

MasterLine®

By Univar

AQUA-KONTROL CONCENTRATE

For Mosquitoes, Flies and Gnats

A 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 use only by federal, state, tribal, or local governmental 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.

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-dichloroethyl)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.

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.

PRECAUTIONARY STATEMENTS

HAZARDS TO DOMESTIC ANIMALS AND HUMANS

Caution: Causes moderate eye irritation. Harmful if swallowed. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove contaminated clothing and wash before reuse. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

ENVIRONMENTAL HAZARDS

This pesticide 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. 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 actively visiting the 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 or 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.

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.

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.

NOTE: 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 other regulatory requirements exist.

**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 in Eyes:	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 or doctor for treatment advice.
If on Skin or Clothing:	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 – 20 minutes. Call a poison control center or doctor for treatment advice.
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.

EMERGENCY INFORMATION: Have the product container or label with you when calling a poison control center or doctor, or going for treatment. **Medical Emergencies,** please call SafetyCall® International at 1-866-674-4334. For **spill related issues,** contact Chemtrec at 1-800-424-9300.

BUYER GUARANTEE LIMITED TO LABEL CLAIMS

MasterLine® is a registered trademark of Univar USA.

Manufactured by:

Univar USA Inc.

9430 Research Blvd.

Suite 350, Echelon Bldg IV

Austin, TX 78759

EPA Reg. No. 73748-1
EPA Est. No. 53883-TX-002

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal. Open dumping is prohibited.

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 the reach of children. Avoid exposure to extreme temperatures. 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: Nonrefillable Container: Metal or Plastic Container. Do not reuse or refill container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. Offer for recycling, if available, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities, such as burning of plastic containers. If burned, stay out of smoke. Triple rinse as follows:

Containers 5 gallons or less: Empty the remaining contents into application equipment and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into 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. Once cleaned, offer for recycling or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill or by other procedures approved by State and local authorities. Do not cut or weld metal containers.

Containers larger than 5 gallons: Empty the remaining contents into application equipment. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip 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. Once cleaned, offer for recycling or reconditioning if appropriate.

Pressure rinse as follows (all sizes): Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Refillable Container: Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller.

Return container to point of purchase for reuse with seal intact and in salable condition. Before refilling, inspect thoroughly for damage such as cracks, punctures, bulges, dents, abrasions, and damaged or worn threads on closure devices. After filling and before transporting, check for leaks. Do not refill or transport damaged or leaking container.

To clean the container before final disposal, empty the remaining contents from the container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing process two more times.

CONDITIONS AND RATES TO USE FOR MOSQUITO CONTROL

NOTE: 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 CONCENTRATE stays fully in suspension and will not settle or separate under normal storage conditions. If, however, there are signs of separation, shake or agitate thoroughly to make a uniform mixture.

AQUA-KONTROL CONCENTRATE 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 CONCENTRATE** 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.

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. Applications during the cool hours of early morning or evening are preferable. Air temperatures should be greater than 50° F when conducting all types of applications. Application in calm air conditions is to be avoided. Apply only when ground wind speed is greater than 1 mph. Do not apply when wind speed exceeds 10 mph. Applications cannot exceed the recommended rates.

Do not re-treat a site more than once in 12 hours. 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.

AQUA-KONTROL CONCENTRATE 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:

Alfalfa	Eggplant
Almonds	Filbert
Apples	Garlic
Artichoke, globe	Range Grasses
Asparagus	Horseradish
Avocado	Leafy Vegetables (except Brassica)
Broccoli	Lettuce, head
Brussels Sprouts	Mushrooms
Cabbage	Onion, dry bulb
Cauliflower	Peaches
Celery	Pears
Cherries	Pepper, bell
Corn, fodder	Pistachio
Corn, forage)	Potato
Corn, grain	Soybeans
(field and pop)	Spinach
Corn, stover	Tomatoes
Corn, sweet kernel	Vegetable, cucurbits
plus cob with	Walnuts
husks removed	

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.

GROUND APPLICATION INSTRUCTIONS

(Thermal and Non-Thermal Application)

DROPLET SIZE CALIBRATION FOR GROUND APPLICATION EQUIPMENT: Spray equipment must be adjusted so that the volume median diameter is less than 30 microns ($D_v 0.5 < 30 \mu m$) and that 90% of the spray is contained in droplets smaller than 48 microns ($D_v 0.9 < 48 \mu m$). Directions from the equipment manufacturer or vendor, pesticide registrant or a test facility using a 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.

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. For use with hand foggers, use the same a.i./acre rates. Do not fog when wind conditions exceed 10 miles per hour. Use well maintained and properly calibrated fogger.

NON-THERMAL AEROSOL (COLD FOG)

AQUA-KONTROL CONCENTRATE ULV Non-Thermal Aerosol (cold fog) Application: To control mosquitoes, midges and blackflies, apply **AQUA-KONTROL CONCENTRATE** using any standard ULV ground applicator capable of producing a non-thermal aerosol spray. 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 CONCENTRATE** 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. May be applied at truck speeds of 5 to 20 mph.

Conditions and Rates to use AQUA-KONTROL CONCENTRATE 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 CONCENTRATE

% CONCENTRATION	Parts AQUA-KONTROL CONCENTRATE	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 MISTER TYPE UNIT: For use in non-thermal equipment, apply **AQUA-KONTROL CONCENTRATE** with a mist blower adjusted to deliver droplets with a volume median diameter of 50 – 120 μm . 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. When this product is applied as a barrier treatment, do not apply within 100 feet (30 meters) of lakes and streams.

AERIAL APPLICATION INSTRUCTIONS

The use of aircraft specially equipped and capable of applying ULTRA LOW VOLUMES of **AQUA-KONTROL CONCENTRATE** may be necessary.

DROPLET SIZE CALIBRATION FOR AERIAL APPLICATION EQUIPMENT: 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 115 microns ($D_v 0.9 < 115 \mu m$). 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 shall be made at altitudes ranging from 75 to 300 feet. Fixed wing aircraft with flat fan or rotary nozzles, or 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) and to achieve the appropriate droplet range. Apply only when ground wind speed is greater than 1 mph.

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.

SPECIMEN