

# AQUA·MIST™

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.

An All Temperature, Quick Knockdown, Low Odor, Non-Corrosive Synergized Synthetic Pyrethroid Formulation for the Control of Adult Mosquitoes, Midges (Biting and Non-Biting) and Black Flies in Residential, Recreational, Municipal and other Areas.

- Quick Knockdown for Control of Target Insects • Ready-To-Use as an Undiluted Spray
- Dilute with Water, Not Oil • May be Applied Undiluted or Diluted with Water
- For Aerial or Ground Application as Diluted or Undiluted Spray. • For Barrier or Surface Application

**EPA Reg. No. 11930-5 EPA Est. No. 62788-AL-1**

**ACTIVE INGREDIENTS:**

\*Permethrin ..... 20.6%

\*\*Piperonyl Butoxide Technical ..... 20.6%

**INERT INGREDIENTS:** ..... 58.8%

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.  
(To the User: If you cannot read English, do not use this product until the label has been fully explained to you.)

### 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.



**GIL MANUFACTURING, INC.**

P.O. Box 242725 • Montgomery, AL 36124-2725 • U.S.A.

**FOR MORE INFORMATION CALL 1-800-445-0180**

## 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.
- Have person sip a glass of water if able to swallow.
- Do not give anything by mouth to an unconscious person

### **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.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

## PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**CAUTION:** Harmful if swallowed or absorbed through skin. Avoid contact with eyes, skin or clothing. Prolonged or frequently repeated skin contact may cause allergic reaction in some individuals. Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

## ENVIRONMENTAL HAZARDS

This pesticide is extremely toxic to aquatic organisms. 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.

This product is highly toxic to bees exposed to direct treatment on blooming crops or weeds. Do not apply to or allow it to drift onto 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 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.

## 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. **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. Do not expose 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 wastes disposal facility. **CONTAINER DISPOSAL:** Nonrefillable; 2 1/2; 5; 30; 55 gallon container. Do not reuse or refill this container. Offer for reconditioning if appropriate. Refillable 275 gallon container. Refill this container with pesticide only. Do not use this container for any other purpose. Clean container promptly after emptying. **(Metal) \*Triple rinse** or equivalent with diluent specified on the label. 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 with diluent specified on the label. 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. **\*Triple rinse or equivalent with diluent specified on the label as follows:** Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. 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. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. 08-08-08

## WARRANTY NOTICE: READ ENTIRE LABEL BEFORE USING

Read the entire Directions for Use, Conditions, Disclaimer of Warranties, and Limitations of Liability before using this product. By using the product, user and buyer accept the following Conditions, Disclaimer of Warranties and Limitations of Liability.

**CONDITIONS:** The directions for use of this product are believed to be adequate and should be followed carefully. However it is impossible to eliminate all risks associated with the use of this product. Injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of **GIL Mfg. Co. Inc.** All such risks shall be assumed by the user or buyer.

**DISCLAIMER OF WARRANTIES:** There are no warranties express or implied, of merchantability or of fitness for a particular purpose or otherwise, which extend beyond the statements made on this label. No agent of **GIL Mfg. Co. Inc.** is authorized to make any warranties beyond those contained here-in or to modify the warranties contained herein. **GIL Mfg. Co. Inc.** disclaims any liability whatsoever for special, incidental, or consequential damages resulting from the use or handling of this product.

**LIMITATION OF WARRANTIES:** The exclusive remedy of the user or buyer for any and all losses, injuries, or damages resulting from the use or handling of this product, whether in contract warranty, tort, negligence, strict liability or otherwise, shall not exceed the purchase price, or at **GIL Mfg. Co. Inc.'s** option, the replacement of the product.

FLOW RATES (Fluid Ounces Per Minute)		Dilutions Based on a 15 Gallon Tank*				
Application Rate (lbs. per Permethrin/Acre)	Vehicle Speed (MPH)	Undiluted	Diluted 1:3	Diluted 1:4.5	Diluted 1:6.5	Diluted 1:9
0.0015	10	0.70	2.80	3.70	5.25	6.70
	15	1.05	4.20	5.50	7.88	10.00
	20	1.40	5.60	7.30	10.50	14.00
0.0035	10	1.55	6.20	8.60	11.70	15.60
	15	2.35	9.30	12.80	17.50	23.30
	20	3.10	12.50	17.20	23.40	
0.007	10	3.10	12.40	17.00	23.20	
	15	4.65	18.60	25.50		
	20	6.20	24.70			

**\*Dilution Instructions:** Fill tank 1/4 full of water, add **AQUA MIST**, then finish filling tank with water. The use of metering pumps, injector systems or other mixing systems is optional. Note: When using oil as a diluent, agitate well before use.

Where dense vegetation is present, the use of the higher rate and/or a slower speed is recommended. Applications should be conducted when temperatures are greater than 50° F.

### READ ENTIRE LABEL FOR DIRECTIONS

**AQUA MIST** 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.

### HOW TO APPLY AND WHERE TO USE

**AQUA MIST** is designed for application as an Ultra-Low Volume (ULV) aerosol to control adult mosquitoes and flies of nuisance, public health or disease vector importance in areas such as, but not limited to: residential, industrial, commercial, urban, parks, campgrounds, woodlands, athletic fields, golf courses, playgrounds, recreational areas, overgrown waste areas, roadsides, and other areas where adult mosquitoes and flies may be found.

**AQUA MIST** is recommended for application with ULV cold aerosol generators, thermal aerosol generators, mist-blowers, backpack sprayers, or handheld sprayers. Mist-blowers, backpack sprayers, handheld sprayers and low-pressure hand sprayers may be used for barrier or surface applications.

**FOR BEST RESULTS**, apply 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 consistent wind speeds are not greater than 10 mph. Application during cooler hours of the night or early morning are usually preferable.

Do not retreat the same 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 MIST** 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, Almonds, Apple, Artichoke,	Cucurbit Vegetable Group,	Head Lettuce, Horseradish, Leafy	Range Grasses, Rhubarb, Roquette
Asparagus, Avocado, Broccoli,	Dandelion, Dock (sorrel), Eggplant,	Vegetables, except brassica, Melons	(arrugula), Soybeans, Spinach,
Cabbage, Cauliflower, Celery, Celtuce,	Endive(escarole), Fennel,	(Cantaloupe), Mushrooms, Onion,	Spinach (New Zealand), Squash
Cherry, Chervil, Chinese Amaranth,	Filbert, (hazelnut), Garden Purslane,	Drach (mountain spinach), Papaya,	(winter), Swiss Chard, Tomato, Turnip,
Chinese Broccoli, Collards, Corn (Field,	Garden Cress, Garlic,	Parsley, Peach, Pear, Peppers (bell),	Upland Cress, Walnut, Water Cress,
Pop and Sweetfodder	Garland Chrysanthemum,	Pistachio, Potato, Pumpkin	Winter Purslane.

Do not allow spray treatment to drift on cropland (other than crops listed) or water supplies. **In treatment of corrals, feedlots, animal confinements / houses, swine lots and zoos**, cover any exposed drinking water, drinking fountains and animal feed before application.

**AQUA MIST** provides effective control of adult mosquitoes, black flies, gnats, biting and non-biting midges, stable flies, horse flies, deer flies, sheep flies, horn and heel flies, and nuisance flying insects such as houseflies. All types of applications shall be conducted at temperatures greater than 50° F.

### GROUND APPLICATION

#### Vehicle-Mounted ULV Cold Aerosol Generators or Vehicle-Mounted Non-Thermal Aerosol

**(Cold Fog):** Apply through non-thermal ULV application equipment and base acreage calculations on the equipment manufacturer's recommended swath width. Spray equipment must be adjusted so that the volume median diameter or mass median diameter is less than 30 microns (Dv 0.5 < 30 µm) and that 90% of the spray is contained in droplets smaller than 48 microns (Dv 0.9 < 48 µm). Directions from the equipment manufacturer, 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.

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Apply at a rate not to exceed 0.007 pounds of permethrin per acre. An optimum swath is created when **AQUA MIST** is applied from a truck that is being driven perpendicular to the wind direction. Direct the spray head of the equipment to ensure even distribution of the spray cloud throughout the area. For best results, apply when insects are most active and weather conditions are conducive to keeping the spray cloud close to the ground. An inversion of air temperatures and a light breeze of approximately 1 to 3 mph is preferable. During applications ground wind speeds should not exceed 10 mph. Application during cooler hours of the night or early morning is recommended.

**AQUA MIST** may be applied through ULV Cold Aerosol Generators, or other similar equipment designed for non-thermal ULV aerosol applications. The desired application rate may be obtained from the chart below or by altering the dilution rate of **AQUA MIST**, the flow rate of the insecticide from the application equipment and the vehicle speed. Some examples are given in the Flow Rate Chart on the opposite page. If an alternate rate is required, adjust the flow rate accordingly, provided the droplet size and spectrum remain within the label specifications.

**BACKPACK OR HANDHELD SPRAYER APPLICATION:** Apply through non-thermal ULV application equipment and base acreage calculations on a 300-foot swath. To apply undiluted at 0.007 pounds of permethrin per acre, adjust equipment to an output rate of 1.24 ounces per minute and walk at 4 mph. To apply 0.0035 pounds of permethrin per acre, dilute 1 part **AQUA MIST** with 5 parts of diluent and apply at the rate of 3.8 ounces per minute and walk at 4 mph.

**THERMAL AEROSOL APPLICATION:** For use in truck-mounted, handheld or other thermal fogging equipment. Spray equipment must be adjusted so that the volume median diameter or mass median diameter is less than 30 microns ( $D_v 0.5 < 30 \mu\text{m}$ ) and that 90% of the spray is contained in droplets smaller than 48 microns ( $D_v 0.9 < 48 \mu\text{m}$ ). Directions from the equipment manufacturer, 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.

Apply this product mixed with water or oil at a rate not to exceed 0.007 lbs. per acre. Base acreage calculations on a 300 foot swath. For maximum control, direct the thermal fog to drift into and through areas where adult mosquitoes are found.

**BARRIER APPLICATIONS:** For control and exclusion of resting or flying adult mosquitoes in areas such as animal quarters, roadsides, urban areas, residential areas, commercial areas, industrial areas, golf courses, parks, recreational areas, tire piles and all public areas where adult mosquitoes may occur or find harborage. May be used to treat aggregation and harborage areas such as the perimeter of residential buildings, commercial buildings, storage buildings, crawl spaces, empty rail cars, truck transport trailers, abandoned or uninhabited buildings and other areas where adult mosquitoes find harborage.

To apply this product using low pressure hand sprayers or other similar equipment for the control of mosquitoes on resting or aggregation surfaces, mix 0.126 oz. (3.73 ml) in one gallon of water and apply sufficient spray to dampen surface, approximately 700-750 square feet of treated area. Use equipment that is capable of delivering an even distribution of the labeled rate over the treatment area. For application using backpack or truck-mounted mist-blower equipment apply **AQUA MIST** undiluted at a rate not to exceed 7.3 oz. per acre. If diluted, apply at a rate not to exceed 0.1 lbs. permethrin a.i. per acre. Diluted or undiluted applications may be made onto foliage at the perimeter of areas such as recreational areas, parks, or golf courses from which mosquitoes or flies are to be excluded. Direct applications into harborage areas or other resting areas where adult mosquitoes or flies may be found.

**Note:** When this product is applied as an application using low pressure hand sprayers, hydraulic sprayers, or ground ULV equipment, do not apply within 100 feet (30 meters) of lakes and streams.

**URBAN ULV MOSQUITO CONTROL APPLICATIONS:** For control of resting or flying adult mosquitoes, biting flies and biting midges in harborage areas such as but not limited to utility tunnels, sewers, storm drains and catch basins, pipe tunnels, basements, underground passages, parking decks, crawl spaces, abandoned or uninhabited buildings. **AQUA MIST** may be applied diluted or undiluted using mechanical foggers, hand-held or truck-mounted ULV equipment, thermal foggers or other spray equipment suitable for this application. Apply **AQUA MIST** at rates up to but not exceeding 0.007 lbs. permethrin per acre.

## AERIAL APPLICATION

**AQUA MIST** may be applied either diluted or undiluted at rates up to 0.007 lbs. Permethrin/PBO per acre by fixed wing or rotary aircraft equipped with a spraying system capable of making a ULV application. For aerial applications of **AQUA MIST** use ULV equipment and nozzles such as rotary atomizers or similar spray equipment. Spray equipment must be adjusted so that the volume median diameter produced is less than 60 microns ( $D_v 0.5 < 60 \mu\text{m}$ ) and that 90% of the spray is contained in droplets smaller than 115 microns ( $D_v 0.9 < 115 \mu\text{m}$ ). 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. Aerial application of **AQUA MIST** should be made at an altitude of 100-300 feet. Do not apply when ground wind speed equals 0 mph or exceeds 10 mph. Aerial applications shall only be made when recommended by public health officials and trained personnel of mosquito abatement districts and other mosquito control programs. For best results, applications shall be made when temperatures are greater than 50° F. For best results, treat when insects are most active and weather conditions are conducive to keeping the spray fog close to the ground. Aerial applications using aircraft equipped with Global Positioning Systems (GPS) may be needed to compensate for windy conditions and to ensure drift into target areas.

**IN FLORIDA:** Do not apply by aircraft except in emergency situations and with the approval of the Florida Department of Agriculture and Consumer Services.