

MATERIAL SAFETY DATA SHEET
ZOECON GENTROL® IGR CONCENTRATE

Manufacturer: Wellmark International
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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%	Not established
Inert ingredients (non hazardous and/or trade secret):		91.0%	Not established

3. HAZARD INFORMATION

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS - CAUTION: KEEP OUT OF THE REACH OF CHILDREN. HARMFUL IF SWALLOWED OR ABSORBED THROUGH THE SKIN. CAUSES MODERATE EYE IRRITATION. AVOID CONTACT WITH EYES, SKIN OR CLOTHING. WASH THOROUGHLY WITH SOAP AND WATER AFTER HANDLING.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

No known health conditions are aggravated by exposure to this product.

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

ACUTE TOXICITY

Oral: No specific hazard identified

Dermal: No specific hazard identified. May cause moderate skin irritation

Inhalation: No specific hazard identified

OTHER TOXICOLOGICAL INFORMATION

Skin Irritation: Avoid contact with skin. May cause skin irritation

Eye Irritation: Avoid contact with eyes. May cause moderate eye irritation

Sensitizer: Is not a 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 eyes.
 - Call a poison control center or doctor for treatment advice.
- If on Skin:**
- Take off contaminated clothing.
 - Rinse skin immediately with plenty of water for 15-20 minutes.
 - Call a poison control center or doctor for treatment advice.
- If swallowed:**
- Immediately call a poison control center or doctor.
 - Do not induce vomiting unless told to by a poison control center or doctor.
 - Do not give **any** liquid to the person.
 - Do not give anything to an unconscious person.
- If inhaled:**
- Move person to fresh air.
 - If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.
 - Call a poison control center or doctor for further 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:	Class IIIB (flash point \geq 200°F)		
Flash Point:	200° F		
Explosive Limits (% of Volume):	Not known		
Extinguishing Media:	CO2, foam, water		
Special Protective Equipment:	Firefighters should wear full protective equipment including self contained breathing apparatus.		
Fire Fighting Procedures:	Normal procedures. Do not allow firefighting water to escape into waterways or sewers.		
Combustion Products:	Oxides of carbon and oxides of sulfur.		
Unusual Fire/Explosion Hazards:	None known		

6. ACCIDENTAL RELEASE MEASURES

- Steps to be taken:** Contain spill and do not allow to enter waterways. Soak up with absorbent 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:** Do not contaminate water, food, or feed by storage or disposal. Store in a cool area away from children.

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 impermeable gloves, goggles and other protective clothing to prevent 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: Not reactive

Incompatibility w/ Other Materials: Strong Oxidizers

Decomposition Products: Carbon oxides, sulfur oxides

Hazardous Polymerization: Will not occur

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY

Acute oral toxicity: LD50 >5100 mg/kg

Acute dermal toxicity: LD50 >2100 mg/kg

Acute inhalation toxicity: 4-Hour LC50 >7.2 mg/L

Skin irritation: Moderate irritant

Eye irritation: Mild irritant

SUBCHRONIC 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. Liver and ovaries were identified as target organs.

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.

CHRONIC TOXICITY/CARCINOGENICITY [Specific to Active Ingredient(s)]

A chronic toxicity/carcinogenicity study in rats identified ovaries and the thyroid as target organs. An increased incidence of benign thyroid tumors was present in male rats only at the highest dose tested. Increased weights and macroscopic and microscopic changes in the ovaries were observed at the highest doses. NOEL for males was 1,000 ppm and for females 100 ppm.

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, 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). NOEL for maternal toxicity was 1,000 mg/kg/day. .

MUTAGENICITY [Specific to Active Ingredient(s)]

(S)-Hydroprene has been found negative for mutagenicity potential. It has tested negative in: 1) Ames Test, 2) in vivo cytogenetic assay, 3) micronucleus test (in vivo) and in 4) test for DNA effects - UDS in rats (in vitro).

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

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 regulated

Freight Classification: Insecticides, other than poison, N.O.I. NMFC-155050 SUB 11 Class 70

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.