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MATERIAL SAFETY DATA SHEET
ZOECON® PRECOR 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® Precor IGR Concentrate
Chemical Name/Synonym: (S)-Methoprene: Isopropyl (2E,4E,7S)-11-methoxy-3,7,11-trimethyl-2,4-dodecadienoate
Chemical Family: Terpenoid
Formula: C₁₉H₃₄O₃
EPA Registration No.: 2724-352
RF Number: 291A

2. COMPOSITION / INFORMATION ON INGREDIENTS

<u>Component (chemical, common name)</u>	<u>CAS Number</u>	<u>Weight</u>	<u>Tolerance</u>
(S)- Methoprene: Isopropyl (2E,4E,7S)-11-methoxy-3,7,11-trimethyl-2,4-dodecadienoate	65733-16-6	1.2%	Not established
Inert ingredients (non-hazardous and/or trade secret):		98.8%	
Aliphatic Hydrocarbon	64742-47-8		Not established

3. HAZARD INFORMATION

PRECAUTIONARY STATEMENT

Caution: Harmful if absorbed through the skin. Avoid contact with skin, eyes and clothing. In case of contact, immediately flush skin or eyes with plenty of water. Get medical attention if irritation persists.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

At large exposures, may cause headaches, nausea, dizziness, may act as anesthetic, cause drowsiness.

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

ACUTE TOXICITY

Oral: LD50 (rat): >5,000 mg/kg (HDT) (Based on (S)-Methoprene)
Dermal: LD50 (rabbit): >2,000 mg/kg (HDT) (Based on (S)-Methoprene)
Inhalation: LC50 (rat) 210mg/l air (Based on RS-Methoprene)

OTHER TOXICOLOGICAL INFORMATION

Skin Irritation: Non-irritating (rabbit) (Based on (S) Methoprene)
Eye Irritation: Practically non-irritating (rabbit) (Based on (S) Methoprene)
Sensitizer: Not a sensitizer (guinea pig) (Based on (RS)-Methoprene)

4. FIRST AID MEASURES

- Eye:** Flush immediately with plenty of water. If irritation persists, get medical attention.
- Skin:** Wash with plenty of soap and water. If irritation persists, get medical attention.
- Ingestion:** Do not induce vomiting. Call a physician or poison control center immediately for guidance.
- Inhalation:** Remove to clear air area.
- Note to Physician:** Treat symptomatically

5. FIRE FIGHTING MEASURES

- NFPA Rating:** **Health: 0** **Fire: 2** **Reactivity: 0**
- Flammability Class:** Combustible liquid
- Flash Point:** 145.4F
- Explosive Limits (% of Volume):** Unknown
- Extinguishing Media:** Water fog, CO2, dry chemical, foam
- 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:** Carbon monoxide and carbon dioxide
- Unusual Fire/Explosion Hazards:** None known

6. ACCIDENTAL RELEASE MEASURES

- Steps to be taken:** Eliminate all ignition sources. Soak up spill with absorbent material. Place in container for disposal. Do not allow spill to enter waterways inhabited by aquatic organisms
- Absorbents:** Clay granules, sawdust, dirt or equivalent.
- Incompatibles:** Oxidizers

7. HANDLING AND STORAGE

- Handling:** Avoid contact with skin, eyes, or clothing when handling, mixing, cleaning up liquid. Wash hands, arms and face thoroughly with soap and water after handling product.
- Storage:** Store in a cool place. Do not store near heat or open flame.

8. EXPOSURE CONTROL / PERSONAL MEASURES

- Exposure Limits:** Not established
- Ventilation:** General ventilation is sufficient.
- Personal Protective Equipment:** If prolonged exposure is anticipated it is recommended for users and handlers to wear a MSHA/NIOSH approved vapor/pesticide respirator, impervious gloves, goggles and appropriate clothing to prevent skin contact.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor: Light yellow to amber oily liquid with faint aliphatic odor.
Boiling Point: N/A
Melting Point: N/A
Vapor Pressure (mm Hg): N/A
Vapor Density (Air = 1): N/A
Specific Gravity: 0.789 ± 0.010 (H₂O=1)
Bulk Density: 6.6 lbs/gal
Solubility: Forms an emulsion in water
Evaporation Rate: N/A
pH: Not applicable

10. STABILITY AND REACTIVITY

Stability: Stable
Reactivity: Non-reactive
Incompatibility w/ Other Materials: Oxidizers
Decomposition Products: Carbon monoxide, carbon dioxide
Hazardous Polymerization: Will not occur

11. TOXICOLOGICAL INFORMATION

CHRONIC TOXICITY [Based on (RS)-Methoprene Technical]

Methoprene is not considered as an oncogenic compound. The NOEL for non-carcinogen effects in an 18-month mouse study was 250ppm.

DEVELOPMENTAL/REPRODUCTIVE TOXICITY [Based on (RS)-Methoprene Technical]

Methoprene is not a teratogenic compound. The NOEL for maternal and embryotoxicity in rabbits was 200/mg/kg/day. The NOEL for reproductive effects in rats was 500 ppm. n

MUTAGENICITY [Based on (RS)-Methoprene Technical]

Methoprene is not a mutagenic compound.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL FATE [Based on (RS)-Methoprene]

Hydrolysis: T_{1/2} > 4 weeks
Photolysis: T_{1/2} < 10 hours
Soil half life: ~ 10 days
Water solubility: < 2 ppm

ECOTOXICITY [Based on (S)-Methoprene]

Acute Toxicity: fish:LC50 (trout): 760 ppb, (bluegill): > 370 ppb (S)-Methoprene);
aquatic invertebrates:LC50 (Daphnia): 360 ppb ((S)-Methoprene)

13. DISPOSAL CONSIDERATIONS

If household use, do not reuse empty container. Wrap empty containers and put in trash. Large quantities or unused product should be disposed of in an approved waste management facility.

14. TRANSPORT INFORMATION

DOT49CFR Description: Not regulated as hazardous by U.S. DOT

Freight Classification: Insecticides other than poison, NOI; NMFC #102120, Class 60

15. REGULATORY INFORMATION

CERCLA (Superfund): Not regulated

RCRA: Not regulated

SARA 311/312 HAZARD CATEGORIES

Immediate Health: Yes (irritant)

Delayed Health: No

Fire: Yes (combustible)

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.