



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

September 22, 2005

Jeffrey S. Miller
Prentiss Incorporated
C.B. 2000
Floral Park, NY 11002-2000

Subject: Label Amendment - Add sites to Directions for Use
Prentox Perm-X UL 4-4
EPA Reg. No. 655-898
Your Submission Dated July 29, 2004

Dear Mr. Miller:

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable subject to the comments listed below. Two (2) copies of the finished labeling must be submitted prior to releasing the product for shipment. A stamped copy of the label is enclosed for your records.

1. On page 2 under "General", replace "cool temperatures and wind speeds are not greater than 20mph" with "cool temperatures and ground wind speeds are not greater than 10mph".
2. Delete "rangelands and fallow croplands" under the heading General. The use over specific crops and range grasses is correctly identified elsewhere on the label.
3. Revise the first sentence second paragraph under General to read as follows, "Perm X UL4-4 maybe applied over within or adjacent to those areas. Application can only be made where the following crops are present:"
4. Under Thermal Aerosol Applications revise the sentence to read, "Do not fog when wind conditions exceed 5 miles per hour. Fog downwind".

- 5. Add the following statements to the end of the Aerial Applications paragraph:

“Aerial application 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 95 F.

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.”

Please note that we have not received labels revised in accordance with PR Notice 2005-1, Labeling Statements on products used for adult mosquito control. The effective date of that Notice was April 15, 2005 and compliance date of October 1, 2005. If you have any questions regarding this action, please contact BeWanda Alexander of my team at (703) 305-7460.

Sincerely,
BeWanda Alexander for
George T. LaRocca
Product Manager (13)
Insecticide Branch
Registration Division (7505C)

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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. Also for use against Biting and Non-Biting Midges and Blackflies. 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. 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 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 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	<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 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 10/02 EPA Est. No. 655-GA-1
Net Contents _____ Lot No. _____
Manufactured by: _____

PRENTISS INCORPORATED

Plant: Kaolin Road, Sandersville, GA 31082
Office: C.B. 2000, Floral Park, NY 11002-2000

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.

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.

ACCEPTED
with COMMENTS
In EPA Letter Dated
SEP 22 2005
Under the Federal Insecticide,
Fungicide, and Rodenticide Act,
as amended, for the pesticide
registered under EPA Reg. No.
655-898

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.

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)

HOW TO APPLY

For proper ground application, mount the fog applicator so that the nozzle is at least 4 1/2 feet above ground level and directed out the back of the vehicle. May be applied at speeds of 5 mph up to 20 mph. Failure to follow these label directions may result in reduced effectiveness. For "Aerial Application" refer to the "Aerial Application" section on this label. Perm-X UL 4-4 may be used as is, or diluted with a suitable solvent such as a 60 to 100 second viscosity mineral oil and applied at a rate not to exceed 3.1819 fl. oz. of Perm-X UL 4-4 per acre. Both aerial and ground applications should be made when the wind is less than 10 mph. For exact rates, see the "Undiluted" or the "For Dilution" rates charts on this label.

Perm-X UL 4-4 is recommended for application as an Ultra Low Volume (ULV) Thermal or Non-thermal aerosol (cold fog) to control adult mosquitoes and other insects as listed on this label, in residential and recreational areas where these insect pests become a problem; such as, but not limited to parks, campsites, woodlands, athletic fields, golf courses, residential areas, municipalities, gardens, 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 on pastureland, 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 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.

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 areas such as, but not limited to parks, campsites, woodlands, athletic fields, golf courses, residential areas, municipalities, roadsides, rangelands, fallow croplands, 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 wind speeds are not greater than 20 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 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 fog with droplets ranging in size from 5 to 30 microns in diameter and a mass median diameter (MMD) of 15 to 20 microns (droplets should not exceed 50 microns and less than 5% of drops should be below 5 microns), with an application swath width of 300 feet. 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 60 to 100 second light mineral oil or another suitable solvent, applied so as not to exceed the maximum a.i. rates per acre as shown in the rates charts. If an alternate dilution is required, adjust the flow rate accordingly, provided droplet size and spectrum remain within label specifications. Do not exceed a flow rate of 20 oz. per minute unless recommended by equipment manufacturers and/or Public Health officials when undiluted or diluted 1 to 2 and high vehicle speeds of 10, 15 or 20 mph are necessary in emergency.

conditions and when fogging equipment is capable of such higher rates of output per minute, 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 FOGGING APPLICATIONS

Truck Mounted—Apply Perm X UL 4-4 diluted or undiluted with suitable Thermal Fogging equipment. Droplet size of thermal “fog” will range 0.1 to 1.0 micron. If diluted, use a 60 to 100 second viscosity mineral oil, or another suitable non-phytotoxic diluent, to reduce oil requirement and sludge buildup in equipment. Do not exceed the maximum rates. May be applied at speeds of 5 mph up to 20 mph. For use with **Hand Carried and/or Lawn Mower Foggers**, use the same rates of A.I. per acre with a 50 foot swath width at a walking speed of 2 mph. Do not fog to wet foliage. Do not fog when wind conditions exceed 10 miles per hour. Only use a clean, well maintained and properly calibrated Fogger, known to give excellent performance. Fog down wind. Apply Perm X UL 4-4 to deliver 0.001 to 0.007 lb. of permethrin a.i. and 0.001 to 0.007 lbs. piperonyl butoxide a.i. per acre. Droplet size of thermal fog will be very small, usually in the 0.5 to 1.0 micron range. 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 10 miles per hour. 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.

USE AS AN INSECT BARRIER TREATMENT- BARRIER APPLICATIONS

For use in non-thermal ULV, motorized, portable, backpack, handheld or truck-mounted Fog type 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 30 to 100 second light mineral oil, or another suitable, non-phytotoxic diluent. (if recommended by Public Health Officials), suitable non-phytotoxic diluent. Use 0.001 to 0.007 pound permethrin a.i. per acre at a 50 ft. (15.2 m) swath width, while walking at a speed of 2 mph (3.2 kph). Whether applied undiluted or diluted, or at a different speed, make sure that the same amount of permethrin a.i. and piperonyl butoxide a.i. is applied per acre. 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

Aerial applications with Ultra Low Volumes of Perm-X UL 4-4 applied according to the Rates Charts on this label, may be considered necessary when conducted at the discretion of Public Health Officials, Mosquito Abatement Districts, or other trained personnel engaged in outdoor Mosquito and flying insect control programs, when these insects threaten to become a public health hazard. Application should be made by suitable aerial ULV equipment capable of producing droplets with an MMD of 50 microns or less with no more than 2.5% exceeding 100 microns at an altitude of 300 feet and a forward speed of 150 mph, achieving an effective swath width of 500 feet. Flow rate and swath width should be set so as to not exceed 3.1819 fluid ounces of Perm-X UL 4-4, which is equal to 0.007 lb. permethrin a.i. and 0.007 lb. piperonyl butoxide a.i. per acre. 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.

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.

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				Diluted Fl. Oz. (ml) to Apply Per Acre
		Per Minute Per M.P.H.				
Permethrin	PBO	5 mph	10 mph	15 mph	20 mph	
0.007	0.007	26.250	52.50	78.75	105.00	8.75 (258.76 ml)
0.0035	0.0035	3.125	26.25	39.38	52.50	4.38 (129.53 ml)
0.0010	0.0010	3.750	7.50	11.25	15.00	1.25 (36.96 ml)