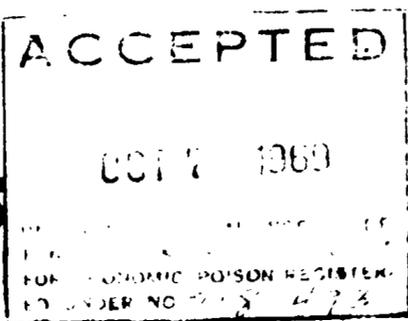


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# ARCADIAN

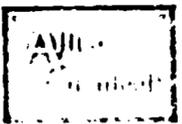
NET CONTENTS GALLONS  
**MALATHION EM-5**  
PREMIUM GRADE  
EMULSIFIABLE CONCENTRATE  
For The Protection Of Stored Grains, Grain Products, Crops  
and Livestock and For Fly Control  
Contains 5 pounds per gallon of  
PREMIUM GRADE MALATHION



CODE 9455

USDA Reg. No. 218-493

**ACTIVE INGREDIENTS:**  
Malathion\* 55.9%  
Xylene Range Aromatic Petroleum Derivative 34.5%  
**INERT INGREDIENTS:** 9.6%  
\*0.0 - dimethyl dithiophosphate of diethyl mercaptosuccinate



**ALLIED CHEMICAL CORPORATION**  
DEPARTMENT AG  
40 RECTOR STREET  
NEW YORK, N.Y., U.S.A.

**CAUTION** — Keep out of reach of children

For Additional CAUTION Information See Right Panel

**DO NOT USE OR STORE NEAR HEAT OR OPEN FLAME**

MADE IN U. S. A.

9455  
SO 15088

PRINTED IN U. S. A.

## DIRECTIONS

**MIXING AND APPLICATION:** Mix the recommended amounts of Malathion EM 5 Emulsifiable Concentrate in water until the spray mixture is uniform. Thoroughly wet plants with the spray mixture, especially the upper and undersides of the leaves. **On vegetable and field crops - for airplane application use a minimum of 3 to 10 (depending on crop growth) gallons of water per acre. For ground application use a minimum of 30 gallons of water per acre.**

### FRUIT

All Rates For Use In 100 Gallons Of Water Unless Otherwise Stated.

**CITRUS (GRAPEFRUIT, LEMON, ORANGE, LIME, TANGERINE, TANGELQ, AND KUMQUAT):** For California red, yellow, purple, black, soft, and citricola scales use 1 to 1 1/2 pints. For Florida red and purple scales use 2 pints. Do Not apply when trees are in bloom or within 7 days of harvest. For proper timing and complete information concerning the use of malathion on citrus, consult your State Experiment Station for local recommendations.

**MITES ON APPLES AND PEARS:** For Spider Mites such as European Red, Two Spotted, Willamette and Clover Mite, use 1 to 2 pints. Make 2 or more applications as needed. For certain mites such as Two Spotted and Willamette Mite, make at least 2 applications 10 to 12 days apart during the summer months. On Macintosh and Cortland apples, Do Not apply later than 30 days before harvest, since injury to these varieties may result. On other varieties Do Not use later than 3 days before harvest. On pears Do Not use later than 1 day before harvest.

**APPLES:** For Plum Curculio, Codling Moth and Red-Banded Leaf Roller, use 2 pints. For Green Apple and Rosy Apple Aphids, use 1 1/2 pints. For Woolly Apple Aphid, Forbes Scale and Bud Moth, use 1 pint. For Apples and Bud Moth, make 1 or more applications as needed. For the other insects make 2 or more applications as needed. On Macintosh and Cortland apples, Do Not apply later than 30 days before harvest, since injury to these varieties may result. On other varieties Do Not use later than 3 days before harvest.

**PEARS:** For Plum Curculio, Codling Moth and Red-Banded Leaf Roller, use 2 pints. Make 2 or more applications as necessary. For Pear Psylla, use 1 to 2 pints. Make 1 or more applications as needed. Do Not apply later than 1 day before harvest.

**PEACH:** For Plum Curculio and Oriental Fruit Moth, use 2 pints. Make 2 or more applications as needed. Do Not apply later than 7 days before harvest.

**PLUM AND PRUNE:** For Mealy Plum Aphid, use 1 pint. Make 1 or more applications as needed. Do Not apply later than 3 days before harvest.

**GRAPES:** For Grape Leafhopper, Mealybug, Mites, and European Fruit Lecanium, use 1 1/2 pints per acre. For Mealybugs and leafhopper, make 1 or more applications as needed. For Mites, make 2 or more applications as needed. For Lecanium apply when newly hatched nymphs migrate over the vines, usually shortly after bloom. Do Not use later than 3 days before harvest. Note: Do Not apply to Ribier, Italia, Cardinal, or Aimeria varieties after clusters appear, since injury may occur.

**SOUR CHERRY:** For Black Cherry Aphid and Fruit Tree Leaf Roller, use 1 1/2 pints. Apply as necessary. Do Not use later than 3 days before harvest. Note: If the product is used on certain varieties of sweet cherry, especially in the North West, foliage injury may occur.  
**STRAWBERRY:** For Aphids and Mites, use 1 1/2 pints per acre. Make 1 or more applications as needed. Do Not use later than 3 days before harvest.  
**CRANBERRY:** For Leafhoppers, Black-Headed Fireworm, Cranberry Fruitworm and Spittlebug (nymphs), use 1 1/2 pints per acre. Make 1 or more applications as needed. Do Not apply during bloom. Do Not use later than 3 days before harvest.

### VEGETABLES

All Rates For Use In Enough Water To Give Good Coverage.

MAKE APPLICATIONS WHEN INSECTS FIRST APPEAR AND REPEAT AS NEEDED, UNLESS OTHERWISE INDICATED.

**POTATO:** For aphids, leafhoppers, and mealybugs use 1 pint per acre. For false chinch bug use 1 1/2 pints per acre.  
**TOMATO:** For Spider Mites, use 1 1/2 pints per acre. For Aphids, use 1 pint per acre. Make 1 or more applications as needed. Do Not use later than 1 day before harvest.  
**PEAS:** For Pea Aphids and Pea Weevil, use 1 1/2 to 2 pints per acre. Apply when Aphids appear. For Pea Weevil apply at early bloom before eggs are laid. Make 1 or more applications as needed. Do Not use later than 3 days before harvest.  
**BEANS:** For Spider Mites, use 1 to 1 1/2 pints per acre. For Mexican Bean Beetle, use 1 1/2 pints per acre. Make 2 or more applications as needed. Do Not use later than 1 day before harvest.  
**COLE CROPS (CABBAGE, KALE, BROCCOLI, TURNIP AND MUSTARD):** For Aphids, Imported Cabbage Worm and Cabbage Looper, use 1 to 2 pints per acre. Apply full coverage sprays as needed. Do Not apply to Turnip or Broccoli later than 3 days before harvest or to other crops later than 7 days before harvest.  
**CUCURBITS (CUCUMBERS, SQUASH, PUMPKIN AND MELONS):** For Spider Mites and Aphids, use 1 1/2 pints per acre. Apply as necessary. Do Not use later than 3 days before harvest on Pumpkin. 1 day on other Cucurbits listed above. Note: Do Not apply Malathion sprays to these plants unless the plants are dry, since plant injury may occur.  
**ONIONS:** For Thrips, use 1 1/2 pints. Make 1 or more applications as needed. Do Not apply later than 3 days before harvest on green Onions.  
**CELERY, BEETS, AND SPINACH:** For Aphids and mites on celery use 1 1/2 pints per acre. For aphids on beets and spinach use 2 pints per acre. Do Not use within 7 days of harvest.  
**LETTUCE:** For aphids and leafhopper use 2 pints, for cabbage loopers use 3 pints per acre. Do Not use on head Lettuce later than 7 days before harvest or on leaf Lettuce not later than 14 days before harvest.

### FORAGE AND OTHER CROPS

All Rates For Use In Enough Water To Give Good Coverage.

**ALFALFA AND CLOVER:** For Aphids, Potato Leafhopper, Mites, and Grasshoppers; and For Alfalfa Weevil (Larvae and Spinning) on Alfalfa use 1 1/2 to 2 pints per acre. For ~~Aphids~~ use 2 pints when larvae are small. Repeat applications as needed. Do Not apply during full bloom. May be grazed or harvested on day of application.  
**LADINO CLOVER (SEED):** For Aphids and Spider Mites, use 1 1/2 pints per acre. Make 2 or more applications as needed.

**TOBACCO:** For Aphids, use 1 to 1 1/2 pints per acre. Make 1 or more applications as needed. Do Not apply later than 7 days before harvest.

### GRASSHOPPERS (ON GRASS CROPS)

All Rates For Use In Enough Water To Give Good Coverage.

**Pasture and Rangeland, Grass and Grass Hay**  
For Grasshoppers, aphids, and leafhoppers use 1 1/2 to 2 pints per acre. - OR Use 1 1/2 pints in one gallon of diesel fuel oil per acre. (See Note.) May be grazed or harvested on day of application.  
**Ungrazed Land (Wastelands, Roadsides, and Soil-Bank Lands)**  
For Grasshoppers use 1 1/2 to 3 pints per acre. - OR Use 1 1/2 to 3 pints in one gallon of diesel fuel oil per acre. (See Note.)  
Note: Apply by airplane or turbine-blower type sprayer. For Grasshoppers repeat applications as needed after hatching and before movement to crops. Make applications whenever grasshoppers are seen. Consult your State Experiment Station for local recommendations.

### ORNAMENTALS

All Rates For Use In 100 Gallons of Water.  
For Oyster Shell Scale and Lace Bugs, use 1 pint. For Spider Mites, Aphids, White Flies, Mealybugs, Thrips, Japanese Beetle, European Pine Shoot Moth, Four-Lined Plant Bug, Tarnished Plant Bug, Rose Leafhopper, Potato Leafhopper, Scoury Scale and Euonymus Scale, use 1 1/2 pints. For Barworm, Tent Caterpillar, Boxwood Leaf Miner, Birch Leaf Miner, Oak Kermes, Florida Red Scale, Elmer Scale, Juniper, Azalea and Magnolia Scales, use 2 pints. For Black Scale crawler, Soft Brown and Monterey Scales, use 2 1/2 pints. Apply thorough full coverage sprays as needed. Note: Do Not apply to petunias, certain ferns (including Boston, Maidenhair, Pteris), and some species of Crassula, since plant injury may occur.

### CATTLE (and non lactating Dairy Animals) AND HOGS

All Rates For Use In 100 Gallons of Water.  
On cattle for ticks use 1 to 2 gallons, for hornflies use 1 to 1 1/2 gallons and for lice use one gallon. On hogs use

lice and sarcoptes mange use one gallon (6 1/2 fluid ounces in 5 gallons of water).

Make a complete coverage spray. Keep hogs out of sun and wind for a few hours following spraying. Repeat spray in 10 days, if needed.  
Do Not use on or around dairy cattle.  
Do Not use on non-lactating dairy animals within 2 weeks of freshening.  
Do Not use on calves under one month of age.  
Do Not contaminate feed, food containers, and water troughs with spray.

### FLIES

For the control of flies in and around animal buildings and yards, and around the outside of dairies, use 2 1/2 gallons of 100 gallons of water per 1 pint in 5 gallons of water. To make bait sprays, add 2 gallons of corn meal or unsulfurized molasses or 20 pounds of sugar to 100 gallons of spray mixture, or add 1 pint molasses or corn syrup or 1 pound of sugar to 5 gallons of spray mixture. Apply to animal stalls or thoroughly wet surfaces on which flies are seen to congregate, such as walls, equipment, and stanchions in barn, milking parlors, garbage cans, fences, etc. Repeat applications as necessary. Note: Do Not contaminate milk, milking equipment, feed, or drinking water. Do Not use on animals. Remove animals and poultry from buildings before spraying. For best results remove manure, waste materials and other fly breeding sites.  
Do Not use in edible products areas of food processing plants.

**COMPATIBILITY:** Malathion may be used with most common insecticides and fungicides. Alkaline materials such as lime and Bordeaux mixture may reduce its effectiveness.  
**CAUTION:** Malathion may impart off flavor to certain crops.

### MAXIMUM DOSAGES

Do Not exceed the following rates of this material per acre per application:  
**On Citrus 5 gallons; Apples and Pears 3 gallons; Plums and Prunes 2 gallons; Peaches 1 1/2 gallons; Cherries 1 1/2 gallons;**  
Potatoes 2 1/2 quarts; Grapes 2 quarts; Cranberries, Figs, Corn Cobs, and Beets, 2 quarts; Strawberries, Tomatoes, Spinach, Lettuce and Onions 1 1/2 quarts; Beans and Cucurbits 1 1/2 quarts; Alfalfa, Clover and Celery 1 1/2 quarts, and Grass and Hay 1 quart.

(Directions Continued on Attached Page)

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**FOR THE PROTECTION OF STORED GRAINS SUCH AS  
WHEAT, OATS, RICE, CORN, RYE, BARLEY, GRAIN  
SORGHUM, AND FIELD OR GARDEN  
SEEDS.**

Against Confused flour beetle, Rice weevil, Granary weevil, Saw-toothed grain beetle, Flat grain beetle, Rusty grain beetle, Lesser grain borer, Indian meal moth and, Cereal leaf beetle, use 1 pint in 2 to 5 gallons of water per 1000 bushels. Apply as the grain is being loaded or turned into final storage.

Against Indian meal moth, use 1/2 pint in 1 to 2 gallons of water per 1000 square feet of grain surface area. Apply evenly as a spray over the surface of uninfested grain. Apply immediately after grain is stored and repeat if needed.

As a residual wall, floor and machinery spray in grain elevators, truck beds, box cars and ships' holds before loading grain, use 1 gallon in 25 gallons of water. Clean area to be treated and remove and burn all sweepings and debris before spraying. All surfaces, cracks and crevices should be sprayed thoroughly.

**FOR BOXCARS WHICH ARE TO BE LOADED  
WITH BAGGED FLOUR AND PACKAGED CEREALS**

As a residual spray for the control of Confused flour beetle, Rice weevil, Granary weevil, Saw-toothed grain beetle, Flat grain beetle, Red flour beetle, Rusty grain beetle, Lesser grain borer, Indian meal moth, and Mites in empty boxcars which are to be loaded with bagged flour and packaged cereals and transported, use 1 gallon in 25 gallons of water or 1 gallon in 19 gallons of deodorized kerosene (4 parts kerosene to one part aromatic petroleum solvent). Spray walls and floor to point of run-off after boxcar has been cleaned and all sweepings and debris have been removed. Allow boxcar to remain empty with doors open until spray has dried thoroughly, then line walls and floor with kraft paper before loading.

**PLANTS PROCESSING DRY MILK**

For the prevention of spread and the reduction of infestation of black carpet beetles and Trogoderma spp. use one pint in 2 1/2 gallons of water, applying as a coarse spray.

Clean premises thoroughly before applying and maintain good sanitation at all times.

Make residual spray applications to all sections of plants and warehouses where insects hide or crawl, and repeat as needed.

**Do Not** contaminate milk, dry milk, equipment, utensils, work surfaces, containers, and liners.

**NOTE:** Applications must be made only by an experienced or trained person.

**CAUTION!**

**Harmful if swallowed, inhaled or absorbed through the skin.**

**Do Not breathe spray mist or vapor.**

**Do Not get on skin.**

**Wash with soap and water after using and before eating or smoking.**

**Wash clothing before re-use.**

**Do Not contaminate feed or foodstuffs.**

**Keep out of reach of children and domestic animals.**

This product is highly toxic to fish. Keep out of any body of water. Do Not contaminate water by direct application, cleaning of equipment, or disposal of waste and containers. Apply this product only as specified on this label.

Follow directions carefully. Timing and method of application, weed and crop conditions, mixtures with other chemicals, not specifically recommended, and other influencing factors in the use of this product are beyond the control of the seller. Buyer assumes all risks of use, storage or handling of this material not in strict accordance with directions given herewith.