Clarke

Family owned business since 1947



Duet

The Dual-Active Adulticide



Duet. . . Dual Active Ingredients put more mosquitoes in the line of fire

- Lab research indicates that prallethrin provokes mosquitoes out of harborage areas in a state of benign agitation
 - Does NOT create a biting frenzy
 - Confuses the mosquito
 - Increases probability that mosquitoes will come in contact with Duet

Duet



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.

A Quick Knockdown, Oil Soluble Symergized Synthetic Pyrethroid for Effective Control of Adult Mosquitoes, Gnats, Biting and Non-Biting Midges and Blackfles in Outdoor Residential & Recreational Areas.

ACTIVE INGREDIENTS	
Prallethrin: (RS)-2-methyl-4-oxo-3-(2-propynyl) cyclopent-2-enyl-	
(1RS)-cis,trans-chrysanthemate.	1.00%
Sumithrin®: 3-Phenoxyberzyl-(1RS, 3RS, 1RS, 3SR)-2.2-dimethyl-3-(2-	
methylprop-1-enyl) cyclopropanecarboxylate	5.00%
Piperonyl Butoxide*	
OTHER INGREDIENTS**	89.00%
	100.00%

Contains 0.075 lbs of Prallethrin/Gallon, 0.375 lbs of Sumithrin/Gallon and 0.375 lbs of Piperonyl Butoxide (PBO)/Gallon

*(butyl carbityl) (6-propylpiperonyl) ether and related compounds
** Contains petroleum distillate

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

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.

IF SWALLOWED: Imm

Immediately call a poison control center or doctor. Do not induce vaming unless told to do so by a person control center or a doctor. Do not give any liquid to the person Do not give anything by mouth to an upconficious person.

NOTE TO PHYSICIAN: Contains petroleum distillates - vomiting may cause aspiration

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

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

<u>Personal Protective Equipment (PPE)</u>: Mixers, loaders, applicators, and other handlers must wear the following: long-sleeve shirt, long parts, shoes and socks. See engineering controls for additional requirements.

<u>User Safety Requirements</u>: 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, dinking, chewing gum, using tobacco, or using the boilet. Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean dothing. Users should remove PPE immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothina.

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 applications is limited to use of the Global Positioning System (GPS) or mechanical flaggers.

ENVIRONMENTAL HAZARDS

This pesticide is highly toxic to aquatic organisms, including fish and aquatic invertebrates. Runoff from treated areas or deposition of spray dioplets 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 (likes, invers, 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 beyond the body of water in order to minimize incidental deposition into the water body. Do not contaminate bodies of water when disposing of equipment rinsate or wash waters.

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 at 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 mosquilo-bome disease in animal or human populations, or if specifically approved by the state or trible during a natural disease recovery effort.

PHYSICAL OR CHEMICAL HAZARDS

Do not use or store near heat or open flame.

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 only.

IN FLORIDA: Do not apply by aircraft unless approved by the Florida Department of Agriculture and Consumer Services.

Do not treat a site with more than 0.0036 ibs of each all. Sumithin and piperony bulovide (0.00072 ibs prailethin) per acre in a 24-hour people. Do not exceed 0.1 b of Sumithin or piperany bulovide of 0.02 lb prailethin) per acre in any site in one year. More fraquent applications may be made to prevent or control differed to public and/or almost insight betermined by a state, tippal-or focal health or vector control agency or line basis of bocumented elividence of disease causing agents in vector mosquitoes or the occurrence of mosquito-bound disease, in a miner's human oppulsions, or if specifically approved by the state in which change a natural disaster recovery effort.

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

Do not contaminate food, feed or drinking water. Do not contaminate pastureland, rangeland, cropland, poutry ranges or potable water supplies with spray drift. In treatment of corrais, feed lots, swine lots and zoos, cover any exposed drinking water, drinking water fountains and animal feed before application.

Not for use in outdoor residential misting systems. Not for use in metered release systems.

DUET cannot be diluted in water. Dilute this product with light mineral oil if dilution is preferred.

USE INFORMATION

DUET is approved for application as a thermal aerosol and as an Ultra Low Volume (ULV) nonthermal aerosol (cold fog) in mosquito adulticiding programs involving outdoor residential and recreational areas where adult mosquitoes are present in annoying numbers, and in vegetation surrounding parks, woodlands, swamps, marshes, overgrown areas and gof courses.

For best results, apply when mosquitoes are most active and meteorological conditions are conductive to keeping the spray cloud close to the ground. Application in calm air conditions is to be avoided. Apply only when wind speed is greater than or equal to 1 mph. All types of applications should be conducted at temperatures above 50 °F.

SPRAY DROPLET SIZE DETERMINATION

Ground-based, wide area mosquito abatement application: Spray equipment must be adjusted so that the volume median diameter (VMD) is between 8 and 30 microns (Dv 0.5 < 30 um) and that 60% of the spray is contained in dopleds 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.

Aerial Equipment, wide area mosquibe abatement application: Spray equipment must be adjusted so that the volume median diameter produced is less than 80 microns (Dv 0.5 < 80 um) and that 90% of the spray is contained in doplets 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 vender, 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 lested at least annually to confirm that pressure at the nozzle and nozzle flow rate(s) are properly califorated.

GROUND U.L.V. APPLICATION

To control Mosquitoes and other listed insects, apply DUET at a flow rate of 2.5 to 7.4 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). Under normal residential conditions a flow rate of 4.6 fluid ounces per minute is rec-

Natular Larvicide

New class of chemistry with a new mode of action

Sustainable solution formulations

Greater application flexibility

Precision performance

Presidential Green Chemistry Challenge Award - 2010



The New, Re-designed Promist Dura®

Flexibility & Durability in a Quiet, Eco-friendly Electric ULV Sprayer



Clarke

Joe Strickhouser

jstrickhouser@clarke.com

704-756-5837

