# 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



# **ACTIVE INGREDIENT:**

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

**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.
- 2. Do not mix with oil; use clean equipment.
- **3.** 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.
- **4.** 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 <sup>3</sup>/<sub>4</sub> - 1 fluid ounce of product per acre to waterholding 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  $\frac{34}{4}$  - 1 fluid ounce of product to acre diluted with water at a minium 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 ( $Dv_{0.0}$ < 200µ). 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  $\geq 1$  mph and  $\leq$  10 mph. Apply when wind factors promoting drift are low. For best results, use Global Positioning System (GPS) equipped aircraft.

#### **METHODS OF APPLICATION**

<u>Aerial</u>: 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.

<u>Ground:</u> 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 <sup>3</sup>/<sub>4</sub> 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 <sup>3</sup>/<sub>4</sub> - 1 ounce per acre. Reapply as breeding sites become reinfested or when monitoring indicates an increase in adult populations.

### **APPLICATION SITES**

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

**<u>Rice:</u>** A.L.L. must be applied to 2nd, 3rd, and/or 4th instar VEC 17-004 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.

**<u>Crop Areas:</u>** 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 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

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