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MATERIAL SAFETY DATA SHEET - Zoëcon® ALTOSID® LIQUID LARVICIDE 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: Zoëcon® Altosid® Liquid Larvicide Concentrate

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.: 2724-446

RF Number: 437

2. COMPOSITION / INFORMATION ON INGREDIENTS

Component (chemical, common name)	CAS Number	Weight	Tolerance
(S)-Methoprene: isopropyl (2E,4E,7S)-11-Methoxy- 3,7,11-trimethyl-2,4-dodecadienoate	65733-16-6	20.0%	Not established
Inert ingredients (non-hazardous and/or trade secret)		80.0%	N/A

3. HAZARD INFORMATION

PRECAUTIONARY STATEMENT

CAUTION: CAUSES MODERATE EYE IRRITATION. AVOID CONTACT WITH EYES OR CLOTHING. WASH THOROUGHLY WITH SOAP AND WATER AFTER HANDLING. PROLONGED OR FREQUENTLY REPEATED SKIN CONTACT MAY CAUSE ALLERGIC REACTIONS IN SOME INDIVIDUALS.

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): >5,000 mg/kg (highest dose tested) (HDT) (Based on (S)-Methoprene)

Dermal: LD₅₀ (rabbit): >2,000 mg/kg (highest dose tested) (HDT) (Based on (S)-Methoprene)

Inhalation: LC₅₀ (rat): >5.2 mg/L air (4 hour study)

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: Immediately flush with copious amounts of water for at least 15 minutes. See a physician if irritation persists.

Skin: Wash material off with copious amounts of water and soap. 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: Combustible liquid

Flash Point: Does not flash

Explosive Limits (% of Volume): None

Extinguishing Media: Water, Foam, CO₂

Special Protective Equipment: Firefighters should wear full 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: Carbon monoxide, carbon dioxide

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 odor.

Boiling Point: 100 degrees Celsius

Melting Point: Not applicable

Vapor Pressure (mm Hg): 17.5 mm Hg

Vapor Density (Air = 1): 0.6 (water phase)

Specific Gravity: 1.04 - 1.06

Bulk Density: 8.3 lbs/gal

Solubility: Disperses in water

Evaporation Rate: Approximately 0.8

pH: 7.5

10. STABILITY AND REACTIVITY

Stability: Stable

Reactivity: Non-reactive

Incompatibility with Other Materials: Bleach, oxidizing/alkaline materials

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-carcinogenic effects in an 18 month mouse study was 250 ppm.

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

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.

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

13. DISPOSAL CONSIDERATIONS

Wastes resulting from this product may be disposed of on site or at an approved waste management facility. Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

14. TRANSPORTATION INFORMATION

DOT49CFR Description: Not regulated as hazardous by 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.

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