

MATERIAL SAFETY DATA SHEET
ZOECON® ALTOSID® LIQUID LARVICIDE MOSQUITO GROWTH REGULATOR

Manufacturer: Wellmark International
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Transportation Emergency Phone: CHEMTREC: 1-800-424-9300

1. CHEMICAL PRODUCT INFORMATION

Product Name: Zoecon Altosid® Liquid Larvicide Mosquito Growth Regulator
Chemical Name/Synonym: (S)-Methoprene; isopropyl (2E,4E,7S)-11-methoxy-3,7,11-trimethyl-2,4-dodecadienoate
Chemical Family: Terpenoid
Formula: C₁₉ H₃₄ O₃
EPA Registration No.: 2724-392
RF Number: 438

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	5.0%	Not established
Inert ingredients (non-hazardous and/or trade secret)		95.0%	N/A

3. HAZARD INFORMATION

PRECAUTIONARY STATEMENT

Caution: Keep out of the reach of children. Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

No adverse reactions have resulted from normal human exposure during research and testing.

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

ACUTE TOXICITY

Oral:	LD50 (rat): >34,000 mg/kg (highest dose tested) (HDT) (Based on (S)-Methoprene)
Dermal:	LD50 (rabbit): >2000 mg/kg (highest dose tested) (HDT) (Based on (S)-Methoprene)
Inhalation:	LC50 (rat): >5.19 mg/L air (Based on (S)-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 (S) Methoprene)

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.

Skin: Wash material off with soap and water. Remove contaminated clothing and footwear. See a physician if symptoms persist.

Ingestion: Drink 1-2 glasses of water and try to induce vomiting. Seek medical attention. Never give anything by mouth to an unconscious person.

Inhalation: Remove victim to fresh air. See a physician if cough or other respiratory symptoms develop.

Note to Physician: Treat symptomatically

5. FIRE FIGHTING MEASURES

NFPA Rating: **Health: 0** **Fire: 0** **Reactivity: 0**
Flammability Class: N/A
Flash Point: Does not flash
Explosive Limits (% of Volume): None
Extinguishing Media: Water, foam, CO2
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: None known
Unusual Fire/Explosion Hazards: None

6. ACCIDENTAL RELEASE MEASURES

Steps to be taken: In case of leakage or spill, soak up with absorbent material. Place in a container for disposal.

Absorbents: Clay granules, sawdust, dirt or equivalent.

Incompatibles: None

7. HANDLING AND STORAGE

Handling: Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling.

Storage: Store in a cool, dry place, away from other pesticides, food and feed.

8. EXPOSURE CONTROL / PERSONAL MEASURES

Exposure Limits:	Not established
Ventilation:	Use with adequate ventilation.
Personal Protective Equipment:	Under ordinary use conditions, no special protection is required. If prolonged exposure is expected, it is recommended to wear a MSHA/NIOSH approved organic vapor/pesticide respirator, impervious gloves, chemical goggles or safety glasses with side shields.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor:	Creamy, yellow liquid with slight hydrocarbon odor.
Boiling Point:	100 C
Melting Point:	N/A
Vapor Pressure (mm Hg):	17.5 mm Hg @ 25C (water phase)
Vapor Density (Air = 1):	0.6 (water phase)
Specific Gravity:	1.0 - 1.02
Bulk Density:	N/A
Solubility:	Disperses in water
Evaporation Rate:	Approximately 0.8 (water phase)
pH:	6.2-6.8

10. STABILITY AND REACTIVITY

Stability:	Stable
Reactivity:	Non-reactive
Incompatibility w/ Other Materials:	None
Decomposition Products:	None
Hazardous Polymerization:	Will not occur

11. TOXICOLOGICAL INFORMATION

CHRONIC TOXICITY [Based on (RS)-Methoprene]

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]

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

MUTAGENICITY [Based on (RS)-Methoprene]

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 ;
aquatic invertebrates:LC₅₀ (Daphnia): 360 ppb

Do not contaminate water when disposing of equipment washwaters or rinsate.

13. DISPOSAL CONSIDERATIONS

Do not contaminate water, food, or feed by disposal. **Pesticide Disposal:** Wastes resulting from this product may be disposed of on site or at an approved waste management facility. **Container Disposal:** Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, if allowed by state and local authorities, by burning. If burned, stay out of smoke. **Pesticide Disposal:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

14. TRANSPORT INFORMATION

DOT49CFR Description: Not regulated as hazardous by U.S. D.O.T.

Freight Classification: Insecticides, NOI other than poison in boxes or drums. NMFC 102120

15. REGULATORY INFORMATION

CERCLA (Superfund): Not regulated

RCRA: Not regulated as hazardous

SARA 311/312 HAZARD CATEGORIES

Immediate Health: Yes (irritation)

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.