

ACCEPTED

APR 06 2011

Under the Federal Insecticide, Fungicide,  
and Rodenticide Act, as amended, for  
the pesticide registered under  
EPA Reg. No. 63823-62

[ ] Indicates optional text

**Z112-014**

AN INSECT GROWTH REGULATOR  
PREVENTS ADULT MOSQUITO EMERGENCE  
(INCLUDING THOSE WHICH MAY TRANSMIT  
WEST NILE VIRUS)

<b>Active Ingredient</b>	
(S)-Methoprene (CAS# 65733-16-6).....	5%
<b>Other Ingredients</b> .....	95%
<b>Total</b> .....	100%

EPA Reg. No.: 63823-

EPA Est. No.: \_\_\_\_\_

## KEEP OUT OF REACH OF CHILDREN

### PRECAUTIONARY STATEMENTS

**ENVIRONMENTAL HAZARDS:** Do not apply directly to treated, finished drinking water reservoirs or drinking water receptacles when the water is intended for human consumption. Do not contaminate water when disposing of unused product.

### 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. Z112-014 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 Z112-014, agitate, and complete filling. Mildly agitate during application.
4. Use spray solution within 48 hours; always agitate before spraying.

### APPLICATION

Z112-014 must be applied to 2<sup>nd</sup>, 3<sup>rd</sup>, or 4<sup>th</sup> larval instars of 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. Z112-014 has sufficient field life to be effective at labeled rates when applied to larval

stages under varying field conditions. Reapply after 10 days as needed for management of mosquito emergence.

### METHODS OF APPLICATION

#### AERIAL

Use the amount of Z112-014 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 treated areas.

#### Spray Drift Management

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment and weather-related factors determine the potential for spray drift. The applicator is responsible for considering all of these factors when making the decision to apply this product.

The following spray drift management requirements must be followed to avoid off-target drift movement from aerial applications.

1. The boom width must not exceed 75% of the wingspan or 90% of the rotor blade.
2. Nozzles must always point backward, parallel with the air stream, and never be pointed downward more than 45 degrees.
3. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.
4. Do not apply when wind speeds favor drift beyond the treatment area.

Where states have more stringent regulations, they must be observed.

#### GROUND

Determine the average spray volume used per acre by individual operators and/or specific equipment. Mix Z112-014 in the appropriate volume of water to give the rate per acre indicated below.

#### APPLICATION RATE

Apply 3 to 4 fl oz of Z112-014 per acre (219 to 293 ml/hectare) in water to listed sites up to 1 foot deep.

#### APPLICATION SITES

##### RICE

Apply Z112-014 as directed to 2<sup>nd</sup>, 3<sup>rd</sup>, or 4<sup>th</sup> instar larvae of mosquitoes, usually present within 4 days after flooding. Treatment with Z112-014 may be repeated with each flooding.

### **INTERMITTENTLY FLOODED NONCROP AREAS**

Apply Z112-014 as directed when flooding may result in 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 Z112-014 to irrigated cropland after flooding to prevent 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 grazing livestock.

### **CHEMIGATION**

Apply this product only through flood (basin), furrow, or border irrigation systems. Do not apply this product through any other type of irrigation system. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water. If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers, or other experts.

Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system.

A person knowledgeable of the chemigation system and responsible for its operation or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

#### **Flood (Basin), Furrow, and Border Chemigation:**

Systems using a gravity flow pesticide dispensing system must meter the pesticide into the water at the head of the field and downstream of a hydraulic discontinuity such as a drop structure or weir box to decrease potential for water source contamination from back flow if water flow stops.

Systems utilizing a pressurized water and pesticide injection system must meet the following requirements:

- The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.

- The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

A pesticide supply tank is recommended for the application of Z112-014 by chemigation.

### **STORAGE AND DISPOSAL**

Do not contaminate water, food, or feed by storage or disposal.

#### **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 DISPOSAL**

Non-refillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse or pressure rinse container (or equivalent) 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.

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

### **WARRANTY & CONDITIONS OF SALE**

To the extent allowable by law, Seller makes no warranty, expressed or implied, concerning the use and handling of this product other than indicated on the label. To the extent allowable by law, Buyer assumes all risks of use and handling of this material when such use and handling are contrary to label instructions.

**Always read the label before using this product.**

Manufactured for  
Management Contract Services, Inc.  
Valdosta, Georgia USA



U.S. ENVIRONMENTAL PROTECTION AGENCY  
Office of Pesticide Programs  
Biopesticides and Pollution Prevention Division (7511P)  
1200 Pennsylvania Avenue NW  
Washington, DC 20460

**NOTICE OF PESTICIDE:**

☒ **Registration**  
☐ **Reregistration**  
(under FIFRA, as amended)

EPA Reg. Number:

**63823-62**

Date of Issuance:

**APR 06 2011**

Term of Issuance:

**Unconditional**

Name of Pesticide Product:

**Z112-014**

Name and Address of Registrant (include ZIP Code):

**Management Contract Services, Inc.  
P.O. Box 5209  
Valdosta, GA 31603-5209**

**Note:** Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Biopesticides and Pollution Prevention Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This registration does not eliminate the need for continual reassessment of the pesticide. If EPA determines at any time, that additional data are required to maintain in effect an existing registration, the Agency will require submission of such data under section 3(c)(2)(B) of FIFRA. This product is unconditionally registered in accordance with FIFRA Sec. 3(c)(5) provided you:

1. Submit and/or cite all data required for registration of your product under FIFRA section 3(c)(5) when the Agency requires all registrants of similar products to submit such data.
2. Revise the EPA Registration Number to read, "EPA Reg. No. 63823-62".
3. Submit within 12 months after the date of registration acceptable Storage Stability (OPPTS 830.6317) and Corrosion Characteristic (OPPTS 830.6320) study/data proposed in your letter dated January 29, 2010.
4. Submit two (2) copies of the final printed labeling before you release the product for shipment. Refer to the A-79 enclosure for a further description of final printed labeling.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA Section 6(e). Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records. A stamped copy of the label is enclosed for your records.

Signature of Approving Official:

*W. Michael McDavit*

W. Michael McDavit, Associate Director,  
Biopesticides and Pollution Prevention Division

Date:

**APR 06 2011**



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

Ms. Peggy Galloway  
Regulatory Agent  
Management Contract Services, Inc.  
P.O. Box 5209  
Valdosta, GA 31603

APR 06 2011

Subject: Product: EPA Registration # 63823-61(Z112-0013)  
EPA Registration # 63823-62 (Z112-0014)

Dear Ms. Galloway:

The Agency has conducted a preliminary review of MCSI's rebuttal information submitted to satisfy aquatic invertebrate species risk assessment for the referenced products. If, upon further review the Agency should conclude that additional information is needed for the referenced products, MCSI will be notified immediately and MCSI must submit a response to the Agency within 60- calendar days from the date of our letter.

If you have questions or need additional information, you may contact Regulatory Action Leader Cheryl Greene by telephone (7093 308-0352) or by Email [greene.cheryl@epa.gov](mailto:greene.cheryl@epa.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "Linda A. Hollis".

Linda A. Hollis, Chief,  
Biochemical Pesticides Branch  
Biopesticides and Pollution  
Prevention Division (7511P)