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U.S. ENVIRONMENTAL PROTECTION AGENCY  
Office of Pesticide Programs  
Registration Division (H7505C)  
401 "M" St., S.W.  
Washington, D.C. 20460

EPA Reg. Number:  
19713-540

Date of Issuance:  
MAR 17 2003

NOTICE OF PESTICIDE:  
  x   Registration  
       Reregistration

Term of Issuance:  
Conditional

Name of Pesticide Product:  
Drexel Malathion ULV  
96.5%

(under FIFRA, as amended)

Name and Address of Registrant (include ZIP Code):

Drexel Chemical Company  
P.O. Box 13327  
Memphis, TN 38113-0327

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA sec. 3(c)(7)(A) provided that you:

1. Submit and/or cite all data required for registration of your product under FIFRA sec. 3(c)(5) when the Agency requires all registrants of similar products to submit such data; and submit acceptable responses required for reregistration of your product under FIFRA section 4.

2. Make the following label change before you release the product for shipment:

Add the designation, "EPA Reg. No. 19713-540".

3. Provide the following information prior to formulating the product.

a. The establishment number of the manufacturing or technical product from which the product is derived.

b. A copy of the bill of sale.

Signature of Approving Official:

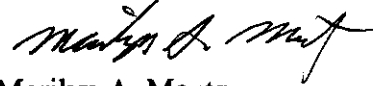
Date:

MAR 17 2003

3. Submit two copies of the revised final printed label before you release the product for shipment.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

A stamped copy of the label is enclosed for your records.



Marilyn A. Mautz  
Biologist  
Insecticide-Rodenticide Branch  
Registration Division (7504C)

MAR 17 2003

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act  
as amended, for the pesticide  
registered under EPA Reg. No.  
19713-540



# Malathion ULV 96.5%

Ultra Low Volume Concentrate Insecticide

**ACTIVE INGREDIENT:**

Malathion*	96.5%
OTHER INGREDIENTS:	3.5%
<b>TOTAL:</b>	<b>100.0%</b>

\*O,O-dimethyl phosphorodithioate of diethyl mercaptosuccinate  
Contains 9.9 lbs. malathion per gallon

**USER SAFETY RECOMMENDATIONS**  
Users should: 1) Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. 2) Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. 3) Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

**KEEP OUT OF REACH OF CHILDREN**  
**CAUTION**  
See FIRST AID Below  
SHAKE WELL BEFORE USING

**ENVIRONMENTAL HAZARDS**  
This pesticide is toxic to fish, aquatic invertebrates, and aquatic life stages of amphibians. For terrestrial uses, do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Drift and runoff may be hazardous to aquatic organisms in areas near the application site. Do not contaminate water when disposing of equipment washwaters. For aquatic uses, do not apply directly to water except as specified on this label.

EPA Reg. No. 19713-  
EPA Est. No. 19713-

Net Contents: \_\_\_\_\_

This product is highly toxic to bees exposed to direct treatment on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area. Protective information can be obtained from your Cooperative Agricultural Extension Service.

FIRST AID	
<b>IF SWALLOWED:</b>	<ul style="list-style-type: none"> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>Have person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>Do not give anything by mouth to an unconscious or convulsing person.</li> </ul>
<b>IF INHALED:</b>	<ul style="list-style-type: none"> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.</li> </ul>
<b>IF ON SKIN OR CLOTHING:</b>	<ul style="list-style-type: none"> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15 to 20 minutes.</li> </ul>
<b>IF IN EYES:</b>	<ul style="list-style-type: none"> <li>Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> </ul>
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 on this pesticide product (including health concerns, medical emergencies or pesticide incidents), call the National Pesticide Information Center at 1-800-858-7378.	
<b>NOTE TO PHYSICIAN:</b> This product is cholinesterase inhibitor. Treat symptomatically. Atropine is antidotal.	

**PHYSICAL OR CHEMICAL HAZARDS**  
Before using, read the directions contained in this labeling 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.

**DIRECTIONS FOR USE**  
It is a violation of Federal law to use this product in a manner inconsistent with its labeling. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

**AGRICULTURAL USE REQUIREMENTS**  
Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted-entry interval. The requirements in this box only apply to uses of the product that are covered by the Worker Protection Standard. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours. PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:  

- Coveralls
- Chemical-resistant gloves such as barrier laminate, butyl rubber, nitrile rubber, or Viton
- Shoes plus socks

**PRECAUTIONARY STATEMENTS**  
**Hazards To Humans And Domestic Animals**  
Harmful by swallowing, inhalation or skin contact. Avoid contact with skin. Avoid breathing spray mist. Do not contaminate food or feed products.  
**PERSONAL PROTECTIVE EQUIPMENT (PPE)**  
Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for Category F on an EPA chemical-resistance category selection chart.  
**Applicators and other handlers must wear:**  

- Long-sleeved shirt and long pants
- Chemical-resistant gloves, such as barrier laminate, butyl rubber, nitrile rubber or Viton
- Shoes plus socks

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets with requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [(40 CFR 170.240 (d)(4-6)), the handler PPE requirements may be reduced or modified as specified in the WPS.  
Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

Manufactured For:  
**Drexel Chemical Company**  
P.O. BOX 13327, MEMPHIS, TN 38113-0327  
SINCE 1972

**AGRICULTURAL USES**

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

This product is used undiluted in any specially designed aircraft or ground equipment that has been adapted and calibrated for ultra low volume spraying. Spray machines must be equipped with accepted low-volume devices that will produce droplets within the range of 30 to 100 microns in size. Apply only when weather conditions are favorable. Wind and rising air currents may cause undesirable spray drift and reduce insect control.

Mist blowers and boom sprayers utilizing a controlled air flow to facilitate particle size and spray deposition may be used at a vehicle speed of 4 to 10 mph.

Mist blowers with a pump capable of producing 40 psi and blower speeds of 2600 rpm are satisfactory. Use flat fan nozzles, 8001 to 8002, placed 30° into air blast, or rotary atomizers placed into the air blast that produce an efficient spray particle with a mass median diameter of 40 to 100 microns. Other similar application equipment which has demonstrated the capability to deliver even distribution of the labeled rate over the desired area may be used. Apply only when weather conditions are favorable. Wind and rising air currents may cause undesirable spray drift and reduce insect control.

Boom sprayers with a filtered rotary air compressor, either PTO or gas engine driven or an air pump capable of producing at least 12 psi are satisfactory. Use air pressure on chemical tanks and an accurate metering valve to assure a calibrated flow of the pesticide. Air should be regulated with a relief valve and gauge for proper air and liquid mixture. Pneumatic-type spray nozzles, as suggested by equipment manufacturer, should be used for spray particles with mass median diameter of 30 to 100 microns. Apply only when weather conditions are favorable. Wind and rising air currents may cause undesirable spray drift and reduce insect control.

Repeat applications should be made as necessary, unless otherwise specified.

**IMPORTANT:** Undiluted spray droplets of this product will permanently damage automobile paint. Cars should not be sprayed. If accidental exposure does occur, the car should be washed immediately. Consult your State Experiment Station or State Extension Service for proper timing of sprays.

CROP	PEST CONTROLLED	FL. OZ./ ACRE	PRE-HARVEST INTERVAL; COMMENTS
Alfalfa	Alfalfa caterpillars	8	0 days; Apply when larvae are small.
	Western yellow striped armyworms	12	5 days; Apply when larvae are large or when foliage is dense.
	Alfalfa weevil larvae	16	5 days; Apply when day temperature is expected to be above 65°F and when 50-70% of leaves show damage.
	Beet armyworms	8	0 days; Apply when larvae are small.
		16	5 days; Apply when larvae are large or when foliage is dense.
Grasshoppers	8	0 days	
Do not apply to Alfalfa in bloom. Do not apply to seed Alfalfa.			
Clover; Pasture and Range grass; Grass; Grass hay; Uncultivated non-agricultural areas (wastelands, roadsides)	Grasshoppers	8-12	0 days; Do not apply to clover in bloom.

(Continued)

CROP	PEST CONTROLLED	FL. OZ./ ACRE	PRE-HARVEST INTERVAL; COMMENTS
Beans (lima, green, snap, navy, red kidney, wax, dry, black-eyed)	Mexican bean beetles, Aphids, Thrips, Spider mites, Asparagus beetles, Pea weevils, Leafhoppers, Green cloverworms, Japanese beetles, Lygus bugs	8	1 day; Do not graze or feed foliage, vines/forage, straw/hay.
Blueberry	Blueberry maggots	10	1 day
Cereal crops (Barley, Corn, Oats, Wheat) and Grasses	Cereal leaf beetles	4-8	Barley oats, Wheat; 7 days. Corn; 5 days. Grasses; 0 days.
Grain crops (Barley, Corn, Oats, Rye, Rice, grain Sorghum (Milo) and Wheat)	Grasshoppers	8	7 days except Corn. Corn; 5 days. Do not graze or feed grain Sorghum forage, fodder/stover, or hay.
Corn	Adult corn rootworms	4	5 days
Grain Sorghum (Milo)	Sorghum midges	8-12	7 days; Apply during the bloom stage. Do not graze or feed grain Sorghum forage, fodder/stover, or hay.
Cherries	Cherry Fruit Flies	12-16	1 day; Apply by aircraft only. Use higher rate when foliage is heavy or infestation is severe. Make first application as soon as flies appear.
Cotton	Early season insects, Thrips, Fleahoppers, Leafhoppers	4-8	0 days
	Boll weevils	8-16	0 days; Early to midseason
		16	0 days; Late season
	Grasshoppers	8	0 days
Lygus bugs	8-12	0 days	
	16	0 days; Very heavy migrating population	
For use on Cotton: This product can be used alone as a ULV concentrate spray or diluted in once-refined cotton seed or vegetable oil sufficient to make at least one quart of finished spray per acre.			
Grain rice (LA, TX)	Rice stink bugs	8	7 days; Apply by aircraft only. Apply during early milk and dough stage of growing Rice.
<b>NOTE FOR AQUATIC USES (Rice):</b> Broadcast use only over intermittently flooded areas. Application may not be made around bodies of water where fish or shellfish are grown and/or harvested commercially.			
Non-agricultural lands	Beet leafhoppers on wild host plants	8	0 days

**OTHER AGRICULTURAL USES**

Alfalfa, Clover, Pasture and Range Grass, Grass and Grass Hay, Grain crops (barley, corn, oats, rice, rye, sorghum/milo, wheat), Beans, and Non-agricultural lands (wasteland):

Adult Mosquitos and Flies - Apply this product at the rate of 2 to 4 fluid ounces per acre for control of adult Mosquitos, and at 8 to 8 fluid ounces per acre for control of adult Flies and Mosquitos. Repeat applications as necessary. On Alfalfa, Clover, Pasture and Range Grass, Grass and Grass Hay, may be applied on day of harvest or grazing. Do not apply to Alfalfa or Clover in bloom. Do not use on seed Alfalfa. On grain crops, make no application within 7 days of harvest or forage use; on Corn within 5 days of harvest or forage; on Rice within 7 days of harvest; on Beans within 1 day of harvest. Do not graze or feed grain Sorghum forage, fodder/stover, or hay.

## MOSQUITO CONTROL

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.**

**NOTE FOR AQUATIC USES:** Broadcast use only over intermittently flooded areas. Application may not be made around bodies of water where fish or shellfish are grown and/or harvested commercially.

**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 fluid ounces of this product per acre. Apply only when weather conditions are favorable. Wind and rising air currents may cause undesirable spray drift and reduce insect control.

**IMPORTANT - IN AREAS WHERE AUTOMOBILES, TRAILERS, TRUCKS AND PLEASURE BOATS ARE PRESENT,** undiluted spray droplets of this product will permanently damage vehicle paint finishes unless the aircraft used for the ultra low volume application meets all of the following specifications:

### 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 ensure positive cut-off of the spray.
5. Dosage of this product 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®.

### HELICOPTERS

Equipment Specifications:

1. Rotary nozzle equivalent to Beecomist Spray Head Assembly Model No. 350 equipped with:
  - a) A direct 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 ensure positive cut-off of the spray.
  - d) A nozzle on/off switch separate from main switch and pump switch.
2. Minimum no-load nozzle speed of 10,500 RPM.
3. A continuous non-pulsating 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 one-half 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 this product's droplets on mounting brackets, feed lines, fittings, etc., or any part of the aircraft.

### Operating Procedures

- 1) This product must be prefiltered through a 10 micron filter prior to transfer into aircraft tank when using the rotary type nozzles described above. A 50 mesh stainless steel line 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 this product.
- 3) Entire system must be inspected daily to ensure that there are no leaks.
- 4) Sleeve must be removed and cleaned immediately after each use by washing with hot water and blowing dry from outside in with clean air.
- 5) 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.
- 6) Dosage of this product does not exceed 3 fluid ounces per acre.
- 7) The spray system must produce droplets of this product 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 APPLICATIONS

### Thermal Aerosols or Fogs

For control of adult Mosquitos with thermal aerosols or fogs, apply this product at the rate of 6-8 fluid ounces actual per gallon (3.9-5.2 gallons of this product 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 to 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 this product.

### Nonthermal Aerosols

Adult Mosquito Control - Control of adult Mosquitos over a 300-foot swath can be obtained with nonthermal aerosols of this product using the following rates at the indicated vehicle speeds.

Vehicle Speed	Flow rate of this product	Maximum Flow Rate per Hour
5 miles per hour	1.0 to 2.1 fluid ozs./min.	1 gallon
10 miles per hour	2.0 to 4.3 fluid ozs./min.	2 gallons
15 miles per hour	3.0 to 6.3 fluid ozs./min.	3 gallons
20 miles per hour	4.0 to 8.6 fluid ozs./min.	4 gallons

ADULT STABLE FLIES, OUTDOORS - Control of adult stable flies around the outside of stables over a 300-foot swath can be obtained, with nonthermal aerosols of this product using the ultra low volume method. Use the following flow rates at the indicated vehicle speeds.

Vehicle Speed	Flow rate of this product	Maximum Flow Rate per Hour
5 miles per hour	2.1 fluid ozs./min.	1 gallon
10 miles per hour	4.3 fluid ozs./min.	2 gallons

ADULT MOSQUITOS AND FLIES on rangeland, pasture, and other uncultivated non-agricultural areas (wastelands, roadsides). Does not include golf courses.

Apply this product at the rate of 2 to 4 fluid ounces per acre for control of both adult Mosquitos and Flies. Application may be made via ground or aerial equipment and may be repeated as necessary. For enhanced knock-down effects against Mosquitos and Flies, this product can be mixed with a synergized pyrethrin emulsifiable concentrate (8% pyrethrum + 60% PBO) in accordance with the most restrictive of label limitations and precautions indicated on both this and the tank-mixed product. No label rates should be exceeded. This product may not be mixed with any product bearing a label which specifically prohibits such mixing. Prior to tank mixing large quantities, mix a small amount in a glass jar to verify that the products are physically compatible.

A tank mix of these may be prepared as follows:

Component	Rapid Knock-down	Improved Knock-down
This product	107 fl. ozs.	117 fl. ozs.
Synergized pyrethrin (6%/60%)	21 fl. ozs.	11 fl. ozs.

Depending upon your operational needs for knock-down, the amount of synergized pyrethrin can be reduced or adjusted. Application rates of this product and droplet distribution requirements remain the same as for this product used alone.

### Droplet Size:

1. The Mass Median Diameter (MMD) of the droplets should not exceed 17 microns. The MMD is the droplet diameter which divides the spray volume into two equal parts; i.e., 50% of the volume are droplet sizes below the MMD and 50% are 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, preferably four-fifths, of the total spray must consist of droplets not exceeding 24 microns in range.

### Operating Equipment

Each Nonthermal Aerosol Generator used for dispersal of this product to control adult Mosquitos must have a 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 ensure 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 ensure that the flow meter is properly calibrated and to determine that the pressure recommended by the manufacturer is being maintained.

**Flow Rate** - Must be regulated by accurate flow meter  
 - Not greater than 1 gallon per hour at 5 mph; 2 gallons per hour at 10 mph; 3 gallons per hour at 15 mph, or 4 gallons per hour at 20 mph

**Nozzle Direction** - Rear of the vehicle  
 - Upward at an angle of 45° or more

**Vehicle Speed** - Not greater than 20 mph  
 - Shut off spray equipment when vehicle is stopped

**IMPORTANT** - Spray droplets of this product undiluted will permanently damage automobile paint unless all the conditions described and recommended in this label are met. If accidental exposure does occur, the vehicle should be washed at once.

**Directions for Determining the Droplet Size of this product Nonthermal Aerosols:**

*Note - Other methods of determining droplet size may also be used. Such methods must first be validated by the user, to ensure droplet sizes are within label parameters.*

*Permanent records of each droplet size determination must be kept and made available to the manufacturer upon request.*

**1. Preparation of Slides with DRI-FILM**

This product's droplet sizes are determined by depositing a sample of the aerosol on a coated glass slide and measuring the droplets under a high power microscope. Ordinary 3" x 1" glass slides must be coated with silicone (General Electric SC-87 DRI-FILM) prior to sampling to prevent excessive spreading or coalescence of the droplets. The slides are dipped into a 10 percent solution of DRI-FILM in toluene, drained and dried at about 200°F, for 30 minutes, after which they are dipped in acetone, allowed to dry and stored in a tight slide box. Coating solution must be freshly prepared. Do not store coating solution because it will deteriorate. Slides are lightly polished with a soft tissue before using to remove any foreign particles.

**2. Deposition of this product's Droplets on Slides**

Droplets should be collected under ideal operating conditions to ensure representative sampling of droplets in the aerosol. A sample of this product's aerosol is deposited on a slide by passing the slide as rapidly as possible perpendicular through the aerosol cloud at a distance of 6 to 10 feet from the point of discharge. The slide speed may be increased by attaching it to a 3 or 4 foot stick by means of a spring paper clip. At least two slides should be exposed to ensure an adequate sample. Store slides in a tight slide box for transfer to a location where measurements can be made. Avoid excessive heat during transit and store in a cool place until measurements can be made.

Although label specifications require the aerosol nozzle to be angled upward at 45° or more during operation, it is more convenient to position the nozzle parallel to the ground for droplet sampling. If this is not possible, it will be necessary to be positioned at sufficient height to obtain a representative sample of the aerosol.

**3. Determination of this product's Droplet Sizes**

A microscope with mechanical stage and an eyepiece micrometer are used to determine the size of the individual aerosol droplets. Prior to taking measurements, the division of the eyepiece micrometer must be calibrated into microns by means of a stage micrometer. In the example represented in Table 1, droplets were measured at 400x magnification. At that magnification, each division of the eyepiece was calibrated to equal 3.5 microns.

At least 200 droplets should be measured. Usually this is easily accomplished on one slide. An accurate method is to measure all droplets that pass through the micrometer scale as the slide is moved from one edge to the other by using the mechanical stage. Measurements should not be taken along the margins of the slide. It is more convenient to measure in terms of the divisions of the eyepiece micrometer and then convert these divisions into microns.

The measurements converted into microns must then be corrected for the amount of spread that occurred on the slides. This product's spread factor for silicone-coated slides is 0.5. Therefore, in Table 1, each division of the eyepiece actually equals 1.75 microns (3.5 microns x the 0.5 spread factor).

The spread factor for TEFLON - coated slides is 0.89. The following procedure, as given for silicone-coated slides, would be the same for TEFLON - coated slides once the value for each eyepiece division has been determined.

The measurements are tabulated and processed as in Table 1. The Maximum Diameter is calculated by converting the diameter of the largest droplet measured into microns. In Table 1, the largest droplet measured has a diameter of 19 eyepiece divisions. Therefore, the Maximum Diameter is 33.3 microns (19 x 1.75 = 33.3).

To determine the Mass Median Diameter (MMD), the accumulative percentages from the last column in Table 1 are plotted against the eyepiece division (D) on arithmetic probability paper as in Figure 1. Directly across from the 50 percent point on the line is the Median droplet size in eyepiece divisions which must be converted to microns. In Figure 1, 9.2 eyepiece divisions times the conversion factor of 1.75 equals a Mass Median Diameter of 16.1 microns.

**Table 1 - Representative Count of this product's Aerosol Droplets Impinged on Microscope Slides Coated with DRI-FILM\***

Eyepiece Divisions (D)*	No. of Droplets (N)	D x N	% of Total D x N Sum (D x N)	Accumulative Percentages
1	5	5	0.31	0.31
2	10	20	1.22	1.53
3	9	27	1.65	3.18
4	12	48	2.93	6.11
5	15	75	4.58	10.69
6	12	72	4.4	15.09
7	25	175	10.7	25.79
8	14	112	6.85	32.64
9	28	252	15.4	48.04
10	19	190	11.61	59.65
11	14	154	9.41	69.06
12	10	120	7.33	76.39
13	6	78	4.77	81.16
14	4	56	3.42	84.58
15	11	165	10.09	94.67
16	2	32	1.96	96.63
18	2	36	2.2	98.83
19	1	19	1.16	99.99
TOTAL	199	1,636		

\*Measurements were taken at 400X magnification. Each eyepiece division equals 1.75 microns (3.5 microns x the 0.5 spread factor).

Also for use in accordance with the recommendations and instructions issued by the U.S. Department of Agriculture for quarantine programs.

To be used only by or under the direction of Federal/State personnel for quarantine treatments.

**STORAGE AND DISPOSAL**

Do not contaminate water, food or feed by storage and disposal. **PESTICIDE STORAGE:** This product should be stored at temperatures not exceeding 25°C (77°F). It should never be heated above 55°C (131°F) and also local heating above this temperature should be avoided.

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

**CONTAINER DISPOSAL:** Triple rinse (or equivalent). 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.

**WARRANTY—CONDITIONS OF SALE**

OUR RECOMMENDATIONS FOR USE of this product are based upon tests believed reliable. Follow directions carefully. Timing and method of application, weather and crop conditions, mixtures with other chemicals not specifically recommended and other influencing factors in the use of this product are beyond the control of the Seller. Buyer assumes all risks of use, storage and handling of this material not in strict accordance with directions given herewith. In no case shall the Manufacturer or the Seller be liable for consequential, special or indirect damages resulting from the use or handling of this product when such use and/or handling is not in strict accordance with directions given herewith. The foregoing is a condition of sale by the Seller and is accepted as such by the Buyer.

DRI-FILM™ is a trademark of General Electric Company  
 TEFLON® is a registered Trademark of E. I. duPont de Nemours & Co., Inc.