



Altosid[®]

LIQUID LARVICIDE CONCENTRATE



PREVENTS ADULT MOSQUITO EMERGENCE (including those which may transmit West Nile virus, Zika, chikungunya and dengue)

For control of mosquito larvae using ULV application

SPECIMEN LABEL

ACTIVE INGREDIENT:

(S)-Methoprene (CAS #65733-16-6)..... 20%

OTHER INGREDIENTS: 80%

TOTAL: 100%

Formulation contains 1.72 lb/gal (205.2 g/liter) active ingredient

EPA REG. NO. 2724-446 EPA EST. NO. 2724-TX-1

KEEP OUT OF REACH OF CHILDREN

CAUTION

SEE ADDITIONAL PRECAUTIONARY STATEMENTS

BECAUSE OF THE UNIQUE MODE OF ACTION OF **A.L.L.**, SUCCESSFUL USE REQUIRES FAMILIARITY WITH SPECIAL TECHNIQUES FOR APPLICATION TIMING AND TREATMENT EVALUATION. SEE **GUIDE TO PRODUCT APPLICATION** OR CONSULT LOCAL MOSQUITO ABATEMENT AGENCY.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS

AND DOMESTIC ANIMALS

CAUTION

Causes moderate eye irritation. Harmful if absorbed through skin. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

FIRST AID

Call a poison control center or doctor immediately for treatment advice.

(continued)

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 eye.

If on skin or clothing • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15–20 minutes.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-248-7763 for emergency medical treatment information.

ENVIRONMENTAL HAZARDS

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

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

MIXING AND HANDLING INSTRUCTIONS

- 1. SHAKE WELL BEFORE USING.** Zoëcon[®] Altosid[®] Liquid Larvicide Concentrate (A.L.L.) may separate on standing and must be thoroughly agitated prior to dilution.
- Do not mix with oil; use clean equipment.
- Partially fill spray tank with water; then add the labeled amount of **A.L.L.**, agitate, and complete filling. Mild agitation during application is desirable.
- Use spray solution within 48 hours; always agitate before spraying.

APPLICATIONS

Mosquito Control: **A.L.L.** must be applied to 2nd, 3rd, or 4th larval instars of target mosquitoes to prevent adult emergence. Treated larvae continue normal development to the pupal stage where they die. This insect growth regulator **has no effect when applied to pupae or adult mosquitoes.** **A.L.L.** has sufficient field life to be effective at label rates when applied to larval stages under varying field conditions. For further information, see **Guide to Product Application.**

For Control of Mosquito Larvae Using ULV Application: For

ground and aerial application to terrestrial sites, apply at the rate of $\frac{3}{4}$ - 1 fluid ounce of product per acre to water-holding containers and other small bodies of water that breed mosquitoes. Use equipment capable of applying a fine mist or ULV. Follow equipment manufacturer's recommendations when making applications. Direct spray applications to sites where mosquitoes breed. These sites include tires and tire piles, potted plants, tree holes, garbage bins, cans, birdbaths, rain barrels, and other water-holding containers and small bodies of water.

For aerial application to terrestrial sites, apply by fixed wing or rotary aircraft. Apply at the rate of $\frac{3}{4}$ - 1 fluid ounce of product to acre diluted with water at a minimum of a 1:1 mix ratio with water. Apply using ULV equipped and capable aircraft. Unlike ULV sprays targeting flying mosquitoes, it is important that spray droplets deposit in targeted areas. Target terrestrial areas where mosquitoes breed. These sites include tires, open containers, garbage bins, birdbaths, and gutters holding small amounts of water. Spray equipment must be adjusted so that the volume median diameter (VMD) produced ranges from 60 microns ($Dv_{0.5} < 60\mu$) to 100 microns ($Dv_{0.5} < 100\mu$), and that 90% of the spray is contained in droplets smaller than 200 microns ($Dv_{0.9} < 200\mu$). Directions from the equipment manufacturer or vendor, pesticide registrant, or test facility using a wind tunnel and laser-based measurement instrument must be used to adjust equipment to produce acceptable droplet size spectra. Application equipment must be calibrated annually to confirm that nozzle flow rate(s) are accurate. Do not apply at altitudes below 100 feet unless using unmanned aircraft designed for low application heights. Apply when wind speed on the ground is ≥ 1 mph and ≤ 10 mph. Apply when wind factors promoting drift are low. For best results, use Global Positioning System (GPS) equipped aircraft.

METHODS OF APPLICATION

Aerial: Apply **A.L.L.** by aircraft to terrestrial locations where mosquito breeding occurs. Use the amount of **A.L.L.** listed below in sufficient water to give complete coverage. One-half to 5 gallons of spray solution per acre is usually satisfactory. Do not apply when weather conditions favor drift from areas treated.

Ground: Determine the average spray volume used per acre by individual operators and/or specific equipment. Mix **A.L.L.** in the appropriate volume of water to give the rate per acre shown below.

APPLICATION RATE

Apply $\frac{3}{4}$ to 1 fl oz of **A.L.L.** per acre (55 to 73 ml/hectare) in water as directed.

For Control of Mosquito Larvae Using ULV Application: Apply at $\frac{3}{4}$ - 1 ounce per acre. Reapply as breeding sites become reinfested or when monitoring indicates an increase in adult populations.

APPLICATION SITES

Pastures: **A.L.L.** may be applied after each flooding without removal of grazing livestock.

Rice: **A.L.L.** must be applied to 2nd, 3rd, and/or 4th instar

larvae of mosquitoes found in rice, usually within 4 days after flooding. **A.L.L.** treatment may be repeated with each flooding.

Intermittently Flooded Noncrop Areas: Apply **A.L.L.** as directed above when flooding may result in floodwater mosquito hatch. Typical sites include: freshwater swamps and marshes, salt marshes, woodland pools and meadows, dredging spoil sites, drainage areas, waste treatment and settling ponds, ditches and other natural and manmade depressions.

Crop Areas: Apply **A.L.L.** to irrigated croplands after flooding to control mosquito emergence. Examples of such sites are: vineyards, rice fields (including wild rice), date palm orchards, fruit and nut orchards, and berry fields and bogs. Irrigated pastures may be treated after each flooding **without** removal of livestock.

Dense Vegetation or Canopy Areas: Apply an **A.L.L.** sand mixture using standard granular dispersal equipment. For detailed preparation instructions, refer to **Guide to Product Application**.

TANK MIXING INSTRUCTIONS

The user, at his discretion can mix **A.L.L.** with a registered adulticide or other larvicide, such as *Bacillus thuringiensis*, variety *israeliensis* (*B.t.i.*) or *Bacillus sphaericus* (*B.s.*) unless the tank mix product label prohibits such mixing. Use of the resulting tank mixture must be used in accordance with the more restrictive label limitations and precautions.

Chemigation: Refer to supplemental labeling entitled **Guide to Product Application** for use directions for chemigation. Do not apply this product through any irrigation system unless the supplemental labeling on chemigation is followed.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal. **Pesticide Storage:** Store in a cool place, away from other pesticides, food and feed. In case of leakage or spill, soak up with sand or another absorbent material. **Pesticide Disposal:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. **Container Handling:** Nonrefillable container. Do not reuse or refill this container. Clean container promptly after emptying. Triple rinse as follows. Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container $\frac{1}{4}$ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling, if available, or puncture and dispose of in a sanitary landfill, or by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

For information, call **1-800-248-7763** or visit our Web site: www.centralmosquitocontrol.com

Wellmark International

1501 East Woodfield Road 200W
Schaumburg, Illinois 60173

Altosid, Zoëcon and Zoëcon with design are registered trademarks of Wellmark International.
©2006-2017 Wellmark International.



March, 2017
Schaumburg, IL



Safety Data Sheet

Section 1: Identification

Product identifier

Product Name

- **Zoecon Altosid Liquid Larvicide Concentrate**

Synonyms

- 37240E; EPA Reg. No.: 2724-446; Strike Professional Midge Control; Zoecon RF-437 Mosquito Growth Regulator SR-20

Product Description

- White, opaque liquid.

Relevant identified uses of the substance or mixture and uses advised against

Recommended use

- Insect growth regulator

Restrictions on use

- Keep out of reach of children. Avoid contact with eyes, skin or clothing.

Details of the supplier of the safety data sheet

Manufacturer

- Wellmark International
1501 E. Woodfield Road, Suite 200W
Schaumburg, IL 60173
United States

www.centralmosquitocontrol.com

Emergency telephone number

Manufacturer (Transportation) • 1-800-424-9300 - CHEMTREC

Manufacturer (Transportation) • 1-703-527-3887 - CHEMTREC - Outside North America - Collect Calls Accepted

Manufacturer • 1-888-914-2082

Section 2: Hazard Identification

United States (US)

According to: OSHA 29 CFR 1910.1200 HCS

Classification of the substance or mixture

OSHA HCS 2012

- Not classified; does not meet hazard criteria.

Label elements

OSHA HCS 2012

Hazard statements • No label element(s) required

Other hazards

OSHA HCS 2012

- This product is not considered hazardous under the U.S. OSHA 29 CFR 1910.1200 Hazard Communication Standard.

Section 3 - Composition/Information on Ingredients

Substances

- Material does not meet the criteria of a substance.

Mixtures

Composition		
Chemical Name	Identifiers	%
(s)-Methoprene	CAS:65733-16-6	20%
Other ingredients	NDA	80%

Section 4: First-Aid Measures

Description of first aid measures

- Inhalation**
- IF INHALED: Move person to fresh air. If person is not breathing, call 911 or get medical help then give artificial respiration, preferably by mouth-to-mouth if possible. Call a poison control center or seek medical advice.
- Skin**
- 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.
- Eye**
- IF IN EYES: Hold eye open and rinse gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
- Ingestion**
- IF SWALLOWED: Call a POISON CONTROL center or doctor if you feel unwell. Rinse mouth. Do NOT induce vomiting.

Most important symptoms and effects, both acute and delayed

- Refer to Section 11 - Toxicological Information.

Indication of any immediate medical attention and special treatment needed

- Notes to Physician**
- Treat symptomatically and supportively.

Section 5: Fire-Fighting Measures

Extinguishing media

- Suitable Extinguishing Media**
- SMALL FIRES: Dry chemical, CO₂, water spray or regular foam.
- Unsuitable Extinguishing Media**
- Avoid heavy hose streams.
- Firefighting Procedures**
- Move containers from fire area if you can do it without risk. Use extinguishing agent suitable for type of surrounding fire. Do not allow fire fighting water to escape into waterways or sewers.

Special hazards arising from the substance or mixture

- Unusual Fire and Explosion Hazards**
- No data available.
- Hazardous Combustion Products**
- No data available.

Advice for firefighters

- Wear positive pressure self-contained breathing apparatus (SCBA).

Section 6 - Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

- Personal Precautions**
- Use appropriate Personal Protective Equipment (PPE). Avoid contact with skin, eyes, and clothing. Ventilate the area.
- Emergency Procedures**
- Do not allow runoff into water, storm drains or drainage ditches.

Environmental precautions

- Contain and prevent from release into any waterway, sewer or drain.

Methods and material for containment and cleaning up

- Containment/Clean-up Measures**
- Absorb spills with an inert material, clay granules or other inert absorbent material and put in container for disposal.

Section 7 - Handling and Storage

Precautions for safe handling

- Handling**
- Avoid contact with skin, eyes, and clothing. Wash hands thoroughly with soap and water after handling. Wear appropriate personal protective equipment, avoid direct contact.

Conditions for safe storage, including any incompatibilities

- Storage**
- Store in a cool/low-temperature, well-ventilated, dry place. Keep container tightly closed.

- Incompatible Materials or Ignition Sources**
- Separate pesticides during storage to prevent cross-contamination of other pesticides, fertilizers, food and feed.

Other Information

- See product label for additional information.

Section 8 - Exposure Controls/Personal Protection

Control parameters

Exposure controls

- Engineering Measures/Controls**
- Use adequate ventilation to remove vapors (fumes, dust etc)

Personal Protective Equipment

Pictograms



Respiratory

- If handling without sufficient ventilation, wear a NIOSH approved respirator with organic cartridge.

Eye/Face

- Wear chemical splash safety goggles.

Hands

- Wear chemical resistant gloves.

Skin/Body

- If prolonged exposure is anticipated, it is recommended for handlers to wear appropriate clothing to prevent skin contact.

General Industrial Hygiene Considerations

- Do not get in eyes or on skin or clothing. Handle in accordance with good industrial hygiene and safety practice.

Environmental Exposure Controls

- Controls should be engineered to prevent release to the environment, including procedures to prevent spills, atmospheric release and release to waterways.

Section 9 - Physical and Chemical Properties

Information on Physical and Chemical Properties

Material Description			
Physical Form	Liquid	Appearance/Description	White, opaque liquid.
Color	White	Odor	Characteristic of hydrocarbons.
Odor Threshold	No data available		
General Properties			
Boiling Point	No data available	Melting Point/Freezing Point	No data available
Decomposition Temperature	No data available	Heat of Decomposition	No data available
pH	6.24 (10% in type I water)	Specific Gravity/Relative Density	1.01 g/ml
Density	No data available	Water Solubility	Insoluble
Viscosity	100 - 350 cPs @ 20°C (68°F)		
Volatility			
Vapor Pressure	No data available	Vapor Density	No data available
Evaporation Rate	No data available		
Flammability			
Flash Point	No flash	UEL	No data available
LEL	No data available	Autoignition	No data available
Flammability (solid, gas)	No data available		
Environmental			
Octanol/Water Partition coefficient	No data available		

Section 10: Stability and Reactivity

Reactivity

- Non-reactive under normal handling and storage conditions.

Chemical stability

- Stable under normal temperatures and pressures.

Possibility of hazardous reactions

- Hazardous polymerization will not occur.

Conditions to avoid

- No data available.

Incompatible materials

- No data available.

Hazardous decomposition products

- No data available.

Section 11 - Toxicological Information

Information on toxicological effects

Components		
(s)-Methoprene (20%)	65733-16-6	Acute Toxicity: Ingestion/Oral-Rat LD50 • >34000 mg/kg; Inhalation-Rat LC50 • 5.19 mg/L; Skin-Rabbit LD50 • >5000 mg/kg; Irritation: Eye-Rabbit • Essentially non-irritating; Skin-Rabbit • Essentially non-irritating

GHS Properties	Classification
Respiratory sensitization	OSHA HCS 2012 • Classification criteria not met
Serious eye damage/Irritation	OSHA HCS 2012 • Classification criteria not met
Acute toxicity	OSHA HCS 2012 • Acute Toxicity - Dermal - Classification criteria not met; Acute Toxicity - Inhalation - Classification criteria not met; Acute Toxicity - Oral - Classification criteria not met
Aspiration Hazard	OSHA HCS 2012 • Classification criteria not met
Carcinogenicity	OSHA HCS 2012 • Classification criteria not met
Skin corrosion/Irritation	OSHA HCS 2012 • Classification criteria not met
Skin sensitization	OSHA HCS 2012 • Classification criteria not met
STOT-RE	OSHA HCS 2012 • Classification criteria not met
STOT-SE	OSHA HCS 2012 • Classification criteria not met
Toxicity for Reproduction	OSHA HCS 2012 • Classification criteria not met
Germ Cell Mutagenicity	OSHA HCS 2012 • Classification criteria not met

Potential Health Effects

Inhalation

Acute (Immediate)

- Under normal conditions of use, no health effects are expected.

Chronic (Delayed)

- No data available.

Skin

Acute (Immediate)

- Under normal conditions of use, no health effects are expected.

Chronic (Delayed)

- No data available.

Eye

Acute (Immediate)

- Under normal conditions of use, no health effects are expected.

Chronic (Delayed)

- No data available.

Ingestion

Acute (Immediate)

- Under normal conditions of use, no health effects are expected.

Chronic (Delayed)

- No data available

Carcinogenic Effects

- No component of this product present at 0.1% or greater is listed by IARC, OSHA or NTP.

Section 12 - Ecological Information

Toxicity

Components		
(s)-Methoprene (20%)	65733-16-6	Aquatic Toxicity-Fish: 96 Hour(s) LC50 <i>Rainbow Trout</i> 0.76 mg/L [Acute] 96 Hour(s) LC50 <i>Blue Gill</i> >0.37 mg/L [Acute] NOEC <i>Fathead minnow</i> 0.048 mg/L [Chronic] Aquatic Toxicity-Crustacea: NOEC <i>Mysid shrimp</i> 0.014 mg/L [Chronic] 96 Hour(s) LC50 <i>Mysid shrimp</i> 0.11 mg/L [Acute]

48 Hour(s) LC50 *Daphnia magna* 0.36 mg/L [Acute]**Persistence and degradability**

- Methoprene degrades rapidly in sunlight, both in water and on inert surfaces. The pesticide also is metabolized rapidly in soil and does not leach. Thus, it should not persist in soil or contaminate ground water.

Bioaccumulative potential

- No data available

Mobility in Soil

- (s)-Methoprene: 10-14 days, rapidly hydrolyzed in soil.

Other adverse effects

- No data available.

Ecological Fate

- Not hydrolyzed up to 30 days.

Other Information

- No data available.

Section 13 - Disposal Considerations**Waste treatment methods****Product waste**

- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations. Do not empty into drains.

Packaging waste

- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations. See product label for disposal instructions.

Section 14 - Transport Information

	UN number	UN proper shipping name	Transport hazard class (es)	Packing group	Environmental hazards
DOT	Not Applicable	Not Regulated	Not Applicable	Not Applicable	Not Applicable
IMO/IMDG	Not Applicable	Not Regulated	Not Applicable	Not Applicable	Not Applicable
IATA/ICAO	Not Applicable	Not Regulated	Not Applicable	Not Applicable	Not Applicable

Special precautions for user • None specified.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code • No data available

Other information

IMO/IMDG • No data available

IATA/ICAO • No data available

Key to abbreviations

= N/A = Not applicable.

Section 15 - Regulatory Information**Safety, health and environmental regulations/legislation specific for the substance or mixture**

SARA Hazard Classifications • Not regulated

FIFRA – Pesticide Labeling

This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.

CAUTION

Precautionary Statements • KEEP OUT OF THE REACH OF CHILDREN.

Hazards to Humans and Domestic Animals • PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS-CAUTION: Causes moderate eye irritation. Harmful if absorbed through skin. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

First Aid • Call a poison control center or doctor for treatment advice. 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 eye. If on skin or clothing • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes.

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

Inventory		
Component	CAS	TSCA
(s)-Methoprene	65733-16-6	No

Section 16 - Other Information

- Revision Date** • 22/September/2015
- Last Revision Date** • 22/September/2015
- Preparation Date** • 22/September/2015
- Disclaimer/Statement of Liability** • The information and statements herein are believed to be reliable but are not to be construed as a warranty or representation for which we assume legal responsibility. Users should undertake sufficient verification and testing to determine the suitability for their own particular purpose of any information or products referred to herein. NO WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE IS MADE.