

73748-1

11/17/2003

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**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

WASHINGTON, D.C. 20460

OFFICE OF  
PREVENTION, PESTICIDES  
AND TOXIC SUBSTANCES

NOV 17 2003

Univar USA, Inc.  
c/o Ms. Jane M. Miller  
Biologic Research & Development, Inc.  
115 Obtuse Hill  
Brookfield, CT 06804

**Subject:** Amendment to Allow Use Over Specific Crops, Pastureland and Poultry Ranges  
Masterline Aqua-Kontrol Concentrate for Mosquitoes, Flies and Gnats  
EPA Registration No.:73748-1  
Your Submission, Dated August 22, 2003

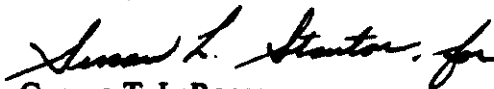
Dear Ms. Miller:

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is acceptable subject to the comments listed below. Two 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. Revise the statement "*Repeat treatment as needed*" (bottom of page 2) to read "Re-apply when recommended by Public Health Officials or Mosquito Abatement Districts."
2. The following typographical errors noted during our review should be corrected in the finished labeling:
  - Delete "*while bees*" from the second to last sentence of the Environmental Hazards, so that this sentence reads "*This product is highly toxic to bees exposed to direct treatment on blooming crops or weeds.*"
  - On page 3, in the third paragraph below the listing of crops ("*Both ground and aerial ...*"), change "*preferably*" to "*preferable*" in the second to last sentence.

If you have any questions regarding this action, please contact Susan Stanton of my team at (703) 305-5218.

Sincerely,



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

Enclosure

ACCEPTED  
with COMMENTS  
In EPA Letter Dated:

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NOV 17 2003  
Under the Federal Insecticide,  
Fungicide, and Rodenticide Act,  
as amended, for the pesticide  
registered under EPA Reg. No.  
73748-1

# 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%
<b>TOTAL</b> .....	<b>100.0%</b>

\*(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: Immediately call a poison control center or doctor. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give any liquid to the person. Do not give anything by mouth to an unconscious person

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:  
Univar USA, Inc.  
11149 Research Blvd., Suite 260  
Austin, TX 78759

EPA Registration No. 73748-1  
EPA Establishment No. 11204-CA-1  
53883-TX-01  
Net Contents: 2.5 gal.

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

Harmful if swallowed. 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.

**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-clogging 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 apply this product with thermal fogging equipment. 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

**AQUA-KONTROL** can 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 these areas. Application can only be made where the following crops are present:

- |                  |                      |
|------------------|----------------------|
| Almonds          | Range Grasses        |
| Apples           | Leafy Vegetables     |
| Broccoli         | Lettuce              |
| Brussels sprouts | Mushrooms            |
| Cabbage          | Onions, dry bulb     |
| Celery           | Peaches              |
| Cauliflower      | Pears                |
| Cherries         | Peppers, bell        |
| Corn, fodder     | Soybeans             |
| Corn, forage     | Tomatoes             |
| Corn grain       | Vegetables, cucurbit |
| Eggplant         | Walnuts              |

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. Do not contaminate non-approved sites with spray drift.

Do not apply this product within 100 feet (30 meters) of lakes and streams.

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 an air temperature inversion is present. Do not apply when wind speed exceed 10 mph. Applications during the cool hours of early morning or evening are preferably. Application in calm air conditions is to be avoided.

**Droplet Size of AQUA-KONTROL application may be determined using the following procedure:**

Droplet size of **AQUA-KONTROL** should be measured using Teflon coated glass slides. An adequate volume of air should be sampled by using, for example, rotating rod samplers. Other sampling techniques, such as an Ames Machine, may be used if authorized by local regulatory authorities. 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.

**AQUA-KONTROL ULV Non-Thermal Aerosol (cold fog) Application:** To control mosquitoes, midges and blackflies, apply **AQUA-KONTROL** 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 from 5 to 30 micron in diameter and mass medium diameter (MMD) of 15 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 must 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 recommended application rates for ground ULV applications. If an alternative dilution rate is required, adjust the flow rate accordingly, provided the droplet size and spectrum remains within label specifications. Do not exceed a flow rate of 20 oz./min. May be applied at truck speeds of 5 to 20 mph.

**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

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**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 2% (1 to 9 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	15.5	Not Recommended	Not Recommended
0.0035/0.0035	7.8	15.5	Not Recommended
0.00175/0.00175	3.9	7.8	15.5

**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	Not Recommended
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 aircraft specially equipped and capable of applying ULTRA LOW VOLUMES of AQUA-KONTROL may be necessary. Such applications should be at the discretion of the Public Health Officials, Mosquito Abatement Districts or others trained in outdoor mosquito and biting fly programs to protect public health. Applications cannot exceed the recommended rates.

Aerial applications should be by suitable aerial ULV equipment capable of producing droplets with an MMD of 50 or less, with no more than 2.5% exceeding 100 micron. Application should be made at an altitude range of 120 to 175 feet (37 to 53 meters) with a swath width from 200 to 500 feet depending on the terrain and weather conditions. The recommended airspeed for fixed wing aircraft with flat fan nozzles is from 120 to 160 mph. For rotary wing aircraft equipped with rotary nozzles, apply at a sufficient airspeed to deliver the appropriate amount of a.i./acre (from 0.00175 to 0.007 # 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

**BUYER GUARANTEE LIMITED TO LABEL CLAIMS**