

PM/16

10163-21

1 of 10 W

ACCEPTED
 MAY 22 1989
 Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 10163-21

DIRECTIONS FOR USE
 It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Do not enter treated areas without protective clothing until sprays have dried. Because certain areas may require more restrictive re-entry intervals for various crops treated with this product, consult your State Department of Agriculture for further information.
WARNING—WORKER SAFETY: When applied to citrus, grapes and peaches, no worker may enter treated area to or near it in any activity requiring substantial contact with treated foliage for 1 day (24 hours) following application.
 Do not apply this product in such a manner as to directly or through drift expose workers or other persons. The area being treated must be vacated by unprotected persons.
 Written or oral warnings must be given to workers who are expected to be in a treated area or in an area about to be treated with this product. When oral warnings are given, warnings shall be given in a language customarily understood by workers. Oral warnings must be given if there is reason to believe that written warnings cannot be understood by workers. Written and oral warnings must include the following information:
CAUTION—Area treated with Malathion on (date of application): Do not enter without appropriate protective clothing until sprays have dried. In case of accidental exposure, see precautionary statements.

STORAGE 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 rinse is a violation of Federal Law. 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 of the nearest EPA Regional Office for guidance.
CONTAINER DISPOSAL: Triple rinse (or equivalent). Then allow for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities.

In order that pesticidal residues on food and storage crops will not exceed tolerances established by the Federal Food and Drug Administration, use only at recommended rates and intervals, and do not apply close to harvest than specified.
 Consult State Agricultural Experiment Stations or the State Agricultural Extension Services for additional information as the timing of applications needed will vary with local conditions.

DIRECTIONS FOR USE
 Pour specified amount of this product into nearby filled spray tank. Add balance of water to fill tank. Keep engine running during filling and spraying operations. If mixture does not mix readily, but tends to separate on an oily layer, do not use as injury to plants may result. Do not combine with wettable powders unless previous use of the mixture has proven physically compatible and safe to plants. Always thoroughly emulsify this product with at least half of total water before adding wettable powder.

APPLICATION STATEMENT
 Do not apply this product through any type of irrigation system.

**PROKIL
 MALATHION 8E**
 AGRICULTURAL INSECTICIDE EMULSIFIABLE LIQUID

ACTIVE INGREDIENTS	BY WT.
Malathion (O,O-dimethyl dithiophosphate phosphorodithioate of diethyl mercaptosuccinate)	79.5%
Malathion Range-Aromatic Solvent	20.5%
INERT INGREDIENTS	
TOTAL	100.0%

Contains 8 lbs. Malathion per gallon

**KEEP OUT OF REACH OF CHILDREN
 CAUTION**

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

HARMFUL IF SWALLOWED. AVOID BREATHING OF SPRAY MIST. AVOID CONTACT WITH SKIN. WASH THOROUGHLY AFTER USING. AVOID CONTAMINATION OF FEED AND FOOD.

NOTE TO PHYSICIANS: Malathion, upon use, may cause cholinesterase inhibition. ATROPINE IS ANTIDOTAL.

ENVIRONMENTAL HAZARDS

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. Do not contaminate water when disposing of equipment washwaters.

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.

Use only with adequate ventilation. After using this product indoors, ventilate thoroughly before occupying enclosed spaces. Do not allow contact with treated surfaces until sprays have dried.

NET CONTENTS U.S. GALLONS

Gowan Company

EPA Reg. No. 10163-21 AA
 EPA Est. No. 10163-AZ-1

6501
 P.O. Box 6097
 Yuma, AZ 85364
 (624) 650-6507

Rates are given in terms of pints of Malathion 8E per acre. Unless otherwise specified, apply at the first sign of infestation and repeat at 7-10 day intervals as needed to maintain control, but observe use limitations for specific crops. Minimum days between application and harvest are given in parenthesis after each crop name. Application may be made by aircraft or by ground equipment according to the Directions for Dilution below. The amount of water needed to treat an acre varies, therefore the following Directions are given to cover a broad range of applications.

Directions for Dilution

Dilute Applications

Field and Row Crops: Use specified rate in 20 to 60 gallons of water per acre.
Trees and Vines: Use specified rate in 100 to 800 gallons of water per acre.

Concentrate Application

Field and Row Crops: Use specified rate in not less than 5 gallons of water per acre.
Trees and Vines: Use specified rate in 20 to 100 gallons of water per acre.

Air Application

Use specified rate in 5 to 20 gallons of water per acre. For trees and Vines, use at least 10 gallons of water per acre.

Trees and Vines

ALMONDS (None): Aphid, Peach twig borer, Red spider mite: Use 2½ to 8 pints.

APPLES (3): Aphid, Eye-spotted bud moth, Forbes scale, Mealybugs, Mites, Pear psylla, Tent caterpillar: Use 2 to 15 pints. Codling moth, Fruit tree leafroller, Plum curculio, Red-banded leafroller, San Jose scale: Use 4 to 15 pints in dormant and delayed dormant sprays. Spray oil may be used for these applications. Follow spray oil manufacturers directions. Do not apply in bloom period. May cause injury to McIntosh and related varieties.

APRICOTS (7): Aphid, Codling moth, European Lecanium scale, Orange tortrix, Soft brown scale, Terrapin scale: Use 4 to 10 pints.

AVOCADOES (7): Green house thrips, Latania scale, Omnivorous looper, Soft brown scale, Orange tortrix: Use 4 to 9 pints.

BLACKBERRIES (1), BOYSENBERRIES (1), DEWBERRIES (1), LOGANBERRIES (1), RASPBERRIES (1): Japanese beetle, Leafhoppers, Mites, Thrips: Use 1 to 4 pints. Aphid, Rose scale: Use 2 to 4 pints.

BLUEBERRIES (1): Aphids, Blueberry maggot, Blueberry tip borer, Cherry fruitworm, Cranberry fruitworm, Japanese beetle, Plum curculio, Leafrollers, Sharp-nosed leafhopper, White Tussock moth: Use 1½ to 2½ pints.

BOYSENBERRIES: See blackberries.

CHERRIES (3): Black cherry aphid, Bud moth, Cherry fruit fly, Fruit tree leafroller, Lesser peach twig borer (apply to trunk and scaffold limbs at 21 day intervals beginning with emergence), Forbes and San Jose scale: Use 2½ to 8 pints. May cause injury on certain varieties of sweet cherries in the Northeast.

CITRUS (GRAPEFRUIT, LEMONS, LIMES, ORANGES, TANGELOS, TANGERINES, KUMQUATS)(7): California red scale, yellow scale, purple scale, black scale (single and off-brooded), soft scale, thrips, citricola scale, orangeworm, aphids: Use 7 to 25 pints. Mediterranean fruit fly: Use 1 to 8 pints. Do not apply when trees are in bloom.

CRANBERRIES (3): Blackheaded fireworms, Cranberry fruitworm, Leafhoppers, Spittlebug nymphs: Use 1 to 2½ pints per acre.

CURRENTS (1), GOOSEBERRIES (3): Mites, Japanese beetle: Use 1 to 2 pints. Currant aphid, Imported currantworm: Use 2 pints.

DATES (7): Nitidulid beetle: Use 2 pints.

DEWBERRIES: See blackberries.

FIGS (3): Dried fruit beetles, Vinegar flies: Use 2½ pints plus 1 to 2 gallons sulfured molasses per acre.

FILBERTS (0): Apple mealybug, Eye-spotted bud moth, Filbert aphid, Scale (crawler stage), tingids: Use 2½ to 3 pints.

GOOSEBERRIES: See currants.

GRAPES (3): Drosophila, European fruit lecanium, Grape leafhopper, Japanese beetle, Leafhopper, Mealybug, Spider mites, Terrapin scale: Use 2 to 2½ pints. Injury may occur to Ribier, Cardinal and Almeria varieties when applications are made after clusters appear.

GUAVA: See mango.

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LOGANBERRIES: See blackberries.

MACADAMIA NUTS (0): Green stink bug: Use 3 to 15 pints.

MANGO (2), PASSION FRUIT (2), GUAVA (2): Fruit flies: Use ¾ pint plus 1 pound partially hydrolized yeast protein or enzymatic yeast hydrolyzate.

NECTARINES: See peaches.

PASSION FRUIT: See mango.

PEACHES (7), NECTARINES (7): Black cherry aphid, Black peach aphid, Green peach aphid, Japanese beetle, Rusty plum aphid: Use 2½ to 9 pints. Cottony peach scale, Lesser peach tree borer, Plum curculio, Oriental fruit moth, San Jose scale, Terrapin scale: Use 5 to 9 pints. May be mixed with spray oil. Follow spray oil manufacturer's directions.

PEARS (1): Mealybugs, Pear psylla, Spider mites, Woolly aphid: Use 2 to 15 pints. Codling moth, Fruittree leafroller, Redbanded leafroller, Plum curculio: Use 4 to 15 pints in dormant and delayed dormant sprays. Spray oil may be used. Follow spray oil manufacturer's directions.

PECANS (None): Aphid, mites, pecan bud moth, pecan leaf casebearer, pecan nut casebearer, pecan phylloxera: Use 2½ to 12½ pints.

PINEAPPLES (7): Mealybugs: Use 5 pints.

PLUMS (3), PRUNES (3): Eyespotted bud moth, Leaf curl plum aphid, Lesser peach tree borer, Mealy plum aphid, European red mite, Two-spotted mite: Use 5 to 10 pints. Aphid, San Jose scale: Use 5 to 10 pints in dormant and delayed dormant application. Spray oil may be used. Follow spray oil manufacturer's directions.

PRUNES: See plums.

RASPBERRIES: See blackberries.

WALNUTS (None): Aphid, Mites, Walnut husk fly: Use 4 to 12½ pints.

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Field and Row Crops

ALFALFA, CLOVER (7 [2 pint rate]; None [1½ pints and less]): Alfalfa weevil larvae, aphids, armyworms, clover leaf weevil, grasshoppers, lygus bugs, pea aphid, potato leafhoppers, spider mites, spittlebug, vetch bruchid: Use 1-1½ pints. Use higher rate for armyworm control. For hard to control insects, use up to 2 pints per acre. 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.

ALFALFA, CLOVER, VETCH GROWN FOR SEED (None): Aphids, leafhoppers, Lygus bugs: Use 1 to 1½ pints. Apply to plants 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.

AMARANTH. See dandelion.

ARRAGULA: See dandelion.

ASPARAGUS (1): Asparagus beetle, thrips: Use 1½ pint.

BARLEY: See small grains.

BEANS (1): Aphids, cucumber beetle, Japanese beetle, potato leafhopper, Mexican bean beetle, nitidulid beetle, spider mites, pea leaf weevil: Use 1½ pint.

BEANS (DRY) (CALIFORNIA ONLY)(1): Lygus bugs: Use 1 to 1½ pints.

BEETS, GARDEN (SEED CROP) (7): Lygus bugs: Use 1½ pint in 5-10 gallons of water per acre. Apply in seedball stage to hard seed stage. Repeat as needed to maintain control.

BEETS, TABLE (7): Aphids, beet armyworm, blister beetles, flea beetles: Use 2½ pints.

BROCCOLI: See cole crops.

BRUSSELS SPROUTS: See cole crops.

CABBAGE: See cole crops.

CARROTS (7), PARSNIPS (7), RADISHES (7), SALSIFY (7), HORSERADISH (7): Aphids, diamondback moth, flea beetle, leafhoppers: Use 2 pints.

CAULIFLOWER: See cole crops.

CELERY (7): Aphid, spider mite: Use 1 to 1½ pints.

CELTUCE: See dandelion.

CHERVIL: See dandelion.

CHINESE BROCCOLI: See cole crops.

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CHINESE CABBAGE: See cole crops.

CHINESE MUSTARD: See cole crops.

CHRYSANTHEMUM (EDIBLE-LEAVED AND GARLAND): See dandelion.

CLOVER: See alfalfa.

COLE CROPS (Brassica crop group: BROCCOLI, CHINESE BROCCOLI, RAPINI, BRUSSELS SPROUTS, CHINESE CABBAGE [BOK CHOY AND NAPA], CABBAGE, CHINESE MUSTARD, CAULIFLOWER, COLLARDS, KALE, KOHLRAB, MUSTARD GREENS, RAPE GREENS) (7 Days, except 3 days on broccoli): Aphids, cabbage loopers, flea beetles, imported cabbageworm: Use 1½ to 2½ pints. ~~Use up to 4 pints on pumpkins.~~
~~Use up to 4 pints on pumpkins.~~
 COLLARDS: See cole crops.

CORN (5): Aphid, corn rootworm adults, sap beetles, thrips, young grasshoppers: Use 1 pint. CAUTION: Injury may occur in whorl and silk stages with emulsifiable liquids.

CORN SALAD: See dandelion.

COTTON (None): Aphids, brown cotton leafworm, cotton leaf perforator, leafhoppers, spider mites, whitefly: Use 1 to 4 pints. Cotton fleahoppers, fall armyworms, boll weevils, grasshoppers, garden webworms and lygus: Use 1½ to 4 pints.

CUCUMBERS (1), MELONS (1), PUMPKINS (1), SQUASH (1): Aphids, cucumber beetle, cutworms, darkling ground beetles, leafhoppers, pickleworm, spider mites, squash vine borer, thrips: Use 1 ¾ pints. Use up to 4 pints on pumpkins. For vine borer, apply weekly to stems and vines at base of plant. Do not apply unless plants are dry.

DAIDELIONS, PARSLEY, SWISS CHARD, WATERCRESS, AMARANTH (LEAFY AMARANTH, CHINESE SPINACH, TAMPALA), ARRUGULA (ROQUETTE), CELTUCE, CHERVIL, CORN SALAD, EDIBLE-LEAVED CHRYSANTHEMUM, GARLAND CHRYSANTHEMUM, DOCK (SORREL), FLORENCE FENNEL, ORACH, GARDEN PURSLANE, WINTER PURSLANE, FINE SPINACH, NEW ZEALAND SPINACH, RHUBARB (7 days, except 21 days for parsley): Aphid: Use 1 to 2 pints.

DOCK: See dandelion.

EGGPLANT (3): Aphid, spider mites: Use ¾ to 3½ pints. Lace bug: Use 2 to 3½ pints.

ENDIVE: See lettuce.

FENNEL: See dandelion.

FINE SPINACH: See dandelion.

GARLIC (3), LEEKS (3), SHALLOTS (3): Aphids, thrips: Use 1 to 2 pints.

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GRASS AND RANGELAND (SUCH AS BARN GRASS, BERMUDA, CANARY GRASS, FESCUE, ORCHARD GRASS, RED TOP, TIMOTHY AND YELLOW FOXTAIL) (1): Aphids, grasshoppers, leafhoppers: Use 1 to 1½ pints. Apply in sufficient water for good coverage or use 1½ pints plus 1 gallon of diesel fuel oil per ac. by means of an airplane or turbine-blower type sprayer.

HOPS (7): Aphid: ½ to 1½ pint.

HORSERADISH: See carrots.

KALE: See cole crops.

KOHLRABI: See cole crops.

LEEKs: See garlic.

LENTILS (3): Aphids: 1 pint.

LETTUCE (14 days for leaf lettuce; 7 days for head lettuce), ENDIVE (7): Aphids, alfalfa looper, leafhoppers, mites: Use 2 pints.

MELONS: See cucumber.

MUSHROOMS (1): Phorid and Sciarid flies: Use 1½ pints per 150 gallons of water per acre or 1 tablespoon per 3 gallons of water per 1000 square foot bed. Make thorough application as soon as possible after picking. Repeat application as necessary, usually twice per week.

MUSTARD GREENS: See cole crops.

NEW ZEALAND SPINACH: See dandelion.

OATS: See small grains.

OKRA (1): Aphid, Japanese beetle: Use 1½ pint.

ONIONS (3): Thrips: Use 1 to 2 pints. Onion maggot: Use 2 pints.

ORACH: See dandelion.

PARSLEY: See dandelion.

PARSNIPS: See carrots.

PEANUTS (None): Leafhoppers: Use 1 pint.

PEAS (3 days for harvest; 7 days for forage use) Aphid, pea weevil: Use 1 to 2½ pints. If forage is to be fed to livestock, use 1 to 1½ pints.

PEPPERMINT (7), SPEARMINT (7): Adult flea beetle, leafhoppers: Use 1 pint.

PEPPERS (3): Aphids, pepper maggot: Use 1½ pints.

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POTATOES (None): False chinch bugs, leafhoppers, mealybugs: Use 1 pint.
Aphids, blister beetles: Use 3 pints.

PUMPKINS: See cucumber.

PURSLANE: See dandelion.

RADISHES: See carrots.

RAPE GREENS: See cole crops.

RAPINI: See cole crops.

RHUBARB: See dandelion.

RICE (7): Rice leaf miner, rice stink bug: Use 1½ pints. Do not apply propanil within 15 days of malathion treatment.

RUTABAGAS (3): Aphids: Use 1 to 2 pints per acre.

RYE: See small grains.

SAFFLOWER (3): Aphid, grasshopper, lygus: Use 1 to 1½ pints.

SALSIFY: See carrots.

SHALLOTS: See garlic.

SMALL GRAINS (BARLEY, OATS, RYE, WHEAT) (7): Armyworms, English grain aphids, grasshoppers, greenbugs: Use 1 to 1½ pint.

SPINACH (7): Aphids: 1½ pints.

SORREL: See dandelion.

SOYBEANS (None): Grasshoppers, Japanese beetle, Mexican bean beetle: Use 2 pints.

SPEARMINT: See peppermint.

SQUASH: See cucumbers.

STRAWBERRIES (3): Aphids, field crickets, lygus bugs, potato leafhoppers, spider mites, spittlebugs, strawberry leafroller, strawberry root weevil, thrips, whitefly: Use 1½ to 2 pints. For strawberry root weevil control, make applications to the soil surface before planting and work into the top 6-8 inches.

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SUGAR BEETS (3 days; 7 days if tops are to be used for feed or food): Aphids: 1 to 2 pints. Grasshoppers: 2 pints.

SWEET POTATOES (3): Leafhoppers: Use 1 to 1 3/4 pints. Morning Glory Leafminer: Use 1 3/4 pint.

SWISS CHARD: See dandelion.

TOBACCO (7): Aphids: Use 1 to 1 1/2 pints.

TOMATOES (1): Aphids, spider mites: Use 1 1/2 pints. Drosophila flies: Use 2 pints in full coverage application to fruit and foliage.

VETCH: See alfalfa.

WATERCRESS: See dandelion.

WHEAT: See small grains.

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ORNAMENTALS

Directions given are for use to 100 gallons of dilute spray. Aphids, European pine shoot moth, four-lined leaf bug, Japanese beetle adult, mealybugs, millipedes, potato leafhopper, rose leafhopper, scurfy scale, spider mites, springtails, scowbugs, tarnished plant bug, thrips, whitefly, euonymus scale, lace scale, oyster shell scale: 1 pt. Anole scale, longworms, birch leafminer, boxwood leafminer, Fletcher scale, Florida-red scale, juniper scale, long neck scale, oak borer, pine leaf scale, tent caterpillar, 1 1/2 pt Black scale crawlers, Monterey pine scale 1 1/2 pt Pine needle scale, wax scale 2 1/2 pt For oyster shell, Fletcher, juniper, oak borer and pine needle scales, apply when scale crawlers have settled on foliage

CAUTION: Avoid use on certain ferns including Boston, Maidenhair and Pteris, as well as some species of *Crossula* and *Conium* Juniper

MOSQUITO CONTROL

MOSQUITOES, FLIES AND SMALL FLYING INSECTS: For use by trained personnel as a 2% to 5% Malathion fog, aerosol or space spray. To make a 2% solution dilute MALATHION 8E in 1 to 45 parts of water, fuel oil or diesel oil. When using benzene-type solvent as carrier, dilute 1 part of MALATHION 8E in 45 parts of mixture consisting of 4 parts benzene-type solvent and 1 part aromatic hydrocarbon-type solvent. Apply 0.58-2.06 gal lone finished spray per acre. For a 5% solution, dilute 1 part MALATHION 8E in 10 parts of mixture using similar solvents. Apply 0.24-1.18 gallons finished spray per acre

MOSQUITO LARVAE IN STANDING WATER: Apply MALATHION 8E at the rate of 8 fluid ounces (approximately 1/2 lb actual Malathion) per acre. (Use this dosage only in intermittently flooded areas, stagnant water, temporary rain pools, and log ponds.) Mix in sufficient water or oil to obtain even coverage when applied by air or ground equipment. Repeat applications as necessary. Avoid applying oil-based formulations to valuable ornamental plants as injury may occur. Keep out of any fish bearing waters

For use in and around buildings which house domestic animals, around houses, around yards and meat processing plants. Do not use in commercial food preparation areas or in edible products areas of processing plants. Apply spray at rate of 1 gal per 1,000 sq ft on painted surfaces and 2 gal per 1,000 sq ft on unpainted surfaces where flies alight or congregate. In most cases, adding molasses or sugar to the spray prolongs the insecticidal activity of Malathion and serves as a fly attractant

CAUTION: Avoid contamination of milk, milk equipment and water. Avoid contamination of feed and food products, also drinking fountains and feed troughs. Remove calves under one month of age and lactating dairy animals from buildings before treating.

DROSOPHILA FLIES AND DRIED FRUIT BEETLES: On or around cull fruit and vegetable dumps, mix 7 1/2 pt. in 100 gal of water and apply as a drench, using 8-10 gal or spray per 100 sq ft. (for best results dumps should not be over 18" deep) Do not feed treated fruit and vegetables

FLY CONTROL

STRAIGHT MALATHION SPRAYS		MALATHION BAIT SPRAYS			
Amount of Spray	Amount Malathion 8-E	Amount of Bait Spray	Amount Malathion 8-E	Sugar (or)	Unacidified Molasses or Corn Syrup
2 1/2 gal.	3/4 cup	2 1/2 gal.	3/4 cup	1 cup	1 cup
12 gal.	1 1/4 pt.	12 gal.	1 1/4 pt.	2 1/2 lb.	1 pt.
100 gal.	1 1/4 gal.	100 gal.	1 1/4 gal.	20 lb.	2 gal.

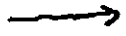
NOTICE ON CONDITIONS OF SALE

Our recommendations for use of this product are based upon tests believed to be reliable. The use of this product being beyond the control of the manufacturer, no guarantee, expressed or implied, is made as to the effects of such or the results to be obtained if not used in accordance with directions or established sale practice. The buyer must assume all responsibilities, including injury or damage, resulting from its misuse or such, or in combination with other materials

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insect heading
In and Around buildings



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