

DEACT LABELING

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FYFANON[®] ULV

ULTRA LOW VOLUME CONCENTRATE INSECTICIDE

OCT 11 1983
 Under Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 4787-8

Insecticide



PRECAUTION

Active Ingredient

Malathion**

95.0 %

Inert Ingredients

5.0 %

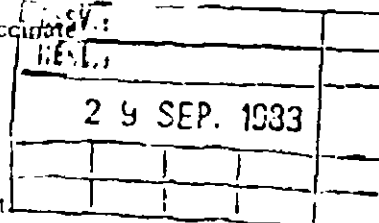
**O,O-dimethyl phosphorodithioate of diethyl mercaptosuccinate

(1 gallon contains 9.79 pounds of malathion)

KEEP OUT OF REACH OF CHILDREN

CAUTION

Harmful by swallowing, inhalation or skin contact



**Avoid Breathing Spray Mist • Avoid Contact With Skin • Wash Thoroughly After Handling
 Change Contaminated Clothing • Do Not Contaminate Food Or Feed Products**

PRECAUCIÓN

AL USUARIO: Si usted no lee ingles, no use este producto hasta que la etiqueta le haya sido explicada amplemente
(TO THE USER: If you cannot read English, do not use this product until the label has been fully explained to you.)

IN CASE OF AN EMERGENCY ENDANGERING LIFE OR PROPERTY INVOLVING THIS PRODUCT, CALL COLLECT, DAY OR NIGHT, AREA CODE 201 595 3100

STATEMENT OF PRACTICAL TREATMENT

If swallowed: Call a physician or poison control center immediately. Induce vomiting by giving 1 or 2 glasses of water and touching back of throat with finger or blunt object. Do not induce vomiting or give anything by mouth to an unconscious person.

If inhaled: Remove victim to fresh air immediately.

If on skin: Remove contaminated clothing and wash affected areas with soap and water.

If in eyes: Flush with water for at least 15 minutes and get medical attention.

NOTE TO PHYSICIAN: This material is a cholinesterase inhibitor. Treat symptomatically. Atropine is an antidote.

See side panels for additional precautionary statements

EPA Reg. No.: 4787-8

Product of Denmark

EPA Est. No.: 4787-DN-1

A/S CHEMINOVA - Løngvig - Denmark

Phone: (07)834100 Telex: 66514

PRECAUTIONARY STATEMENTS

Hazards to Humans (5 Domestic Animals)

Harmful by swallowing, inhalation or skin contact. Avoid breathing spray mist. Avoid contact with skin. Wash thoroughly after handling. Change contaminated clothing. Do not contaminate food or feed products.

Environmental Hazards

This product is toxic to fish. Keep out of lakes, streams, ponds, rivers, marshes, and estuaries. Do not apply where run-off may occur. Do not apply when weather conditions favor run-off from treated areas. Do not contaminate water, fish, or aquatic equipment. Do not dispose of wastes from this product in any way. Do not apply at application rates recommended on this label. Do not apply where these are important resources. Apply this product only as specified on this label.

Physical or Chemical Hazards

Before using, read the directions contained in this leaflet for the proper methods and procedures which must be followed to achieve effective insect control and avoid permanent damage to automobile and other paint finishes.

STORAGE AND DISPOSAL

Pesticide Disposal: Pesticide spray mixture or rinse water that cannot be used according to label instructions must be disposed of according to applicable Federal, state or local procedures.

Container Disposal: Metal Containers: Triple rinse and recondition. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill or by other approved state and local procedures.

DISCLAIMER

The label instructions for the use of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and should be followed carefully. However, it is impossible to eliminate all risks inherently associated with the use of this product. For example, automobile paint damage, weathering, 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 CHEMINOVA. All such risks shall be assumed by the user.

CHEMINOVA warrants only that the material described and herein conforms to the chemical description on the label and is reasonably fit for the use therein described, when used in accordance with the directions for use, subject to the risks set forth above.

Any damages arising from a breach of this warranty shall be limited to direct damages and shall not include consequential or indirect damages, such as lost profits or values or any other special or indirect damages.

CHEMINOVA makes no other express or implied warranty, including any other express or implied warranty of FIF, FIFCO, or of MICHMENTA, INC.

FYFANON ULV may be used for the preparation of malathion insecticides. Before using for this purpose, manufacturers should consult CHEMINOVA for manufacturing and safe handling instructions.

The sale of this product is subject to a license under any patent owned by CHEMINOVA.

Mosquito Control with Thermal Aerosols in Fog
 Applied by Ground Equipment

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Ultra Low Volume Aerial Application where automobiles, trailers, trucks and pleasure boats are present

IMPORTANT NOTICE

TO BE APPLIED ONLY BY TRAINED PERSONNEL OF PUBLIC HEALTH ORGANIZATIONS, MUNICIPAL ABATEMENT DISTRICTS, OR PEST CONTROL OPERATORS.

DIRECTIONS FOR USE

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. Aerial spraying should not be attempted when the wind is at or above 10 mph or temperatures are above 82°F.

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 100 mph or less.
2. There are no leaks in the ultra low volume spray system.
3. Nozzles are placed on the spray system so that the spray is cut off at the wind.
4. Droplets of **FYFANON ULV** are not allowed to impinge on the surface of the aircraft.
5. Dosage of **FYFANON ULV** does not exceed 3 fluid ounces per acre.
6. The spray system produces droplets of uniform size with a mass median diameter (MMD) of not 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 sprayer must be capable of producing a spray of uniform size with a mass median diameter (MMD) of not more than 10% of the droplets exceeding 100 microns, as determined by readings made from microscope slides coated with DRI FILM or TEFLON.*
2. Minimum rated nozzle speed of 100 ft./min.
3. A continuous liquid pressure of 100 psi or less is required to operate the sprayer. The sprayer must be capable of operating at a pressure of 100 psi or less.
4. The sprayer must be capable of operating at a pressure of 100 psi or less.
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6. The sprayer must be capable of operating at a pressure of 100 psi or less.
7. The sprayer must be capable of operating at a pressure of 100 psi or less.
8. The sprayer must be capable of operating at a pressure of 100 psi or less.
9. The sprayer must be capable of operating at a pressure of 100 psi or less.
10. The sprayer must be capable of operating at a pressure of 100 psi or less.

Operating Procedures

1. **FYFANON ULV** must be transferred through a 10-micron filter prior to transfer into helicopter tank. A 50-mesh stainless steel fine strainer must be installed in the pump feed line.
2. Entire system, including tank, pump, nozzle and feed lines, to be used only for application of **FYFANON ULV**.
3. Entire system must be inspected for leaks prior to operation.
4. Spray droplets must be uniform in size and must not impinge on the surface of the aircraft or on the ground.
5. Rotating nozzle must be used on all surfaces of the target area. For spot spraying, the nozzle must be held steady and not stopped or moved.

*Trade mark of General Electric Company.

*Registered Trademark of E. I. du Pont de Nemours & Co., Inc.

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 25% of the droplets exceeding 100 microns, as determined by readings made from microscope slides coated with DRI FILM or TEFLON.

**Ultra Low Volume Application
NONTHERMAL AEROSOLS
Applied by
GROUND EQUIPMENT**

IMPORTANT NOTICE

TO BE APPLIED ONLY BY TRAINED PERSONNEL OF PUBLIC HEALTH ORGANIZATIONS, MUNICIPAL ABATEMENT DISTRICTS, OR PEST CONTROL OPERATORS.

DIRECTIONS FOR USE

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	2.1 to 4.3 fluid ounces	2 gallons

Adult Stable Fly Control - For controlled 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 Miles 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 50 microns. The MMD is the droplet diameter which divides the spray volume into two equal parts. The size of the droplets in the spray should be below the MMD and size is above the MMD.
2. Spray droplets should not exceed 50 microns in size. Three percent of the spray droplets out of 1000 can exceed 50 microns and the MMD does not exceed 10 microns and no droplets exceed a maximum of 40 microns. Larger droplets, when passing directly through a current, impinge more readily on objects in the pathway and will permanently damage automobile type paints.
3. More than one half of the total spray mass must consist of droplets in the 5 to 15 micron range to achieve adequate dispersal of insecticide over a 300 foot swath.
4. A minimum of two thirds, preferably four fifths, of the total spray mass must consist of droplets not exceeding 14 microns in range.

OPERATING EQUIPMENT

Each Nonthermal Aerosol Generator used for dispersal of **FYFANON ULV to control adult mosquitoes 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 malfunctions 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 calibrated, and to determine that the pressure recommended by the manufacturer is being maintained.

Flow Rate - must be flow meter or accurate flow meter.
-not greater than 2.1 fluid ounces per hour at 5 mph or 2 gallons per hour at 10 mph.

Nozzle Direction - must be perpendicular to the surface of the target area.
-the nozzle must be at an angle of 45° or more.

Vehicle Speed - not greater than 10 miles per hour.
-stop spray equipment when vehicle is stopped.

IMPORTANT - Spray droplets of undiluted **FYFANON ULV** will permanently damage automobile paint unless all the conditions described and recommended in this leaflet are met.

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

4. — EYFANON ULV — at the rate of 6.8 oz. (actual gallon) or 9.52 gallons (re 100 gallon, finished solution*) by ground equipment (averaging 40 p.d.p.s. 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 a fog and/or affect the solubility of the —————

Directions For Use

For Ultra Low Volume Applications

Do not use this product for any uses other than those specified in this label.

— FIFANON ULV — is used undiluted in specially designed aircraft or ground equipment capable of applying ultra low volume for control of the insects indicated. Aerial applications are most effective when made at a boom height of 5 feet and a swath width of 50 feet. Do not make application when winds exceed 10 mph.

Mist blowers and boom sprayers utilizing a controlled air flow to facilitate the size and spray deposition may be used at a vehicle speed of 4 to 6 mph.

Flows with a pump capable of producing up to 40 psi and a speed of 1,600 rpm are satisfactory. Use flat fan nozzles, positioned at a 30° angle to air blast or rotary atomizers into the air stream that produce an efficient spray particle with a mass median diameter of 40 to 100 microns. Swath widths should not exceed 30 feet, and application should not be made when winds exceed 5 mph.

Use a sprayer with a filtered rotary air compressor, either PTO or belt driven, or an air pump capable of producing at least 12 lb. air pressure. Use air pressure on chemical tanks and an adjustable safety valve to assure a calibrated flow of the pesticide. Equipment should be equipped with relief valve and gauge for proper air pressure. Use pneumatic type spray nozzles, as suggested by the manufacturer, should be used for spray particles with diameter in the order of 30 to 100 microns. Applications should not be made when winds exceed 5 mph.

1. All other things should be made as necessary unless otherwise stated.

Year	Number of Inhabitants	DN	2011 Total (DN)	Accumulative Percentages
1	5	5	0.31	0.31
2	10	20	1.22	1.53
3	9	27	1.65	3.18
4	17	48	2.93	6.11
5	15	75	4.58	10.69
6	12	72	4.40	15.09
7	25	175	10.70	25.79
8	14	112	6.85	32.64
9	28	252	15.4	48.04
10	19	170	11.61	59.65
11	14	154	9.41	69.06
12	10	120	7.37	76.39
13	6	78	4.77	81.16
14	4	56	3.47	84.58
15	11	165	10.09	94.67
16	2	32	1.96	96.63
18	2	36	2.20	98.83
19	1	19	1.16	99.99
Total	199	1636		

Measurements were taken at 4 x 4 m intervals in a zig-zag pattern, plus 1.25 m margins (3.5 m for stream edges) on both sides.

CROP	PESTS CONTROLLED	FLUID OUNCES PER ACRE	DAYS TO HARVEST OR GRAZING AND COMMENTS
Apples	Adults (caterpillars)	8	1 day. Apply when caterpillars are small.
	Western cutworm	12	5 days. Apply when caterpillars are small or before they begin to damage.
	Adults (caterpillars)	16	5 days. Apply when day temperatures are expected to exceed 85° F. and when 50-75% of leaves show feeding damage.
	Beet armyworms	8	1 day. Apply when caterpillars are small.
		16	5 days. Apply when caterpillars are small or before they begin to damage.
	Cornborers	8	1 day.
	Do not apply to any crop in bloom. Do not apply to seed crops.		
Banding (large green, small hairy, red & green, mostly black spots)	Mexican Bean Beetle (caterpillars)	8	1 day.
	Corn Earworm (caterpillars)		
	Japanese Beetle (caterpillars)		
	Leaf Miner		
Blueberries	Blueberry Acanth	8	1 day.
Cherries	Cherry Acanth	12	1 day. Apply at first bloom. Use higher rate when foliage is heavy or when bloom is over. Make first application before or after apple.
Leafy Crops (early leafy cots, wheat and grass)	Caterpillar Beetle	8-12	Barley cots: wheat: 1 day. Corn: 5 days. Grasses: 5 days.
Onion, Potatoes and other Green Crops (small flies)	Cabbage Fly	8-12	1 day. Do not apply to onion in bloom.
Onion	Adults (caterpillars)	4	5 days.
Potatoes	Early Greenhouse Fly	4-8	
	Thrips		
	Colorado Potato Beetle		
	Colorado Potato Beetle	8-12	1 day in greenhouse
	Colorado Potato Beetle	16	1 day in greenhouse
	Colorado Potato Beetle	8	
	Colorado Potato Beetle	12	
	Colorado Potato Beetle	16	very heavy or growing in shade
Green Crops (early green cots, red & green, purple and white)	Colorado Potato Beetle	8	1 day in greenhouse, 5 days

CRIP	PLANT CONTAINER USED	PLANT QUANTITIES PER ACRE	INTERVAL BETWEEN LAST APPLICATION AND HARVEST
Corn (single row)	Single row planter	8 - 12	7 days. Applied during the bud stage.
Peas (double row)	Double row planter	8	14 days
Wheat (double row) Low moisture areas	Double row planter	6	7 days. Applied to plants 10 days before harvesting. With a light fogging stage of planting time.
Soybeans	Double row planter	8	7 days. Harvesting seeds.
Tomatoes	Machine transplanter. Double transplanter. 400 plants per acre. 100 plants per row.	8	7 days. Harvesting fruit.
Sugar beets	Double row planter	8	10 days 7 days. If there are to be used for food or feed.
Peas (double row) - Lowers	Double row planter	8	0 day
Barley (double row) - Lowers	Double row planter	8	0 day

TIME LAG FINAL USES

[illegible]

1. 1994

1. The results of the study show that the use of the proposed system is effective in reducing the number of errors in the data entry process. The system is able to detect and correct errors in real-time, which helps to improve the accuracy of the data. The results also show that the system is able to handle a large volume of data without any loss of performance.

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