For use only by federal, state, tribal, or local government officials responsible for public health or vector control, or by persons certified in the appropriate category or otherwise authorized by the state or tribal lead pesticide regulatory agency to perform adult mosquito control procedures, or by persons under their direct supervision.

- For the control of adult mosquitoes, non-biting midges, and black flies.
- For use as a space spray by air and ground application to control adult mosquitoes.
- Approved for use over agricultural crops (including those intended for human consumption), pasture and rangeland.
- Can be used undiluted or diluted.
- Quick permanent knockdown of adult mosquitoes.
- Controls non-biting midges, nuisance and biting flies.
- Controls adult mosquitoes that may transmit diseases including west Nile virus, eastern equine encephalitis, St. Louis encephalitis, dengue, chikungunya, and Zika virus.

### Active Ingredient:
- Etofenprox (CAS 644-07-1): 20%

### Other Ingredients:
- Contains petroleum distillates
- Contains 1.48 lbs etofenprox per gallon

**PRECAUTIONARY STATEMENTS – HAZARDS TO HUMANS & DOMESTIC ANIMALS – CAUTION**

Harmful if inhaled. Causes eye irritation. Avoid contact with eyes. Application and other handlers must wear long-sleeved shirt, long pants, gloves and shoes. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using the toilet. Remove contaminated clothing and launder before reuse. Repellent exposure to etofenprox can cause skin irritation.

**FIRST AID**
- If swallowed: Immediately call a poison control center or doctor. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.
- If inhaled: Remove to fresh air. Call a poison control center or doctor for treatment advice.
- If on skin: Wash with soap and water for 15-20 minutes. Remove contaminated clothing and launder before reuse. Repellent exposure to etofenprox can cause skin irritation.

**ENVIRONMENTAL HAZARDS** – This pesticide is toxic to aquatic organisms, including fish and aquatic invertebrates. Read from treated areas or deposits into bodies of water may be hazardous to fish and other aquatic organisms. Do not apply over bodies of water (bays, rivers, permanent streams, natural ponds, commercial fish ponds, oxbows, marshes or estuaries), except when necessary to treat areas where adult mosquitoes are present, and where conditions will facilitate movement of applied material away from water in order to minimize incidental deposition into the water body. Do not contaminate surface waters with spray. This product is highly toxic to bees exposed to direct treatment on blooming crops or weeds. Time applications to avoid blooming crops or weeds. Time applications to avoid contact with bees. Do not use near bees or beehives or areas frequented by them. Do not contaminate water when disposing of equipment or washwater.

**PHYSICAL/CHEMICAL HAZARDS** – Combustible. Do not use or store near heat or open flame.

**DIRECTIONS FOR USE** – It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

**READ AND FOLLOW ALL LABEL DIRECTIONS.** Before making the first application of the season, it is advisable to consult with the state or tribal agency with primary responsibility for pesticide regulation to determine if other regulatory requirements exist.

**GENERAL** – Zenivex® E20 is an effective insecticide used at low volumes to control adult mosquitoes, biting midges, biting and non-biting flies. Use Zenivex® E20, either undiluted or as Ultra-Low Volume (ULV) sprayed at rates from 0.00175 to 0.00700 pounds of etofenprox per acre. Dilute this product with oil (10-50 cps) only; do not mix with water.

**FOR USE AS A SPACE SPRAY BY AIR AND GROUND APPLICATION TO CONTROL ADULT MOSQUITOES**

**AERIAL APPLICATION** – Use Zenivex® E20, either undiluted or diluted, with ULV equipment. Spray equipment must be adjusted as follows:  Empty the remaining contents into application equipment or a mix tank. Fill the container up to ¼ full with mineral oil or other suitable oil as directed in the equipment manufacturer’s instructions, apply this product at a rate of 0.00175 to 0.00700 pounds etofenprox per acre. Direct fog to treated areas or deposition into bodies of water may be hazardous to fish and other aquatic organisms. Do not contaminate water when disposing of equipment or washwater.

**GROUND APPLICATION** – Use a vehicle-mounted cold aerosol ULV sprayer to apply the product. Direct the spray equipment nozzle to provide even distribution of the product. For best results, apply perpendicular to the wind direction using a swath width of 300 ft. Spray equipment must be adjusted so that the volume median diameter (VMD) is between 10-30 microns (<20µ). The flow rate is contained in droplets smaller than 60 microns (D₉₀小于60µ). 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 tested annually to confirm that pressure at the nozzle and nozzle orifices are properly calibrated.

**APPLICATIONS OVER CROPS OR TO AREAS FAIRING DRIFT OVER CROPS**

Zenivex® E20 can be applied to these areas by either ground or aerial application. Use label rates and follow directions for use as directed in this label. Applications over crops or where drift may occur over crops are limited to 4 applications per month to the same site but no more than two applications within a seven day interval. Do not apply more than 0.028 pounds of active ingredient per month to the same site within a month.

**PESTICIDE STORAGE AND DISPOSAL**

- Store out of reach of children.
- Do not apply to plants in full bloom.
- Do not store near food or food stuffs.
- Do not store near water.
- Do not store near the site of intended application.
- Do not store near recreation areas.
- Store in a well-ventilated area.

**Storage and Spill Procedures:** Store sprayer at room temperature. Avoid exposure to extreme temperatures. In case of spill or leakage, clean up with an absorbent material such as sawdust, sand, earth, fuller’s earth, etc. Disposal of chemical waste.

- Do not contaminate soil, water or other fresh water sources.
- Do not contaminate bodies of water when disposing of equipment or washwater.
- Do not contaminate streams, brooks, or other waterways.
- Do not apply over bodies of water.
- Do not apply where contact with surface waters may occur.
- Do not apply more than 0.028 pounds of active ingredient per month to the same site within a month.
- Do not apply more than 0.18 lbs of active ingredient per site per year.

**KEEP OUT OF REACH OF CHILDREN**

See additional Precautionary Statements below.

**CONTENT:**
- NET CONTENTS: 30 GAL (113.6 L)

**Application Rate**

<table>
<thead>
<tr>
<th>Rate</th>
<th>Pounds A.I. per Acre</th>
<th>Vehicle Speed MPH</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>0.175</td>
<td>0.9</td>
</tr>
<tr>
<td>15</td>
<td>0.175</td>
<td>1.4</td>
</tr>
<tr>
<td>20</td>
<td>0.175</td>
<td>1.8</td>
</tr>
</tbody>
</table>

**Flow Rates**

<table>
<thead>
<tr>
<th>Rate</th>
<th>Undiluted</th>
<th>Diluted 1 to 1</th>
<th>Diluted 1 to 2</th>
<th>Diluted 1 to 4.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.00350</td>
<td>2.7</td>
<td>3.6</td>
<td>5.5</td>
<td>10.1</td>
</tr>
<tr>
<td>0.00700</td>
<td>5.4</td>
<td>7.2</td>
<td>11.0</td>
<td>20.2</td>
</tr>
<tr>
<td>0.01050</td>
<td>7.4</td>
<td>10.8</td>
<td>16.5</td>
<td>30.3</td>
</tr>
<tr>
<td>0.01400</td>
<td>9.4</td>
<td>14.4</td>
<td>22.0</td>
<td>40.4</td>
</tr>
</tbody>
</table>

Use the higher labeled rate when spraying areas where dense vegetation is present. Conduct applications when temperatures are between 50-90°F.

**Backpack Sprayer ULV Application:** Use Zenivex® E20 undiluted or ultrasonic-thermal ULV backpack sprayer capable of applying the product in the 10-50 micron range. Apply product to the area as evenly as possible. Apply at the rate of 0.00175 to 0.00700 pounds etofenprox per acre.

**Urban ULV Mosquito Control Application:** For control of resting or flying adult mosquitoes, biting flies and non-biting midges in areas such as utility tunnels, sewers, storm drains and catch basins, pipe chases, underground basements, parking decks, crawl spaces or unfinished buildings, apply Zenivex® E20 using mechanical foggers, handheld or truck-mounted equipment, thermal foggers or other spray equipment suitable for this application. Apply Zenivex® E20 at rates to not exceed 0.00700 pounds of etofenprox per acre.
For use only by federal, state, tribal, or local government officials responsible for public health or vector control, or by persons certified in the appropriate category or otherwise authorized by the state or tribal lead pesticide regulatory agency to perform adult mosquito control operations, or persons by their direct supervision

**FOR THE CONTROL OF ADULT MOSQUITOES, NOT-BBIDING MICES, AND BLACKFLIES**

**FOR USE AS A SPACE SPRAY BY AIR AND GROUND APPLICATION TO CONTROL ADULT MOSQUITOES**

**APPROVED FOR USE OVER AGRICULTURAL CROPS (INCLUDING THOSE INTENDED FOR HUMAN CONSUMPTION), PASTURE AND RangelAND**

**CAN BE USED UNDILUTED OR DILUTED**

**QUICK PERMANENT KNOCKDOWN OF ADULT MOSQUITOES**

**CONTROLS NOT-BBIDING MICE, NUISANCE AND BITING FLIES**

**CONTROLS ADULT MOSQUITOES THAT MAY TRANSMIT DISEASES INCLUDING WEST NILE VIRUS, EASTERN EQUINE ENCEPHALITIS, ST. LOUIS ENCEPHALITIS, DENGUE, CHIKUNGUNYA, AND ZIKI VIRUS**

**PRECAUTIONARY STATEMENTS – HAZARDS TO HUMANS & DOMESTIC ANIMALS – CAUTION**

Harmful fumes. Caustic nature. Avoid contact with the skin, eyes, and clothing. Application operators and other handlers must wear long-sleeved shirt, long pants, socks and shoes. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove contaminated clothing and launder before reuse. Repellent exposure to mosquitoes can cause skin irritation.

**ENVIRONMENTAL HAZARDS** – This pesticide is toxic to aquatic organisms, including fish and aquatic invertebrates. Residues from treated areas or deposits into bodies of water may be hazardous to fish and other aquatic organisms. Do not apply over bodies of water (dams, rivers, permanent streams, natural ponds, commercial fish ponds, oxbows, marshes or estuaries), except when necessary to treat areas where adult mosquitoes are present, and where conditions will facilitate movement of applied material away from water in order to minimize incidental deposition into the water body. Do not contaminate bodies of water when disposing of equipment or washwater.

**DIRECTIONS FOR USE – This is a violation of Federal law to use this product in a manner inconsistent with its labeling.**

READ AND FOLLOW ALL LABEL DIRECTIONS. Before making the first application of the season, it is advisable to consult with the state or tribal agency with primary responsibility for pesticide regulation to determine if other regulatory requirements exist.

GENERAL – Zenivex® E20 is an effective insecticide used at low volumes to control adult mosquitoes, biting and non-biting flies. Use Zenivex® E20, either undiluted or as Ultra-Low Volume (ULV) or ULV backpack sprayer or aerial application. Zenivex® E20 is effective from 0.00175 to 0.00700 pounds etofenprox per acre. Direct fog to the treatment area, except when applications are made to prevent or control a threat to public and/or animal health determined by a state, tribal, or local health or vector control agency on the basis of documented evidence of disease-causing agents in vector mosquitoes or the occurrence of a mosquito-borne disease in animal or human populations, or if specifically approved by the state or tribe during a natural disaster recovery effort.

**PHYSICAL-CHEMICAL HAZARDS** – Combustible. Do not use or store near heat or open flame. DILUTION – It is recommended that dilutions of the product be made in a clean, suitable, non-disposable (or disposable) tank. This product is highly toxic to bees exposed to direct treatment on blooming crops or weeds. Time applications to provide the maximum possible interval between treatment and the next period of bee activity. Do not apply to blooming crops or weeds when bees are foraging the treated area, even if treatments are made to prevent or control disease in public and/or animal health determined by a state, tribal, or local or state or tribal health care agency on the basis of evidence of disease-causing agents in vector mosquitoes or the occurrence of mosquito-borne disease in animal or human populations, or if specifically approved by the state or tribe during a natural disaster recovery effort.

**APPLICATION – The appropriate application rate can be achieved by altering the dilution rates of Zenivex® E20. Refer to the following chart for examples.**

<table>
<thead>
<tr>
<th>Application Rate Panned A. Per Acre</th>
<th>Vehicle Speed MPH</th>
<th>Flow Rates</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>UnDiluted</td>
<td>Diluted 1 to 1</td>
</tr>
<tr>
<td></td>
<td>Oz/Minute</td>
<td>Oz/Minute</td>
</tr>
<tr>
<td>0.00175</td>
<td>10</td>
<td>0.9</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>1.4</td>
</tr>
<tr>
<td></td>
<td>20</td>
<td>1.8</td>
</tr>
</tbody>
</table>

Use the following table when spraying areas where dense vegetation is present. Conduct applications when temperatures are between 59°F-95°F.

**Backpack Sprayer ULV Application: Apply Zenivex® E20 diluted or undiluted through non-thermal ULV backpack sprayer capable of applying the product in the 10 to 30 microns range. Apply product to the area as evenly as possible. Apply at the rate of 0.00175 to 0.00700 pounds etofenprox per acre.

Urban ULV Mosquito Control Applications: For control of resting or flying adult mosquitoes, biting flies and non-biting flies in areas such as utility towers, homes, storage areas and catch basins, pipe chases, underground basements, underground parking decks, crawl spaces or unfinished buildings, apply Zenivex® E20 using mechanical handlers, backpack or truck-mounted application equipment, thermal foggers or other spray equipment suitable for this application. Apply Zenivex® E20 at rates to not exceed 0.00700 pounds of etofenprox per acre.

**Medical Application:** Apply using a truck, dolly-mounted, handheld, or other thermal fogging equipment. Following the equipment manufacturer’s instructions, apply this product at a rate of 0.00175 to 0.00700 pounds etofenprox per acre. Direct fog to areas where mosquitoes and other pests are located. The volume median diameter (VMD) of droplets produced by thermal foggers is less than 60 microns (D_{50} < 60) and 90% of the spray is contained in droplets smaller than 100 microns (D_{90} < 100).

**Aerial Application – Apply Zenivex® E20, either diluted or undiluted, by fixed-wing or rotary aircraft.** Aerial applications of this product require trained personnel to perform industry accepted assays to monitor resistance formation in targeted mosquitoes. This product is permissible for applications over crops or where drift over cropland could occur. Zenivex® E20 can be applied to these areas by either ground or aerial application. Use label rates and follow DIRECTIONS FOR USE as directed in this label. Applications over crops or where drift may occur over crops are limited to 4 applications per month to the same site but no more than two applications within a seven day interval. Do not apply more than 0.02 pounds of active ingredient per month to the same site within a 30 day interval. Do not spray more than 0.18 lbs etofenprox per acre per day. Do not more than 25 applications per site per year.

**STORAGE & DISPOSAL**

Zenivex® E20 is a combustible. Keep away from heat, sparks, and open flame.

**FIRE FIGHTING HAZARDS – Combustible. Do not use water to fight a fire. Do not use dry chemical, carbon dioxide or foam. Do not use halon as it may react with halon.**

**Spills and Leaks:** Spills and leaks into water may be hazardous to aquatic organisms. Application operators and other handlers must wear long-sleeved shirt, long pants, socks and shoes. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove contaminated clothing and launder before reuse. Repellent exposure to mosquitoes can cause skin irritation.

**KEEP OUT OF REACH OF CHILDREN**

See additional Precautionary Statements below.

**NET CONTENTS: 30 GAL (113.6 L)**

**SAFETY DATA SHEET**

Zenivex® E20® is intended for use by federal, state, tribal, or local government officials responsible for public health or vector control, or by persons certified in the appropriate category or otherwise authorized by the state or tribal lead pesticide regulatory agency to perform adult mosquito control operations, or persons by their direct supervision.