PERM-X™ UL 4-4

For application Only by Public Health Officials and other trained personnel of Mosquito Abatement Districts and other Mosquito Control Programs. An All Temperature, Quick Knockdown, Low Odor, Non-Corrosive Synergized Synthetic Pyrethroid for the control of Adult Mosquitoes, in Residential and Recreational areas. Provides quick knockdown and effective control of mosquitoes, flies, black flies, gnats, biting and non-biting midges, as well as other biting flies.

ACTIVE INGREDIENTS:
- Permethrin, CAS[52645-53-1] …………………………………………………………………………………..             4.0%
- Piperonyl Butoxide Technical [CAS [51-03-6] ] ……………………………………………………………………………….. 4.0%

OTHER INGREDIENTS*: …………………………………………………………………………………………………...          92.0%

TOTAL: 100.0%

*Contains a Petroleum Distillate Solvent

Contains 0.2783 lb. A.I. Permethrin and 0.2783 lb. A.I. Piperonyl Butoxide per gallon.

PRENTOX® - Registered Trademark of Prentiss Incorporated

PERM-X™ - Trademark of Prentiss Incorporated

KEEP OUT OF REACH OF CHILDREN

CAUTION

PRECAUCION AL USUARIO: Si usted no lee inglés, no use este producto hasta que la etiqueta haya sido explicado ampliamente.

FIRST AID

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

If swallowed
- Immediately call a Poison Control Center, physician, or the National Pesticide Information Center at 1-800-858-7378 for treatment advice.
- Do not induce vomiting unless told to by a Poison Control Center or physician.
- Do not give any liquid to the person.
- Do not give anything by mouth to an unconscious or convulsing person.

If on skin or clothing
- Take off contaminated clothing.
- Rinse skin immediately with plenty of water for 15-20 minutes.
- Call a Poison Control Center, physician, or the National Pesticide Information Center at 1-800-858-7378 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.
- Call a Poison Control Center, physician, or the National Pesticide Information Center at 1-800-858-7378 for treatment advice.

If inhaled
- Move person to fresh air.
- If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.
- Call a Poison Control Center, physician, or the National Pesticide Information Center at 1-800-858-7378 for treatment advice.

NOTE TO PHYSICIAN: Solvent presents an aspiration hazard. Gastric lavage is indicated if material was taken internally. Vomiting may cause aspiration pneumonia.

For information on this pesticide product (including health concerns, medical emergencies, or pesticide incidents), call the National Pesticide Information Center at 1-800-858-7378.

SEE SIDE PANEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS

EPA Reg. No. 655-898 9/05
EPA Est. No. 655-GA-1
Lot No. ____________

PRENTISS INCORPORATED

Plant: Kaolin Road, Sandersville, GA  31082
**PRECAUTIONARY STATEMENTS**

**CAUTION:** Harmful if swallowed or absorbed through the skin. Avoid contact with eyes or clothing. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove contaminated clothing and wash clothing before reuse. Prolonged or frequently repeated skin contact may cause an allergic reaction in some individuals.

**ENVIRONMENTAL HAZARDS**

This product is extremely toxic to fish and aquatic invertebrates. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not apply when weather conditions favor drift from treated areas. Drift and runoff from treated sites may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwaters. Bee Warning: This product is highly toxic to bees exposed to direct treatment on blooming crops or weeds. Do not apply this product or allow it to drift on blooming crops or weeds while bees are actively visiting the treatment areas.

**PHYSICAL AND CHEMICAL HAZARDS**

Do not use, pour, spill or store near heat or open flame.

**STORAGE AND DISPOSAL**

Do not contaminate water, food or feed by storage or disposal. **Storage:** Store product in its original labeled container in a cool, dry, locked place designated for such insecticides and out of reach of children. In case of spillage, soak up with absorbent material such as sawdust, or fuller’s earth, sweep up and place in a labeled container and dispose of as follows. **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:** (Metal) Triple rinse or equivalent. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other approved state and local procedures. (Plastic) Triple rinse or equivalent. Then offer for recycling or reconditioning, 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.

**NOTICE:** Buyer and user assume all risk and liability of use, storage and/or handling of this product not in accordance with the terms of this label.

**DIRECTIONS FOR USE**

It is a violation of Federal to use this product in a manner inconsistent with its labeling.

**GENERAL**

Perm-X UL 4-4 is recommended for application as a Ultra Low Volume (ULV) Thermal or Non-thermal aerosol (cold fog) for control of adult mosquitoes and flies in residential, recreational, industrial, urban and other areas where these insect pests are found. Perm-X UL 4-4 provides effective control of mosquitoes and flies in areas such as, but not limited to parks, campites, woodlands, athletic fields, golf courses, residential areas, municipalities, roadsides, animal quarters, barns, playgrounds, and non-crop waste areas. Do not apply this product within 100 feet (30 meters) of lakes and streams. Do not allow spray to drift onto crops grown as pasture, cropland, poultry ranges or potable water supplies. For best results, treat when mosquitoes or insects are most active and weather conditions are conducive to keeping the fog close to the ground, e.g. cool temperatures and ground wind speeds are not greater than 10 mph. Applications during the cool hours of night or early morning are usually preferable. Repeat treatment when recommended by Public Health officials, or Mosquito Abatement Districts.

Perm-X UL4-4 may be applied over specific growing crops and range grasses prior to harvest for the control of adult mosquitoes and biting flies within or adjacent to those areas. Application can only be made where the following crops are present: Almonds, apples, broccoli, brussels sprouts, cabbage, celery, cauliflower, cherries, corn (fodder), bell peppers, soybeans, tomatoes, cucurbit vegetables, and walnuts.

**ULV NON-THERMAL AEROSOL (COLD FOG)**

Perm-X UL 4-4 is recommended for application as an Ultra Low Volume (ULV) non-thermal aerosol (cold fog) for control of adult mosquitoes, flies and gnats in residential, and recreational, industrial, urban and other areas where these insects are a problem. For best results, treat when insects are most active and conditions are conducive to keeping the fog close to the ground. Repeat treatment when recommended by Public Health officials or Mosquito Abatement Districts. To control Mosquitoes and other flies, Midges and Blackflies, apply Perm-X UL 4-4 using any standard ULV ground applicator capable of producing a non-thermal aerosol. The ULV aerosol fog should have a calculated mass median diameter (MMD) that is within a range of 8 to 20 microns (no more than 3% of droplets should be greater than 30 microns). Perm-X UL 4-4 may be applied at vehicle speeds of 5 mph to 20 mph. When applying this product undiluted, apply at a flow rate of 2.728 to 19.092 ounces per minute at an average vehicle speed of 10 mph. These rates are equivalent to 0.001 to 0.007 pound of permethrin a.i. and 0.001 to 0.007 pound of piperonyl butoxide a.i. per acre. If a different vehicle speed is used, adjust the rate accordingly. Vary flow rates accordingly to vegetation density and mosquito population. Use higher flow rates in heavy vegetation or when insect populations are high. Do not exceed the highest flow rates recommended by the equipment manufacturer. An accurate flow rate control system must be used to ensure proper flow rate. Perm-X UL 4-4 may also
be applied by diluting with a light mineral oil or another suitable solvent, applied so as not to exceed 0.007 lbs. a.i. per acre using a swath width of 300 feet for calculation. Refer to Chart 2 for suggested rates for diluted use. Perm-X UL 4-4 may be used to treat aggregation and harborage sites such as, but not limited to, abandoned buildings, warehouses, storm drains, underground drainage pipes, pipe chases and other areas where adult mosquitoes find harborage.

**THERMAL AEROSOL APPLICATIONS**

For use in thermal fogging equipment such as truck-mounted thermal fog generators or other equipment capable of making thermal fogging applications. Perm-X UL 4-4 may be applied either diluted or undiluted. If diluted, use a light mineral oil, or another suitable non-phytotoxic diluent. Do not exceed the maximum rate of 0.007 lbs. a.i. per acre. May be applied with truck-mounted equipment at speeds of 5 mph to 20 mph. Use a swath width of 300 feet for calculation. For use with handheld, backpack or lawn mower thermal fogging equipment do not exceed the maximum rate of 0.007 lbs. a.i. per acre. Use a walking speed of 2 mph (3.2 kph) and a swath width of 300 feet for calculations. Avoid wetting foliage with the thermal fog. Do not fog when wind conditions exceed 5 miles per hour. Fog downwind. Use well maintained and properly calibrated thermal fogging equipment to ensure optimum performance and effectiveness. May be used to treat aggregation and harborage sites such as abandoned buildings, warehouses, storm drains, underground drainage pipes, pipe chases and other areas where adult mosquitoes find harborage.

**BARRIER APPLICATIONS**

For use in non-thermal ULV, motorized, portable, backpack, handheld or truck-mounted fogging equipment or mist blower equipment, apply Perm-X UL 4-4 with equipment adjusted to deliver ULV particles of 50 to 100 mass median diameter. Perm-X UL 4-4 may be applied undiluted or diluted (see Application Rates Charts on this label.) If diluted, use a light mineral oil, or another suitable, non-phytotoxic diluent. For truck-mounted applications, use not more than 0.007 lbs. permethrin per acre. Use a 300 ft. (15.2 m) swath width (see application rate charts on this label) for calculations. For backpack or handheld applications, use not more than 0.007 lbs. a.i. per acre. Use a 300 ft. swath width and a walking speed of 2 mph (3.2 kph) for calculations. Direct spray onto foliage at the perimeter of areas from which mosquitoes or flies are to be excluded or direct spray into harborage areas where adult mosquitoes or flies may be found. May be used to treat aggregation and harborage sites such as abandoned buildings, residential buildings, warehouses, storm drains, underground drainage pipes and other areas where adult mosquitoes find harborage.

**AERIAL APPLICATION**

Perm-X UL 4-4 may be applied either diluted or undiluted at rates not more than 0.007 lbs. a.i. per acre by fixed wing or rotary aircraft. Aerial applications should be made with ULV equipment and nozzles capable of producing droplets with a VMD of 60 microns or less, with not more than 2.5% exceeding 100 microns. Application rates and swath width should be adjusted to not exceed 3.819 fluid ounces of Perm-X UL 4-4 per acre (which is equal to 0.007 lbs. permethrin a.i. and 0.007 lbs. piperonyl butoxide a.i. per acre). Use the effective swath width of the aircraft for calculations. Aerial applications should be made at an altitude of 100-300 feet. Do not apply when ground wind speed exceeds 10 MPH. Applications shall only be made when recommended by public health officials and trained personnel of mosquito abatement districts and other mosquito control programs. Applications shall be made when temperatures are between 50 F and 95F.

For best results, treat when insects are most active and meteorological conditions are conducive to keeping the spray cloud close to the ground. In order to compensate for windy conditions and ensure drift onto the target area aerial application with aircraft equipped with Global Positioning Systems (GPS) is recommended.

Always clean equipment after use to ensure against contamination.

**PROHIBITION ON AERIAL USE IN FLORIDA:** Not for aerial application in the State of Florida unless specifically authorized by the Florida Bureau of Entomology and Pest Control and the Florida Department of Agriculture and Consumer Services.

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**CHART NO. 1 – FOR USE UNDILUTED**

<table>
<thead>
<tr>
<th>Conditions and Rates To Use Perm-X UL 4-4 Undiluted for Mosquito Control</th>
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<tbody>
<tr>
<td><strong>Application Rates</strong></td>
</tr>
<tr>
<td>Pounds Per Acre</td>
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<tr>
<td>Permethrin/PBO</td>
</tr>
<tr>
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<tr>
<td>0.0035</td>
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</table>
### CHART NO. 2 – DILUTE 1 PART WITH 2 PARTS MINERAL OIL

Amounts to Use After Diluting 1 Part Perm-X UL 4-4 with 2 Parts Mineral Oil

<table>
<thead>
<tr>
<th>Lbs. of A.I. Per Acre</th>
<th>Application Rates for Fluid Ounces of Diluted Product Per Minute Per M.P.H.</th>
<th>Diluted Fl. Oz. (ml) to Apply Per Acre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permethrin</td>
<td>PBO</td>
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<td>0.007</td>
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<tr>
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<td>3.750</td>
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