

ACCEPTED

SEP 14 1998

Under the Federal Insecticide,
Fungicide, and Rodenticide Act,
as amended, for the pesticide
registered under
EPA Reg. No. 1386-124

MALATHION-5

Emulsifiable Concentrate

**KEEP OUT OF REACH OF CHILDREN
CAUTION**

REFER TO INSIDE OF LABEL BOOKLET FOR ADDITIONAL
PRECAUTIONARY STATEMENTS AND DIRECTIONS FOR USE

ACTIVE INGREDIENT:

Malathion: O,O-dimethyl phosphoro-
dithioate of diethyl mercaptosuccinate

57.00%

INERT INGREDIENTS*

43.00%

Total

100.00%

Contains 5 pounds of Malathion per gallon. *Contains Xylene Range
Aromatic Solvent.

EPA Reg. No. 1386-124
EPA Est. No. 1986-OH-1

CO-OP**Universal Cooperatives, Inc.****Minneapolis, MN 55440**

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

Harmful if swallowed. Avoid breathing spray mist. Avoid contact with skin, eyes and clothing. Avoid contamination of feed and foodstuffs.

PERSONAL PROTECTIVE EQUIPMENT

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category F on an EPA chemical-resistance category selection chart.

Applicators and other handlers must wear:

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

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

USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing 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.

**STATEMENT OF PRACTICAL TREATMENT
ORGANOPHOSPHATE**

If Swallowed: Drink promptly a large quantity of milk, egg whites, or gelatin solution or, if these are not available, large quantities of water. Avoid alcohol. Do not induce vomiting as it may cause aspiration pneumonia. **If On Skin:** Wash affected areas with soap and water. **If Inhaled:** Remove victim to fresh air. Apply respiration if indicated. **If In eyes:** Flush eyes for at least 15 minutes with water.

For Medical Emergency information call 1-800-228-5635, extension 138.

ENVIRONMENTAL HAZARDS

AQUATIC USES: This pesticide is toxic to fish, aquatic invertebrates, and aquatic life stages of amphibians. Do not apply directly to water except as specified on this label. Shrimp and crab may be killed at application rates recommended on this label. Do not apply where these are important resources. Do not contaminate water when disposing of equipment washwaters. Drift or runoff may adversely affect aquatic invertebrates and nontarget plants.

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

BEE CAUTION STATEMENT (For Both Aquatic and Terrestrial Uses): This product is highly toxic to bees exposed to direct treatment on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting

the treatment area.

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.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is:

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

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, nurseries, or greenhouses.

Empty Grain Storage Facilities: Use only with adequate ventilation. After using this product indoors, ventilate thoroughly before occupying enclosed spaces. Do not allow contact with treated surface until sprays have dried.

RECOMMENDATIONS FOR USE

Apply when pests first appear and repeat as necessary to maintain control. Apply the following recommended rates. By ground, apply a minimum of 200 gallons per acre on stone fruits and nuts; a minimum of 300 gallons per acre on pome fruits; a minimum of 200 gallons per acre on bush and vine fruits and a minimum of 10 gallons per acre on vegetable and row crops. By air, a minimum of 2 gallons per acre on small fruits and tree crops. Use the designated amount in 100 gallons of water unless otherwise specified.

DILUTION RATE FOR SMALL APPLICATION EQUIPMENT: The dosage rate of 2 pints per acre is equivalent to approximately 1/2 teaspoonful per 1,000 square feet, which usually can be applied to that area in 3 gallons of water in a typical compressed air sprayer.

AMOUNT IN 100 GALLONS

AMOUNT IN 1 GALLON

1 Pint
1 Gallon

1 Teaspoon
2 1/2 Tablespoons

Mix this concentrate with water as directed below for application as a spray. Make thorough full-coverage applications of the spray and repeat applications as stated in all cases. Do not combine emulsifiable liquids with wettable powders in the same spray tank unless previous use of the materials being combined has proven them to be physically compatible.

DO NOT APPLY THIS PRODUCT THROUGH ANY TYPE OF IRRIGATION SYSTEM. DO NOT APPLY THIS PRODUCT TO FOOD CROPS PRODUCED IN GREENHOUSES.

FRUITS, NUTS AND BERRIES

BLUEBERRIES: Japanese Beetle - Use 1 1/2 pints per acre. Cherry Fruitworm, Cranberry Fruitworm - Use 1 1/2 pints per acre. Plum Curculio, Sharp-nosed Leafhopper - Use 2 1/2 to 3 pints per acre. **DO NOT APPLY TO BLUEBERRIES WITHIN 1 DAY OF HARVEST.**

BRAMBLES (BLACKBERRIES, BOYSENBERRIES, LOGANBERRIES, and RASPBERRIES): Mites, Thrips, Leafhoppers, Japanese Beetle Adults, Aphids, and Rose Scale - Use 3 pints per acre. Repeat at 7 to 10 day intervals, as necessary. **DO NOT APPLY TO BLACKBERRIES, BOYSENBERRIES, LOGANBERRIES, AND RASPBERRIES WITHIN 1 DAY OF HARVEST.**

CANTALOUPEs: Pickleworm, Leafhoppers - Use 2 to 3 pints per acre. Aphids, Spider Mites - Use 1 1/2 pints per acre. Cucumber Beetles, Leafminers - Do not apply unless plants are dry. Use 2 pints per acre. **DO NOT APPLY TO CANTALOUPEs WITHIN 1 DAY OF HARVEST.**

CHERRIES: Black Cherry Aphid, Fruittree Leafroller - Use 1 1/2 pints per acre. Cherry Fruit Fly, Eyespotted Bud Moth - Use 1 pint per acre. Injury may occur on certain varieties of Sweet Cherries particularly in the Northwest. **DO NOT APPLY TO CHERRIES WITHIN 3 DAYS OF HARVEST.**

GRAPES: Mealybugs - Use 1 1/2 pints per acre. Leafhoppers, Spider Mites - Use 3 pints per acre. European Fruit Lecanium - Make full coverage applications when newly hatched nymphs are migrating over vines, usually shortly after bloom. Use 3 pints per acre.

Emulsion may cause injury to foliage on some varieties (Ribier, Italia, Cardinals, Almeria). **DO NOT APPLY TO GRAPES WITHIN 3 DAYS OF HARVEST.**

HONEYDEWS: Cucumber Beetles, Leafminers - Do not apply unless plants are dry. Use 2 pints per acre. Pickleworm, Leafhoppers - Use 1 1/4 to 2 1/2 pints per acre. Aphids, Spider Mites - Use 1 1/2 pints per acre. **DO NOT APPLY TO HONEYDEWS WITHIN 1 DAY OF HARVEST.**

MELONS (CASABAS, CRENSHAWs, HONEYBALLS, MUSKMELONS, PERSIANS): Pickleworm, Leafhoppers - Use 1 1/4 to 2 1/2 pints per acre. Aphids, Spider Mites - Use 1 1/2 pints per acre. Cucumber Beetles, Leafminers - Do not apply unless plants are dry. Use 2 pints per acre. **DO NOT APPLY TO MELONS WITHIN 1 DAY OF HARVEST.**

PEACHES: Oriental Fruit Moth, Aphids - Use 2 pints per acre. For Oriental Fruit Moth control, apply at petal fall and every 10 to 14 days thereafter until control is achieved. **DO NOT APPLY TO PEACHES WITHIN 7 DAYS OF HARVEST.**

PECANS: Pecan Bud Moth, Pecan Leaf Casebearer, Pecan Nut Casebearer, Pecan Phylloxera - Use 1 1/2 pints per acre. Aphids, Mites - Use 1 to 2 pints per acre. May be harvested on day of application.

STRAWBERRIES: Aphids, Spider Mites, Spittlebug, Strawberry Leafroller, Leafhoppers and Whitefly - Apply 1 1/2 to 3 pints per acre. **DO NOT APPLY TO STRAWBERRIES WITHIN 3 DAYS OF HARVEST.**

TANGERINES: California Red Scale, Yellow Scale, Purple Scale, Black Scale, Soft Scale, Citrocicola Scale - Use 1 1/2 pints per acre. Red Scale, Purple Scale - Use 1 1/4 to 2 pints per acre. Thrips - Do not apply during full bloom. Use 1 1/4 pints per acre. **DO NOT APPLY TO TANGERINES WITHIN 7 DAYS OF HARVEST.**

WALNUTS: Aphids, Mites - Use 1/5 to 2/5 pint per acre. **Walnut Husk Fly** - Use 2/5 to 3/5 pint per 100 gallons of water per acre. May be harvested on day of application.

WATERMELONS: Aphids, Spidermites - Use 1 1/2 pints per acre. **Pickleworm, Leafhoppers** - Use 2 to 2 1/2 pints per acre. **Cucumber Beetles, Leafminers** - Do not apply unless plants are dry. Use 2 pints per acre. **DO NOT APPLY TO WATERMELONS WITHIN 1 DAY OF HARVEST.**

VEGETABLE CROPS

To control the insects on the crops listed below, begin applications when insects first appear and repeat at 7 to 10 day intervals, as necessary, using 1 1/2 to 2 pints per acre. **APHIDS** - On beans, beets, broccoli, Brussels sprouts, cabbage, carrots, cauliflower, celery, cucumbers, eggplant, kale, lettuce (head, leaf), mustard greens, okra, peas, peppers, potatoes (white, sweet), pumpkins, radishes, spinach, squash, tomato and turnips. **LEAFHOPPERS** - On beans, cucumbers, celery, eggplant, pumpkins, squash, and tomatoes. **MEXICAN BEAN BEETLE** - On beans. **IMPORTED CABBAGE WORM AND CABBAGE LOOPER** - On broccoli, Brussels sprouts, cabbage, cauliflower, kale, lettuce (head, leaf), and mustard greens. **THRIPS** - On onions. **PEPPER MAGGOT** - On peppers. **CUCUMBER BEETLES** - On cucumbers, pumpkins, and squash. **MEALYBUG** - On potatoes (white, sweet). **PEA WEEVIL** - On peas. **DROSOPHILA** - On tomatoes. **MITES, PICKLEWORM, SQUASH VINE BORER** - On pumpkins.

DO NOT APPLY TO BEANS, CUCUMBERS, OKRA, SQUASH, OR TOMATOES WITHIN 1 DAY OF HARVEST. DO NOT ALLOW LIVESTOCK TO GRAZE OR FEED ON TREATED BEAN FOLIAGE (VINES/FORAGE AND STRAW/HAY). APPLY TO CUCUMBERS ONLY WHEN THE FOLIAGE IS DRY. DO NOT APPLY TO BROCCOLI, PEPPERS, GREEN ONIONS, PEAS, PUMPKINS, OR TURNIPS (INCLUDING TOPS) WITHIN 3 DAYS OF HARVEST. DO NOT ALLOW LIVESTOCK TO GRAZE OR FEED ON TREATED PEA FOLIAGE (VINES/FORAGE AND STRAW/HAY). DO NOT APPLY TO BEETS, BRUSSELS SPROUTS, CABBAGE, CARROTS, CAULIFLOWER, CELERY, KALE, MUSTARD GREENS, RADISHES, SPINACH OR HEAD LETTUCE WITHIN 7 DAYS OF HARVEST. DO NOT APPLY TO LEAF LETTUCE WITHIN 14 DAYS OF HARVEST.

FIELD CROPS

ALFALFA: Aphids, Spotted Alfalfa Aphid, Leafhoppers, Spider Mites, Spittlebug, Alfalfa Weevil Larvae - Use 1 1/2 to 2 pints per acre, in the amount of water required for uniformly thorough coverage. Begin applications when insects first appear and repeat at 7 to 10 day intervals, as necessary. Apply to alfalfa in bloom only in the evening or early morning when bees are not working in the field or are not hanging on the outside of hives. May be grazed or harvested on day of application.

CLOVER: Aphids, Grasshoppers, Leafhoppers, Spider Mites, Alfalfa Weevil Larvae, Spittlebug - use 1 1/2 to 2 pints per acre. Apply to plants in bloom only in the evening or early morning when bees are not working in the field or are not hanging on the outside of hives. **DO NOT APPLY TO CLOVER WITHIN 7 DAYS OF HARVEST.**

COTTON (COTTONSEED): Boll Weevil - For control of worms and weevils, use in combination with other recommended insecticides. Use 1 to 2 quarts per acre. **Desert Spider Mite, Cotton Aphid, Leafhoppers, White Flies, Cotton Leafworm, Brown Cotton Leafworm, Cotton Leaf Perforator, Thrips, Lygus Bugs** - Use 1 to 2 quarts per acre. **Fleahoppers** - Use 1 to 1 1/2 pints per acre. **Fall Armyworms, Grasshoppers, Garden Webworms** - Use 1 1/2 to 3 pints per acre. May be harvested on day of application.

GRASS CROPS: Grasshoppers, Leafhoppers - Use 1 1/2 to 2 pints per acre. **Armyworms** - Use 2 pints per acre. Apply when larvae are small. **DO NOT APPLY WITHIN 7 DAYS OF HARVEST.**

GRAIN CROPS (BARLEY, CORN, OATS, WHEAT): Cereal Leaf Beetle - Use 1 to 1 1/2 pints per acre. **Green Bugs, Grasshoppers** - Use 1 to 1 1/2 pints per acre. Make full coverage to hatching areas when nymphs are young. **Armyworms** - Use 2 pints per acre. **DO NOT APPLY TO BARLEY, OATS, AND WHEAT WITHIN 7 DAYS OF HARVEST, DO NOT APPLY TO CORN WITHIN 5 DAYS OF HARVEST.**

GRAIN SORGHUM: Greenbugs - Use 1 1/2 pints per acre. Make full coverage application and repeat as necessary. **DO NOT APPLY TO GRAIN SORGHUM WITHIN 7 DAYS OF HARVEST.**

RICE: 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. **Rice Leafminer** - Use 2 1/2 pints per acre. Make first application shortly after the first rice blades appear on the surface of the water and repeat if necessary. **Rice Stink Bugs** - Use 1 to 1 1/2 pints per acre.

Apply by airplane in 2 gallons of water per acre during the early milk and dough stage of growing rice. Repeat applications as necessary. **DO NOT APPLY TO RICE WITHIN 7 DAYS OF HARVEST.**

SWEET CORN: Japanese Beetle - Use 2 pints per acre. Injury may occur in the whorl or to the silks. Sap Beetle - Use 1 1/2 pints per acre. Begin treatment when 10% of ears show silk. Repeat at 3 to 5 day intervals until 4 to 5 applications are made. **DO NOT APPLY TO SWEET CORN WITHIN 5 DAYS OF HARVEST.**

ORNAMENTAL PLANTS

To control the following on ornamentals, mix the indicated dosage with 100 gallons of water. Apply spray when the insects are first observed and repeat as necessary.

OYSTER SHELL SCALE - 1 pint. **APHIDS, SPIDER MITES, JAPANESE BEETLE ADULTS, LEAFHOPPERS, THRIPS, AND SCURFY SCALE** - 1 1/2 pints. **BIRCH LEAFMINER, BOXWOOD LEAFMINER, AZALEA SCALE, PINE LEAF SCALE, AND MAGNOLIA SCALE** - 2 pints. Do not use on Boston, Maidenhair, or Pteris ferns. Do not use on petunias. May cause injury to Crassula.

MOSQUITO CONTROL

ADULT MOSQUITO CONTROL - To control adult mosquitoes outdoors, in backyards, in areas of ornamental shrubbery, and on lawns, use a 2% to 5% area or fog spray. For a 2% spray, dilute 1 part Malathion-5 Emulsifiable Concentrate with 28 parts of water, fuel oil, or diesel oil. For a 5% spray, dilute 1 to 11. Apply water based spray uniformly, into and around the ornamental vegetation. Apply oil based fog to uniformly penetrate into and around the ornamental vegetation. Repeat applications as needed. Do not apply to areas where food or feed crops are growing. Do not apply oil mixture for fogging directly to ornamental plants.

MOSQUITO LARVAE CONTROL - For control of mosquito larvae in standing water (intermittently flooded areas, stagnant water, temporary rain pools), apply 13 fluid ounces of Malathion-5 Emulsifiable Concentrate per acre, mixed in sufficient water or oil to obtain even coverage when applied by air or ground equipment. 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. NOTE: Contamination of shallow, fish bearing waters may kill fish.

GRAIN PROTECTANT

CLEAN-UP SPRAY (Before Storing Barley, Corn, Oats, Rye and Wheat) - Since many of the insects which commonly infest grain in storage continue to live and breed in residues and debris, the bins, storage areas, elevators, and handling equipment such as trucks and conveyors should be thoroughly cleaned before storing the new crop. Remove and burn all sweepings and debris. The ground outside should be kept free of debris since this material also breeds insects.

Before the new grain goes into storage, a spray made by mixing 1 gallon of this concentrate in 19 gallons of water (1 pint in 2 1/2 gallons) should be applied to walls, floors and ceilings of bins, warehouses, and other storage areas including farm storage. Spray also handling equipment and truck beds. Spray all surfaces to the point of runoff, making sure the spray is driven into joints, corners, cracks, and crevices where insects may be concealed.

STORAGE AND CONTAINER REUSE AND DISPOSAL

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

PESTICIDE DISPOSAL: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or residue is a violation of Federal law and may contaminate groundwater. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

TANK CLEANING: Triple rinse (or equivalent) and wash with appropriate cleaners before reusing.

MINI-BULK REUSE: This container may be offered for refilling with Malathion-5 Emulsifiable Concentrate, if the tank seal has not been broken or removed.

METAL DRUM DISPOSAL: Triple rinse (or equivalent). Then offer for recycling or reconditioning or dispose of by procedures

