

PRENTOX

SINCE
1919

PERM-X™ UL 4-4

For use only by the Federal, State, Tribal, or local government officials responsible for public health and vector control, or by persons certified by state or tribal lead pesticide regulatory agency to perform adult mosquito control application, or by persons under their direct supervision. A Quick Knockdown, Low Odor, Non-Corrosive Synergized 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 [51-03-6]	4.0%

OTHER INGREDIENTS*:	92.0%
TOTAL:	100.0%

*Contains a Petroleum Distillate Solvent.

PRENTOX® - Registered Trademark of Prentiss Incorporated

Contains 0.2783 lb. A.I. Permethrin and
0.2783 lb. A.I. Piperonyl Butoxide per gallon.
PERM-X™ - Trademark of Prentiss Incorporated

EPA Reg. No. 655-898

EPA Est. No. 655-GA-1

KEEP OUT OF REACH OF CHILDREN CAUTION

PRECAUCION AL USUARIO: Si usted no lee ingles, 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	<ul style="list-style-type: none"> • 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 do so by a Poison Control Center or physician. • Do not give liquid to the person. • Do not give anything by mouth to an unconscious or convulsing person.
If on skin or clothing	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or 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: Contains Petroleum Distillates - 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 INSIDE BOOKLET FOR ADDITIONAL PRECAUTIONARY STATEMENTS

Manufactured by

3/07

Plant: **Kaolin Rd.,
Sandersville, GA 31082**

Office: **C. B. 2000,
Floral Park, NY 11002-2000**

PRENTISS INCORPORATED

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS

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.

This product is extremely toxic to aquatic organisms, including fish and aquatic invertebrates. Runoff from treated areas or deposition of spray droplets into a body of water may be hazardous to fish and aquatic invertebrates. Do not apply over bodies of water (lakes, rivers, permanent streams, natural, ponds, commercial fish ponds, swamps, marshes, or estuaries), except when necessary to target areas where adult mosquitoes are present, and weather conditions will facilitate movement of applied material away from the water in order to minimize incidental deposition into the water body. Do not contaminate bodies of water when disposing of equipment rinsate or 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 to blooming crops or weeds while bees are visiting 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 mosquito-borne disease in animal or human populations, or if specifically approved by the state or the tribe during a natural disaster recovery effort.

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 law to use this product in a manner inconsistent with its labeling.

Before making the first application in a season, it is advisable to consult with the state or tribal agency with primary responsibility for pesticide regulation to determine if permits or other regulatory requirements exist.

GENERAL

Perm-X UL 4-4 is recommended for application as an 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 area such as parks, campsites, woodlands, athletic fields, golf courses, residential areas, municipalities, roadsides, animal quarters, barns, playgrounds, and non-crop waste areas. 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 the night or early morning are usually preferable. Repeat treatment when recommended by Public Health officials, or Mosquito Abatement Districts. Apply this product at temperatures greater than 50F and when wind speed equals or exceeds 1 mph.

Do not spray this product on or allow it to drift onto pastureland, cropland (other than crops listed) or potable water supplies. In the treatment of corrals, feedlots, animal confinements/houses, swine lots, poultry ranges, and zoos, cover any exposed drinking water, drinking water fountains and animal feed before application.

Do not treat a site with more than 0.007 lbs. permethrin per acre in a 24-hour period. Do not apply more than 0.18 lbs of permethrin per acre per year to any site. More frequent treatments may be 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 mosquito-borne disease in animal or human populations, or if specifically approved by the state or tribe during a natural disaster recovery effort.

Perm-X UL 4-4 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.

Spray Droplet Size Determination

Ground-based Application: Spray equipment must be adjusted so the volume median diameter is less than 30 microns (Dv 0.5 < 30 μm) and that 90% of the spray is contained in droplets smaller than 50 microns (Dv 0.9 < 50 μm). Directions from the equipment manufacturer or vendor, pesticide registrant or a test facility using laser based equipment to produce acceptable droplet spectra. Application equipment must be tested at least annually to confirm that pressure at the nozzle and nozzle flow rate(s) are properly calibrated.

Aerial Application: Spray equipment must be adjusted so that the volume median diameter produced is less than 60 microns (Dv 0.5 < 60 μm) and that 90% of the spray is contained in droplets smaller than 100 microns (Dv 0.9 < 100 μm). The effects of flight speed and, for non-rotary nozzles, nozzle angle on the droplet size spectrum must be considered. Directions from the equipment manufacturer or vendor, pesticide registrant or a 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 at least annually to confirm that pressure at the nozzle and nozzle flow rate(s) are properly calibrated.

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

To control adult mosquitoes, flies, and gnats (blackflies) apply Perm-X UL 4-4 using truck mounted ground ULV (cold fog) equipment with a swath width of 300 feet in areas such as residential, recreational, industrial areas. For best results, apply when insects are most active and conditions are conducive to keeping the fog close to the ground. Apply the undiluted product at flow rates of 4.092 to 19.092 fluid oz. per minute at a truck speed of 10 mph. These rates are equivalent to a 0.001 to 0.007 pounds of permethrin a.i. and 0.001 to 0.007 pounds of piperonyl butoxide a.i. per acre. If a different vehicle speed is used, adjust the flow rate accordingly. An accurate flow control system must be used to ensure proper flow rate. Use of the maximum flow rates and application rates listed on this label is recommended to treat heavy vegetation or when target insect populations are high. Do not exceed the highest flow rates recommended by the manufacturer. Perm-X UL 4-4 may also be applied by diluting with a light mineral oil or other 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 outdoor aggregation and harborage sites including storm drains, underground drainage pipes, and pipe chases.

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 volume median diameter. Perm-X UL 4-4 may be applied undiluted or diluted (see Application Rates Chart 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. When this product is applied as a barrier treatment, do not apply within 100 feet (30 meters) of lakes and streams.

AERIAL APPLICATIONS

Use aircraft specifically equipped and capable of applying Ultra-Low Volumes of Perm-X UL 4-4. Applications can be made diluted or undiluted but cannot exceed the recommended rates of 0.007 lbs. permethrin per acre and 0.007 lbs. piperonyl butoxide per acre, equivalent to 3.1819 fl. oz. of undiluted Perm-X UL 4-4 per acre. Applications should be made at an altitude of 100 to 300 feet. Apply at airspeed sufficient to deliver the appropriate amount of active ingredient per acre. The minimum height (from the ground) for aerial application of this product is 100 feet. 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.

PROHIBITION OF AERIAL USE IN FLORIDA: Not for aerial use in Florida UNLESS specifically authorized by the Bureau of Entomology and Pest Control, Florida Department of Agriculture and Consumer Services.

CHART NO. 1 - FOR USE UNDILUTED

Conditions and Rates To Use Perm-X UL 4-4 Undiluted for Mosquito Control						
Pounds Per Acre		Application Rates				Fluid Ounces and Milliliters Per Acre
		Fluid Ounces per Minute				
Permethrin	PBO	5 mph	10 mph	15 mph	20 mph	
0.007	0.007	9.546	19.092	28.637	38.183	3.1819 (94.1 ml)
0.0035	0.0035	4.773	9.545	14.318	19.091	1.5909 (47.05 ml)
0.001	0.001	1.363	2.728	4.092	5.455	0.4546 (13.44 ml)

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						
Lbs. of A.I. Per Acre		Application Rates for Fluid Ounces of Diluted Product Per Minute Per M.P.H.				Diluted Fl. Oz. (ml) to Apply Per Acre
		5 mph	10 mph	15 mph	20 mph	
Permethrin	PBO	5 mph	10 mph	15 mph	20 mph	
0.007	0.007	26.250	52.5	78.75	105.00	8.75 (258.76 ml)
0.0035	0.0035	13.125	26.25	39.38	52.50	4.38 (129.53 ml)
0.0010	0.0010	3.750	7.5	11.25	15.00	1.25 (36.96 ml)