

73748-1

4-4-2002

1/6



U.S. ENVIRONMENTAL PROTECTION AGENCY  
Office of Pesticide Programs  
Registration Division (H7505C)  
1200 Pennsylvania Ave., N.W.  
Washington, D.C. 20460

EPA Reg. Number:  
73748-1

Date of Issuance:  
APR 4 2002

NOTICE OF PESTICIDE:

- Registration
- Reregistration

(under FIFRA, as amended)

Term of Issuance: **Conditional**

Name of Pesticide Product:  
**Masterline Aqua-Kontrol  
Concentrate for Mosquitoes,  
Flies and gnats**

Name and Address of Registrant (include ZIP Code):

Van Waters & Rogers, Inc.  
11149 Research Blvd., Suite 260  
Austin, TX 78759

**Note:** Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act. Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA sec. 3(c)(7)(A), provided that you:

1. Submit and/or cite all data required for registration/reregistration of your product under FIFRA sec. 3(c)(5) when the Agency requires all registrants of similar products to submit such data; and submit acceptable responses required for reregistration of you product under FIFRA section 4.
2. Make the following labeling changes listed below before you release the product for shipment:
  - a. The toxicity category for eye irritation is Toxicity Category IV. Therefore, you may delete the statement "Causes moderate eye irritation" under the "Precautionary Statements" section.
  - b. Based on the acute toxicity profile for this formulation, the "If Swallowed" statement is the only required First Aid statement. You may delete the other First Aid statements.

Signature of Approving Official:

George T. LaRocca

Date:

APR 4 2002

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- c. Under the "Directions for Use" section, revise the first sentence under the paragraph beginning "Both ground and aerial application should be made when wind...etc.," to read "Both ground and aerial application 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. Do not apply when wind speeds exceed 10 mph."
- d. Revise the MMD range for ground applied ULV applications to read 15-20 microns. The largest droplet should not exceed 50 microns. Less than 5% of the drops should be below 5 microns. Silicon slides should be required for calibration. State the ground ULV swath width as 300 feet. State a % value to the droplet size range of 5 - 30 microns.
- e. State the application rate(s) for the 2% dilution and flow rate at truck speeds up to 20 mph.
- f. For all ground ULV spraying, the pump volume is to be limited to 20 oz./minute unless data are provided to show that high volumes are efficacious. Submitted data must show that it is possible to spray the high volumes stated (>20 oz./min) using existing pump and sprayer technology to achieve an acceptable MMD. Supporting data must include calibration results showing that the MMD of the spray droplets meets specifications with a variety of ULV equipment types (London Fog, Leco, Beecomist, Grizzly, MicroAir etc.). The sprayer equipment available today will not meet the droplet size requirements when pump volumes are elevated past 20 fl. oz. /minute-despite marketing claims to the contrary. Gas powered sprayers can not move enough air through the nozzles at a high enough pressure to atomize droplets in the 15-20 micron range and neither can electric sprayers with a rotary nozzle. I have seen no data in the literature or submitted to EPA that demonstrates the ability of the currently available ground equipment to spray at high volumes and make label specifications.
- g. Revise the aerial directions by adding airspeed, altitude, altitude range, nozzle types, swath width, etc.. MMD should be 50 microns or less.
- h. Since this is a water-based formulation, add a statement indicating that this formulation shall not be applied by thermal fogging equipment.
- i. Remove the language about "suggested flow rates". State the listed flow rates as "Recommended". Revise the last sentence in the paragraph entitled "ULV Non-Thermal Aerosol(Cold Fog)" to read: "If an alternate dilution rate is required, adjust the flow rate accordingly, provided the droplet size and spectrum remain within label specifications. Do not exceed a flow rate of 20 oz./min. May be applied at truck speeds of 5 to 20 mph."

With respect to the Child Resistant Packaging(CRP) certification submitted to the Agency on April 4, 2002, the Agency has found this information to be acceptable in support of the container sizes associated in the marketing of this product. A copy of our review and the CRP certification have been placed in the product file.

With respect to the public literature data cited in support of the subject product, refer to the attached March 8, 2002 Efficacy Review. These studies were considered supplemental and do not completely satisfy the performance standard for adult mosquito control.

The Agency may require submission of product performance data in support of label claims for any pesticide product in order to evaluate the benefits of product use where the risks are substantial, or in situations where a pattern of inadequate product performance has been reported. Since promulgation of the waiver of efficacy data, the Agency has not routinely required submission of product performance data of old pesticide chemicals registered prior to 1984 for non-public health pests. Although not required to be submitted, these

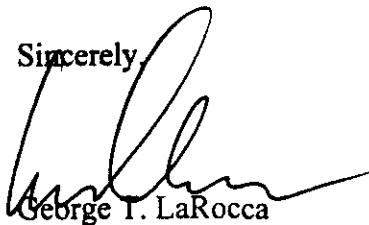
data were required to be generated by pesticide producers. Pesticide producers are required to ensure that products will adequately perform their intended functions. With the advent of West Nile virus and the potential public health hazard this and other vectored diseases may pose, it is important that the Agency have a complete data base supporting performance of these pesticides as mosquito adulticides.

In this regard, we request that you submit or cite by "MRID" number any additional product performance data in your files on the subject mosquito adulticide product formulation to address some of the deficiencies noted in the attached efficacy review. If after submission and review of asll data currently on file for products containing permethrin and PBO for mosquito control the Agency determines that the submitted/cited data are unacceptable, then we will request submission of the following data listed below to support registration.

GUIDELINE REFERENCE NO.	TITLE OF STUDY
810.3400	Mosquito, Black Fly and Biting Midge (Sand fly) Treatments

Please submit two (2) copies of your final printed label for before your release the product for shipment. Please refer to the A-79 enclosure for a further description of final printed labeling. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). Your release for shipment of the product bearing amended labeling constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records. If you have any questions regarding this action, please contact Dr. William Sproat of my team at (703) 308-8587.

Sincerely,



George T. LaRocca  
Product Manager 13  
Insecticide Branch  
Registration Division (7505C)

Enclosure

F-22 F. 257m 13148-K

4/16

# MASTERLINE AQUA-KONTROL CONCENTRATE For Mosquitoes, Flies and Gnats

An All Temperature, Quick Knockdown, Low Odor, Non-Corrosive Synergized Synthetic Pyrethroid for the Control of Adult Mosquitoes, in Residential, Recreational and Other Areas. Also for Use Against Biting and Non-Biting Midge and Black Flies.

For Application only by Public Health Officials and Trained Personnel of Mosquito Abatement Districts and Other Mosquito Control Programs

### ACTIVE INGREDIENTS:

\*Permethrin .....20.0%  
\*\*Piperonyl Butoxide Technical.....20.0%

INERT INGREDIENTS:.....60.0%  
TOTAL..... 100.0%

\*(3-phenoxyphenyl)methyl(+/-)Cis/trans 3-(2,2-dichloroethenyl)2,2-Dimethyl cyclopropanecarboxylate.  
Cis/trans ratio: min. 35% (+/-) cis and max. 65% (+/-) trans.

\*\*Equivalent to 80% (butylcarbityl)(6-propylpiperonyl) ether and 20% related compounds  
Contains 1.75 pounds of Permethrin and 1.75 pounds of Piperonyl Butoxide per gallon.

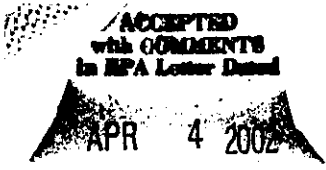
## KEEP OUT OF REACH OF CHILDREN CAUTION

“PRECAUCION AL USUARIO: Si usted no lee ingles, no use este producto hasta que la etiqueta haya sido explicado ampliamente”

FIRST AID	
If Swallowed	<ul style="list-style-type: none"> <li>• Immediately call a poison control center or doctor.</li> <li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>• Do not give any liquid to the person.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
If on Skin or Clothing	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
If in Eyes	<ul style="list-style-type: none"> <li>• Hold eyelid open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
If Inhaled	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.</li> <li>• Call a poison control center or doctor for further advice</li> </ul>
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	

See Side Panel for Additional Precautionary Statements

Manufactured By:  
Van Waters & Rogers, Inc.  
11149 Research Blvd., Suite 260  
Austin, TX 78759



EPA Registration No. 73748-R  
EPA Establishment No.

Net Contents:

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 73748-1

5/6

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

Harmful if swallowed. Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling.

**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 cleaning equipment and disposing of equipment washwaters. This product is highly toxic to bees while 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 area.

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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.

**PHYSICAL AND CHEMICAL HAZARDS**

Flash point: Non-flammable

**DIRECTIONS FOR USE**

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

**STORAGE AND DISPOSAL**

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

**Pesticide Storage and Spill Procedures:** Store product in its original labeled container in a cool, dry locked place designated for such insecticides and out of reach of children. Avoid exposure to extreme temperatures. In case of spillage, soak up with absorbent material such as sawdust, or fullers' 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:** Triple rinse or equivalent. Then offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill or incineration, or if allowed by State and local authorities, by burning. If burned, stay out of smoke.

**AQUA - KONTROL NON-THERMAL AEROSOL (COLD FOG)**

NOTICE- This product cannot be mixed with oil. Use only clean water. Contains no aromatic or aliphatic petroleum distillates.

Wear long sleeved shirt and long pants, socks and shoes.

AQUA-KONTROL stays fully in suspension and will not settle or separate. No shaking or agitation is required before mixing. Mixed product will stay in suspension and will not gelatinize or produce filter-causing by-products.

AQUA-KONTROL acts similar to an oil based product. No adjustment of application equipment is necessary.

AQUA-KONTROL is designed to be either diluted with water, or used undiluted, and applied as a ULV or Barrier spray. Do not exceed the maximum recommended # a.i. per acres. AQUA-KONTROL may be used to control adult mosquitoes, flies and gnats in mosquito control programs including, but not limited to residential, industrial, municipalities, parks, campsites, woodlands, athletic fields, golf courses, gardens, playground, recreational areas, waste areas and other places where mosquitoes occur. For best results, treat when insects are most active and conditions are conducive to keeping the fog close to the ground. Repeat treatment as needed.

In treatment of corrals, feedlots, animal confinements/houses, swine lots and zoos, cover any exposed drinking water and feed source before applying. Do not contaminate non-approved sites with spray drift.

Both ground and aerial applications should be made when wind is less than 10 mph and meteorological conditions are conducive to keeping the spray cloud close to the grounds such as when an air temperature inversion is present. Applications during the cool hour early morning or evening are preferably. Application in calm air conditions is to be avoided.

6/10

**AQUA-KONTROL ULV Non-Thermal Aerosol (cold fog) Application:** To control mosquitoes, midges and blackflies, apply AQUA KONTROL using any standard ULV ground applicator capable of producing a non-thermal aerosol spray with droplets ranging in size from 5 to 30 micron in diameter and mass medium diameter (MMD) up to 20 microns. 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 may be used to ensure proper flow rate. AQUA-KONTROL may also be applied by diluting with water and applying so as not to exceed the maximum pounds of active ingredient per acre as shown in the first column of the ULV table shown below. That table represents some suggested application rates for ground ULV applications. If an alternative dilution rate is used, adjust the flow rate accordingly.

**Conditions and Rates to use AQUA-KONTROL Undiluted for Mosquito Control**

PERMETHRIN/PBO LBS. A.I./ACRE	APPLICATION RATES /FLUID OUNCES TO USE PER MINUTE		
	5 mph	10 mph	20 mph
0.007/0.007	1.5	3.1	6.2
0.0035/0.0035	0.75	1.5	3.1
0.00175/0.00175	0.4	0.75	1.5

**Suggested Dilution Rates for AQUA-KONTROL**

% CONCENTRATION	Parts AQUA-KONTROL	Parts Water
2%	1	9
4%	1	4

**Suggested Flow (oz/min) and Use Rates for a 4% (1 to 4 Dilution Ratio) Product**

PERMETHRIN/PBO LBS. A.I./ACRE	APPLICATION RATES /FLUID OUNCES TO USE PER MINUTE		
	5 mph	10 mph	20 mph
0.007/0.007	7.75	15.5	31.0
0.0035/0.0035	3.9	7.75	15.5
0.00175/0.00175	2.0	3.9	7.75

**AS A BARRIER SPRAY USING A BACKPACK MISTER TYPE UNIT**

For use in a non-thermal, portable, backpack equipment, apply AQUA-KONTROL with a motorized backpack mist blower adjusted to deliver particles of 50 – 100 Mass Medium Diameter. Use undiluted or diluted to achieve an application of 0.00175 / 0.00175 # a.i./acre. Use a 50 ft (15.2m) swath while walking at a speed of 2 mph (3.2 kph). If using a different speed, swath or dilution, do not exceed the maximum a.i./acre.

**AERIAL APPLICATION**

The use of specially equipped aircraft capable of applying ULTRA LOW VOLUMES of at or above recommended rates may be considered necessary when conducted at the discretion of the Public Health Officials, Mosquito Abatement districts or other trained personnel engaged in Outdoor Mosquito and Biting Fly Programs when these insects threaten or become a public health hazard. Aerial applications should be by suitable aerial ULV equipment capable of producing droplets with an MMD of 60 or less, with no more than 2.5% exceeding 100 micron. **PROHIBITION FOR AERIAL USE:** ] for aerial application in Florida unless specifically authorized by the Bureau of Entomology, 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 (Aqua-Kontrol 6/2010).

**BUYER GUARANTEE LIMITED TO LABEL CLAIMS**