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MATERIAL SAFETY DATA SHEET
ZOECON® GENTROL® IGR CONCENTRATE

Manufacturer: Wellmark International
Address: 1000 Tower Lane, Suite 245 Bensenville, IL 60106
Emergency Phone: 1-800-248-7763
Transportation Emergency Phone: CHEMTREC: 1-800-424-9300

1. CHEMICAL PRODUCT INFORMATION

Product Name: Zoecon Gentrol® IGR Concentrate
Chemical Name/Synonym: (S)-Hydroprene:Ethyl (2E,4E,7S)-3,7,11-trimethyl-2,4-dodecadienoate
Chemical Family: Isoprenoid
Formula: C₁₇ H₃₀ O₂
EPA Registration No.: 2724-351
RF Number: 259

2. COMPOSITION / INFORMATION ON INGREDIENTS

<u>Component (chemical, common name)</u>	<u>CAS Number</u>	<u>Weight</u>	<u>Tolerance</u>
(S)-Hydroprene: Ethyl (2E,4E,7S)-3,7,11-trimethyl-2,4-dodecadienoate	65733-18-8	9.0%	
Inert ingredients (nonhazardous and/or trade secret):		91.0%	

3. HAZARD INFORMATION

PRECAUTIONARY STATEMENT

WARNING: Keep out of reach of children. Avoid contact with eyes, skin or clothing. causes skin irritation. Harmful if swallowed. Wash thoroughly with soap and water after handling.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

Intoxification not reported. Probable symptoms of overexposure would be nausea, diarrhea, vomiting, G.I. tract irritation.

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

ACUTE TOXICITY

Oral: LD₅₀ (rat): >5,100 mg/kg b.w. (highest dose level tested)

Dermal: LD₅₀ (rabbit): >2,100 mg/kg b.w. (highest dose level tested)

Inhalation: LC₅₀ (rat): >7.3 mg/L (highest dose level tested)

OTHER TOXICOLOGICAL INFORMATION

Skin Irritation: Moderate (rabbit)

Eye Irritation: Minimal (rabbit)

Sensitizer: Not considered a sensitizer (guinea pig)

4. FIRST AID MEASURES

- Eye:** Flush with gently flowing water. If irritation persists see a physician
- Skin:** Wash thoroughly with soap and water. If irritation occurs, see a physician
- Ingestion:** Do not induce vomiting. Drink promptly a large quantity of milk, egg whites, gelatin solution or if these are not available, drink large quantities of water. Avoid alcohol. Call a physician or poison control center immediately
- Inhalation:** Remove to fresh air and get medical attention if needed
- 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:** Combustible liquid
- Flash Point:** 200F
- Explosive Limits (% of Volume):** Not known
- Extinguishing Media:** CO2, foam, water fog
- Special Protective Equipment:** Firefighters should wear protective clothing and 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 and oxides of sulfur
- Unusual Fire/Explosion Hazards:** Not known

6. ACCIDENTAL RELEASE MEASURES

- Steps to be taken:** Absorb spill with inert material and place in a container for disposal.
- Absorbents:** Clay granules, sawdust, dirt or equivalent.
- Incompatibles:** Strong oxidizers

7. HANDLING AND STORAGE

- Handling:** Avoid inhalation of vapors and contact with skin, eyes, and clothing. Wash hands, arms and face thoroughly with soap and water after handling product. Do not use this product in or on an electrical portion of equipment due to possibility of shock hazard.
- Storage:** Keep away from children. Store in a cool area. Do not contaminate water, food, or feed by storage or disposal.

8. EXPOSURE CONTROL / PERSONAL MEASURES

- Exposure Limits:** Not established
- Ventilation:** Use with adequate ventilation.
- Personal Protective Equipment:** If prolonged exposure is anticipated, it is recommended for handlers to wear a MSHA/NIOSH approved organic vapor/pesticide respirator, impervious gloves, goggles and other protective clothing to avoid skin contact.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor:	Straw colored liquid with mild 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:	0.85
Bulk Density:	7.1 lbs/gal
Solubility:	Emulsifies in water
Evaporation Rate:	Not known
pH:	6.22

10. STABILITY AND REACTIVITY

Stability:	Stable
Reactivity:	Non-reactive
Incompatibility w/ Other Materials:	Strong Oxidizers
Decomposition Products:	Carbon oxides, sulfur oxides
Hazardous Polymerization:	Will not occur

11. TOXICOLOGICAL INFORMATION

CHRONIC TOXICITY [Specific to Active Ingredient(s)]

In a 90-day subchronic feeding study in rats, the NOEL was 50 mg/kg/day. Changes in body weight and organ weights were observed at higher dose levels. Maximum tolerated dose (MTD) was suggested to be between 250 and 1,000 mg/kg/day. No immunotoxic effects were observed in a study in mice when (S)-Hydroprene was fed (diet) at dose levels up to and including 1,200 mg/kg/day, continuously for 30 days.

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

Parental reproductive performance in rats remained unaffected up to a dose level of 7,500 ppm, when evaluated in a 2-generation reproduction/toxicity study. Histologically, all females of 7,500 ppm dose group had cytoplasmic vacuolation in the ovaries and regression of corpora lutea, but without affecting reproductive performance. The NOEL for pup development was 1,500 ppm. No teratogenic or fetotoxic effects were observed in rats when pregnant animals were exposed (gavage) to (S)-Hydroprene at levels up to 1,000 mg/kg/day (highest dose tested) during days 6 to 15 of gestation. NOEL for maternal toxicity was 1,000 mg/kg/day. Minor skeletal anomalies observed at lower dose levels were absent in the high dose animals, indicating an observation unrelated to the dose treatment.

MUTAGENICITY [Specific to Active Ingredient(s)]

(S)-Hydroprene is not a mutagen.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL FATE [Active Ingredients Only]

Hydrolysis:	Not available
Photolysis:	Not available
Soil half life:	Not available
Water solubility:	<2 ppm, emulsifies in water.

ECOTOXICITY [Active Ingredients Only]

Acute Toxicity:	fish: Not available; aquatic invertebrates: Not available
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13. DISPOSAL CONSIDERATIONS

Do not reuse container. Securely wrap original container in several layers of newspaper and discard in trash. Larger wastes resulting from this product may be disposed of on site or at an approved waste disposal facility.

14. TRANSPORT INFORMATION

DOT49CFR Description: Not regulated

Freight Classification: Insecticides other than poison, N.O.I. NMFC #102120

15. REGULATORY INFORMATION

CERCLA (Superfund): Not regulated as hazardous

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.