MATERIAL SAFETY DATA SHEET
ZOECON® ALTOSID PELLETS

Manufacturer: Wellmark International
Address: 1501 E. Woodfield Rd., Suite 200 West, Schaumburg, IL 60173
Emergency Phone: 1-800-248-7763
Transportation Emergency Phone: CHEMTREC: 1-800-424-9300

1. CHEMICAL PRODUCT INFORMATION

Product Name: Zoecon® Altosid Pellets
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.: 2724-448
RF Number: 330

2. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Component (chemical, common name)</th>
<th>CAS Number</th>
<th>Weight</th>
<th>Tolerance</th>
</tr>
</thead>
<tbody>
<tr>
<td>(S)-Methoprene: Isopropyl (2E,4E,7S)-11-Methoxy-3,7,11-trimethyl-2,4-dodecadienoate</td>
<td>65733-16-6</td>
<td>4.25%</td>
<td>Not established</td>
</tr>
<tr>
<td>Inert ingredients: (nonhazardous and/or trade secret):</td>
<td></td>
<td>95.75%</td>
<td></td>
</tr>
</tbody>
</table>

3. HAZARD INFORMATION

PRECAUTIONARY STATEMENT
Caution: Keep out of the reach of children.

SIGNS AND SYMPTOMS OF OVEREXPOSURE
No adverse reactions have resulted from normal human exposure during research and testing. Adverse animal reactions to this product have not been shown.

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

ACUTE TOXICITY
Oral: LD50 (rat): >34,000 mg/kg (HDT) (Based on (S)-Methoprene)
Dermal: LD50 (rabbit): >2,000 mg/kg (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 flush slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first five minutes, then continue rinsing eye.

**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:** N/A

**Flash Point:** Does not flash

**Explosive Limits (% of Volume):** N/A

**Extinguishing Media:** Water, foam, dry chemical

**Special Protective Equipment:** Firefighters should wear protective clothing, eye protection, and self contained breathing apparatus.

**Fire Fighting Procedures:** Normal procedures. Do not allow run-off to enter waterways inhabited by aquatic organisms

**Combustion Products:** None known

**Unusual Fire/Explosion Hazards:** None

6. ACCIDENTAL RELEASE MEASURES

**Steps to be taken:** Sweep up material and place in a container for disposal. Do not allow spill to enter waterways inhabited by aquatic organisms

**Absorbents:** None necessary due to product form and packaging

**Incompatibles:** None

7. HANDLING AND STORAGE

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

**Storage:** Store closed containers of Altosid pellets in a cool, dry place. Do not contaminate water, food or feed by storage or by disposal.

8. EXPOSURE CONTROL / PERSONAL MEASURES

**Exposure Limits:** Not applicable

**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

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance and Odor</td>
<td>Dark grey to black pellets with slight hydrocarbon odor.</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>N/A</td>
</tr>
<tr>
<td>Melting Point</td>
<td>N/A</td>
</tr>
<tr>
<td>Vapor Pressure (mm Hg)</td>
<td>N/A</td>
</tr>
<tr>
<td>Vapor Density (Air = 1)</td>
<td>N/A</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.04 g/cc</td>
</tr>
<tr>
<td>Bulk Density</td>
<td>N/A</td>
</tr>
<tr>
<td>Solubility</td>
<td>1 ppm</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>N/A</td>
</tr>
<tr>
<td>pH</td>
<td>N/A</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stability</td>
<td>Stable</td>
</tr>
<tr>
<td>Reactivity</td>
<td>Non-reactive</td>
</tr>
<tr>
<td>Incompatibility w/ Other</td>
<td>None</td>
</tr>
<tr>
<td>Materials</td>
<td></td>
</tr>
<tr>
<td>Decomposition Products</td>
<td>None</td>
</tr>
<tr>
<td>Hazardous Polymerization</td>
<td>Will not occur</td>
</tr>
</tbody>
</table>

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 tertogenic 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: T1/2 > 4 weeks ((S)-Methoprene)
- Photolysis: T1/2 < 10 hours ((S)-Methoprene)
- Soil half life: ~ 10 days ((S)-Methoprene)
- Water solubility: < 2 ppm ((S)-Methoprene)

**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

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

14. TRANSPORT 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 (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.