

# AquaDUET® Water-Based Dual-Action Adulticide

A water based dual-action Adulticide for Effective Control of Adult Mosquitoes, Gnats, Non-biting Midges, Biting and Non-biting Flies in Outdoor Residential and Recreational Areas.

1.00%
5.00%
5.00%
<u>89.00%</u>
100.00%

Contains 0.084 pounds of Prallethrin/Gallon, 0.422 pounds of Sumithrin®/Gallon and 0.422 pounds of Technical Piperonyl Butoxide/Gallon

\*(butylcarbityl)(6-propylpiperonyl) ether and related compounds

# KEEP OUT OF REACH OF CHILDREN CAUTION

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

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.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For information regarding medical emergencies or pesticide incidents, call 1-888-740-8712.

## PRECAUTIONARY STATEMENTS

# HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**CAUTION.** Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

# PERSONAL PROTECTIVE EQUIPMENT (PPE)

Mixers, loaders, applicators, and other handlers must wear the following: long-sleeved shirt, long pants, shoes and socks. See engineering controls for additional requirements.

### **USER SAFETY REQUIREMENTS**

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. Discard clothing and other absorbent material that have been drenched or heavily contaminated with the product's concentrate. Do not reuse them.

# **USER SAFETY RECOMMENDATIONS**

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. As soon as possible, wash thoroughly and change into clean clothing.

# **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 the use of the Global Positioning System (GPS) or mechanical flaggers.

# ENVIRONMENTAL HAZARDS

This product is highly 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. 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. 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 drift onto blooming crops or weeds when bees are visiting the treatment 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.

#### **DIRECTIONS FOR USE**

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

#### **USE RESTRICTIONS**

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.

IN CALIFORNIA: This product is to be applied by County Health Department, State Department of Health Services, Mosquito and Vector Control or Mosquito Abatement District personnel, or by persons under their direct supervision.

IN FLORIDA: Aerial applications of this product require trained personnel to perform industry accepted assays to monitor resistance formation in targeted mosquitoes.

Do not treat a site with more than 0.0036 lb of each a.i., Sumithrin and piperonyl butoxide and 0.00072 lbs prallethrin per acre in a single application or in any 24-hour period. Do not apply more than 0.0108 lb each of Sumithrin and piperonyl butoxide and 0.0022 lb prallethrin to the same treatment area in a 7 day period. Do not apply more than 0.0216 lb each of Sumithrin and piperonyl butoxide and 0.0043 lb prallethrin to the same treatment area in 1 month. Do not exceed 0.1 lb of Sumithrin or piperonyl butoxide or 0.02 lb prallethrin per acre in any site in one year. More frequent applications 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.

NOTE: When rotating products with other insecticides containing PBO, do not exceed 2 lbs PBO per acre per year.

Not for use in outdoor residential misting systems.

# **USE INFORMATION**

AQUADUET is approved for application as an Ultra Low Volume (ULV) nonthermal aerosol (cold fog) in mosquito adulticiding programs involving outdoor residential, outdoor urban, industrial, and recreational areas where adult mosquitoes or other listed flying pests are present in annoying numbers, and in vegetation surrounding parks, woodlands, swamps, marshes, overgrown areas and golf courses.

AQUADUET may be applied over crops or to areas favoring drift over crops, including row, tree, fruit, citrus, pasture and other areas where agricultural enterprises take place.

AQUADUET cannot be mixed with oil. Use only clean water. SHAKE OR AGITATE THOROUGHLY BEFORE DILUTING. Diluted product must be thoroughly agitated before use. Avoid storing excess formulation in equipment.

# SPRAY DROPLET SIZE DETERMINATION

Ground-based Application: Spray equipment must be adjusted so that the volume median diameter (VMD) is less than 30 microns (Dv 0.5 < 30 um) and that 90% of the spray is contained in droplets smaller than 50 microns (Dv 0.9 < 50 um). 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.

<u>Aerial Application</u>: Spray equipment must be adjusted so that the volume median diameter produced is less than 60 microns (Dv 0.5 < 60 um) and that 90% of the spray is contained in droplets smaller than 115 microns (Dv 0.9 < 115 um). The effects of flight speed and, for non-rotary atomizers, 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 U.L.V. APPLICATION**

To control Mosquitoes and other listed insects, apply AQUADUET at a flow rate of 2.2 to 6.6 fluid ounces per minute at an average vehicle speed of 10 mph using a swath width of 300 feet for acreage calculations (see chart below). For best results, apply when mosquitoes are most active and meteorological conditions are conducive to keeping the spray cloud close to the ground. Certain mosquito species, such as *Aedes aegypti* and *Aedes albopictus*, are most active during the day. Application in calm air conditions is to be avoided. Apply only when ground wind speed is greater than or equal to 1 mph. All types of applications should be conducted at temperatures above 50 °F. Under normal residential conditions a flow rate of 4.0 fluid ounces per minute is recommended. If a different vehicle speed is used, adjust rate accordingly. These rates are equivalent to 0.00024 to 0.00072 pounds of Prallethrin and 0.0012 to 0.0036 pounds of Sumithrin® and Piperonyl Butoxide per acre.

Vary flow rate according to vegetation density and mosquito population. Use higher flow rate in heavy vegetation or when populations are high. AQUADUET may also be diluted with water and applied by GROUND ULV equipment so long as 1.09 fluid ounces per acre of AQUADUET is not exceeded. Refer to the tables on following panel for flow rate calculations for diluted end-use formulations of AQUADUET. If an alternate dilution rate is used, adjust the flow rate accordingly, provided the droplet

size and spectrum remain within label specifications. Use the following table to calculate application rates:

Pounds a.i./Acre			AQUADUET	Flow Rates in fluid oz./minute at truck speeds of:				
Sumithrin®	PBO	Prallethrin	Fl.oz./Acre	5 MPH	10 MPH	15 MPH	20 MPH	
0.0036	0.0036	0.00072	1.09	3.3	6.6	9.9	13.2	
0.0022	0.0022	0.00044	0.67	2.0	4.9	6.1	8.1	
0.0018	0.0018	0.00036	0.55	1.7	3.3	5.0	6.6	
0.0012	0.0012	0.00024	0.36	1.1	2.2	3.3	4.4	

**Urban ULV Mosquito Control:** AQUADUET may be applied for control of resting or flying adult mosquitoes in outdoor urban and industrial areas such as rail yards, waste yards, junkyards, tire dumps, and other outdoor areas where adult mosquitoes may be found. Apply using mechanical-foggers, or truck-mounted ULV equipment, or other spray equipment suitable for this application. Apply at rates up to but not exceeding 0.0036 lb of each a.i., Sumithrin and piperonyl butoxide and 0.00072 lbs. prallethrin per acre in a single application or in any 24-hour period.

#### **AERIAL APPLICATION**

AQUADUET may be applied at rates of 0.36 to 1.09 fluid ounces of AQUADUET per acre by fixed wing or rotary aircraft equipped with suitable ULV application equipment. AQUADUET may also be diluted with water and applied by aerial ULV equipment so long as 1.09 fluid ounces per acre of AQUADUET is not exceeded. Do not apply by fixed wing aircraft at a height less than 100 feet above the ground or canopy, or by helicopter at a height less than 75 feet above the ground or canopy, unless specifically approved by the state or tribe based on public health needs. When making aerial application at an altitude of less than 100 feet, apply only when wind speed at altitude is greater than or equal to 5 mph. When making application at an altitude of 100 feet or greater, apply only when wind speed at altitude is greater than or equal to 3 mph.

#### DILUTION

Reference the dilution charts on this label. If an alternative dilution rate is used, adjust the flow rate accordingly, provided the droplet size and spectrum remains within label specifications.

For a 4% Sumithrin product, dilute 1 gallon AQUADUET with 0.25 gallon water. Finished spray

contains 0.338 lbs Sumithrin & PBO and 0.067 pounds Prallethrin per gallon.

Dosage Description	Pounds a.i./Acre			Fluid oz. Finished	Flow Rates in fluid oz./minute at truck speeds of:			
	Prallethrin	Sumithrin	PBO	spray/Acre	5 MPH	10 MPH	15 MPH	20 MPH
High Population	0.00072	0.0036	0.0036	1.36	4.1	8.3	12.4	16.5
Recommended	0.00044	0.0022	0.0022	0.83	2.5	5.1	7.6	10.1
Light Population	0.00036	0.0018	0.0018	0.68	2.1	4.1	6.2	8.3
	0.00024	0.0012	0.0012	0.45	1.4	2.8	4.1	5.5

For a 2.5% Sumithrin product, dilute 1 gallon AQUADUET with 1 gallon water. Finished spray contains 0.211 lbs Sumithrin & PBO and 0.042 pounds Prallethrin per gallon.

Dosage Description	Pounds a.i./Acre			Fluid oz. Finished	Flow Rates in fluid oz./minute at truck speeds of:			
	Prallethrin	Sumithrin	PBO	spray/Acre	5 MPH	10 MPH	15 MPH	20 MPH
High Population	0.00072	0.0036	0.0036	2.18	6.6	13.2	19.9	26.5
Recommended	0.00044	0.0022	0.0022	1.33	4.0	8.1	12.1	16.2
Light Population	0.00036	0.0018	0.0018	1.09	3.3	6.6	9.9	13.2
	0.00024	0.0012	0.0012	0.73	2.2	4.4	6.6	8.8

For a 2% Sumithrin product, dilute 1 gallon AQUADUET with 1.5 gallons water. Finished spray contains 0.169 lbs Sumithrin & PBO and 0.034 pounds Prallethrin per gallon.

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Dosage Description	Pounds a.i./Acre			Fluid oz. Finished	Flow Rates in fluid oz./minute at truck speeds of:			
	Prallethrin	Sumithrin	PBO	spray/Acre	5 MPH	10 MPH	15 MPH	20 MPH
High Population	0.00072	0.0036	0.0036	2.73	8.3	16.5	24.8	33.1
Recommended	0.00044	0.0022	0.0022	1.67	5.1	10.1	15.2	20.2
Light Population	0.00036	0.0018	0.0018	1.36	4.1	8.3	12.4	16.5
	0.00024	0.0012	0.0012	0.91	2.8	5.5	8.3	11.0

# STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Store in a cool, dry place. Keep container closed.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

# **CONTAINER HANDLING & DISPOSAL:**

For Nonrefillable Containers: Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. 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.

CONTAINERS 5 GALLON CAPACITY OR SMALLER: 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 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a rinse 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.

CONTAINERS LARGER THAN 5 GALLON CAPACITY: Empty the remaining contents into the 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. 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.

For Refillable Containers: Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump maste into rinsate collection system. Repeat this rinsing procedure two more times. 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 MORE INFORMATION CALL 1-800-323-5727

NOTICE: To the extent provided by law, Seller makes no warranty, expressed or implied, concerning the use of this product other than as indicated on the label. Buyer assumes all risk of use and/or handling of this material when use and/or handling is contrary to label instructions.

AQUADUET® - RegisteredTrademark of Clarke Mosquito Control Products, Inc.

Sumithrin® - Registered Trademark of Sumitomo Chemical Company, Ltd.

Manufactured For:
CLARKE MOSQUITO CONTROL PRODUCTS, INC.
159 N. GARDEN AVENUE
ROSELLE, ILLINOIS 60172 U.S.A.

AVAILABLE PACKAGING: 2.5 GAL, 30 GAL, 55 GAL, 275 GAL, TOTE

Lot No.: Marked on Container Label

EPA Reg. No.: 1021-2562-8329

EPA Est. No.: