

19713-540

3/19/2014

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460



OFFICE OF
CHEMICAL SAFETY AND
POLLUTION PREVENTION

MAR 19 2014

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

Subject: Response to the Malathion Reregistration Eligibility Decision
Product Name: Drexel Malathion ULV 96.5%
EPA Reg. No. 19713-540
EPA Decision No. 416251
Submission dated February 5, 2010; resubmission dated March 19, 2014

Dear Ms. Chan:

The proposed labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), is acceptable under FIFRA § 3(c)(5) provided that you submit one copy of your final printed label before you release the product for shipment.

Products shipped after 12 months from the date of this amendment or the next printing of the label, whichever occurs first, must bear the new revised label. Your release for shipment of the product bearing the amended label constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e).

Your product has met and complied with the risk mitigation provisions of the Malathion RED and therefore your product is reregistered pursuant to FIFRA § 4(g)(2)(C). But note, EPA is currently reassessing the cumulative impacts of organophosphates and that review may impact your product once complete.

A stamped copy of the labeling is enclosed for your records. Please also note that the record currently contains a Basic CSF dated February 5, 2010. Any previously dated CSFs are superseded. If you have any questions, please contact Julie Chao at (703) 308-8735 or chao.julie@epa.gov.

Regards,

A handwritten signature in black ink that reads "Venus Eagle".

Venus Eagle, Product Manager 01
Insecticide-Rodenticide Branch
Registration Division (7505P)

Enclosure

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Malathion ULV 96.5%

Ultra Low Volume Concentrate Insecticide

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.

ACTIVE INGREDIENT:	
Malathion*	96.5%
OTHER INGREDIENTS:	3.5%
TOTAL:	100.0%

* O,O-dimethyl phosphorodithioate of diethyl mercaptosuccinate.
This product contains 9.9 lbs. of malathion per gallon.

Not for sale or use after [insert date 1 year from the date of production].

KEEP OUT OF REACH OF CHILDREN CAUTION

See FIRST AID Below

EPA Reg. No. 19713-540
EPA Est. No. 19713-XX-XXX

Net Content: _____

FIRST AID	
This product is an organophosphate and is a cholinesterase inhibitor.	
IF ON SKIN OR CLOTHING:	
<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15 to 20 minutes. • 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.	
Note to Physician: This product is cholinesterase inhibitor. Treat symptomatically. Atropine is antidotal.	

Manufactured For:



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

ACCEPTED
MAR 19 2014

Under the Federal Insecticide, Fungicide,
and Rodenticide Act, as amended, for the
pesticide registered under:

540SP-0314*P

EPA. Reg. No: 19713-540

**PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

CAUTION: Harmful if absorbed through skin. Avoid contact with skin, eyes, or clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are barrier laminate, butyl rubber, nitrile rubber, and viton. If you want more options, refer to Category F on EPA chemical-resistance category selection chart.

For all formulations and use patterns - mixers, loaders, applicators, flaggers, and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves
- Shoes plus socks

USER SAFETY REQUIREMENTS

Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

ENGINEERING CONTROLS

Pilots must use an enclosed cockpit in a manner that is consistent with the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR 170.240 (d)(4-6). Pilots must wear chemical-resistant gloves only when entering and exiting the aircraft. Pilots must wear the PPE required on this labeling for applicators.

USER SAFETY RECOMMENDATIONS

Users should: 1) Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. 2) Remove clothing/PPE 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.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to aquatic organisms, including fish and invertebrates. Use care when applying in or to an area which is adjacent to any body of water, and do not apply when weather conditions favor drift from target area. Poorly draining soils and soils with shallow water tables are more prone to produce runoff that contains this product.

When applying as a wide area mosquito adulticide, before making the first application in a season, it is advisable to consult with the State or Tribal agency charged with primary responsibility for pesticide regulation to determine if other regulatory requirements exist.

This product is highly toxic to bees exposed to direct treatment on blooming crops or weeds. Do not apply or allow to drift onto blooming crops or weeds while bees are actively 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 public 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. When applying as a wide area mosquito adulticide, 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 discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

PHYSICAL OR CHEMICAL HAZARDS

Do not use or store near heat or open flame.

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DIRECTIONS FOR USE

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

MOSQUITO CONTROL IN POPULATED AND RURAL AREAS

PRECAUTIONS AND RESTRICTIONS

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.

Restrictions:

- Do not apply more than 0.23 pound a.i. per acre per day.
- Only treat when mosquitoes are swarming or biting. Do not retreat a site more than 3 times in any one week. However, more frequent treatments 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 diseases in animal or human populations, or if specifically approved by the State or Tribe during a natural disaster effort.
- Apply when wind speed is greater than or equal to 1 mph.
- Do not apply by fixed wing aircraft at height less than 100 feet, or by helicopter at a height less than 75 feet unless specifically approved by the State or Tribe based on public health needs.

Precautions:

- **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 specifications listed under *AERIAL APPLICATION*.

AERIAL APPLICATION

Adult Mosquitoes on Rangeland, Pasture, and Other Uncultivated Non-Agricultural Areas (Wastelands, Roadsides):

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 100 microns (Dv 0.9 < 100 um). The effects of flight speed and, for non-rotary nozzles, 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.

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 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. See "*Precautions and Restrictions*" for additional instructions.

BUFFER ZONES FOR AERIAL APPLICATION

When making a non-ULV application with aerial application equipment, a minimum buffer zone of 25 feet must be maintained along any water body.

When making a ULV application with aerial application equipment, a minimum buffer zone of 50 feet must be maintained along any water body.

GROUND-BASED APPLICATION

Spray equipment must be adjusted so that the volume median diameter is less than 30 microns (Dv 0.3 < 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 test facility using 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.

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Thermal Aerosols or Fogs

For control of adult mosquitoes with thermal aerosols or fogs: Apply this product at the rate of 3.9 to 5.2 gallons of this product in 100 gallons of 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 feet (equivalent to 180 acres per hour). At 3.9 gallons of this product per 100 gallons of finished solution, this is equivalent to 0.08 pounds active per acre. At 5.2 gallons per 100 gallons of finished solution, this is equivalent to 0.11 pound active per acre.

Non-thermal Aerosols

Adult Mosquito Control - Control of adult mosquitoes over a 300-foot swath can be obtained with non-thermal aerosols of this product using the following rates at the indicated vehicle speeds:

Rates for This Product					
Undiluted					
Apply As Follows:					
Pounds A.I. per Acre per Day	Application Rates Fluid Ounces per Minute at Vehicle Speed				Fluid Ounces of This Product per Acre
	5 mph	10 mph	15 mph	20 mph	
0.03 to 0.06*	1.0 to 2.1	2.0 to 4.3	3.0 to 6.3	4.0 to 8.6	0.38 to 0.75

*Use higher rate of application when vegetation is dense and/or mosquito populations are heavy.

OPERATING EQUIPMENT

Each non-thermal aerosol generator used for dispersal of this product to control adult mosquitoes must have minimum capability of producing the droplet spectrum described under *GROUND BASED APPLICATION*. 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. Recheck the unit frequently 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 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 undiluted form of this product 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.

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STORAGE AND DISPOSAL

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

STORAGE: This product should be stored in the original unopened container in a secure, dry place. Do not contaminate with other pesticides or fertilizers. This product should never be heated above 55°C (131°F), and should not be stored for long periods of time at a temperature in excess of 25°C (77°F).

PESTICIDE DISPOSAL: To avoid wastes, use all material in this container by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste disposal facility or pesticide disposal program (often such programs are run by State or local governments or by industry).

CONTAINER HANDLING:

Nonrefillable Container (rigid material; less than 5 gallons): Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse container (or equivalent) promptly after emptying. 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 one-fourth full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix 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. Dispose of empty container in a sanitary landfill or by incineration.

Nonrefillable Container (rigid material; 5 gallons up to <250 gallons): Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container one-fourth 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. Dispose of empty container in a sanitary landfill or by incineration.

Refillable Container (≥ 250 gallons & Bulk): Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. 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% full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

WARRANTY—CONDITIONS OF SALE

OUR DIRECTIONS 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. To the extent consistent with applicable law, Buyer assumes all risks of use, storage and handling of this material not in strict accordance with directions given herewith. To the extent consistent with applicable law, 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.

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