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# MATERIAL SAFETY DATA SHEET
# ZOECON® CATALYST®-EMULSIFIED IN WATER INSECTICIDE

**Manufacturer:** Wellmark International

**Address:** 1501 E. Woodfield Rd., Suite 200-West, Schaumburg, IL 60173

**Emergency Phone:** 1-800-248-7763

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

## 1. CHEMICAL PRODUCT INFORMATION

**Product Name:** Zoecon® Catalyst® Emulsified in Water Insecticide

**Chemical Name/Synonym:** Propetamphos: {(E)-1-methylethyl 3-[[(ethylamino) methoxyphosphinothioyl]oxy]-2-butenoate}

**Chemical Family:** Organophosphate

**Formula:** C10 H20 N O4 PS

**EPA Registration No.:** 2724-450

**RF Number:** 9001

## 2. COMPOSITION / INFORMATION ON INGREDIENTS

| Component (chemical, common name) | CAS Number | Weight | Tolerance |
|---|---|---|---|
| Propetamphos: {(E)-1-methylethyl 3-{{(ethylamino)methoxyphosphinothioyl}oxy}-2-butenoate} | 31218-83-4 | 18.9% | Not established |
| Inert Ingredients (non-hazardous and/or trade secret): | | 81.1% | Not established |

## 3. HAZARD INFORMATION

### PRECAUTIONARY STATEMENT

WARNING: Keep out of the reach of children. May be fatal if swallowed. Harmful if inhaled or absorbed through the skin. Avoid breathing vapor or spray mist. Avoid contact with skin, eyes, or clothing.

### SIGNS AND SYMPTOMS OF OVEREXPOSURE

This product contains a cholinesterase inhibiting compound. Early symptoms are unspecific and may include headache, nausea, vomiting, salivation, sweating, and constricted pupils. If the exposure is severe, symptoms such as diarrhea, tightness in chest, slowing of pulse, and difficulty in breathing may be observed.

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

**ACUTE TOXICITY**

**Oral:** LD50 (rat): 451 mg/kg.

**Dermal:** LD50 (rabbit): 2723 mg/kg.

**Inhalation:** LC50 (rat): .98 mg/L (4 hour study) (estimate based on similar product).

## OTHER TOXICOLOGICAL INFORMATION

**Skin Irritation:** Mild irritant (rabbit).

**Eye Irritation:** Mild transient irritant (rabbit).

**Sensitizer:** Non-sensitizing (guinea pig).

## 4. FIRST AID MEASURES

**Eye:** Hold eye open and flush slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first five minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

**Skin:** Remove contaminated clothing and rinse skin immediately with water for 15 – 20 minutes.

**Ingestion:** Call a physician or poison control center 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. Do not give anything by mouth to an unconscious person.

**Inhalation:** Remove to fresh air - if not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.

**Note to Physician:** Propetamphos, an organophosphate compound, is a cholinesterase inhibitor. Atropine with 2-PAM is the emergency antidote if symptoms of cholinesterase inhibition are present.

## 5. FIRE FIGHTING MEASURES

**NFPA Rating:** **Health: 3** **Fire: 2** **Reactivity: 0**

**Flammability Class:** Combustible liquid.

**Flash Point:** >194F (90C).

**Explosive Limits (% of Volume):** Not known.

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

**Special Protective Equipment:** Firefighters should wear protective clothing, eye protection and self-contained breathing apparatus.

**Fire Fighting Procedures:** Do not allow run-off to enter waterways inhabited by aquatic organisms.

**Combustion Products:** Possible oxides of sulfur, nitrogen and carbon from incomplete combustion.

**Unusual Fire/Explosion Hazards:** None.

## 6. ACCIDENTAL RELEASE MEASURES

**Steps to be taken:** Absorb all spills. Place all contaminated materials in a container for disposal.

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

**Incompatibles:** Strong oxidizing agents.

## 7. HANDLING AND STORAGE

**Handling:** Avoid contact with skin, eyes, and clothing. Avoid inhalation. Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and change into clean clothing. Wash clothes separately from other laundry. May use detergent and hot water if no instructions for washables exist.

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

## 8. EXPOSURE CONTROL / PERSONAL MEASURES

**Exposure Limits:** Not established.

**Ventilation:** Use with adequate ventilation.

**Personal Protective Equipment:** If prolonged or excessive exposure is anticipated, it is recommended for handlers to wear a NIOSH/MSHA approved organic vapor/pesticide respirator, chemical-resistant gloves, such as barrier laminate, butyl rubber (>14 mils), neoprene rubber (>14 mils), polyvinyl chloride (PVC)(>14 mils), or viton (>14 mils) and goggles. Long sleeved shirts, long pants, shoes and socks are required. Follow manufacturer's instructions for cleaning and maintaining PPE. Remove PPE immediately after handling this product. Wash the outside of gloves before removing.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance and Odor:** White to yellow-white milky emulsion, with orange-citrus to mild sulfurish odor.

**Boiling Point:** >100C.

**Melting Point:** <32F (0C).

**Vapor Pressure (mm Hg):** Not known.

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

**Specific Gravity:** 1.08.

**Bulk Density:** 9 lbs/gal.

**Solubility:** Emulsifies in water.

**Evaporation Rate:** Not known.

**pH:** 5 - 7.

## 10. STABILITY AND REACTIVITY

**Stability:** Stable.

**Reactivity:** Non-reactive.

**Incompatibility w/ Other Materials:** Strong oxidizing agents.

**Decomposition Products:** Oxides of sulfur and nitrogen may form under conditions of extreme heat.

**Hazardous Polymerization:** Will not occur.

## 11. TOXICOLOGICAL INFORMATION

**CHRONIC TOXICITY [Specific to Active Ingredient(s)]**
No evidence of oncogenicity was observed in a chronic dietary study in rats, where Propetamphos was fed continuously for 2 years at levels up to 120 ppm.

**DEVELOPMENTAL/REPRODUCTIVE TOXICITY [Specific to Active Ingredient(s)]**
No adverse effect was observed on the reproductive performance of rats up to mid dose level of 30 ppm. At the 75 ppm level, some parameters of reproductive performance were affected. The 4 ppm dose level was suggested as the NOEL for overall effects.

**MUTAGENICITY [Specific to Active Ingredient(s)]**
Propetamphos is not considered as a mutagenic compound.

## 12. ECOLOGICAL INFORMATION

**ENVIRONMENTAL FATE [Active Ingredients Only]**

**Hydrolysis:** 1 year (pH6).

**Photolysis:** > 2 years.

**Soil half life:** Not applicable.

**Water solubility:** 110 ppm.

**ECOTOXICITY [Active Ingredients Only]**

**Acute Toxicity:** fish:LC50 (rainbow trout): 2.650 mg/L (bluegill sunfish): 1.100 mg/L (96 hour study); aquatic invertebrates:LC50 (Daphnia magna): 3.3 ug/L (48 hour study)

## 13. DISPOSAL CONSIDERATIONS

Do not contaminate water, food, or feed by disposal. **Pesticide Disposal:** Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance. **Container disposal:** Triple rinse (or equivalent). Then offer for recycling or reconditioning, 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.

## 14. TRANSPORT INFORMATION

**DOT49CFR Description:** Consumer Commodity ORM-D.

**Freight Classification:** Insecticides o/t poison; NMFC #102120.

## 15. REGULATORY INFORMATION

**CERCLA (Superfund):** Not regulated.

**RCRA:** Not regulated as hazardous.

**SARA 311/312 HAZARD CATEGORIES**

**Immediate Health:** Yes (irritant).

**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.*