MOSQUITO CONTROL IN POPULATED AND RURAL AREAS

IMPORTANT NOTICE: TO BE APPLIED ONLY BY TRAINED PERSONNEL OF PUBLIC HEALTH ORGANIZATIONS, MOSQUITO ABATEMENT DISTRICTS OR PEST CONTROL OPERATORS

AERIAL APPLICATION

ADULT MOSQUITO CONTROL OVER CITIES, TOWNS AND OTHER AREAS WHERE AUTOMOBILES, TRAILERS, TRUCKS AND PLEASURE BOATS ARE PRESENT. Apply 2.6 to 3.0 fluid ounces of FYFANON ULV per acre. Apply only when weather conditions are favorable. Wind and inadequate air currents may cause undesirable spray drift and reduce overall control.

IMPORTANT - Undiluted spray droplets of FYFANON ULV will permanently damage vehicle paint finishes unless the aircraft used for the ultra low volume application meets all of the specifications listed below.

FIXED WING AIRCRAFT

1. Aircraft is operated at 150 mph or more.
2. There are no leaks in the ultra low volume spray system.
3. Nozzles are placed on the boom at a 45° angle down and into the wind.
4. Diaphragm check valves are used on all nozzles to insure positive cut off of the spray.
5. Dosage of FYFANON ULV does not exceed 3 fluid ounces per acre.
6. The spray system produces droplets of this product in the 50 to 60 mass median diameter (MMD) micron range with no more than 10% of the droplets exceeding 100 microns, as determined by readings made from microscope slides coated with DRI FILM* or TEFLON*.

HELICOPTER

Equipment Specifications

1. Rotary nozzle equivalent to Beecomist Spray Head Assembly Model No. 8x0 equipped with
   a. a 3½" reading RPM tachometer or low RPM signal light readily visible to operator.
   b. a stainless steel porous metal sleeve .20 micron pore size, dynamically balanced to the nozzle.
   c. a diaphragm check valve as near to the rotary nozzle as possible to insure positive cut off of the spray.
   d. nozzle on off switch separate from main switch and pump switch.
2. Minimum no load nozzle speed of 10,500 RPM.
3. A continuous nonpulsating metered flow must be maintained by a variable speed metering pump equipped with
   a. a positive cut off valve between tank and pump,
   b. a flow gauge or tachometer visible to operator,
   c. a pump on off switch separate from main switch and nozzle switch.
4. Maximum flow rate of 0.5 gallon per minute per nozzle.
5. Rotary nozzle must be mounted behind and below the boom with the sleeve directed toward the rear of the aircraft and parallel to the ground during flight. Nozzle must be positioned to minimize air turbulence and the collection of FYFANON ULV droplets on mounting brackets, feed lines, fittings, etc., or any part of the aircraft.

OPERATING PROCEDURES

6. FYFANON ULV must be prefiltered through a 10 micron filter prior to transfer into helicopter tank. A 50 mesh stainless steel line strainer must be installed in the pump feed line.
7. Entire system, including tank, pump, nozzle and feed lines, to be used only for application of FYFANON ULV.
8. Entire system must be inspected daily to insure that there are no leaks.
9. Sleeve must be removed and cleaned immediately after each use by washing with hot water and blowing dry from outside in with clean air.
10. Rotating nozzle must be turned on and operating before turning on pump. For shut off, pump must be shut off and lines cleared prior to stopping nozzle rotation.
11. Dosage of FYFANON ULV does not exceed 3 fluid ounces per acre.
12. The spray system must produce droplets of FYFANON ULV with a mass median diameter (MMD) of less than 50 microns, with no more than 2.5% of the droplets exceeding 100 microns, as determined by readings made from microscope slides coated with DRI FILM* or TEFLON*.

GROUND APPLICATION

Thermal Aerosols or Fogs

For control of adult mosquitoes with thermal aerosols or fogs, apply FYFANON ULV at the rate of 6.8 oz. actual gallon (3.9-5.2 gallons FYFANON ULV in 100 gallons finished solution*) by ground equipment delivering 40 gallons per hour at a vehicle speed of 5 miles per hour to treat a swath width of 300-400 feet.

- There is a great variation in the chemical composition of fuel oils which may be used as thermal fog solvents. These differences may cause sludge and or affect the solubility of the FYFANON ULV.

Nonthermal Aerosols

Adult Mosquito Control - For control of adult mosquitoes over a 300 foot swath with nonthermal aerosols of FYFANON ULV using the following rates at the indicated vehicle speeds.

Vehicle Speed Rate per Hour	Flow Rate of FYFANON Fluid Ounces per Minute	Maximum Flow Rate per Hour
5	1.0 to 2.1 fluid ounces	1 gallon
10	2.0 to 4.3 fluid ounces	2 gallons
15	3.0 to 6.3 fluid ounces	3 gallons
20	4.0 to 8.6 fluid ounces	4 gallons

Adult Stable Fly Control - For control of adult stable flies over a 300-foot swath with nonthermal aerosols of FYFANON ULV using the ultra low volume method, use the following flow rates at the indicated vehicle speeds.

Vehicle Speed Rate per Hour	Flow Rate of FYFANON Fluid Ounces per Minute	Maximum Flow Rate per Hour
5	2.1 fluid ounces	1 gallon
10	4.3 fluid ounces	2 gallons

DROPLET SIZE

1. The Mass Median Diameter (MMD) of the droplets should not exceed 17 microns. The MMD is the drop diameter which divides the spray volume into two equal parts, i.e., 50% of the volume is in the drop sizes below the MMD and 50% is above the MMD.
2. Spray droplets should not exceed 32 microns in size. Three percent of the spray droplets (6 droplets out of 200) can exceed 32 microns providing the MMD does not exceed 17 microns and no droplets exceed a maximum of 48 microns. Larger droplets, when transported by natural air currents, impinge more readily on objects in their pathway and will permanently damage automobile type paints.
3. More than one half of the total spray mass must consist of droplets in the 6 to 18 micron range to achieve adequate dispersal of insecticide over a 300 foot swath.
4. A minimum of two thirds, pregerably four fifths of the total spray mass must consist of droplets not exceeding 24 microns in range.

OPERATING EQUIPMENT

Each Nonthermal Aerosol Generator used for dispersal of FYFANON ULV to control adult mosquitos must have minimum capability of producing the droplet spectrum described under DROPLET SIZE. The initial determination of droplet size is made after the unit is installed in a vehicle and prior to its use in mosquito control operations. The unit should be rechecked as frequently as necessary to insure that proper droplet size is maintained for each operation. Determination of droplet size every two months is usually sufficient if the unit has been maintained in good operating condition. Equipment manufacturer's instructions setting forth cleaning and maintenance of the unit must be followed. The unit must be inspected before each operation to correct any leaks or obstructions in the spray system, to detect whether the nozzle, hoses, or other parts are worn and need replacement, to insure that the flow meter is properly

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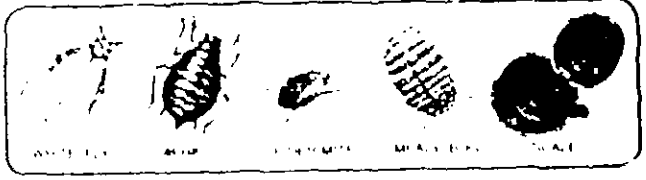
CHACON

MALATHION SPRAY



FRUITS • VEGETABLES ORNAMENTALS

Active Ingredients	
Malathion*	50.00%
[illegible] Petroleum Derivative Solvent	40.[illegible]%
Inert Ingredients	9.[illegible]%

ACCEPTED

FEB 2 1984

EPA Reg. # 5719-41

MALATHION SPRAY

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

CAUTION

Keep out of reach of children. Harmful if swallowed. Avoid breathing of spray mist. Avoid contact with skin. Avoid contamination of food and feed.

Statement of Practical Treatment: If swallowed, do not induce vomiting. Never give anything by mouth to an unconscious person. Get immediate medical attention. If inhaled, remove affected person from exposure. If in eyes, rinse with plenty of fresh water for at least 15 minutes. Get medical attention if irritation persists. If on skin, wash affected area with soap and water.
Note to Physician: Malathion is a cholinesterase inhibitor and can cause symptoms similar to those caused by other organic phosphate compounds. Atropine is antidotal.

Environmental Hazards

This pesticide is toxic to fish and other wildlife. Do not apply directly to water. Do not apply where runoff is likely to occur. Do not contaminate water by cleaning of equipment or disposal of wastes.
This product is highly toxic to bees exposed to direct treatment or residues on crops. Protective information may be obtained from your Cooperative Agricultural Extension Service.

Physical and Chemical Hazards

Do not use, pour, spill 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. Read entire label thoroughly. Apply this product only as specified on this label.
Use as thorough cover spray on all parts of the plant. Repeat as necessary. Keep children and pets off treated areas until material is washed into the soil or the grass is dry. Do not use on Boston, Maiden Hair or Pteris Ferns. This product can be used up to 3 days before harvest of fruit crops unless otherwise specified.
ORNAMENTALS: Rose, Azalea, Gardenia, [illegible] and other flowers and shrubs. For Aphids, use [illegible] per gallon of water. For Red Spider Mite, [illegible], Leafhopper, Thrips (exposed), Japanese [illegible] Beetle (adult), use at the rate of [illegible] Soft Brown, or Oyster Shell Scale, use at the rate of [illegible] tablespoons per gallon of water.
FRUITS: Apple, Pear, or Grape. For Aphids, use at the rate of 1½ to 2 tablespoons per gallon of water. For Red Spider Mite, Mealybug, White Fly, Thrips (exposed), Japanese Beetle (adult), Pear Psylla, Grape Leafhopper, or Tarnished Plant Bug, use at the rate of 1 tablespoon per gallon of water. For Scale Crawlers, use at the rate of 1½ to 2 tablespoons per gallon of water. Do not apply to Pears within 1 day of harvest. Do not spray during bloom period.