MALATHION ULV
Concentrate Insecticide

ACTIVE INGREDIENT:  % BY WT.
Malathion (O,O-Dimethyl phosphorodithioate of diethyl mercaptosuccinate)  96.5%
INERT INGREDIENTS**  3.5%
TOTAL  100.00%

Contains 9.9 lbs. Malathion per gallon

KEEP OUT OF REACH OF CHILDREN

CAUTION

FIRST AID

If swallowed:
• Call a poison control center or doctor immediately for treatment advice.
• Have a person sip a glass of water if able to swallow.
• Do not induce vomiting unless told to by a poison control center or doctor.
• Do not give anything by mouth to an unconscious person.

If inhaled:
• Move person to fresh air.
• If person is not breathing, call 911 or ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.
• Call a poison control center or doctor for further treatment advice.

If on skin or clothing:
• 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.

If in eyes:
• Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.
• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
• Call a poison control center or doctor for treatment advice.

Note to Physician: This material is a cholinesterase inhibitor. Treat symptomatically. Atropine is an antidote.

FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL: 1-866-944-8565.
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

See Below For Additional Precautionary Statements.

EPA REG. NO. 34704-565
EPA EST. NO. 34704-MS-001
NET CONTENTS 2½ GALS (9.46 L)

022311 V2D 09Y11
HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

Harmful if swallowed, inhaled or absorbed through skin. Avoid breathing vapors or spray mist. Avoid contact with skin, eyes, or clothing.

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, follow the instructions for category (F) on an EPA chemical resistance category selection chart.

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

- Long sleeved shirt and long pants
- Shoes plus socks
- Chemical resistant gloves
- Chemical resistant apron (for mixers and loaders only)

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 materials that have been drenched or heavily contaminated with this product’s concentrate. Do not reuse them.

See engineering controls for additional requirements.

ENGINEERING CONTROLS

Pilots must use an enclosed cockpit in a manner that is consistent with the WPS for Agricultural Pesticides [40 CFR 170.240(d)(6)]. Pilots must wear the PPE required on this labeling for applicators.

USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- 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.

This product may contaminate water through drift of spray in wind. This product has a high potential for runoff after application. 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. A level, well maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential for contamination of water from rain-fall-runoff. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours.

Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater or rinsate.

This pesticide 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 while bees are actively visiting the treatment area.

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.

**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. 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.

**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 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 (REI). The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard. Do not enter or allow worker entry into treated areas during the restricted entry interval (REI). The REI for each crop is listed in the directions for use associated with each crop. 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,
- Shoes plus socks, and
- Chemical-resistant gloves made of any waterproof material.

**PRECAUTIONS AND RESTRICTIONS**

- All ULV aerial formulations other than those intended for use as a Wide area Mosquito Adulticide, must be packaged in closed mixing and loading systems.
- Buffer Zones for Aerial Application:
  - When making a ULV application with aerial application equipment, a minimum buffer zone of 50 feet must be maintained along any water body.
  - When making a ULV application with ground-based equipment a minimum buffer zone of 25 feet must be maintained along any water body.

- **SPRAY DRIFT REQUIREMENTS**

  Observe the following requirements when spraying in the vicinity of aquatic areas such as, but not limited to, lakes, reservoirs, rivers, permanent streams, marshes or natural ponds, estuaries and commercial fish ponds.

  **Droplet Size** – Use the largest droplet size consistent with acceptable efficacy. Formation of very small droplets may be minimized by appropriate nozzle selection, by orienting nozzles away from the air stream as much as possible, and by avoiding excessive spray boom pressure. For groundboom and aerial applications, use only medium or coarser spray nozzles according to ASAE (S572) definition for standard nozzles, or a volume mean diameter (VMD) of 300 microns or greater for spinning atomizer nozzles. In conditions of low humidity and high temperatures, applicators should use a coarser droplet size.

  **Wind Direction and Speed** – Make aerial or ground applications when the wind velocity favors on target product deposition (approximately 3 to 10 mph). Do not apply when wind velocity exceeds 15 mph. Avoid
applications when wind gusts approach 15 mph. For all non-aerial applications, wind speed must be measured adjacent to the application site on the upwind side, immediately prior to application.

**Temperature Inversion** – Do not make aerial or ground applications into areas of temperature inversions. Inversions are characterized by stable air and increasing temperatures with increasing distance above the ground. Mist or fog may indicate the presence of an inversion in humid areas. Where permissible by local regulations, the applicator may detect the presence of an inversion by producing smoke and observing a smoke layer near the ground surface.

In conditions of low humidity and high temperatures, applicators should use a coarser droplet size.

**Additional Requirements for Ground Applications** – Spray should be released at the lowest height consistent with pest control and flight safety. Applications more than 10 feet above the crop canopy should be avoided. For groundboom applications, apply with nozzle height no more than 4 feet above the ground or crop canopy.

For airblast applications, turn off outward pointing nozzles at row ends and when spraying the outer two rows. To minimize spray loss over the top in orchard applications, spray must be directed into the canopy.

**Additional Requirements for Aerial Applications** – For aerial applications, the spray boom should be mounted on the aircraft as to minimize drift caused by wingtip or rotor vortices. The minimum practical boom length should be used and must not exceed 75% of wing span or 90% rotor diameter. Aerial applicators must consider flight speed and nozzle orientation in determining droplet size. When applications are made with a cross-wind, the swath will be displaced downwind. The applicator must compensate for this displacement at the downwind edge of the application area by adjusting the path of the aircraft upwind.

Before beginning treatment, notify all registered apiarists in or near the treatment area of the date and appropriate time of treatment.

**IMPORTANT** – Undiluted spray droplets of Malathion ULV will permanently damage automobile paint. If accidental exposure does occur, the vehicle should be washed immediately.

Consult your state experiment station or state extension service for proper timing of sprays. 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.

**AGRICULTURAL USES**

Operating Instructions

Malathion ULV is used undiluted in specially designed aircraft or ground equipment capable of applying ultra low volumes for control of the insects indicated. Aerial applications are most effective when made at a height of 5 feet and a swath width of 50 feet. Apply only when weather conditions are favorable. Wind and rising air currents may cause undesirable spray drift and reduce insect control.

Use mist blowers and boom sprayers utilizing a controlled air flow to facilitate particle size and spray deposition at a vehicle speed of 4 to 10 mph.

Use mist blowers with a pump capable of producing up to 40 psi and blower speeds of 2600 rpm. Use flat fan nozzles, 8001 to 8002, placed 30° into air blast or rotary atomizers into the air blast that produces an efficient spray particle with a mass median diameter of 40 to 100 microns (Dv 0.5 = 100 um). Do not exceed 30 foot swath widths. Apply only when weather conditions are favorable. Wind and rising air currents may cause undesirable spray drift and reduce insect control.

Use 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. Use air pressure on chemical tanks and an accurate metering valve to assure a calibrated flow of the pesticide. Regulate air with relief valve and gauge for proper air and liquid mixture. Pneumatic-type spray nozzles, as suggested by equipment manufacturer, are to be used for spray particles with mass median diameter of 30 to 100 microns (Dv 0.5 = 100 um). Apply only when weather conditions are favorable. Wind and rising air currents may cause undesirable spray drift and reduce insect control.
**MALATHION ULV CONCENTRATE INSECTICIDE**  
**EPA REG. NO. 34704-565**

## CROP TABLE

Use higher rate when foliage is heavy or infestation is severe.

<table>
<thead>
<tr>
<th>Crop (Field)</th>
<th>Pest</th>
<th>Fl Ozs/A</th>
<th>Directions</th>
<th>Pre-Harvest Interval (PHI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alfalfa</td>
<td>Alfalfa caterpillar</td>
<td>8.0</td>
<td>Apply when larvae are small.</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Western yellow striped armyworm</td>
<td></td>
<td>Apply when larvae are large or when foliage is dense.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Alfalfa weevil larvae</td>
<td></td>
<td>Apply when day temperatures are expected to exceed 65 °F and when 50-75% of leaves show feeding damage.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Beet armyworm</td>
<td></td>
<td>Apply when larvae are small.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Grasshoppers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Do not apply to alfalfa in bloom. The Restricted-Entry Interval (REI) is 12 hrs. The maximum application rate is 0.61 lb Al/A (8.0 ozs/A Malathion ULV); the maximum number of applications/yr is 2/cutting; and the minimum retreatment interval is 14 days.</td>
<td></td>
</tr>
<tr>
<td>Barley</td>
<td>Cereal leaf beetle</td>
<td>4.0 to 8.0</td>
<td></td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Grasshoppers</td>
<td>8.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>The Restricted-Entry Interval (REI) is 12 hrs. The maximum application rate is 0.61 lb Al/A (8.0 ozs/A Malathion ULV); the maximum number of applications/yr is 2; and the minimum retreatment interval is 7 days.</td>
<td></td>
</tr>
<tr>
<td>Beans (Dry &amp; Succulent)</td>
<td>Green cloverworm</td>
<td>8.0</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Japanese beetle</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Leafhoppers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lygus bug</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mexican bean beetle</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>The Restricted-Entry Interval (REI) is 12 hrs. The maximum application rate is 0.61 lb Al/A (8.0 ozs/A Malathion ULV); the maximum number of applications/yr is 2; and the minimum retreatment interval is 7 days.</td>
<td></td>
</tr>
<tr>
<td>Blueberries</td>
<td>Blueberry maggot</td>
<td>10.0</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>The Restricted-Entry Interval (REI) is 12 hrs. The maximum application rate is 0.77 lb Al/A (10.0 ozs/A Malathion ULV); the maximum number of applications/yr is 3; and the minimum retreatment interval is 10 days.</td>
<td></td>
</tr>
<tr>
<td>Cherries (Sweet)</td>
<td>Cherry fruit fly</td>
<td>12.0 to 16.0</td>
<td>Apply by aircraft only. Make first application as soon as flies appear.</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>The Restricted-Entry Interval (REI) is 12 hrs. The maximum application rate is 1.22 lbs Al/A (16.0 ozs/A Malathion ULV); the maximum number of applications/yr is 4; and the minimum retreatment interval is 7 days.</td>
<td></td>
</tr>
<tr>
<td>Cherries (Tart)</td>
<td>Cherry fruit fly</td>
<td>12.0 to 16.0</td>
<td>Apply by aircraft only. Make first application as soon as flies appear.</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>The Restricted-Entry Interval (REI) is 12 hrs. The maximum application rate is 1.22 lbs Al/A (16.0 ozs/A Malathion ULV); the maximum number of applications/yr is 6; and the minimum retreatment interval is 7 days.</td>
<td></td>
</tr>
<tr>
<td>Clover</td>
<td>Blackgrass bugs</td>
<td>8.0</td>
<td>Do not apply to clover in bloom.</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Grasshoppers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>The Restricted-Entry Interval (REI) is 12 hrs. The maximum application rate is 0.61 lb Al/A (8.0 ozs/A Malathion ULV); the maximum number of applications/yr is 2/cutting; and the minimum retreatment interval is 14 days.</td>
<td></td>
</tr>
<tr>
<td>Corn (Field)</td>
<td>Adult corn rootworm</td>
<td>4.0</td>
<td></td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Cereal leaf beetle</td>
<td>4.0 to 8.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Grasshoppers</td>
<td>8.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>The Restricted-Entry Interval (REI) is 72 hrs for detasseling and 12 hrs for all other activities. The maximum application rate is 0.61 lb Al/A (8.0 ozs/A Malathion ULV); the maximum number of applications/yr is 2; and the minimum retreatment interval is 7 days.</td>
<td></td>
</tr>
<tr>
<td>Corn (Sweet, Pop)</td>
<td>Adult corn rootworm</td>
<td>4.0</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Cereal leaf beetle</td>
<td>4.0 to 8.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Grasshoppers</td>
<td>8.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>The Restricted-Entry Interval (REI) is 72 hrs for detasseling and 12 hrs for all other activities. The maximum application rate is 0.61 lb Al/A (8.0 ozs/A Malathion ULV); the maximum number of applications/yr is 2; and the minimum retreatment interval is 5 days.</td>
<td></td>
</tr>
</tbody>
</table>
## Malathion ULV Concentrate Insecticide

**EPA Reg. No. 34704-565**

<table>
<thead>
<tr>
<th>Crop</th>
<th>Pest</th>
<th>Fl Ozs/A</th>
<th>Directions</th>
<th>PHI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cotton</td>
<td>Aphids (Green peach and Cotton)</td>
<td>14.0 to 16.0</td>
<td>Early to midseason.</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Boll weevil</td>
<td>8.0 to 12.0</td>
<td>Late season.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cotton Aphids (Green peach and Cotton)</td>
<td>8.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fleahoppers</td>
<td>4.0 to 8.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Leafhoppers</td>
<td>4.0 to 8.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lygus bugs</td>
<td>8.0 to 12.0</td>
<td>Moderate populations.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tarnished plant bugs</td>
<td>16.0</td>
<td>Very heavy or migrating populations</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Thrips</td>
<td>4.0 to 8.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The Restricted-Entry Interval (REI) is 48 hrs. The maximum application rate is 1.22 lbs AI/A (16.0 ozs/A Malathion ULV); the maximum number of applications/yr is 3; and the minimum retreatment interval is 7 days. For use on cotton: Malathion ULV can be used alone as a ULV concentrate spray or diluted in once-refined cottonseed or vegetable oil sufficient to make at least one qt of finished spray/A.

| Grain Sorghum            | Grasshoppers                                 | 8.0      | Apply during the bloom stage. | 7   |
|                         | Sorghum midge                               |          |                     |     |

The Restricted-Entry Interval (REI) is 12 hrs. The maximum application rate is 0.61 lb AI/A (8.0 ozs/A Malathion ULV); the maximum number of applications/yr is 2; and the minimum retreatment interval is 7 days.

| Oats                     | Cereal leaf beetle                          | 4.0 to 8.0 |                     | 7   |
|                         | Grasshoppers                               | 8.0      |                     |     |

The Restricted-Entry Interval (REI) is 12 hrs. The maximum application rate is 0.61 lb AI/A (8.0 ozs/A Malathion ULV); the maximum number of applications/yr is 2; and the minimum retreatment interval is 7 days.

| Pasture and Rangeland    | Blackgrass bug                              | 8.0 to 12.0 |                     | 0   |
|                         | Cereal leaf beetle                          | 4.0 to 8.0 |                     |     |
|                         | Grasshoppers                               | 8.0      |                     |     |

The Restricted-Entry Interval (REI) is 12 hrs. The maximum application rate is 0.92 lb AI/A (12.0 ozs/A Malathion ULV); the maximum number of applications/yr is 1/cutting; and the minimum retreatment interval is 7 days.

| Rice                     | Grasshoppers                                 | 8.0      |                     | 14  |

(Aquatic restriction for rice only.) 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.

The Restricted-Entry Interval (REI) is 12 hrs. The maximum application rate is 0.61 lb AI/A (8.0 ozs/A Malathion ULV); the maximum number of applications/yr is 2; and the minimum retreatment interval is 7 days.

| Rye                      | Grasshoppers                               | 8.0      |                     | 7   |

The Restricted-Entry Interval (REI) is 12 hrs. The maximum application rate is 0.61 lb AI/A (8.0 ozs/A Malathion ULV); the maximum number of applications/yr is 1.

| Wheat, spring and winter | Cereal leaf beetle                          | 4.0 to 8.0 |                     | 7   |
|                         | Grasshoppers                               | 8.0      |                     |     |

The Restricted-Entry Interval (REI) is 12 hrs. The maximum application rate is 0.61 lb AI/A (8.0 ozs/A Malathion ULV); the maximum number of applications/yr is 2; and the minimum retreatment interval is 7 days.

| Nonagricultural Rights-of-way/ Uncultivated Areas/Soils | Beet leafhopper (on wild host plants) | 8.0 |                     | 0   |
|                                                           | Blackgrass bug                          | 8.0 to 12.0 |                     |     |
|                                                           | Grasshoppers                            | 8.0      |                     |     |

The maximum application rate is 0.92 lb AI/A (12.0 ozs/A Malathion ULV).

### Mosquito Control in Populated and Rural Areas

**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.

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 pesticide is toxic to aquatic organisms, including fish and invertebrates.

This product is highly toxic to bees exposed to direct treatment on blooming crops or weeds. Do not apply or allow it 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 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.

**PRECAUTIONS AND RESTRICTIONS**

- Do not apply more than 0.23 pound active ingredient per acre per day.
- Only treat when mosquitoes are swarming or biting. Do not re-treat 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 a 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.
- 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.

**AERIAL APPLICATION**

Spray equipment must be adjusted so that the volume median diameter produced is less than 60 microns (Dv 0.5 < 60 um) and 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 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.
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.

Thermal Aerosols or Fogs
For control of adult mosquitoes with thermal aerosols or fogs: Apply Malathion ULV at the rate of 3.9 to 5.2 gallons Malathion 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 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 pound active per acre. At 5.2 gallons per 100 gallons of finished solution, this is equivalent to 0.11 pound active per acre.

*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 Malathion ULV.

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

<table>
<thead>
<tr>
<th>Rates for Malathion ULV</th>
</tr>
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<tbody>
<tr>
<td>Lb AI/A</td>
</tr>
<tr>
<td>0.03 to 0.06*</td>
</tr>
<tr>
<td>0.07 to 0.11</td>
</tr>
<tr>
<td>0.12 to 0.16</td>
</tr>
<tr>
<td>0.17 to 0.21</td>
</tr>
</tbody>
</table>

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

OPERATING EQUIPMENT
Each nonthermal aerosol generator used for dispersal of Malathion ULV 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 MALATHION ULV 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.

STORAGE AND DISPOSAL

PROHIBITIONS: Do not contaminate water, food, or feed by storage and disposal. Open dumping is prohibited. Do not reuse empty container. Do not store under conditions which might adversely affect the container or its ability to function properly.

PESTICIDE STORAGE: Malathion ULV should be stored in the original unopened container in a secure, dry place. Do not contaminate with other pesticides or fertilizers. The 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). Keep container tightly closed when not in use. Reduce stacking height where local conditions can affect package strength.

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 DISPOSAL: Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse container (or equivalent) promptly after emptying.

Containers equal to or less than 5 gallons: 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 1/4 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.

Containers greater than 5 gallons or 50 pounds: Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 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.

For help with any spill, leak, fire or exposure involving this material, call day or night CHEMTREC – 1-800-424-9300.

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

BEFORE BUYING OR USING THIS PRODUCT, read the entire Directions for Use and the following Conditions of Sale and Limitation of Warranty and Liability. By buying or using this product, the buyer or user accepts the following Conditions of Sale and Limitation of Warranty and Liability, which no employee or agent of LOVELAND PRODUCTS, INC. or the seller is authorized to vary in any way.

Follow the Directions for Use of this product carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop or other plant injury, ineffectiveness, or other unintended consequences may result from such risks as weather or crop conditions, mixture with other chemicals not specifically identified in this product’s label, or use of this product contrary to the label instructions, all of which are beyond the control of LOVELAND PRODUCTS, INC. and the seller. The buyer or user of this product assumes all such inherent risks.

Subject to the foregoing inherent risks, LOVELAND PRODUCTS, INC. warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use when the product is used in strict accordance with such Directions for Use under normal conditions of use. EXCEPT AS WARRANTED IN THIS LABEL AND TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THIS PRODUCT IS SOLD “AS IS,” AND LOVELAND PRODUCTS, INC. MAKES NO OTHER WARRANTY, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR ELIGIBILITY OF THIS PRODUCT FOR ANY PARTICULAR TRADE USAGE.
MALATHION ULV CONCENTRATE INSECTICIDE
EPA REG. NO. 34704-565

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