# Aqua Zenivex

A reduced-risk, water-dilutable option for effective mosquito control.



## KEY ADVANTAGES OF AQUA ZENIVEX™ E20 ADULTICIDE:

- Water-dilutable formulation
- EPA reduced risk classification
- Approval for wide range of application sites including agricultural crops, pastures and rangeland
- Requires no synergist (PBO)
- Non-ester pyrethroid
- No aquatic or crop set-backs
- Can be used diluted or undiluted

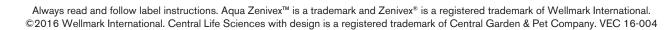


To learn more about Zenivex<sup>®</sup> adulticide or Aqua Zenivex<sup>™</sup> E20, contact Central Life Sciences or visit CentralLifeSciences.com



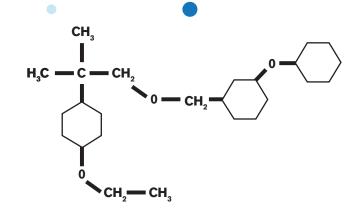






### **ALL ABOUT ETOFENPROX:**

The active ingredient in Aqua Zenivex<sup>™</sup> E20 is Etofenprox, a unique molecule for the control of adult mosquitoes. The EPA has classified Etofenprox as reduced risk for mosquito control. It poses a low risk to human health and the environment.



### **ENVIRONMENTAL PROFILE:**

Etofenprox offers a positive environmental profile. The molecule rapidly breaks down in sunlight. Environmental studies show Agua Zenivex™ E20 is not persistent in soil, surface water or sediment, with average half-lives in aquatic field studies of 1.7 days in water and 4.4 days in soil.

### **HOW IT WORKS:**

The Etofenprox molecule in Agua Zenivex™ E20 is a sodium channel blocker, providing rapid knockdown and a broad spectrum of control. Aqua Zenivex<sup>™</sup> E20 is an adulticide that works on contact and has a very low toxicity profile for mammals, a low profile for avians and its dried residues are easy on bee populations.

### **CHEMICAL NAME:**

2-(4-ethoxphenyl)-2-methylpropyl

3 phenoxybenzyl ether

**COMMON NAME:** 

Etofenprox

**CAS NUMBER:** 

80844-07-1

**EMPIRICAL FORMULA:** 

Cor Hoo Oo

PHYSICAL STATE (TECHNICAL):

Crystalline solid at room temperature

**FORMULATION PROPERTIES:** 

Clear liquid, low odor

**MOLECULAR WEIGHT:** 

**SPECIFIC GRAVITY (TECHNICAL):** 

1.157@23°C

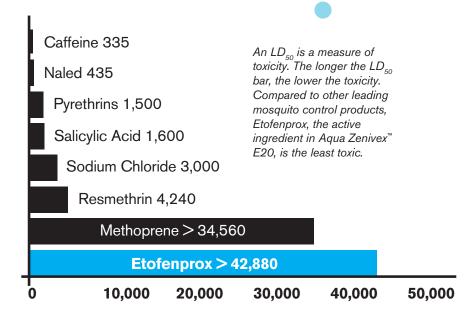
**VAPOR PRESSURE:** 

32mPA (100°C)

**WATER SOLUBILITY:** 

<1µ/1 (25°C)

### **COMPARATIVE ACUTE TOXICITIES:**



### **TARGETING ALL MOSQUITO SPECIES:**

- Aedes aegypti
- Aedes albopictus
- Aedes dorsalis
- Aedes melanimon
- Aedes nigromaculis
- Aedes vexans
- Anopheles crucians
- Anopheles quadrimaculatus
- Coquillettidia sp.
- C. perturbans
- Culex nigripalpus
- Culex pipiens
- Culex quinquefasciatus
- Culex tarsalis
- Ochlerotatus sollicitans
- Ochlerotatus taeniorhynchus

### **Percent Mortality** 100 60

40

20

Aedes albopictus

Rate 0.00175 Pounds per Acre

Rate Used: 0.00175 lbs/acre Air Temperature: (rep 100) 26.8° C

**Date(s):** June 3 & 4, 2014

AQUA ZENIVEX™ E20 EFFICACY TESTING IN TEXAS VIA

TRUCK MOUNTED ULV SPRAYER AND 300 FOOT SPRAY SWATH:

(rep 300) 26.1° C **AVG Wind:** 

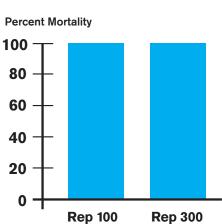
June 3 (rep 100) - 4.1 m/s June 4 (rep 300) - 5.9 m/s

24-hour Percentage Mortality: Rep 100 – Aedes albopictus: 100%

Culex quinquefasciatus: 94% Rep 300 – Aedes albopictus: 100%

Culex quinquefasciatus: 95%

### Culex quinquefasciatus Rate 0.00175 Pounds per Acre



Rep 300

### **TOXICOLOGICAL PROFILES:**

- Ecological Toxicology
  - Etofenprox presents a low toxicity to birds
  - Dried foliar residues are not harmful to honeybees

### Mammalian Toxicology

- Etofenprox has a low toxicity to mammals
- EPA has classified Etofenprox as unlikely to cause cancer in humans
- Etofenprox has low intermediate-term toxicity and chronic toxicity
- Etofenprox is not a mutagen, developmental or reproductive toxin

### **USAGE RATES INFO:**

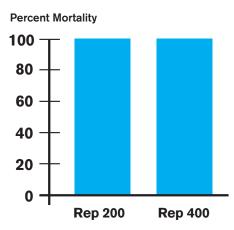
Application rates – 0.00175, 0.0035, and 0.007 lb per acre - vary depending on the preference of the user, allowing for flexibility in a variety of habitats and for a variety of mosquito species. Aqua Zenivex<sup>™</sup> E20 applications include aerial, vehicle mounted and hand held equipment. VMD for ground fogging is 7 to 30 microns, and for aerial <60 microns.

Consult your Central Life Sciences field or technical representative for calibration or application assistance.

#### Aedes albopictus Rate 0.0035 Pounds per Acre

Rep 100

Rep 300



### **Date(s):** June 4, 2014 Rate Used: 0.0035 lbs/acre

**Air Temperature:** (rep 200) 26.8° C

(rep 400) 26.0° C

AVG Wind:

(rep 200) 4.1 m/s (rep 400) 6.2 m/s

24-hour Percentage Mortality:

Rep 200 – Aedes albopictus: 100% Culex quinquefasciatus: 96% Rep 400 – Aedes albopictus: 100% Culex quinquefasciatus: 93%

### **Culex quinquefasciatus** Rate 0.0035 Pounds per Acre

