

34704-474

07/07/2011

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

NOTIFICATION

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

JUL 07 2011

Glenda Haage
Loveland Products Inc.
P.O. Box 1286
Greeley, CO 80632

Subject: Notification of Injury Statement to Cherries
EPA Registration No. 34704-474
Submission Date: June 23, 2011
Decision: D450958

Dear Ms Haage:

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 dated June 23, 2011 for product EPA Reg No. 34704-474. The Registration Division (RD) has conducted a review of this request and finds that the action requested falls within the scope of PRN 98-10. The label submitted with the application has been stamped "Notification" and will be placed in our records. If you have any questions, please contact Jessica Rogala at (703) 347-0263 or via email at rogala.jessica@epa.gov.

Sincerely,

A handwritten signature in cursive script that reads "J. Rogala".

Jessica Rogala
Environmental Protection Specialist
Insecticide-Rodenticide Branch
Registration Division (7505P)

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Please read instructions on reverse before completing form.

Form Approved MB No. 2070-0060. Approval expires 11-30-93



United States
Environmental Protection Agency
Washington, DC 20460

- Registration
- Amendment
- Other

OPP Identifier Number

Application for Pesticide -Section I

1. Company/Product Number 34704-474	2. EPA Product Manager Eagle	3. Proposed Classification <input type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company/Product (Name) Malathion 8 Aquamul	PM#	
5. Name and Address of Applicant (Include ZIP Code) Loveland Products Inc. P.O. Box 1286 Greeley, Co 80632 <input type="checkbox"/> Check if this is a new address	6. Expedited Review. In accordance with FIFRA Section 3(c)(3)(b)(i), my product is similar or identical in composition and labeling to: EPA Reg. No. _____ Product Name _____	

Section II

<input type="checkbox"/> Amendment - Explain Below	<input type="checkbox"/> Final printed labels in response to Agency letter dated _____
<input type="checkbox"/> Resubmission in response to Agency letter dated _____	<input type="checkbox"/> "Me Too" Application
<input checked="" type="checkbox"/> Notification - Explain below	<input type="checkbox"/> Other - explain below

Explanation: Use additional page(s) if necessary. (For Section I and Section II). Notification of cautionary statement under cherries. This notification is consistent with the provisions of PR Notice 98-10 and EPA regulations at 40 CFR 152.46, and no other changes have been made to the labeling or the confidential statement of formula of this product. I understand that it is a violation of 18 U.S.C. Sec. 1001 to willfully make any false statement to EPA. I further understand that if this notification is not consistent with the terms of PR Notice 98-10 and 40 CFR 152.46, this product may be in violation of FIFRA and I may be subject to enforcement action and penalties under sections 12 and 14 of FIFRA.

Section III

1. Material This Product Will Be Packaged In:			
Child-Resistant Packaging <input type="checkbox"/> Yes* <input type="checkbox"/> No <i>*Certification must be submitted.</i>	Unit Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No If "Yes," Unit Package Wt. No. Per Container	Water Soluble Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No If "Yes," Package Wt. No. Per Container	2. Type of Container <input type="checkbox"/> Metal <input type="checkbox"/> Plastic <input type="checkbox"/> Glass <input type="checkbox"/> Paper <input type="checkbox"/> Other (Specify) _____
3. Location of Net Contents Information <input type="checkbox"/> Label <input type="checkbox"/> Container		4. Size(s) of Retail Container	5. Location of Label Directions <input type="checkbox"/> On Label <input type="checkbox"/> On Labeling accompanying product
6. Manner In Which Label Is Affixed To Product <input type="checkbox"/> Lithograph <input type="checkbox"/> Other (_____) <input type="checkbox"/> Paper Glued <input type="checkbox"/> Stenciled			

Section IV

1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)		
Name Glenda Haage	Title Registration Consultant	Telephone No. (Include Area Code) 712-546-5233
Certification I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.		6. Date Application Received (Stamped)
2. Signature 	3. Title Registration Consultant	
4. Typed Name Glenda Haage	5. Date 6-21-2011	



June 21, 2011

Document Processing Desk (NOTIF)
Office of Pesticide Programs (7504C)
U.S. Environmental Protection Agency
2777 S. Crystal Dr., Room S-4900
Arlington, VA 22202

RE: Notification of injury statement for cherries
Malathion 8 Aquamul (EPA Reg. No. 34704-474)

Dear Sir or Madam;

Loveland Products Inc. is submitting an application for a notification allowable per PR Notice 98-10. The notification involves adding a cautionary statement for cherries. Enclosed please find one (1) copy of highlighted labeling with change and two (2) copies of final printed labeling (printer's proof).

Should you need anything else, please contact me at 712-548-5213 or email ghbconsulting@frontiernet.net.

Sincerely,

A handwritten signature in cursive script that reads "Glenda Haage".

Glenda Haage
Consultant for Loveland Products Inc.

A large, faint circular stamp or logo located in the bottom right corner of the page. The text within the stamp is illegible due to fading.

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MALATHION 8 AQUAMUL

Organophosphate Insecticide

FOR INSECT CONTROL ON LISTED ORNAMENTALS, FRUIT AND NUT TREES AND VEGETABLE PLANTS.

ACTIVE INGREDIENT:		% BY WT.
Malathion (O,O-Dimethyl phosphorodithioate of diethyl mercaptosuccinate)	81.8%
OTHER INGREDIENTS:	<u>18.2%</u>
	TOTAL	100.0%

Contains 8 lbs. of Malathion per gallon.

KEEP OUT OF REACH OF CHILDREN CAUTION

FIRST AID

If swallowed:	<ul style="list-style-type: none"> • 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:	<ul style="list-style-type: none"> • 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:	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
If in eyes:	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 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 product may cause cholinesterase inhibition. Atropine is antidotal. 2-PAM may be effective as an adjunct to atropine.

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.

NOTIFICATION

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EPA EST. NO. 34704-MS-001

NET CONTENTS 2½ GALS. (9.46 L)

022311 V2D 05Y11

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**MALATHION 8 AQUAMUL
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**PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
CAUTION**

Harmful if swallowed or absorbed through skin. Causes moderate eye irritation. Avoid contact with eyes, skin, or clothing. Prolonged or frequently repeated skin contact may cause allergic reaction 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, 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, and
- Chemical resistant gloves.

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 rainfall-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. To protect the environment, do not allow pesticide to enter or run off into storm drains, drainage ditches, gutters or surface waters. 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.

For commercial, industrial, and institutional use products packaged in containers equal or greater than 5 gallons or 50 pounds:

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

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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.

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, or nurseries.

Do not enter or allow others to enter until sprays have dried.

PRECAUTIONS AND RESTRICTIONS

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.

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

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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 ground-boom applications, apply with nozzle height no more than 4 feet above the ground or crop 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.

APPLICATION THROUGH IRRIGATION SYSTEMS – CHEMIGATION

Apply this product only through sprinkler, including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, or hand move; flood (basin); furrow; border or drip (trickle) irrigation systems. Do not apply this product through any other type of irrigation system.

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.

If you have questions and calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

Do not connect an irrigation system used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.

A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

Mix in clean supply tank the recommended amount of this product for acreage to be covered, and needed quantity of water.

This product should not be tank-mixed with other pesticides, surfactants or fertilizers unless prior use has shown the combination noninjurious under your conditions of use.

Follow precautionary statements and directions for all tank-mixed products.

On all crops, use sufficient gallonage of water to obtain thorough and uniform coverage, but not cause runoff or excessive leaching. This will vary depending on equipment, pest problem and stage of crop growth. Application of more or less than optimal quantity of water may result in decreased chemical performance, crop injury or illegal pesticide residues.

Meter this product into the irrigation water uniformly during the period of operation. Do not overlap application. Follow specified label rates, application timing, and other directions and precautions for crop being treated.

Continuous mild agitation of pesticide mixture may be needed to assure a uniform application, particularly if the supply tank requires a number of hours to empty.

CHEMIGATION SYSTEMS CONNECTED TO PUBLIC WATER SYSTEMS

Note: Loveland Products Inc. does not encourage connecting chemigation systems to public water supplies. The following information is provided for users who have diligently considered all other application and water supply options before electing to make such a connection.

Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year. Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should

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be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the flow outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection.

The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.

Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Do not apply when wind speed favors drift beyond the area intended for treatment.

SPRINKLER CHEMIGATION (FOLIAR SPRAY USES)

The system must contain a functional check valve vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Do not apply when wind speed favors drift beyond the area intended for treatment.

FLOOD (BASIN), FURROW AND BORDER CHEMIGATION (SOIL DRENCH USES)

Systems using a gravity flow pesticide dispensing system must meter the pesticide into the water at the head of the field and downstream of a hydraulic discontinuity such as a drop structure or weir box to decrease potential for water source contamination from backflow if water flow stops.

Systems utilizing a pressurized water and pesticide injection system must meet the following requirements:

- a. The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
- b. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- c. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- d. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- e. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- f. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

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DRIP (TRICKLE) CHEMIGATION (SOIL DRENCH USES)

The system must contain a functional check valve, vacuum relief valve and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

Systems must use a metering pump such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

APPLICATIONS

Use rates and use directions as noted below. Use higher rate when foliage is heavy or infestation is severe. Apply when pests first appear. Apply the following specified rates in sufficient water to thoroughly cover one acre. By ground, apply using a minimum of 10 gallons of water per acre and by air apply using a minimum of 2 gallons of water per acre (standard is 100 gallons of water for thorough coverage sprays). Do not apply orchard rates in less than 10 gallons of water per acre.

Crop	Pest	Rate Pts/A	Directions	Pre-Harvest Interval (PHI) (days)
Alfalfa Birdsfoot Trefoil Clover Lespedeza Vetch	Aphids Armyworm Clover leaf weevil Grasshoppers Leafhopper Spider mites	1.25	Apply to alfalfa in bloom only in the evening or early morning when bees are not working in the fields or are not hanging on the outside of hives. The Restricted Entry Interval (REI) is 12 hrs. The maximum application rate is 1.25 lbs AI/A (1.25 pts Malathion 8 Aquamul); the maximum number of applications is 2/cutting; and the minimum retreatment interval is 14 days.	0
Apricots	Aphids Codling moth Orange tortrix Soft brown scale Terrapin scale	1.5	Full coverage spray. The Restricted Entry Interval (REI) is 12 hrs. The maximum application rate is 1.5 lbs AI/A (1.5 pts Malathion 8 Aquamul); the maximum number of applications/yr is 2; and the minimum retreatment interval is 7 days.	6
Asparagus	Asparagus beetle Thrips	1.25	The Restricted Entry Interval (REI) is 12 hrs. The maximum application rate is 1.25 lbs AI/A (1.25 pts Malathion 8 Aquamul); the maximum number of applications/year is 2; and the minimum retreatment interval is 7 days.	1
Avocados	Green house thrips Latania scale Omnivorous looper Orange tortrix Soft brown scale	4.0 to 4.7	The Restricted Entry Interval (REI) is 48 hrs. The maximum application rate is 4.7 lbs AI/A (4.7 pts Malathion 8 Aquamul); the maximum number of applications/year is 2; and the minimum retreatment interval is 30 days.	7

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Crop	Pest	Rate Pts/A	Directions	Pre-Harvest Interval (PHI) (days)
Barley	Aphids Cereal leaf beetle Grasshoppers Greenbugs	1.25	The Restricted Entry Interval (REI) is 12 hrs. The maximum application rate is 1.25 lbs AI/A (1.25 pts Malathion 8 Aquamul); the maximum number of applications/year is 2; and the minimum retreatment interval is 7 days.	7
Beets (Garden) Do not apply to Sugar Beets	Aphids	1.0 to 1.25	The Restricted Entry Interval (REI) is 12 hrs. The maximum application rate is 1.25 lbs AI/A (1.25 pts Malathion 8 Aquamul); the maximum number of applications/year is 3; and the minimum retreatment interval is 7 days.	7
Blackberries Boysenberries Dewberries Gooseberries Loganberries Raspberries	Rose scale aphids Japanese beetle Leafhoppers Mites Thrips	2.0 1.0 to 2.0	The Restricted Entry Interval (REI) is 12 hrs. The maximum application rate is 2.0 lbs AI/A (2.0 pts Malathion 8 Aquamul); the maximum number of applications/year is 3; and the minimum retreatment interval is 7 days.	1
Blueberries	Cherry fruitworm Cranberry fruitworm Japanese beetle Plum curculio Sharpnose leafhopper	1.25	The Restricted Entry Interval (REI) is 12 hrs. The maximum application rate is 1.25 lbs AI/A (1.25 pts Malathion 8 Aquamul); the maximum number of applications/year is 3; and the minimum retreatment interval is 5 days.	1
Broccoli Broccoli Raab (Rapini) Brussels Sprouts Cauliflower Chinese Broccoli Cavalo Broccolo Mizuna Mustard Spinach Rape Greens	Aphids Cabbage looper Flea beetle Imported cabbageworm	1.25	The Restricted Entry Interval (REI) is 48 hrs. The maximum application rate is 1.25 lbs AI/A (1.25 pts Malathion 8 Aquamul); the maximum number of applications/year is 2; and the minimum retreatment interval is 7 days.	2
Cabbage	Aphids Cabbage looper Flea beetle Imported cabbageworm	1.25	The Restricted Entry Interval (REI) is 48 hrs. The maximum application rate is 1.25 lbs AI/A (1.25 pts Malathion 8 Aquamul); the maximum number of applications/year is 6; and the minimum retreatment interval is 7 days.	7
Cabbage, Chinese (Bok Choy, Napa) Cabbage, Chinese Mustard	Aphids Cabbage looper Flea beetle Imported cabbageworm	1.25	The Restricted Entry Interval (REI) is 24 hrs. The maximum application rate is 1.25 lbs AI/A (1.25 pts Malathion 8 Aquamul); the maximum number of applications/year is 2; and the minimum retreatment interval is 7 days.	7
Carrots, roots	Aphids Leafhoppers	1.0 to 1.25	The Restricted Entry Interval (REI) is 24 hrs. The maximum application rate is 1.25 lbs AI/A (1.25 pts Malathion 8 Aquamul); the maximum number of applications/year is 2; and the minimum retreatment interval is 7 days.	7
Celery	Aphids Spider mites	1.0 to 1.5	The Restricted Entry Interval (REI) is 24 hrs. The maximum application rate is 1.5 lbs AI/A (1.5 pts Malathion 8 Aquamul); the maximum number of applications/year is 2; and the minimum retreatment interval is 7 days.	7

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Crop	Pest	Rate Pts/A	Directions	Pre-Harvest Interval (PHI) (days)
Cherries (sweet & tart)	Black cherry aphid Bud moth Cherry fruit fly Forbes scale Fruit tree leafroller Lesser peach San jose scale tree borer	1.75	May injure foliage or fruit of varieties such as Brooks, Tulare, Coral and some others. The Restricted Entry Interval (REI) is 12 hrs. The maximum application rate is 1.75 lbs AI/A (1.75 pts Malathion 8 Aquamul); the maximum number of applications/year is 4; and the minimum retreatment interval is 3 days.	3
Chestnuts	Mites	2.0 to 2.5	The Restricted Entry Interval (REI) is 24 hrs. The maximum application rate is 2.5 lbs AI/A (2.5 pts Malathion 8 Aquamul); the maximum number of applications/year is 3; and the minimum retreatment interval is 7 days.	2
Citrus (Grapefruit, Lemons, Limes, Oranges, Tangerines, Tangelos)	Aphids Black scale California red scale Citricola scale Florida purple scale Florida red scale Mediterranean fruit fly Soft scale Thrips Yellow scale	CA: 7.5 pts or 1.5 pts; All other states: 4.5 pts or 1.5 pts	Do not apply during full bloom. California Only: At the maximum application rate of 7.5 lbs AI/A (7.5 pts Malathion 8 Aquamul), the Restricted Entry Interval (REI) is 72 hrs and the maximum number of applications/year is 1; OR At the maximum application rate of 1.5 lbs AI/A (1.5 pts Malathion 8 Aquamul) the REI is 12 hrs, the maximum number of applications/year is 3, the minimum application interval is 30 days and the minimum preharvest interval is 7 days. All States other than CA: At the maximum application rate of 4.5 lbs AI/A (4.5 pts Malathion 8 Aquamul), the Restricted Entry Interval (REI) is 72 hrs and the maximum number of applications/year is 1; OR At the maximum application rate of 1.5 lbs AI/A (1.5 pts Malathion 8 Aquamul) the REI is 12 hrs, the maximum number of applications/year is 3, the minimum application interval is 30 days and the minimum preharvest interval is 7 days.	7
Collards	Aphids Cabbage looper Flea beetle Imported cabbageworm	1.0	The Restricted Entry Interval (REI) is 12 hrs. The maximum application rate is 1.0 lb AI/A (1.0 pt Malathion 8 Aquamul); the maximum number of applications/year is 3; and the minimum retreatment interval is 7 days.	7
Corn (field)	Aphids Cereal leaf beetle Corn earworm Corn rootworm-adults Grasshoppers Sap beetle Thrips	1.0	For corn earworm, apply to silks as soon as they appear. The Restricted Entry Interval (REI) is 72 hrs for detasseling, and 12 hrs for all other activities. The maximum application rate is 1.0 lb AI/A (1.0 pt Malathion 8 Aquamul); the maximum number of applications/year is 2; and the minimum retreatment interval is 7 days.	7
Corn, Sweet	Japanese beetles	1.0	The Restricted Entry Interval (REI) is 72 hrs for detasseling, and 12 hrs for all other activities. The maximum application rate is 1.0 lb AI/A (1.0 pt Malathion 8 Aquamul); the maximum number of applications/year is 2; and the minimum retreatment interval is 5 days.	5

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Crop	Pest	Rate Pts/A	Directions	Pre-Harvest Interval (PHI) (days)
Cotton	Aphids Boll weevil Cotton leaf perforator Cotton leafworm Fall armyworm Fleahopper Garden webworm Grasshopper Leafhoppers Lygus bug Mites Thrips White Flies	1.5 to 2.5	The Restricted Entry Interval (REI) is 48 hrs. The maximum application rate is 2.5 lbs AI/A (2.5 pts Malathion 8 Aquamul); the maximum number of applications/year is 3; and the minimum retreatment interval is 7 days.	7
Cucumbers	Aphids Pickleworm Spider mites	1.0 to 1.75	Do not apply unless plants are dry. The Restricted Entry Interval (REI) is 24 hrs. The maximum application rate is 1.75 lbs AI/A (1.75 pts Malathion 8 Aquamul); the maximum number of applications/year is 2; and the minimum retreatment interval is 7 days.	1
	Thrips Cucumber beetle	1.75		
Currants	Currant aphid Imported currantworm	1.25	The Restricted Entry Interval (REI) is 12 hrs. The maximum application rate is 1.25 lbs AI/A (1.25 pts Malathion 8 Aquamul); the maximum number of applications/year is 3; and the minimum retreatment interval is 7 days.	1
	Japanese beetle Mites	1.0 to 1.25		
Dandelions	Aphids	1.0 to 1.25	The Restricted Entry Interval (REI) is 24 hrs. The maximum application rate is 1.25 lbs AI/A (1.25 pts Malathion 8 Aquamul); the maximum number of applications/year is 2; and the minimum retreatment interval is 7 days.	7
Eggplant	Aphids Spider mite	0.75 to 1.56	The Restricted Entry Interval (REI) is 12 hrs. The maximum application rate is 1.56 lbs AI/A (1.56 pts Malathion 8 Aquamul); the maximum number of applications/year is 4; and the minimum retreatment interval is 5 days.	3
	Lace bugs	1.56		
Endive	Aphids Mites	1.0 to 1.25	The Restricted Entry Interval (REI) is 24 hrs. The maximum application rate is 1.25 lbs AI/A (1.25 pts Malathion 8 Aquamul); the maximum number of applications/year is 2; and the minimum retreatment interval is 7 days.	7
Figs	Dried fruit beetle Vinegar flies	2.0 pts plus 2 gals unsulfurized molasses as a bait spray	At the maximum application rate of 2.0 lbs AI/A (2.0 pts Malathion 8 Aquamul), the Restricted Entry Interval (REI) is 24 hrs. The maximum number of applications/year is 2, and the minimum application interval is 5 days; OR At the maximum application rate of 1.5 lbs AI/A (1.5 pts Malathion 8 Aquamul), the Restricted Entry Interval (REI) is 12 hrs. The maximum number of applications/year is 2, and the minimum application interval is 5 days.	5

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Crop	Pest	Rate Pts/A	Directions	Pre-Harvest Interval (PHI) (days)
Flax	Grasshoppers	0.5	The Restricted Entry Interval (REI) is 12 hrs. The maximum application rate is 0.5 lb AI/A (0.5 pt Malathion 8 Aquamul); the maximum number of applications/year is 3; and the minimum retreatment interval is 7 days.	52
Garlic	Aphids Thrips	1.0 to 1.5	The Restricted Entry Interval (REI) is 24 hrs. The maximum application rate is 1.56 lbs AI/A (1.5 pts Malathion 8 Aquamul); the maximum number of applications/year is 3; and the minimum retreatment interval is 7 days.	3
Grapes	Drosophila Japanese beetle Leafhopper Mealybugs Spider mite Terrapin scale	1.88	May cause injury to foliage on some varieties. The Restricted Entry Interval (REI) is 72 hrs for girdling and tying, and 24 hrs for all other activities. The maximum application rate is 1.88 lbs AI/A (1.88 pts Malathion 8 Aquamul); the maximum number of applications/year is 2; and the minimum retreatment interval is 14 days.	3
Grass Hay Grasses	Aphids Armyworms Grasshoppers Leafhoppers	1.25	The Restricted Entry Interval (REI) is 12 hrs. The maximum application rate is 1.25 lbs AI/A (1.25 pts Malathion 8 Aquamul); the maximum number of applications/year is 1.	0
Guava	Fruit flies	0.75 pt. + 1.0 lb partially hydrolyzed yeast protein or enzymatic yeast hydrolyzate	The Restricted Entry Interval (REI) is 12 hrs. The maximum application rate is 1.25 lbs AI/A (1.25 pts Malathion 8 Aquamul); the maximum number of applications is 13; and the minimum retreatment interval is 3 days.	2
Hops	Aphids	0.63	The Restricted Entry Interval (REI) is 12 hrs. The maximum application rate is 0.63 lb AI/A (0.63 pt Malathion 8 Aquamul); the maximum number of applications/year is 3; and the minimum retreatment interval is 7 days.	10
Horseradish	Aphids	1.0 to 1.25	The Restricted Entry Interval (REI) is 24 hrs. The maximum application rate is 1.25 lbs AI/A (1.25 pts Malathion 8 Aquamul); the maximum number of applications/year is 3; and the minimum retreatment interval is 7 days.	7
Kale	Aphids Cabbage looper Flea Beetle Imported cabbageworm	1.0	The Restricted Entry Interval (REI) is 12 hrs. The maximum application rate is 1.0 lb AI/A (1.0 pt Malathion 8 Aquamul); the maximum number of applications/year is 3; and the minimum retreatment interval is 5 days.	7
Kohlrabi	Aphids Cabbage looper Flea Beetle Imported cabbageworm	1.25	The Restricted Entry Interval (REI) is 24 hrs. The maximum application rate is 1.25 lbs AI/A (1.25 pts Malathion 8 Aquamul); the maximum number of applications/year is 2; and the minimum retreatment interval is 7 days.	7

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Crop	Pest	Rate Pts/A	Directions	Pre-Harvest Interval (PHI) (days)
Kumquats	Aphids Black scale California red scale Citricola scale Florida red scale Florida purple scale Soft scale Thrips Yellow scale	4.5	Do not apply during full bloom. The Restricted Entry Interval (REI) is 48 hrs. The maximum application rate is 4.5 lbs AI/A (4.5 pts Malathion 8 Aquamul); the maximum number of applications/year is 1; and the minimum retreatment interval is 30 days.	7
	Mediterranean fruit fly	1.0 to 4.5		
Leeks	Aphids Thrips	1.0 to 1.56	The Restricted Entry Interval (REI) is 24 hrs. The maximum application rate is 1.56 lbs AI/A (1.56 pts Malathion 8 Aquamul); the maximum number of applications/year is 2; and the minimum retreatment interval is 7 days.	3
Lettuce	Aphids Leafhoppers	1.25 to 1.88	The Restricted Entry Interval (REI) is 24 hrs. The maximum application rate is 1.88 lbs AI/A (1.88 pts Malathion 8 Aquamul); the maximum number of applications/year is 2; and the minimum retreatment interval is 6 days for head and 5 days for leaf.	14
	Cabbage looper Mites	1.88		
Macadamia Nuts	Green stink bug	0.94	The Restricted Entry Interval (REI) is 12 hrs. The maximum application rate is 0.94 lb AI/A (0.94 pt Malathion 8 Aquamul); the maximum number of applications/year is 6; and the minimum retreatment interval is 7 days.	1
Mango	Fruit flies	0.75 pt + 1.0 lb partially hydrolyzed yeast protein or enzymatic yeast hydrolyzate	The Restricted Entry Interval (REI) is 12 hrs. The maximum application rate is 0.9375 lb AI/A (0.9375 pt Malathion 8 Aquamul); the maximum number of applications/year is 10; and the minimum retreatment interval is 7 days.	1
Melons (other than watermelon)	Aphids Cucumber beetle Pickleworm Spider mites Thrips	1.0	Do not apply unless plants are dry. The Restricted Entry Interval (REI) is 12 hrs. The maximum application rate is 1.0 lb AI/A (1.0 pt Malathion 8 Aquamul); the maximum number of applications/year is 2; and the minimum retreatment interval is 7 days.	1
Mustard Greens	Aphids Cabbage looper Flea beetle Imported cabbageworm	1.0	The Restricted Entry Interval (REI) is 12 hrs. The maximum application rate is 1.0 lb AI/A (1.0 pt Malathion 8 Aquamul); the maximum number of applications/year is 3; and the minimum retreatment interval is 5 days.	7
Nectarines	Aphids (Green, Peach, Black cherry, Peach, Rusty plum) Japanese beetle Mites (European red; Two-spotted)	2.5 to 3.0	Full coverage spray. The Restricted Entry Interval (REI) is 24 hrs. The maximum application rate is 3.0 lbs AI/A (3.0 pts Malathion 8 Aquamul); the maximum number of applications/year is 3; and the minimum retreatment interval is 7 days.	7
	Cottony peach scale Lesser peach tree borer Oriental fruit moth Plum curculio Terrapin scale	3.0		

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Crop	Pest	Rate Pts/A	Directions	Pre-Harvest Interval (PHI) (days)
Oats	Aphids Cereal leaf beetle Grasshoppers Greenbugs	1.0	The Restricted Entry Interval (REI) is 12 hrs. The maximum application rate is 1.0 lb AI/A (1.0 pt Malathion 8 Aquamul); the maximum number of applications/year is 2; and the minimum retreatment interval is 7 days.	7
Okra	Aphids Japanese beetle	1.2	The maximum application rate is 1.2 lbs AI/A (1.2 pts Malathion 8 Aquamul); the maximum number of applications/year is 5; and the minimum retreatment interval is 7 days.	1
Onions, (bulb and green)	Onion thrips	1.0 to 1.56	The Restricted Entry Interval (REI) is 12 hrs. The maximum application rate is 1.56 lbs AI/A (1.56 pts Malathion 8 Aquamul); the maximum number of applications/year is 2; and the minimum retreatment interval is 7 days.	3
	Onion maggots	1.56		
Papaya	Aphids Mealybugs	1.25	The Restricted Entry Interval (REI) is 12 hrs. The maximum application rate is 1.25 lbs AI/A (1.25 pts Malathion 8 Aquamul); the maximum number of applications/year is 8; and the minimum retreatment interval is 3 days.	1
Parsley	Aphids	1.0 to 1.5	The Restricted Entry Interval (REI) is 24 hrs. The maximum application rate is 1.5 lbs AI/A (1.5 pts Malathion 8 Aquamul); the maximum number of applications/year is 2; and the minimum retreatment interval is 7 days.	7
Parsnips	Aphids	1.0 to 1.25	The Restricted Entry Interval (REI) is 24 hrs. The maximum application rate is 1.25 lbs AI/A (1.25 pts Malathion 8 Aquamul); the maximum number of applications/year is 3; and the minimum retreatment interval is 7 days.	7
Passion Fruit	Fruit flies	0.75 pt. + 1.0 lb partially hydrolyzed yeast protein or enzymatic yeast hydrolyzate	The Restricted Entry Interval (REI) is 12 hrs. The maximum application rate is 1.0 lb AI/A (1.0 pt Malathion 8 Aquamul); the maximum number of applications/year is 8; and the minimum retreatment interval is 7 days.	3
Peaches	Aphids (Green, Peach, Black cherry, Black Peach, Rusty plum) Japanese beetle Mites (European red, Two-spotted)	2.5 to 3.0	Full coverage spray. The Restricted Entry Interval (REI) is 24 hrs. The maximum application rate is 3.0 lbs AI/A (3.0 pts Malathion 8 Aquamul); the maximum number of applications/year is 3; and the minimum retreatment interval is 11 days.	7
	Cottony peach scale Lesser peach tree borer Oriental fruit moth Plum curculio Terrapin scale	3.0		
Peas	Aphids Pea weevil	1.0	The Restricted Entry Interval (REI) is 12 hrs. The maximum application rate is 1.0 lb AI/A (1.0 pt Malathion 8 Aquamul); the maximum number of applications/year is 2; and the minimum retreatment interval is 7 days.	3

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Crop	Pest	Rate Pts/A	Directions	Pre-Harvest Interval (PHI) (days)
Pecans	Aphids Mites Pecan bud moth Pecan leaf casebearer Pecan nut casebearer Pecan phylloxera	2.5	The Restricted Entry Interval (REI) is 24 hrs. The maximum application rate is 2.5 lbs AI/A (2.5 pts Malathion 8 Aquamul); the maximum number of applications/year is 2; and the minimum retreatment interval is 7 days.	7
Peppers	Aphids	0.75 to 1.5	The Restricted Entry Interval (REI) is 12 hrs. The maximum application rate is 1.56 lbs AI/A (1.56 pts Malathion 8 Aquamul); the maximum number of applications/year is 2; and the minimum retreatment interval is 5 days.	3
	Pepper maggots	1.5		
Peppermint Spearmint	Aphids Flea beetle - adults Leafhoppers Spider mites	0.94	The Restricted Entry Interval (REI) is 12 hrs. The maximum application rate is 0.94 lb AI/A (0.94 pt Malathion 8 Aquamul); the maximum number of applications/year is 3; and the minimum retreatment interval is 7 days.	7
Pineapples	Mealybugs	2.0	The Restricted Entry Interval (REI) is 24 hrs. The maximum application rate is 2.0 lbs AI/A (2.0 pts Malathion 8 Aquamul); the maximum number of applications/year is 3; and the minimum retreatment interval is 7 days.	7
Potatoes	Aphids False chinch bugs Leafhoppers Mealybugs	1.0 to 1.5	The Restricted Entry Interval (REI) is 12 hrs. The maximum application rate is 1.56 lbs AI/A (1.56 pts Malathion 8 Aquamul); the maximum number of applications/year is 2; and the minimum retreatment interval is 7 days.	0
Pumpkins	Aphids Cucumber beetle Pickleworms Spider mites Thrips	1.0	Do not apply unless plants are dry. The Restricted Entry Interval (REI) is 12 hrs. The maximum application rate is 1.0 lb AI/A (1.0 pt Malathion 8 Aquamul); the maximum number of applications/year is 2; and the minimum retreatment interval is 7 days.	1
Radishes	Aphids	1.0	The Restricted Entry Interval (REI) is 12 hrs. The maximum application rate is 1.0 lb AI/A (1.0 pt Malathion 8 Aquamul); the maximum number of applications/year is 3; and the minimum retreatment interval is 7 days.	7
Rice	Rice leafminers Rice stink bugs	1.25	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 1.25 lbs AI/A (1.25 pts Malathion 8 Aquamul); the maximum number of applications/year is 2; and the minimum retreatment interval is 7 days.	7

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Crop	Pest	Rate Pts/A	Directions	Pre-Harvest Interval (PHI) (days)
Rutabagas	Aphids	1.0	The Restricted Entry Interval (REI) is 12 hrs. The maximum application rate is 1.0 lb AI/A (1.0 pt Malathion 8 Aquamul); the maximum number of applications/year is 3; and the minimum retreatment interval is 7 days.	7
Rye	Aphids Cereal leaf beetles Grasshoppers Greenbugs	1.0	The Restricted Entry Interval (REI) is 12 hrs. The maximum application rate is 1.0 lb AI/A (1.0 pt Malathion 8 Aquamul); the maximum number of applications/year is 3; and the minimum retreatment interval is 7 days.	7
Salsify (including tops)	Aphids	1.0 to 1.25	The Restricted Entry Interval (REI) is 24 hrs. The maximum application rate is 1.25 lbs AI/A (1.25 pts Malathion 8 Aquamul); the maximum number of applications/year is 3; and the minimum retreatment interval is 7 days.	7
Shallots	Aphids Thrips	1.0 to 1.5	The Restricted Entry Interval (REI) is 24 hrs. The maximum application rate is 1.56 lbs AI/A (1.56 pts Malathion 8 Aquamul); the maximum number of applications/year is 2; and the minimum retreatment interval is 7 days.	3
Sorghum, Grain	Greenbugs	1.0	The Restricted Entry Interval (REI) is 12 hrs. The maximum application rate is 1.0 lb AI/A (1.0 pt Malathion 8 Aquamul); the maximum number of applications/year is 2; and the minimum retreatment interval is 7 days.	7
Spinach	Aphids	1.0	The Restricted Entry Interval (REI) is 12 hrs. The maximum application rate is 1.0 lb AI/A (1.0 pt Malathion 8 Aquamul); the maximum number of applications/year is 2; and the minimum retreatment interval is 7 days.	7
Squash	Aphids Cucumber beetles Pickleworms Spider mites Thrips	Summer: 1.75 pts; Winter: 1.0 pt	Do not apply unless plants are dry. For Summer Squash , the Restricted Entry Interval (REI) is 24 hrs. The maximum application rate is 1.75 lbs AI/A (1.75 pt Malathion 8 Aquamul); the maximum number of applications/year is 3; and the minimum retreatment interval is 7 days. For Winter Squash , the Restricted Entry Interval (REI) is 12 hrs. The maximum application rate is 1.0 lb AI/A (1.0 pt Malathion 8 Aquamul); the maximum number of applications/year is 3; and the minimum retreatment interval is 7 days.	1
Strawberries	Aphids Field crickets Lygus bugs Potato leafhoppers Spider mites Spittle bugs Strawberry leafroller Strawberry root weevil Thrips Whitefly	1.0 to 2.0	The Restricted Entry Interval (REI) is 12 hrs. The maximum application rate is 2.0 lbs AI/A (2.0 pts Malathion 8 Aquamul); the maximum number of applications/year is 4; and the minimum retreatment interval is 7 days.	3

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Crop	Pest	Rate Pts/A	Directions	Pre-Harvest Interval (PHI) (days)
Sweet Potatoes	Leafhoppers	1.0 to 1.56	The Restricted Entry Interval (REI) is 12 hrs. The maximum application rate is 1.56 lbs AI/A (1.56 pts Malathion 8 Aquamul); the maximum number of applications/year is 2; and the minimum retreatment interval is 7 days.	0
	Leafminers, morningglory	1.56		
Swiss Chard	Aphids	1.0	The Restricted Entry Interval (REI) is 12 hrs. The maximum application rate is 1.0 lb AI/A (1.0 pt Malathion 8 Aquamul); the maximum number of applications/year is 2; and the minimum retreatment interval is 7 days.	14
Tomatoes	Aphids Spider mites	1.0 to 1.56	The Restricted Entry Interval (REI) is 12 hrs. The maximum application rate is 1.56 lbs AI/A (1.56 pts Malathion 8 Aquamul); the maximum number of applications/year is 4; and the minimum retreatment interval is 5 days.	1
	Armyworms Drosophila Fruit worms Tomato russet mites	1.56		
Turnips	Aphids Cabbage loopers Flea beetles Imported cabbageworms	1.25	The Restricted Entry Interval (REI) is 12 hrs. The maximum application rate is 1.25 lbs AI/A (1.25 pts Malathion 8 Aquamul); the maximum number of applications/year is 3; and the minimum retreatment interval is 5 days for greens and 7 days for roots.	1
Walnuts	Aphids Mites Walnut husk fly	2.5	The Restricted Entry Interval (REI) is 24 hrs. The maximum application rate is 2.5 lbs AI/A (2.5 pts Malathion 8 Aquamul); the maximum number of applications/year is 3; and the minimum retreatment interval is 7.	7
Watercress	Aphids	1.0 to 1.25	At the maximum application rate of 1.25 lbs AI/A (1.25 pts Malathion 8 Aquamul), the Restricted Entry Interval (REI) is 24 hrs. The maximum number of applications/year is 5, and the minimum application interval is 3 days; OR At the maximum application rate of 1.0 lb AI/A (1.0 pt Malathion 8 Aquamul), the Restricted Entry Interval (REI) is 12 hrs. The maximum number of applications/year is 5, and the minimum application interval is 3 days.	3
Watermelon	Aphids Cucumber beetle Leafhopper Pickleworms Spider mites	1.5	The Restricted Entry Interval (REI) is 12 hrs. The maximum application rate is 1.5 lbs AI/A (1.5 pts Malathion 8 Aquamul); the maximum number of applications/year is 4; and the minimum retreatment interval is 7 days.	1
Wheat (spring & summer)	Aphids Cereal leaf beetles Grasshoppers Greenbugs	1.0	The Restricted Entry Interval (REI) is 12 hrs. The maximum application rate is 1.0 lb AI/A (1.0 pt Malathion 8 Aquamul); the maximum number of applications/year is 2; and the minimum retreatment interval is 7 days.	7

OUTDOOR ORNAMENTALS

Precaution: Before treating a large number of ornamental plants with Malathion 8 Aquamul alone or as a tank mixture with any other material, make a test application on a few plants and observe 7 to 10 days prior to treating large areas to reduce the possibility of plant injury.

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Crop	Rate	Pests	Comments
Ornamental Herbaceous Plants Ornamental and/or Shade Trees Ornamental Woody Shrubs	1.0 pt in 100 gals of water as a dilute spray	Aphids Euonymus scales European pine shoot moth Four-lined leaf bug Japanese beetle adults Lace scale Mealybugs Millipedes Oyster shell scale Potato leafhopper Rose leafhopper Scurfy scale Spider mites Springtails Sowbugs Tarnished plant bug Thrips Whiteflies	CAUTION: Avoid use on certain ferns including Boston, Maidenhair and Pteris, as well as some species of Crassula and Canaetri Juniper. For Oyster Shell, Fletch, Juniper, Oak Kermes and Pine Needle Scales, apply when scale crawlers have settled on foliage. The Restricted Entry Interval (REI) is 12 hrs. Maximum of 2 applications/year/growing cycle;10 day minimum retreatment interval.
	1.25 pts in 100 gals of water as a dilute spray	Azalea scale Bagworm Birch leafminer Boxwood leafminer Fletch scale Florida-red scale Juniper scale Magnolia scale Oak kermes Pine leaf scale Tent caterpillar	
	1.6 pts in 100 gals of water	Black scale crawler Monterey pine scale	
	2.5 pts in 100 gals of water	Pine needle scale Wax scale	
Slash Pine Pine Seed Orchards and Christmas Tree Plantations	For ground application, mix 0.75 to 0.8 gal of Malathion 8 Aquamul in 100 gals of water	European pine sawfly Slash pine flower thrips	Apply 0.75 gal of the mixture/tree on the smallest flowering trees. Mist blowers or airblast sprays may be used. The Restricted Entry Interval (REI) is 12 hrs. Maximum of 2 applications/year/growing cycle;10 day minimum retreatment interval.
	For air application, mix 0.4 gal of Malathion 8 Aquamul in at least 5.0 gals of water		

SMALL GRAIN STORAGE FACILITIES (Grain Elevators/Silos)

For a residual wall, floor, and machinery spray in grain elevators/silos. Before loading grain, apply 5.0 pints per 25 gallons of water making thorough application. Before applying spray, clean elevators/silos thoroughly. Remove and burn all sweepings and debris. Only for use in storage facilities for corn, wheat, rye, oats and barley grain.

FLY CONTROL

Amount of Spray	Amount Malathion 8 Aquamul	Directions for Use
1.0 gal	1.2 fl ozs	For use around the lower foundation of homes and as a spot treatment only on yards. Apply spray at rate of 1.0 gal/1,000 sq ft on painted surfaces and 2.0 gals/1,000 sq ft on unpainted surfaces where flies alight or congregate.
10.0 gals	12.0 fl ozs	
100 gals	7.5 pts	

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Add the following sugar or unsulfurized molasses/corn syrup to the following spray.

Amount of Spray	Amount of Sugar	Amount of Unsulfurized Molasses/ Corn Syrup
1.0 gal	1/2 cup	4.0 fl ozs
10.0 gals	2.0 lbs	26.0 fl ozs
100 gals	20.0 lbs	2.0 gals

Cull Fruit and Vegetable Dumps: On cull fruit and vegetable dumps, mix 7.5 pints in 100 gallons of water and apply as a drench, using 8 to 10 gallons of spray per 100 square feet. Not for use on dumps over 18 inches deep. Do not feed treated fruit and vegetables.

**FOR WIDE AREA MOSQUITO CONTROL
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.

ENVIRONMENTAL HAZARDS FOR WIDE AREA MOSQUITO ADULTICIDE USE

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 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.

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 recovery effort.
- Apply when wind speed is greater than or equal to 1 mph.

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- 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.
- 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. **IMPORTANT:** IN AREAS WHERE AUTOMOBILES, TRAILERS, TRUCKS AND PLEASURE BOATS ARE PRESENT, undiluted spray droplets of Malathion 8 Aquamul will permanently damage vehicle paint finishes unless the aircraft used for the ultra low volume application meets all of the specifications listed below.

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 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 the nozzle flow rate(s) are properly calibrated.

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 a test facility using a 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 8 Aquamul at the rate of 0.23 pints in 100 gallons finished solution* by ground equipment delivering 40 gallons per hour at a vehicle speed of 5 mph to treat a swath width of 300 feet (equivalent to 180 acres per hour). At 0.23 pints Malathion 8 Aquamul per 100 gallons of finished solution, this is equivalent to 0.23 pound active ingredient 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 8 Aquamul.

Nonthermal Aerosols

Control of adult mosquitoes over a 300-foot swath can be obtained with non-thermal aerosols of Malathion 8 Aquamul using the following rates at the indicated vehicle speeds:

Dilution Rates for Malathion 8 Aquamul

**Undiluted
Apply as follows:**

Lb AI/A	Application Rates FI Oz/Min at Vehicle Speeds				FI Oz of finished spray/A
	5 mph	10 mph	15 mph	20 mph	
0.03 to 0.06*	2.3 to 4.5	4.5 to 9.0	6.8 to 13.5	9.0 to 18.0	0.75 to 1.5

**For A 1:2 Dilution
Mix 1 part Malathion 8 Aquamul with 2 parts Suitable Fuel Oil or Water
Apply as follows:**

Lb AI/Acre	Application Rates FI Oz/Min at Vehicle Speeds				FI Oz of finished spray/A
	5 mph	10 mph	15 mph	20 mph	
0.03 to 0.06*	9.0 to 18.0	18.0 to 36.0	27.0 to 54.0	36.0 to 72.0	3.0 to 6.0

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

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**For A 1:4 Dilution
Mix 1 part Malathion 8 Aquamul with 4 parts Suitable Fuel Oil or Water
Apply as follows:**

Lb AI/Acre	Application Rates Fl Oz/Min at Vehicle Speeds				Fl Oz of finished spray/A
	5 mph	10 mph	15 mph	20 mph	
0.03 to 0.06*	11.25 to 22.5	22.5 to 45.0	33.75 to 67.5	45.0 to 90.0	3.75 to 7.5

*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 8 Aquamul 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 8 Aquamul 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.

MOSQUITO CONTROL IN POPULATED AND RURAL AREAS

Adult mosquito control over cities, towns, and other areas where automobiles, trailers, trucks, and pleasure boats are present: Apply 3.6 fluid ounces Malathion 8 Aquamul only when weather conditions are favorable. Wind and rising air currents may cause undesirable spray drift and reduce insect control.

Adult Mosquitoes on Rangeland, Pasture, and Other Uncultivated Non-Agricultural Areas (Wastelands, Roadsides): Apply Malathion 8 Aquamul at the rate of 2.8 to 3.6 fluid ounces in 2 to 8 quarts of water per acre for control of adult mosquitoes. Application may be made via ground or aerial equipment.

This product can be mixed with a synergized pyrethrin emulsifiable concentrate (such as 6% pyrethrin + 60% PBO) in accordance with the most restrictive of label limitations and precautions indicated on both this and the tank-mixed product. Label rates must not 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.

Depending upon your operation needs, 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.

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STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Malathion 8 Aquamul 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). Store in a cool, dry, well-ventilated area. Store separately from strong alkalies and strong oxidizers. Keep container tightly closed when not in use.

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.

For containers up to 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 ¼ 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.

For 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 ¼ 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. If not recycled, then puncture and dispose of in a sanitary landfill. Triple rinse or pressure rinse container (or equivalent) promptly after emptying.

For refillable containers: 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 percent 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.

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.

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IN THE UNLIKELY EVENT THAT BUYER OR USER BELIEVES THAT LOVELAND PRODUCTS, INC. HAS BREACHED A WARRANTY CONTAINED IN THIS LABEL AND TO THE EXTENT REQUIRED BY APPLICABLE LAW, BUYER OR USER MUST SEND WRITTEN NOTICE OF ITS CLAIM TO THE FOLLOWING ADDRESS: LOVELAND PRODUCTS, INC., ATTENTION: LAW DEPARTMENT, P.O. BOX 1286, GREELEY, CO 80632-1286.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE BUYER'S OR USER'S EXCLUSIVE REMEDY FOR ANY INJURY, LOSS, OR DAMAGE RESULTING FROM THE HANDLING OR USE OF THIS PRODUCT, INCLUDING BUT NOT LIMITED TO CLAIMS OF BREACH OF WARRANTY OR CONTRACT, NEGLIGENCE, STRICT LIABILITY, OR OTHER TORTS, SHALL BE LIMITED TO ONE OF THE FOLLOWING, AT THE ELECTION OF LOVELAND PRODUCTS, INC. OR THE SELLER: DIRECT DAMAGES NOT EXCEEDING THE PURCHASE PRICE OF THE PRODUCT OR REPLACEMENT OF THE PRODUCT. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, LOVELAND PRODUCTS, INC. AND THE SELLER SHALL NOT BE LIABLE TO THE BUYER OR USER OF THIS PRODUCT FOR ANY CONSEQUENTIAL, SPECIAL, OR INDIRECT DAMAGES, OR DAMAGES IN THE NATURE OF A PENALTY.

**FORMULATED FOR
LOVELAND PRODUCTS, INC.
P.O. BOX 1286, GREELEY, COLORADO 80632-1286**