

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460-0001



OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

July 20, 2011

Sharon M. Johnston, Esq.
RegGuide
509 Tower Valley Drive
Hillsboro, MO 63050

Subject: Amended Reregistration Label
Product Name: Prentox Perm-X UL 4-4
EPA Registration Number: 655-898
EPA Decision Numbers: 411085, 413347

Dear Ms. Johnston:

The Agency, in accordance with the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, has completed reviewing all of the information submitted with your application to support the reregistration of the above referenced product in connection with the Permethrin and Piperonyl Butoxide RED(s), and has concluded that your submission is acceptable.

NOTE: This product is not being reregistered under sections 3(c)5 and 4(g) of FIFRA at this time.

Please be reminded that 40 CFR Part 156.140(a)(4) requires that a batch code, lot number, or other code identifying the batch of the pesticide distributed and sold be placed on non-refillable containers. The code may appear either on the label or durably marked on the container itself, and can be added by non-notification per PRN 98-10.

Please note that the record for this product currently contains the Confidential Statements of Formulation (CSFs) listed below. Any previously dated CSFs are superseded.

- Basic CSF, dated 06-29-2010
- Alternate CSF #1, dated 06-29-2010
- Alternate CSF #2, dated 06-29-2010
- Alternate CSF #3, dated 06-29-2010

A copy of your label stamped "Accepted" is enclosed along with copies of the acute toxicity and product chemistry reviews completed for the subject product. Products shipped after 12 months from the date of this amendment or the next printing of the label whichever occurs first, must bear the new revised label. Your release for shipment of the product bearing the amended label constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e).

If you have any questions about this letter, please contact Julie Chao at (703) 308-8735 or chao.julie@epa.gov.

Sincerely,



Richard J. Gebken
Product Manager (10)
Insecticide Branch
Registration Division (7504P)

*Enclosures: Label stamped "Accepted," dated July 20, 2011
Acute Toxicity Review, dated September 13, 2010
Product Chemistry Reviews, dated January 27, March 29, and April 14, 2011*



PERM-X™ UL 4-4

For use only by federal, state, tribal or local government officials responsible for public health or vector control or by persons certified in the appropriate category or otherwise authorized by the state or tribal lead pesticide regulatory agency to perform adult mosquito control applications or by persons under their direct supervision.

A 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:

Permethrin4.0%
Piperonyl Butoxide.....4.0%

OTHER INGREDIENTS*.....92.0%
TOTAL 100.0%

*Contains Petroleum Distillate
Contains 0.2783 lb. A.I. Piperonyl Butoxide per gallon.

PRENTOX® - Registered Trademark of Prentiss Incorporated
PERM-X™ - Trademark of Prentiss Incorporated

ACCEPTED
JUL 20 2011

Under the Federal Insecticide, Fungicide,
and Rodenticide Act, as amended, for the
pesticide registered under:

EPA. Reg. No: 655-898

Table with 2 columns: Condition (e.g., If swallowed, If on skin or clothing) and First Aid instructions. Includes sections for KEEP OUT OF REACH OF CHILDREN, CAUTION, PRECAUCION AL USUARIO, and FIRST AID.

EPA Reg. NO. 655-898

Est. NO.

Net Contents _____

Lot No. _____

Manufactured by:

PRENTISS, LLC
501 Cascade Pointe Lane, Suite 103
Cary, NC 27513

**PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

CAUTION: Harmful if swallowed. Harmful if absorbed through skin. Avoid contact with skin, eyes, or clothing. Causes moderate eye irritation.

Personal Protective Equipment (PPE):

Some materials that are chemical-resistant to this product are listed below. Mixers, loaders, applicators and other handlers (including during mixing/loading, repair and cleaning of equipment and disposal of pesticide) must wear the following:

- Long-sleeved shirt and long pants
- Shoes plus socks,
- Chemical-resistant gloves such as barrier laminate, viton, neoprene rubber or nitrile rubber.
- Chemical-resistant apron for mixers/loaders, persons cleaning equipment and persons exposed to the concentrate.

In addition to the above PPE, mixers and loaders supporting aerial applications to forests must wear at least a NIOSH-approved respirator with:

- A dust/mist filter with MSHA/NIOSH approval number prefix TC-21C, or any R, P, or HE filter.

See engineering controls for additional requirements.

User Safety Requirements:

Follow manufacturer's instructions for cleaning/maintaining PPE. If there are no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

Engineering Controls-

Pilots must use an enclosed cockpit that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(6)].

Human flagging is prohibited. Flagging to support aerial application is limited to use of the Global Positioning System (GPS) or mechanical flaggers.

<p>User Safety Recommendations-</p> <ul style="list-style-type: none"> - Users should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. - Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. - Users should remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.
--

ENVIRONMENTAL HAZARDS

This pesticide is extremely toxic to aquatic organisms, including fish and invertebrates. Runoff from treated areas or deposition of spray droplets into a body of water may be hazardous to fish and aquatic invertebrates. 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.

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 wash-waters.

This pesticide 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 actively visiting the treatment area.

PHYSICAL OR CHEMICAL HAZARDS

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

DIRECTIONS FOR USE

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

For use only by federal, state, tribal or local government officials responsible for public health or vector control or by persons certified in the appropriate category or otherwise authorized by the state or tribal lead pesticide regulatory agency to perform adult mosquito control applications or by persons under their direct supervision.

Precautions and Use Restrictions

- Apply this product only as specified on this label.
- Apply this product at temperatures greater than 50°F and when wind speed equals or exceeds 1 mph.
- Not for use in metered release systems or animal premise automatic misting systems.
- Not for use in outdoor residential misting systems.
- Do not spray this product on or allow it to drift onto cropland (other than those 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 fountains and animal feed before application.
- For hand carried and/or lawn mower foggers: Do not fog 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.
- Do not apply by fixed wing aircraft at a height less than 100 feet, or by helicopter at a height less than 75 feet unless specifically approved by the state or tribe based on public health needs.
- Apply when wind speed is greater than 1 mph.
- Do not make applications during rain.
- Except when applying to storm drains, drainage pipes and pipe chases as instructed on this label, do not apply directly to sewers and drains or to any area like a gutter where drainage to sewers, storm drains, water bodies or aquatic habitat can occur.
- Do not use in dairy barns or facilities.

Do not retreat site more than once in 3 days. Do not exceed 25 applications at 0.007 lbs. permethrin per acre per application or 0.007 lbs piperonyl butoxide per acre per application, or 0.18 lbs. of permethrin per acre per season or 0.18 lbs piperonyl butoxide per acre per year. 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 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 parks, campsites, woodlands, athletic fields, golf courses, residential areas, municipalities, roadsides, animal quarters, barns, playgrounds, and non- crop waste areas. 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 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 with 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 vegetables¹, and walnuts.

¹Includes chayote (fruit); Chinese waxgourd (Chinese preserving melon); Citron melon; cucumber; gherkin, gourd, edible (hyotan, cucuzza, hechima, Chinese okra); Momordica spp. (balsam apple, balsam pear, bitter melon, Chinese cucumber); Muskmelon (hybrids and/or cultivars of Cucumis melo – true cantaloupe, cantaloupe, casaba, Crenshaw melon, golden pershaw melon, honeydew melon, honey balls, mango melon, Persian melon, pineapple melon, Santa Claus melon and snake melon); pumpkin; squash, summer (crookneck squash, scallop squash, straightneck squash, vegetable marrow, zucchini); squash, winter butternut squash, calabaza, hubbard squash, acorn squash, spaghetti squash); watermelon (hybrids and/or varieties of Citrullus lanatus).

Spray Droplet Size Determination

Ground-Based Application: Spray equipment must be adjusted so that 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 made at ≤200 feet above ground elevation: Spray equipment must be adjusted so that the volume median diameter produced is less than 60 microns ($D_v 0.5 < 60 \mu m$) and that 90% of the spray is contained in droplets smaller than 100 microns ($D_v 0.9 < 100 \mu m$). 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.

Aerial Application made at > 200 feet above ground elevation: Spray equipment must be adjusted so that the volume median diameter produced is less than 70 microns ($D_v 0.5 < 70 \mu m$) and that 90% of the spray is contained in droplets smaller than 145 microns ($D_v 0.9 < 145 \mu m$). 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.

GROUND APPLICATION

ULV NON-THERMAL AEROSOL (COLD FOG): 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. 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 on this label to treat heavy vegetation or when target insect populations are high. Do not exceed the highest flow rates specified 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.

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. 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 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

Use aircraft specially 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 specified 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. 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 ON AERIAL USE IN FLORIDA: Not for aerial application in the State of 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 MPH				Diluted Fl. Oz. (ml) to Apply Per Acre
		5 mph	10 mph	15 mph	20 mph	
Permethrin	PBO					
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)

STORAGE & DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

PESTICIDE 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: Non-refillable container. Do not refill or reuse this container. Clean container promptly after emptying. [For Containers 5 gallons or less] Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with mineral oil (or other solvent used when diluting the product) and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. [For Containers greater than 5 gallons] Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with mineral oil (or other solvent used when diluting the product). Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then, offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities.

NOTICE: To the extent consistent with applicable law, 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.