



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

OFFICE OF
PREVENTION OF PESTICIDES AND
TOXIC SUBSTANCES

Mr. Jeffrey S. Miller
Executive Vice President
Prentiss Incorporated
C.B. 2000
21 Vernon Street
Floral Park, N.Y. 11001

MAR 27 2007

Dear Mr. Miller,

Subject: Label Amendment to add PR Notice 2005-1 Recommendations
Prentox Perm-X UL 2-2
EPA Reg. No. 655-813
Submission dated November 4, 2005

The label amendment above, submitted in connection with the Federal Insecticide, Rodenticide, and Fungicide Act is acceptable provided you make the following changes before releasing product bearing the amended labeling for shipment.

1. Page 1

a. Remove the phrase "All-Temperature". Add the following statement to the directions for use. "*Apply this product at temperatures greater than 50° F and when wind speed equal or exceed 1 mph.*"

b. Revise the Note to the Physician to the current LRM recommendation for products containing petroleum distillates. "Contains Petroleum Distillates-Vomiting may cause aspiration hazard."

2. Page 2

a. Environmental Hazard Statement. Rephrase as follows:

"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."*

b. Under the heading "Conditions and Rates to Use For Mosquito Control."

i. Revise the first sentence to read:

"Do not spray this product on or allow it to drift onto pastureland, rangeland, cropland 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."

ii. Insert Recommendation 7 from PR Notice 2005-1 in this section of the label and remove it from the non-thermal aerosol (cold fog) application directions.

"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."

iii. Remove the term "but not limited to" from the label.

iv. Remove the last paragraph in this section beginning with "Droplet size of Perm-X UL 2-2 ..." and replace with Recommendation 5 from PR Notice 2005-1:

“Ground-based Application: Spray equipment must be adjusted so the volume median diameter is less than 20 microns ($Dv\ 0.5 < 20\ \mu m$) and that 90% of the spray is contained in droplets smaller than 48 microns ($Dv\ 0.9 < 48\ \mu m$). 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 50 microns ($Dv\ 0.5 < 50\ \mu m$) and that 90% of the spray is contained in droplets smaller than 100 microns ($Dv\ 0.9 < 100\ \mu m$). 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.”

3. Page 3

a. ULV Non-Thermal Aerosol (Cold Fog) Application. Revise this section to read:

“To control mosquitoes, midges, and blackflies apply Perm-X UL 2-2 using truck mounted ground ULV (cold fog) equipment with a swath width of 300 feet. Apply the product undiluted at flow rates of 4.7 to 18.8 fluid oz. per minute at a truck speed of 5 mph. 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 20 fl. oz./minute. This product may be applied at truck speeds of 5 to 20 mph.”

b. Rates Charts. Revise to include information necessary to calibrate truck mounted sprayers including flow rates per minutes at prescribed truck speeds between 5 and 20 mph. Also include the amount of finished spray to for each dilution on a per acre basis.

c. As a Barrier Spray Using a Backpack Mister Type Unit.

- i. Change Mass Median Diameter to Volume Median Diameter.
- ii. Add the following restriction: “When this product is applied as a barrier treatment, do not apply within 100 feet (30 meters) of lakes and streams.”

c. Aerial Application. Revise this section as follows:

“Use aircraft specially equipped and capable of applying Ultra-Low Volumes of Perm-X UL 2-2. Applications cannot exceed the recommended rates of 0.007 lbs. permethrin per acre and 0.007 lbs. piperonyl butoxide per acre, equivalent to 6.27 fl. oz. of undiluted Perm-X UL 2-2 per acre. Applications should be made at an altitude range of 120 to 175 feet (37 to 53 meters). 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.

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.*

d. **NOTICE:** Add the following phrase, *“To the extent allowed by law,”*

Please note that a notice of availability of EPA’s reregistration eligibility document (RED) for products containing permethrin was published in the FR on June 28, 2006 (Vol. 71 No. 124 pg. 36788). The availability of the piperonyl butoxide RED was published in the FR on July 26, 2006 (Vol. 71, No. 143 pg. 42385). Additional data and/or labeling changes may be required for products containing permethrin and/or piperonyl butoxide.

A stamped copy of the label is enclosed for your records. Submit 2 copies of the final printed label as soon as possible. If you have any questions, please contact Kevin Sweeney at (703) 305-5063. Thank you for your cooperation in this matter.

Sincerely,


George LaRocca
Product Manager 13
Registration Division (7505P)
Insecticides Branch

Enclosure



PERM-X™ UL 2-2

5 8 7

~~For application Only by Public Health Officials and other trained personnel of Mosquito Abatement Districts and other Mosquito Control Programs.~~ For use only by Federal, state, tribal or local government officials responsible for public health and vector control, or by persons certified by the state or tribal lead pesticide regulatory agency to perform adult mosquito control application, or by persons under their direct supervision. 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.

ACTIVE INGREDIENTS:

Permethrin, CAS [52645-53-1]	2.0%
Piperonyl Butoxide Technical [51-03-6]	2.0%
OTHER INGREDIENTS*:	96.0%
TOTAL:	100.0%

*Contains a Petroleum Distillate Solvent. Contains 0.144 lb. A.I. Permethrin and 0.144 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- 813

12/04

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

ACCEPTED
with COMMENTS
In EPA Letter Dated
MAR 27 2007
Under the Federal Insecticide,
Fungicide, and Rodenticide Act,
as amended, for the pesticide
registered under EPA Reg. No.
655-813

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.~~ 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 water when disposing of equipment wash waters.

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. drift where bees are actively 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 tribe during a natural disaster recovery effort. Applications should be timed to provide the maximum possible interval between treatment and the next period of bee activity.

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.

Conditions And Rates To Use For Mosquito Control

~~Do not apply this product within 100 feet (30 meters) of fish bearing areas.~~ Do not allow spray treatment to drift onto pastureland, cropland, poultry ranges or water supplies.

Perm-X UL 2-2 may be applied either diluted or undiluted as a thermal or non-thermal fog. Applicators should wear long sleeved shirt, long pants, shoes and socks.

Perm-X UL 2-2 is recommended for application in ultra low volume (ULV) non-thermal aerosol (cold fog) to control adult mosquitoes, midges and black flies in residential and recreational areas where these insects are a problem, such as, but not limited to parks, campsites, woodlands, athletic fields, golf courses, residential areas, municipalities, gardens, playgrounds, recreational areas and overgrown waste areas. For best results, treat when insects are most active and conditions are conducive to keeping the fog close to the ground. Both ground and aerial applications should be made when meteorological conditions are conducive to keeping the spray cloud close to the ground, such as when air temperature inversion is present. Applications during the cool hours of early morning or evening are preferable. Do not apply when wind speeds exceed 10 mph or during calm air conditions (wind speeds <2-3 mph).

Droplet size of Perm-X UL 2-2 application may be determined using the following procedure: Droplet size should be measured using silicon slides. An adequate volume of air should be sampled by using, for example, rotating rod samplers. Slides are examined microscopically and the diameter of droplets measured in microns. Slides should be scanned until 100-200 droplets have been assessed. A spread factor of 0.61 should be used to correct droplet diameters. The largest droplet should not exceed 50 microns and less than 5% of the droplets should be below 5 microns. A 90% value of the droplets should be in the range of 5 to 30 microns in size.

Conditions and Rates to Use Perm-X UL 2-2 Undiluted for Mosquito Control

Permethrin/PBO Lbs. A./Acre	Application Rates/Fluid Ounces To Use Per Minute				Fl. Oz. Perm-X UL 2-2 per Acre
	5 mph	10 mph	15 mph	20 mph	
0.007/0.007	18.8	Not Recommended	Not Recommended	Not Recommended	6.2
0.0035/0.0035	9.4	18.8	Not Recommended	Not Recommended	3.1
0.00175/0.00175	4.7	9.4	14.1	18.9	1.6

ULV Non-Thermal Aerosol (Cold Fog) Application: To control mosquitoes, midges and black flies, apply Perm-X UL 2-2 using any standard ULV ground applicator, with a swath width of 300 ft. capable of producing a non-thermal aerosol spray with droplets ranging in size up to 48 microns in diameter and mass medium diameter (MMD) 15 to 20 microns. Apply the product undiluted at a flow rate of 4.7 to 18.8 fluid ounces per minute at an average vehicle speed of 5 mph. If 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 populations are high. An accurate flow control system must be used to ensure proper flow rate. Do not exceed a flow rate of 20 fl. oz./min. May be applied at truck speeds of 5 to 20 mph. Do not treat a site with more than 0.007 pounds of permethrin per acre in a twenty-four hour period. Do not exceed 1.0 pounds of permethrin per acre in any given year. More frequent applications 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.

THERMAL AEROSOL FOGGING

Truck Mounted: Apply undiluted with suitable Thermal Fogging equipment. Do not exceed the maximum a.i./acre rates. May be applied at speeds of 5 to 20 mph. To reduce oil requirement and sludge buildup in equipment, use 100-second viscosity mineral "fog" oil. For use with hand foggers, use the same a.i./acre rates. Do not wet foliage since the oil base formulation may be phytotoxic. Do not fog when wind conditions exceed 5 miles per hour. Use well maintained and properly calibrated fogger. Fog downwind.

Recommended Dilution Rates to achieve 0.00175/0.00175 Lbs. A.I./Acre

Machine Output	Dilution Ratio 5 mph	Dilution Ratio 10 mph	Dilution Ratio 15 mph	Dilution Ratio 20 mph
10 gal/hr	1:3.5	1:1.3	1:0.5	1:0.1
20 gal/hr	1:8	1:3.5	1:2	1:1.3
30 gal/hr	1:12.6	1:5/8	1:3.5	1:2.4

Recommended Dilution Rates to Achieve 0.0035/0.0035 Lbs. A.I./Acre

Machine Output	Dilution Ratio 5 mph	Dilution Ratio 10 mph	Dilution Ratio 15 mph	Dilution Ratio 20 mph
10 gal/hr	1:1.3	1:0.2	Not Recommended	Not Recommended
20 gal/hr	1:3.7	1:1.3	1:0.6	1:0.2
30 gal/hr	1:6	1:2.5	1:1.3	1:0.8

Recommended Dilution Rates to Achieve 0.007/0.007 Lbs. A.I./Acre

Machine Output	Dilution Ratio 5 mph	Dilution Ratio 10 mph	Dilution Ratio 15 mph	Dilution Ratio 20 mph
10 gal/hr	1:0.2	Not Recommended	Not Recommended	Not Recommended
20 gal/hr	1:1.3	1:0.2	Not Recommended	Not Recommended
30 gal/hr	1:2.5	1:0.8	1:0.2	Not Recommended

Recommended Dilution Rates for Hand Held Thermal Foggers - 50 Ft. Swath Walking at 2 MPH

Machine Output	Dilution Ratio 0.00175/0.00175 Lbs. A.I./Acre	Dilution Ratio 0.0035/0.0035 Lbs. A.I./Acre	Dilution Ratio 0.007/0.007 Lbs. A.I./Acre
2 gal/hr	1:12.5	1:6	1:2.5
5 gal/hr	1:32.5	1:16.5	1:7.8
8 gal/hr	1:53.3	1:27	1:13

As A Barrier Spray Using A Backpack Mister Type Unit

For use in non-thermal, portable, motorized backpack equipment, apply Perm-X UL 2-2 with equipment adjusted to deliver ULV particles of 50 to 100 microns mass median diameter. Use 1.6 to 6.2 fl. oz. of the undiluted spray per acre (equal to 0.00175 to 0.007 lb. A.I./Acre) as a 50 ft. swath while walking at a speed of 2 mph (3.2 kph). May also be applied diluted, making sure that the same amount of A.I. (0.00175 to 0.007 lb.) is applied per acre.

Recommended Dilution Rates for Backpack Mister Type Unit - 50 Ft. Swath Walking at 2 MPH

Machine Output	Dilution Ratio 0.00175/0.00175 Lbs. A.I./Acre	Dilution Ratio 0.0035/0.0035 Lbs. A.I./Acre	Dilution Ratio 0.007/0.007 Lbs. A.I./Acre
1 gal/hr	1:5.8	1:2.5	1:0.8
2 gal/hr	1:12.5	1:6	1:2.5
3 gal/hr	1:19.3	1:9.6	1:4.3
4 gal/hr	1:26.1	1:13	1:6

Aerial Application

The use of aircraft specially equipped and capable of applying Ultra Low Volumes of Perm-X UL 2-2 may be necessary. Such applications 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 fly insect control programs when these insects threaten to become a public health hazard. Applications cannot exceed the recommended rates.

Aerial applications should be by suitable aerial ULV equipment capable of producing droplets with a MMD of 50 microns or less, with no more than 2.5% exceeding 100 microns. Application should be made at an altitude range of 120 to 175 feet (37 to 53 meters) with rotary nozzles, apply at a sufficient airspeed to deliver that appropriate amount of a.i./acre (from 0.00175 to 0.007 lbs. a.i./acre).

Prohibition For Aerial Use: Not for aerial application in Florida unless specifically authorized by the Bureau of Entomology and Pest Control, Florida Department of Agriculture and Consumer Services.

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