OSHA) 750 ppm TWA (ACGIH)
Dimethyl Ether	115-10-6	2.86%	
Hydrocarbon Propellant Blend:		10.14%	
Propane	74-98-6		1000 ppm*
Isobutane	75-28-5		800 ppm*
n-Butane	106-97-8		800 ppm*

\* established by  
NIOSH

**3. HAZARD INFORMATION**

**PRECAUTIONARY STATEMENTS**  
**KEEP OUT OF REACH OF CHILDREN**  
**CAUTION**  
**HAZARDOUS TO HUMANS AND DOMESTIC ANIMALS**  
**CAUSES MODERATE EYE IRRITATION. AVOID CONTACT WITH EYES OR CLOTHING**  
**WASH THOROUGHLY WITH SOAP AND WATER AFTER HANDLING AND BEFORE**  
**EATING, DRINKING, CHEWING GUM OR USING TOBACCO.**

**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:** Avoid contact with skin. Slightly irritating.  
**Eye Irritation:** Avoid contact with eyes. Causes moderate eye irritation.  
**Sensitizer:** Not a sensitizer.

#### **4. FIRST AID MEASURES**

**Eye:**

- 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:** Contains Petroleum Distillates – vomiting may cause aspiration pneumonia.

#### **5. FIRE FIGHTING MEASURES**

**NFPA Rating:**     **Health: 2**                     **Fire: 2**                     **Reactivity: 0**  
**Flammability Class:** Level 1 Aerosol  
**Flash Point:** Not available.  
**Explosive Limits (% of Volume):** Not available.  
**Extinguishing Media:** Extinguishing media suitable for Class B fires.  
**Special Protective Equipment:** Firefighters should wear full protective clothing including self-contained breathing apparatus.  
**Fire Fighting Procedures:** Do not allow run-off to enter waterways or sewers. Contents under pressure.  
**Combustion Products:** Products of combustion are principally carbon dioxide, carbon monoxide, and water.  
**Unusual Fire/Explosion Hazards:** Contents under pressure.

#### **6. ACCIDENTAL RELEASE MEASURES**

**Steps to be taken:** Absorb spills with an inert material. Place in container for disposal. Do not allow spill to enter waterways or sewers.  
**Absorbents:** Clay granules, sawdust, dirt, or equivalent.  
**Incompatibles:** None known.

#### **7. HANDLING AND STORAGE**

**Handling:** Wash hands with soap and water after handling material and before eating, drinking, chewing gum, or using tobacco. Avoid contact with skin, eyes, or clothing. If clothing becomes contaminated, remove and launder before use.  
**Storage:** Do not store above 130°F. Do not store near open flames. Store in a cool, dry place away from children. Do not contaminate water, food, or feed, by storage.

## 8. EXPOSURE CONTROL / PERSONAL MEASURES

**Exposure Limits:** Acetone: 500 ppm (ACGIH TWA) 1000 ppm (OSHA TWA). Propane: 1000 ppm (ACGIH TWA and OSHA TWA). Isobutane and n-butane: 800 ppm (OSHA TWA).

**Ventilation:** Use adequate ventilation.

**Personal Protective Equipment:** None required; however, professional applicators (those with repeated and extended exposure) should wear appropriate protective equipment to prevent skin and eye contact.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance and Odor:** Concentrate is a white liquid emulsion.

**Boiling Point:** 212°F

**Melting Point:** Not applicable

**Vapor Pressure (mm Hg):** (PSIG @ 70°F) Not Det.

**Vapor Density (Air = 1):** Not known

**Specific Gravity:** Concentrate: 0.960

**Bulk Density:** Concentrate: 8.0 lbs/gallon

**Solubility:** In Water: Miscible

**Evaporation Rate:** (Water): 1.0

**pH:** 6.80

## 10. STABILITY AND REACTIVITY

**Stability:** Stable.

**Reactivity:** Not reactive.

**Incompatibility w/ Other Materials:** None known.

**Decomposition Products:** Products of combustion are principally carbon dioxide, carbon monoxide, and water, with trace decomposition of C1-NOx, POx, and SOx.

**Hazardous Polymerization:** Will not occur.

## 11. TOXICOLOGICAL INFORMATION

### ACUTE TOXICITY

Acute oral toxicity: LD50 >5,000 mg/kg

Acute dermal toxicity: LD50 >5,000 mg/kg

Acute inhalation toxicity: LC50 >2.03 mg/L

Skin irritation: slightly irritating

Eye irritation: moderately irritating

Not a dermal sensitizer

### CHRONIC TOXICITY [Specific to Active Ingredient(s)]

**Etofenprox** 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.

Carcinogenicity: NTP: No IARC: No OSHA: No

**Tetramethrin** is classified by EPA as Class C (possible human carcinogen).

**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

### **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.

**Tetramethrin** in rats the NOEL for 13-week inhalation study is  $>5.03 \text{ mg/m}^3$  and for 6-month feeding study is 1500 ppm. In dogs the NOEL for a 90-day feeding study is  $>5000 \text{ ppm}$ .

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

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

**Tetramethrin** 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.

**Tetramethrin** is not a mutagen when tested for gene mutations, Chromosomal aberrations, and unscheduled DNA synthesis.

**Piperonyl butoxide** is not genotoxic in several tests including the Ames 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.

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

### **MUTAGENICITY [Specific to Active Ingredient(s)]**

## **12. ECOLOGICAL INFORMATION**

### **ENVIRONMENTAL FATE [Active Ingredients Only]**

**Hydrolysis:** Not determined.

**Photolysis:** Not determined.

**Soil half life:** Not determined.

**Water solubility:** Not determined.

### **ECOTOXICITY [Active Ingredients Only]**

**Acute Toxicity:** This product is highly toxic to fish. Do not apply directly to water. Drift and runoff from treated areas may be hazardous to aquatic organisms in adjacent areas. Do not contaminate water when disposing of equipment wash waters.

**Etofenprox**

**Acute Toxicity:** **Rainbow trout:**  $LC_{50} = 3.3 \text{ ppb}$   
**Bluegill:**  $LC_{50} = 8.5 \text{ ppb}$

**Tetramethrin**

**Acute Toxicity:** **Rainbow trout:**  $LC_{50} = 43.5 \text{ ppb}$   
**Bluegill:**  $LC_{50} = 157.3 \text{ ppb}$   
**Daphnia:**  $LC_{50} > 300 \text{ mg/L}$

**Piperonyl butoxide**

**Acute Toxicity:** **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:** Consumer Commodity ORM-D

**Freight Classification:** Insecticides N.O.I. NMFC I-155050 Sub 5 CL.65

## 15. REGULATORY INFORMATION

**CERCLA (Superfund):** Acetone: Reportable Quantity = 5000 lbs.

**RCRA:** Not regulated.

### **SARA 311/312 HAZARD CATEGORIES**

**Immediate Health:** Yes

**Delayed Health:** Yes

**Fire:** No

**Sudden Pressure:** Yes

**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.*