[] optional wording

ZOECON RF-437 MOSQUITO GROWTH REGULATOR SR-20

Alternate brand names:

Zoëcon® Altosid® Liquid Larvicide Concentrate

Strike Professional Midge Control

Prevents emergence of adult floodwater mosquitoes

[Prevents the emergence of adult filter [moth] flies, and midges]

[Keeps infestations under control]

Prevents emergence of adult fleas up to 8 weeks outdoors

Controls pre-adult fleas (larvae) up to 8 weeks

Biorational [approach to] flea control outdoors

Microencapsulated Formula

Prevents adult mosquito emergence (including those which may transmit West Nile Virus)

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ACTIVE INGREDIENT:

(S)-Methoprene (CAS #65733-16-6)	20.0%
OTHER INGREDIENTS:	<u>80.0%</u>
TOTAL	100.0%

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

KEEP OUT OF REACH OF CHILDREN CAUTION

See Back Panel For Additional Precautionary Statements

BECAUSE OF THE UNIQUE MODE OF ACTION OF ZOECON RF-437 MOSQUITO GROWTH REGULATOR SR-20, SUCCESSFUL USE REQUIRES FAMILIARITY WITH SPECIAL TECHNIQUES FOR APPLICATION TIMING AND TREATMENT EVALUATION. SEE GUIDE TO PRODUCT APPLICATION OR CONSULT LOCAL MOSQUITO ABATEMENT AGENCY.

EPA Reg. No. 2724-446 EPA Est. No.

NET CONTENTS:

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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. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

FIRST AID	
Call a poison of	ontrol 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.
	uct container or label with you when calling a poison control center or doctor, or nent. You may also contact 1-800-[phone number] for emergency medical

[Note: First Aid statement paragraph format may be used if space is limited.]

ENVIRONMENTAL HAZARDS

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

[INTRODUCTION]

[Zoecon RF-437 is a unique product that controls [mosquitoes][filter [moth] flies (*Psychoda* spp.)][midges (*Chironomidae*)] and other nuisance aquatic insect species [infesting waste water treatment facilities]. Zoecon RF-437 contains an insect growth regulator (IGR) that is efffective on the developing [immature] stages of insect pests. Zoecon RF-437 does not kill adults but affects the larval stages as they grow and develop. Zoecon RF-437 stops the formation of pupa of insect pests, thereby eliminating adult populations. Zoecon RF-437 stops the cycle of reproduction, keeping pest infestations under control. Continued use of the product prevents these pests from rebounding into unmanageable infestations.]

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:

- SHAKE WELL BEFORE USING. Zoecon RF-437 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 [container] with water; then add the labeled amount of Zoecon RF-437, agitate and complete filling. Mild agitation during application is desirable. [Accomplish agitation by use of recirculation pump, mixer, air pump, or other suitable equipment]
- 4. Use spray solution within 48 hours; always agitate before spraying.

APPLICATIONS

Mosquito Control: Zoecon RF-437 must be applied to 2nd, 3rd, or 4th larval instars of floodwater 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**. Zoecon RF-437 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**.

[Waste Water Treatment Facility Pests: Use Zoecon RF-437 in trickling filters, sludge drying beds, clarifiers, holding ponds, lagoons, influent structures, stagnant or standing water, or other areas of waste water treatment facilities where midges, filter [moth] flies, and other nuisance aquatic insect pests are a problem.]

[What to Expect in Waste Water Treatment Facilities] [Continuous Flow Sewage {waste water}

In order to achieve effective results, Zoecon RF-437 must be applied on a daily basis for at least 2 weeks. Failure to apply the material on a daily basis during the treatment phase may result in erratic results. Following initial applications of Zoecon RF-437, a gradual reduction in the number of adult pests will be seen over approximately a 1 week period. Reduction in adult populations will be very noticeable within a two week period following continuous application. Due to varying conditions or heavy infestations, the period to expect control may be longer. Since the mode of action of Zoecon RF-437 is to prevent adult emergence, existing adults and pupa present at the time of initial application will complete their life cycle.

As adult suppression peaks, use a maintenance rate of Zoecon RF-437 for continuous protection from population rebound. However, if application of Zoecon RF-437 is halted following population suppression, rebound of the population can be expected within 2 to 3 weeks after stopping application. For continuous suppression throughout the pest season, continue application of Zoecon RF-437.

Sludge or Solid Waste Applications

For solid waste applications, use 5 ounces per million gallons of sludge or solids. Apply the dilution until the drying beds have been filled. Following filling of the drying beds, the application of the dilution may be halted. Make applications of the dilution at the <u>influent</u> side as the sludge or solids enter into the drying beds. Application of Zoecon RF-437 to solids will prevent the emergence of adult insect pests thereby keeping infestations under control.]

METHODS OF APPLICATION

Aerial: Use the amount of Zoecon RF-437 listed below in sufficient water to give complete coverage. One-half to 5 gallons of spray solution per acre (4.7 to 46.8 liters/hectare) 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 Zoecon RF-437 in the appropriate volume of water to give the rate per acre shown below.

[Waste Water Treatment Facilities:] [Dilute Zoecon RF-437 with water prior to use. Make application of Zoecon RF-437 by use of a metering pump, drip bucket or other suitable equipment. Metering pumps are the most efficient and accurate method of application. Appropriate dilution of product will be influenced by the method of application. Depending on the dosage rate, prepare the desired volume of dilution to apply over a $\{6-8 \text{ hour period}\}\$ $\{24 \text{ hour period (day tank)}\}$, or in cases of sludge beds, applied until the beds have been filled. When using delivery devices, it is important to calibrate the device to deliver the required amount of Zoecon RF-437 over a $\{6-8 \text{ hour period}\}\$ $\{24 \text{ hour period}\}$. $\{34 \text{ hour period}\}$ $\{34 \text{$

APPLICATION RATE

Mosquitoes: Apply $^{3}/_{4}$ to 1 fl oz of Zoecon RF-437 per acre (55 to 73 ml/hectare) in water as directed.

[Waste Water Treatment Pests:]

[Initial Application - 4 - 5 ounces Zoecon RF-437 per 1 million gallons of sewage [waste water] in sufficient water to uniformly apply at the influent side over a 24 hour period.]

[Maintenance Rate - 2.5 - 3.0 ounces Zoecon RF-437 per 1 million gallons of sewage [waste water] in sufficient water to uniformly apply at the influent side over a 24 hour period.]

[To achieve effective results, make initial application rates on a daily basis for 2 weeks without interruption. Use sufficient water/Zoecon RF-437 to achieve uniform application to sewage [waste water] over a 24 hour period. Make application of the dilution at the <u>influent</u> side of the particular area to be treated.]

[Maintain initial rate of application for two weeks and then follow the directions for the maintenance rate for continued effectiveness.]

[Application to Waste Water – Trickling Filter:

Apply 5 ounces Zoecon RF-437 per 1 million gallons of sewage [waste water] in sufficient water to uniformly apply the material. Make applications at times of low periods of flow (typically evening through early morning hours) for 6 – 8 hours. Discontinue treatment during peak flow periods and repeat applications the following day during the low flow period. Continue this application method for 7 to 10 days or until suppression of pests is achieved. Repeat applications every 15 days or as necessary to control pests.]

Fleas: Apply 1 fluid ounce of Zoecon RF-437 per 1000 square feet in water as directed.

APPLICATION SITES

Pastures: Zoecon RF-437 may be applied after each flooding without removal of grazing livestock.

Rice: Zoecon RF-437 must be applied to 2nd, 3rd, and/or 4th instar larvae of mosquitoes found in rice, usually within 4 days after flooding. Zoecon RF-437 treatment may be repeated with each flooding.

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Intermittently Flooded Noncrop Areas: Apply Zoecon RF-437 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 Zoecon RF-437 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 a Zoecon RF-437 sand mixture using standard granular dispersal equipment. For detailed preparation instructions, refer to Guide to Product Application.

For Fleas Outdoors: (1) When using a hose-end sprayer, place 0.75 ounces of Zoecon RF-437 in bottle, add 6 ounces of water and apply at low pressure. (2) Make sure to apply at 0.75 ounces of Zoecon RF-437 per 15 gallons of water. (3) Apply 0.75 ounces of Zoecon RF-437 in 15 gallons of water to every 750 square feet of residential turf. (4) Pay particular attention to areas where pets frequent, such as, in and around dog houses and runs, and around shrubs, outside decks, and porches. (5) If a large population of fleas is present, use [an outdoor flea control product][brand name of outdoor flea control product] for initial kill of adult fleas.

[Waste Water Treatment Facilities: Make applications of Zoecon RF-437 to sewage as it <u>flows into</u> trickling filters, sludge drying beds, clarifiers, holding ponds, lagoons, influent structures, stagnant or standing water, or other areas of waste water facilities where pests are a problem.

Make applications of Zoecon RF-437 as the sewage enters (influent areas) the targeted processing area. Failure to add the material at the influent side may result in erratic results.]

TANK MIXING INSTRUCTIONS: Zoecon RF-437 may be tank mixed with liquid *Bacillus* thuringiensis variety israeliensis (*B.t.i.*) formulations. The ratio of *B.t.i.* to Zoecon RF-437 is to range from 24:1 to 50:1 (volume/volume). For example, to prepare a 50:1 tank mix, add 1 gallon of RF-437 to 50 gallons of *B.t.i.* This tank mix can be applied to sites listed above at rates of 2 to 16 fluid ounces/acre (0.15-1.2 liters/hectare).

The user, at his discretion can [tank] mix Zoecon RF-437 with an adulticide currently registered for use unless the 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. **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:** 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.

For information, call 1/800-XXX-XXXX or visit our Web site: [URL].

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