

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

OFFICE OF PREVENTION, 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 2 8 2007

Dear Mr. Miller,

Subject: Label Amendment to add PR Notice 2005-1 Recommendations

Prentox Perm-X UL 4-4 EPA Reg. No. 655-898

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 50^0 F and when wind speed equals or exceeds 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 pneumonia."

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 "GENERAL"

i. Add:

"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."

ii. Insert <u>Recommendation 7</u> 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.
- c. <u>Spray Droplet Determination</u>. Delete the proposed text for this section and revise as follows to include <u>Recommendation 5</u> from PR Notice 2005-1.

"Ground-based Application: Spray equipment must be adjusted so the volume median diameter is less than 30 microns (Dv $0.5 < 30 \mu m$) and that 90% of the spray is contained in droplets smaller than 50 microns (Dv $0.9 < 50 \mu m$). 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 60 microns (Dv $0.5 < 60 \mu m$) 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."

d. **GROUND APPLICATION**

i. <u>ULV Non-Thermal Aerosol (Cold Fog) Application</u>. Revise this section to read:

"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 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 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 outdoor aggregation and harborage sites including storm drains, underground drainage pipes, and pipe chases."

b. As a Barrier Application

- 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-Lov' 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.

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 Landdca Product Manager 13

Registration Division (7505P)

Insecticides Branch



PERM-XTM UL 4-4

For application Only by Public Realth 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 Provides quick knockdown and effective control of mosquitoes, flies, black flies, gnats, biting and nonbiting midges, as well as other biting flies.

ACTIVE INGREDIENTS: Permethrin, CAS [52645-53-1] ... Piperonyl Butoxide Technical [51-03-6] 4.0% OTHER INGREDIENTS*: 92.0% TOTAL:

*Contains a Petroleum Distillate Solvent Contains 0.2783 lb. A.I. Permethrin and 0.2783 lb. A.I. Piperonyl Butoxide per gallon. PERM-XTM - Trademark of Prentiss Incorporated PRENTOX® - Registered 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 Immediately call a Poison Control Center, physician, or the National Pesticide Information Center at 1-800-858-7378 for If swallowed 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 Take off contaminated clothing. If on skin or Rinse skin immediately with plenty of water for 15-20 minutes. clothing Call a Poison Control Center, physician, or the National Pesticide Information Center at 1-800-858-7378 for treatment Hold eye open and rinse slowly and gently with water for 15-20 minutes If in eyes 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 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

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), cal the National Pesticide Information Center at 1-800-858-7378

SEE SIDE PANEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS EPA Reg. No. 655-898

Net Contents

Manufactured by:

EPA Est. ACCEPTED iouith COMMENTS

Under the Federal loss Fungicide, and Rodenticide as amended, for the p registered under EPA

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. Wesh 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.

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 when 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 or 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.

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 founc. 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, 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 erops grown as pasture, oropland, 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.

Spray Droplet Size Determination

Ground Equipment:

Spray equipment must be adjusted so that the volume median diameter is less than 30 microns and that 90% of the spray is contained in droplets smaller than 50 microns. Application equipment must be tested at least annually to confirm that nozzle performance, flow rate(s) and droplet size requirements are properly calibrated.

Aerosol droplet size of a Perm-X UL 4-4 application may be determined using generally acceptable methods such as, but not limited to A.I.M.S.; PC-DC-III, Magnesium oxide or Teflon®-coated glass slides. When droplet sizing using either an AIMS or PC-DC-III, the machine should be adjusted to the oil setting for neat Perm-X UL 4-4 and all dilutions. When using coated glass slides, an adequate volume of air should be sampled by using, for example, rotating slide impingers. Depending on the apparatus used, follow manufacturer's instructions for obtaining droplet measurements. Slides should be examined microscopically and the diameter of droplets measured in microns. Slides should be scanned until at least 200 droplets have been sized. If using Teflon coated slides, a spread factor of 0.61 should be used to correct droplet diameters. If using magnesium oxide coated slides, a spread factor of 0.86 should be used. The optimum droplet size range is from 8 to 30 microns by the volume median diameter (VMD) calculation.

Aerial Equipment:

Spray equipment must be adjusted so that the volume median diameter produced is less than 60 microns and that 90% of the spray is contained in droplets smaller than 100 microns. The effects of flight speed and, for non-rotary nozzles, nozzle angle on the droplet size spectrum must be considered. Application equipment must be tested at least annually to confirm that nozzle performance, flow rate(s) and droplet size requirements are properly calibrated. For aerial applications of this product, the use of ULV equipment and nozzles such as rotary atomizers or similar types that produce droplet VMD's less than 60 microns are recommended.

Aerosol droplet size of an aerial application may be determined using generally acceptable methods such as Teflon or magnesium oxide coated slides on rotating impingers, rotor rod, cascade impactors, wind tunnel mounted lasers or other suitable methods.

GROUND APPLICATION

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 gnáts 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 drolpets 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 undituted, 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. 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 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 abarement 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.

CHART NO. 1 - FOR USE UNDILUTED

		Conditions and	Rates To Use Per	m-X UL 4-4 Und	liluted for Mosqu	nito Control
			Applicat			
Pounds Per Acre			Fluid Ounce			
Permethrin	PBO	5 mph	10 mph	15 mph	20 mph	Fluid Ounces and Milliliters Per Acre
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

					I ARTS PHINER	
		Amounts to Use	After Diluting 1	Part Perm-X UL	4-4 with 2 Parts	Mineral Oil
	· ·					
Lbs. of A.I. Per Acre		1	Per Minute			
Permethrin	PBO	5 mph	10 mph	15 mph	20 mph	Diluted Fl. Oz. (nl) to Apply Per Acre
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)