



U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Registration Division (H7505C)
401 "M" St., S.W.
Washington, D.C. 20460

EPA Reg. Number:
48273-26

Date of Issuance:
MAR 19 1998

NOTICE OF PESTICIDE:
 x Registration
 Reregistration

Term of Issuance:
Conditional

Name of Pesticide Product:
Marman Malathion 56
EC

(under FIFRA, as amended)

Name and Address of Registrant (include ZIP Code):

MARMAN USA, Inc.
c/o RegWest Company
P.O. Box 2220
Greeley, CO 80632-2220

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product, always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA sec. 3(c) (7) (A) provided that you:

1. Submit and/or cite all data required for registration of your product under FIFRA sec. 3(c) (5) when the Agency requires all registrants of similar products to submit such data; and submit acceptable responses required for reregistration of your product under FIFRA section 4.

2. Make the following label changes before you release the product for shipment:

- a. Add the designation, "EPA Reg. No. 48273-26".
- b. Make the corrections described below in the directions for use on blueberries so that they agree with that appearing on the previously submitted draft label.
 - Correct the 3 pts./acre rate for blueberry maggots to 1 pt./acre.
 - Correct the number of gallons from 500 to 200 in the statement at the end of the blueberry use directions so that it reads as follows: "Note: The rates are based on a standard of 200 gallons per acre dilute spray."

Signature of Approving Official:

Mmm

Date:

MAR 19 1998

2 9 10

c. Relocate the following statements from their present location outside the AGRICULTURAL USE REQUIREMENTS box to a location inside the box immediately before the restricted entry interval statement: "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."

d. The statement, "Keep children, pets and other unprotected persons out of treated areas until sprays have dried." was specified in the 1988 Malathion Registration Standard as an indoor use caution and is not practical for the non-agricultural uses such as the wide-spread outdoor public health uses which appear on the subject label. Revise the NON-AGRICULTURAL USE REQUIREMENTS box by deleting this statement.

3. Submit two copies of the revised final printed label before you release the product for shipment.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

A stamped copy of the label is enclosed for your records.

Sincerely,



Marilyn A. Mautz
Biologist
Insecticide-Rodenticide Branch
Registration Division (7504C)

ACCEPTED Page 1 of 8
with COMMENTS
in EPA Letter Dated:

MAR 19 1998

MARMAN MALATHION 56 EC

A Water Emulsifiable Spray Concentrate Insecticide and Miticide

Under the Federal Insecticide,
Fungicide, and Rodenticide Act
as amended, for the pesticide
registered under EPA Reg. No.
48273-26

ACTIVE INGREDIENT:

Malathion: O,O-dimethyl phosphorodithioate of diethyl mercaptosuccinate	56.0%
OTHER INGREDIENTS*	44.0%
*Contains petroleum distillates	Total
	100.0%

Contains 5 lbs. of Malathion per gallon.

**Keep Out of Reach of Children
WARNING AVISO**

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand this label, find someone to explain it to you in detail.)
See back panel for additional precautionary statements.

NET CONTENTS: _____ GALS.

EPA Reg. No. 48273-EA EPA Est. 51036-GA-1

Sold by
MARMAN USA, INC.
P.O. Box 22829
Tampa, FL 33622-2829

[Back Panel]

PRECAUTIONARY STATEMENTS Hazards to Humans & Domestic Animals

WARNING: Harmful if swallowed. Causes substantial but temporary eye injury. Do not get in eyes or on skin or clothing. Avoid contact with skin. Wash thoroughly after using. Avoid breathing spray mist. Avoid contamination of feed and foodstuff. Keep out of reach of children. Keep container closed and away from heat or open flame. Do not combine emulsifiable liquids with wetttable powders in the same spray tank unless previous use of the materials being combined has proven them to be physically compatible.

Personal Protective Equipment (PPE)

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 selections 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
- Chemical-resistant headgear for overhead exposure

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and was 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

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 Inhaled:** Remove person to fresh air. Apply artificial respiration if indicated. **If on Skin:** Remove contaminated clothing and wash affected areas with soap and water. **If in Eyes:** Flush eyes with plenty of water. Call a physician if irritation persists. **Note to Physician:** This product may cause cholinesterase inhibition. Atropine is antidotal. 2-PAM may be effective as an adjunct to atropine.

Environmental Hazards

Outdoor Use on Nonaquatic Sites: This pesticide is toxic to fish, aquatic invertebrates and aquatic life stages of amphibians. Do not apply directly to water, 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. 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.

On Aquatic Sites: This pesticide is toxic to fish, aquatic invertebrates and aquatic life states of amphibians. Do not apply directly to water except as specified on this label. Do not contaminate water when disposing of equipment washwaters. 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.

Indoor Use: 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.

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.

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. 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 apply only 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
- Chemical-resistant headgear for overhead exposure.

Non-Agricultural Use Requirements

The requirements of this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (for CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries or greenhouses. Keep children, pets and other unprotected persons out of treated areas until sprays have dried.

Chemigation Prohibition: Do not apply this product through any type of irrigation system.

Storage and Disposal

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

Storage: Do not store under conditions which might adversely affect the container or its ability to function properly. Do not store at temperatures below freezing, as such low temperatures may be harmful to product. If frozen, warm to 40°F and redissolve, before using, by rolling or shaking the container. Keep container tightly closed when not in use. Reduce stacking height where local

conditions can affect package strength. Personnel should use clothing and equipment consistent with good pesticide handling. **Pesticide Disposal:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. **Container Disposal:** Triple rinse, or equivalent, then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

GENERAL INFORMATION

For proper mixing, the spray tank should be at least ¾ filled with water before this product is added. Mechanical agitation or recirculation through the pump by-pass to the tank is usually sufficient for maintaining a good dispersion. Rinse empty container with water and drain into spray tank - repeat twice more. Repeat applications should be made as needed unless otherwise indicated. Consult your state Experiment Station as to the timing of applications.

Note: The U.S. Food and Drug Administration has set official tolerances for certain pesticide residues. To assure residues on food and forage crops will not exceed established tolerance, use only at recommended rates, and do not apply closer to harvest than specified.

VEGETABLES

Apply in a minimum of 30 gallons by ground equipment or 5 gallons by air equipment unless otherwise specified. Best results are obtained with uniform coverage. **Note:** The preharvest interval (PHI) days are indicated in [] after each crop.

CROP	PESTS	RATE PER ACRE	REMARKS
Beans (Green, Lima, Navy, Red Kidney, Snap, Wax, Cowpeas, Blackeyed Peas) [1]	Aphids, Bean leaf beetles, Blister beetles, Cucumber beetles, Potato leafhoppers, Lygus bugs	2 pints	Do not feed or graze forage, hay or straw to livestock.
	Japanese beetles, Mexican bean beetles	1½ - 2 pints	
	Red spider mites	1½ pints	
Dry Beans (California and Northwest only) [1]	Lygus bugs	1½ - 2 pints, or 1½ pints (air) in 10 gals. of water	Do not feed or graze forage, hay or straw to livestock.
Beets (Garden/Table) [3]	Aphids	1½ - 2 pints	
Broccoli [3]	Aphids, Cabbage loopers, Imported cabbageworms	1 - 2 pints	
Brussels Sprouts [7]	Aphids	1 - 2 pints	
Cabbage [7]	Aphids, Cabbage loopers, Imported cabbageworms	1 - 2 pints	For control of caterpillars on summer and fall plantings in the south, begin when true leaves appear. On other plantings, and for control of other insects, begin when insects appear.
	Diamondback moths, Webworms	2 pints	
Cauliflower [7]	Aphids	1 - 2 pints	
	Diamondback moths	2 - 4 pints	
Celery [7]	Aphids, Spider mites	1½ pints	To be applied to fresh leaves and stalks only. Do not use on crops grown for seed and oil.
Collards [7]	Aphids	1½ - 2 pints	For control of caterpillars on summer and fall plantings in the South, begin when true leaves appear. On other plantings, and for control of other insects, begin when insect appear.
	Harlequin cabbage bugs	1 pint	
Cucumbers [1]	Aphids, Pickleworms, Spider mites	1½ - 2 pints	Do not apply unless plants are dry.
	Squash vine borers	3 pints	
	Cucumber beetles, Leaf miners	2 pints	
Dandelion, Parsley, Swiss Chard and Watercress [7] Parsnip [21]	Aphids	1 ½ - 2 pints	
Eggplant [3]	Aphids, Spider mites	1 pint	
	Lacebugs	3 pints	
Endive [7]	Aphids, Spider mites	1½ - 2 pints	
Garlic, Shallots [3]	Aphids, Thrips	1½ - 2 pints	
Hops [10]	Aphids, Spider mites	1 pint	
Kale [7]	Aphids, Cabbage loopers, Imported cabbageworms	1 - 2 pints	For control of caterpillars on summer and fall plantings in the South, begin when true leaves appear. On other plantings, and for control of other insects, begin when insect appear.
	Webworms, Diamondback moths	2 pints	
Kohlrabi [7]	Aphids	1 - 2 pints	
	Cabbage loopers, Diamondback moths, Imported cabbageworms, Webworms	2 pints	

CROP	PESTS	RATE PER ACRE	REMARKS
Leeks [3]	Aphids	1 - 2 pints	
	Onion maggot flies	2½ pints	
	Thrips	3 pints	
Lentils [3]	Cowpea aphids, pea aphids	1½ pints	Do not feed or graze forage, hay or straw to livestock.
Head Lettuce [7] and Leaf Lettuce [14]	Aphids, Leafhoppers, Spider mites	2 pints	
	Cabbage loopers	3 pints	
Mushrooms [1]	Mites, Phorid and Sciarid flies	2 ½ pints in 130 gals. of water; or 2 tbsp. in 3 gals. of water per 1000 sq. ft. of bed	Make thorough applications as soon after picking as possible. Repeat applications as necessary, usually twice a week.
Mustard Greens [7]	Aphids, Cabbage loopers, Imported cabbageworms	2 pints	For control of caterpillars on summer and fall plantings in the South, begin when true leaves appear.
	Flea beetles	1½ - 2 pints	On other plantings, and for control of other insects, begin when insects appear.
Okra [1]	Aphids	1½ pints	Make no application after pods start to form.
	Japanese beetles	2 pints	
Onions [3]	Onion maggots	1½ - 2½ pints	
	Onion thrips	1½ - 2 pints	
Peas [3]	Aphids	1½ - 2 pints	Do not apply within 7 days of harvest if vines are to be fed.
	Grasshoppers	2 pints	
	Leafhoppers	1 ¼ - 4 pints	
Peppermint, Spearmint [7]	Aphids, Flea beetles, Leafhoppers, Spider Mites	1½ pints	
Peppers [3]	Aphids	1 - 2½ pints	
	Pepper maggots	2½ pints	
White Potatoes [0]	Aphids, Grasshoppers, Leafhoppers	2 pints	
	False chinch bugs	1½ pints	
	Mealybugs	2 - 2½ pints	
Radish, Horseradish [7]	Aphids	1½ - 2 pints	
Rice [7]	Rice leaf miner	2 pints	Make first application shortly after the first rice blades appear on the surface of the water and repeat if necessary.
	Rice stink bugs	1 - 1½ pints	Apply by airplane in 2 gallons of water per acre during the early milk and dough stage of growing rice. Repeat applications as necessary.
Note: For 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.			
Rutabaga [3]	Aphids	1½ pints	
Spinach [7]	Aphids	2 pints	
Squash [1]	Aphids, Leafminers, Spider mites, Pickleworms	2 pints	Do not apply to squash unless plants are dry.
	Cucumber beetles, Squash vine borers	3 pints	
Strawberries [3]	Aphids, spider mites	1½ pints	
	Field crickets, Lygus bugs, Spittlebugs, Thrips	1½ - 3 pints	
	Potato leafhoppers, Strawberry leafrollers, Strawberry root weevils, Whiteflies	1½ - 2½ pints	
Sweet Corn [5]	Japanese beetles	2 pints	
Sweet Potatoes [3]	Leafhoppers	1 ½ - 2 pints	
	Morninglory leaf miner	2½ - 3 pints	
Tomatoes [3]	Aphids, Spider mites	1½ pints	Do not apply within 1 day of harvest for spider mite control.
	Drosophila	2½ pints	
	Amyworms, Fruitworms (CA only)	2 pints	
Turnips [7]	Aphids, Cabbage loopers, Imported cabbageworms	1 - 2 pints	For control of caterpillars on summer and fall plantings in the South, begin when true leaves appear. On other plantings, and for control of other insects, begin when insects appear.

VEGETABLES GROWN IN COMMERCIAL GREENHOUSES			
Note: The preharvest interval (PHI) days are indicated in [] after each crop. Apply to give complete coverage.			
CROP	PESTS	RATE OER 100 GALS.	REMARKS
Beans [1]	Aphids, Cucumber beetles, Leafhoppers, Spider mites	1½ - 2 pints	Spray plants thoroughly.
Cucumbers [1]	Aphids, Armyworms, Cabbage loopers, Earwigs, Garden fleahoppers, Mealybugs, Spider Mites, Thrips, Whiteflies	1½ - 2 pints	Spray plants thoroughly. Do not apply unless plants are dry.
Eggplant [3]	Aphids, Spider mites	1½ - 2 pints	Spray plants thoroughly.
Endive [7]	Aphids, Armyworms, Cabbage loopers, Serpentine leaf miners, Thrips, Whiteflies	1½ - 2 pints	
Head Lettuce [7] and Leaf Lettuce [14]	Aphids, Armyworms, Cabbage loopers, Serpentine leaf miners, Thrips, Whiteflies	1½ - 2 pints	
Onions [3]	Thrips	1½ - 2 pints	
Peppers [3]	Aphids	1½ - 2 pints	
Tomatoes [1]	Aphids, Armyworms, Cabbage loopers, Cutworms, Drosophila, Garden fleahoppers, Mealybugs, Serpentine leaf miners, Spider mites, Thrips, Tomato russet mites, Whiteflies	1½ - 2 pints	

FRUITS AND NUTS			
Note: The preharvest interval (PHI) days are indicated in [] after each crop.			
CROP	PESTS	APPLICATION RATE	REMARKS
Apricots [7]	Aphids, Codling moths, European fruit lecanium, Orange tortrix, Soft brown scales, Terrapin scales	1½ - 2 pts./100 gals. or 4½ - 6 pts./acre	The rate is based on a standard of 300 gallons per acre dilute spray for mature trees.
Avocado [7]	Greenhouse thrips, Latania scales, Omnivorous loopers, Orange tortrix, Soft brown scales	1½ pts./100 gals. or 4½ pts./acre	
Blackberry, Boysenberry, Current Dewberry, Loganberry, Raspberry [1]	Aphids, Rose scale chafers, Japanese beetles, Leafhoppers, Mites, Thrips	1½ pts./100 gals. or 3 pts./acre	The rate is based on a standard of 200 gallons per acre dilute spray.
Blueberries [1]	Blueberry maggots	1 pt./100 gals. or 3 pts./acre	For use in the Northeast only. Apply in 100 gallons of water per acre.
	Cherry fruitworm	1 pt./100 gals. or 2 pts./acre	
	Cranberry fruitworm	1 pt./100 gals. or 2 pts./acre	Make first application at egg hatch and repeat applications every 4 to 5 days until a total of four applications has been made.
	Japanese beetles	¾ pt./100 gals. or 1½ pts./acre	
Note: The rates are based on a standard of 500 gallons per acre dilute spray.			
Cherry [3]	Black cherry aphids, Fruit tree leafrollers	1½ pts./100 gals. or 6 pts./acre	The rate is based on a standard of 400 gallons per acre dilute spray for mature trees. Do not apply more than 8 pounds of actual Malathion 56 EC per acre to cherry trees. Injury may occur on certain varieties of sweet cherries, particularly in the Northwest.
	Cherry fruit flies, Japanese beetles	1 pt./100 gals. or 4 pts./acre	
Citrus (Grapefruit, Kumquat, Lemon, Lime, Orange, Tangerine, Tangelo) [7]	Black scales (single and off-brooded), California red scales, Citricola scales, Purple scales, Soft brown scales, Yellow scales	1 - 1½ pts./100 gals.	Do not apply when trees are in bloom.
	Citrus red mites, Thrips	2½ pts./acre	Apply in 200 gallons of water per acre. Do not apply when trees are in bloom.
	Florida purple scale, Florida red scale	2 pts./100 gals.	
Note: The rates are based on a standard of 500 gallons per acre dilute spray for mature trees.			
Currants, Gooseberries [3]	Japanese beetles	1½ pts./100 gals. or 3 pts./acre	The rates are based on a standard of 200 gallons per acre dilute spray.
	Rose chafers, Mites	1 pt./100 gals. or 2 pts./acre	
Figs [3]	Dried fruit beetles, Vinegar flies	2 qts./acre plus 1-2 gals. of unsulfured molasses	

CROP	PESTS	APPLICATION RATE	REMARKS
Grapes [3]	Leafhoppers, Spider mites	1½ pts./100 gals. or 3 pts./acre	
	European fruit lecanium	1½ pts./100 gals.	Make full coverage applications when newly hatched nymphs are migrating over vines, usually shortly after bloom.
	Mealybugs	1½ pts./acre	Apply in 50 to 100 gallons.
	Note: The rates are based on a standard of 200 gallons per acre dilute spray. Injury may occur on grapes of Almeria, Cardinal, Italia and Ribier varieties when sprays containing Malathion 56 EC are applied after clusters appear.		
Grape Vines (over-wintering stock only)	Grape phylloxera	3 pts./100 gals.	Remove excess soil from the roots and dip in the Malathion 56 EC solution. Submerge the entire root system for 5 minutes. Keep the solution agitated at all times.
Guava [2]	Drosophila	1 - 1½ pts./acre	Apply in sufficient water to provide a thorough coverage of the foliage.
Macadamia Nuts [0]	Green stink bugs	1½ pts./100 gals.	Apply when insects start to feed on the nuts and repeat as necessary. May be applied during harvest. No more than 15 pounds of actual Malathion 56 EC per acre should be applied to macadamia nut trees.
Mango [2]	Drosophila	1 - 1½ pt./acre	Apply in sufficient water to provide thorough coverage of foliage.
Nectarines [7]	Spider mites	1 - 2 pts./100 gals. or 3 - 6 pts./acre	The rates are based on a standard of 300 gallons per acre dilute spray for mature trees.
	Plum curculio	2 pts./100 gals. or 6 pts./acre	Malathion 56 EC may cause fruit spotting on nectarines.
Passion Fruit [0]	Drosophila	1 - 1½ pt./acre	Apply in sufficient water to provide thorough coverage of foliage.
Papaya [0]	Aphids, Mealybugs	1½ - 2 pts./100 gals.	
Peaches [7]	Black cherry aphids, Black peach aphids, European red mites, Green peach aphids, Rusty plus aphids, Japanese beetles, Spider mites	1 pt./100 gals. or 3 pts./acre	The rates are based on a standard of 300 gallons per acre dilute spray for mature trees. Do not apply more than 9 pounds of actual Malathion 56 EC per acre to peach trees.
	Oriental fruit moths, Plum curculio	2 pts./100 gals. or 3 pts./acre	
	Cottony peach scales, European fruit lecanium, Terrapin scales	2 pts./100 gals.	Make full coverage applications at completion of hatching, but the last of June.
Pecans [0]	Aphids, Spider mites, Walnut aphids	1½ - 2 pts./100 gals. or 7½ - 10 pts./acre	The rates are based on a standard of 500 gallons per acre dilute spray for mature trees 25 to 35 feet high.
	European red mite	1½ pts./100 gals. or 6½ pts./acre	Apply when buds begin to develop and repeat as necessary.
	Pecan nut casebearers, Walnut husk flies	1½ pts./100 gals. or 6½ pts./acre	Apply after first generation of eggs begin to hatch.
Walnuts [0]	Aphids, European red mites, Walnut husk flies	½ pt./100 gals. or 1½ - 3 pts./acre	Apply with conventional sprayer. For bait sprays, combine Staley's Sauce Base Nos. 2 and 7 at the rate of 2 quarts per acre with Malathion 56 EC. Apply in 500 gallons of water per acre with an air-carrier type sprayer.

FIELD CROPS AND PASTURE/RANGE GRASSES

Note: The preharvest interval (PHI) days are indicated in [] after each crop.

CROP	PESTS	RATE PER ACRE	REMARKS
Alfalfa [0]	Alfalfa weevil larvae, Aphids, Grasshoppers, Lygus bugs, Potato leafhoppers, Spider mites, Spittlebugs, Stink bugs	1½ - 2 pints	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 outside of hives.
	Armyworms	2 pints	
	Clover leaf weevils	1½ pints	
	Vetch bruchid	2 - 2½ pints	
Clover [0]	Alfalfa weevil larvae, Aphids, Grasshoppers, Lygus bugs, Potato leafhoppers, Spider mites, Spittlebugs	1½ pints	Do not apply to clover in bloom.

CROP	PESTS	RATE PER ACRE	REMARKS
Corn (Grain or Forage) [5]	Aphids, Corn earworms, Corn rootworm adults, Grasshoppers, Sap beetles, Thrips	1½ pints	For control of corn earworm and sap beetles, begin treatments when 10% of the ears show silk. Repeat applications at 3 to 5 day intervals until 4 to 5 applications have been made.
	Armyworms	1 ½ - 2 pints	
Cotton [0]	Brown cotton leafworms, Cotton aphids, Cotton leafworms, Cotton leafperforators, Desert spider mites, Leafhoppers, Lygus bugs, Thrips, Whiteflies	1½ - 2 pints	
	Boll weevils	2 - 4 pints	
	Cotton fleahoppers	1 - 1½ pints	
	Fall armyworms, Garden webworms, Grasshoppers	1½ - 3 pints	
	Lygus bugs, Thrips	1 - 4 pints	
Flax [45]	Grasshoppers	1 pint	Limited to one application per season. Do not graze or feed forage to livestock.
Grasses (Barnyardgrass, Canarygrass, Fescue, Orchardgrass, Red Top, Timothy, Yellow Foxtail) [0]	Cereal leaf beetle	1 - 1½ pints	May be applied on the day of grazing.
	Grasshoppers	1½ - 2 pints	
Lupine [0]	Grasshoppers	1½ - 2 pints	
Pasture and Range Grass, Grass and Grass Hay [0]	Aphids, Grasshoppers, Leafhoppers	1½ - 2 pints	May be applied at the rate of 1½ pint in 1 gallon of diesel fuel oil per acre.
	Armyworms	2 pints	
Popcorn [5]	Aphids, Corn rootworms, Grasshoppers, Spider mites, Thrips, Corn earworms	1½ pint	Note: Injury may occur in whorl and silk stages with Malathion 56 EC, especially at low dilution rates.
	Armyworms	1½ - 2 pints	
Salsify [7]	Aphids, Diamondback moths, Flea beetles, Leaf hoppers, Spider mites, Thrips	1½ - 2 pints	
Small Grains (Barley, Oats, Rye, Wheat) [7]	Cereal leaf beetles	1 - 1½ pint	Do not apply within 7 days of forage use.
	English grain aphids, Grasshoppers, Greenbugs	1½ pint	
	Winter grain mite	2 pints	
Grain Sorghum [7]	Greenbugs	1½ pint	Do not feed or graze forage, hay or straw to livestock.
Vetch [0]	Omnivorous leaf tiers, Pea aphids, Vetch bruchids	1½ - 2 pints	May be applied on the day of grazing.

RESIDUAL SPRAY

Before storing grains (corn, barley, oats, rye and wheat): Before applying spray, thoroughly clean elevators, box cars, etc. Remove and burn all sweepings and debris. For a residual wall, floor and machinery spray in grain elevators, in treating truck beds, box cars and ships holds and before loading grain, make a thorough application at the rate of 1 pint in 2 to 5 gallons of water per 1000 bushels.

Warehouse (corn, barley, oats, rye and wheat): To kill Khapra beetles, dilute 8 pints per 20 gallons of water. Apply at the rate of 2 gallons per 1000 sq. ft. of surface or to the point of runoff. Thoroughly spray with sufficient pressure, interior of empty warehouse including cracks and protected places.

FLY AND MOSQUITO CONTROL

For Outdoor Use Only

Fly Control: For use around buildings which house domestic animals, around yards, homes and meat and food processing plants.

Adult Flies: Straight sprays: 5 tablespoons plus 1 gallon water, or 1 cup plus 2½ gallons water, of 1 quart plus 12 gallons water. Apply as a spray at the rate of 1 gallon per 1000 sq. ft. on painted surfaces and 2 gallons per 1000 sq. ft. on unpainted surfaces where flies alight or congregate, such as fences, around garbage cans, etc.

Mosquito Control: Mosquito Larvae: 13 fl. oz. per acre. For use only in standing water (intermittently flooded areas, stagnant water, temporary rain pools). 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. Mix in sufficient water or oil when applied by air or ground equipment. Mosquito Adults: 1 part to 28 parts water, fuel oil or diesel oil. Spray building foundations, shrubs, low trees and lawn areas.

OUTDOOR ORNAMENTALS

Flowers, Shade Trees, Shrubs: Injury may occur on Ferns, Hickory, Viburnum, Lantana, Crassula and Canareti Juniper following the use of this product. Slight injury has also been reported on Boston, Pteris and Maidenhair Ferns, Petunias, Small-Leaf Spirea, White Pine and Maples. Under extreme heat, drought and disease conditions the emulsifiable concentrates may cause slight damage to Elms.

PESTS	APPLICATION RATE
Lace bugs, Oyster shell scales Note: Apply when Oyster shell scale crawlers have settled on foliage.	1 pint/100 gallons or 2 tsp./gallon
Aphids, Euonymous scales, European pine shoot moths, Four-lined leaf bugs, Japanese beetles (adult), Mealybugs, Potato leafhoppers, Rose leafhoppers, Scurfy scales, Spider mites, Tarnished plant pubs, Thrips, Whiteflies	1½ pint/100 gallons or 2 tsp./gallon
Azalea scales, Bagworms, Birch leaf miners, Boxwood leaf miners, Fletcher scales, Florida red scales, Juniper scales, magnolia scales, Oak kemes, Pine leaf scales, Tent caterpillars Note: Apply when Fletcher, Juniper and Oak kemes scale crawlers have settled on foliage.	2 pints/100 gallons or 2 tsp./gallon
Black scale crawlers, Soft brown scales	2¼ pints/100 gallons or 2 tsp./gallon
Monterey pine scales	2½ pints/100 gallons or 2 tsp./gallon
Pine needle scales, wax scales Note: For wax scales, apply in spring when crawlers are active; repeat 1 or 2 full-coverage applications at 10 day intervals.	4 pints/100 gallons or 4 tsp./gallon

IN AND AROUND GREENHOUSES AND GARDENS

Beans, Cucumbers, Eggplant, Endive, Head lettuce, Leaf Lettuce, Onions, Peppers, Tomatoes; and ornamental Flowering Plants, Nursery Stock and Woody Plants: To kill Millipedes, Sawbugs and Springtails, mix 1 teaspoon of this product per gallon of water. Apply to 150 square feet of soil surface or where insects congregate. Repeat at 7 to 10 day intervals as needed.

Lawns: For ant mounds, mix 1½ pints of this product per 100 gallons of water. Spray ant hills thoroughly so that they are well soaked. For other small ants in flower beds, lawns and around trees, lightly spray the infested areas. Repeat in 10 to 15 days if ants return.

Ground Pearls: Mix 3 to 4 quarts of this product per 100 gallons of water. Make full coverage to soil surface when ground pearl nymphs are in the pink, "crawler," or active stage and immediately wash into soil with additional water.

ON AND AROUND CULL FRUIT AND VEGETABLE DUMPS

Drosophila flies, Dried fruit beetles: Mix 1½ gallons of this product per 100 gallons of water. Apply as a drench using 8 to 10 gallons of spray per 100 sq. ft. For best results, dumps should not be over 18 inches deep. DO NOT FEED TREATED FRUIT AND VEGETABLES.

CONDITIONS OF SALE AND WARRANTY

The *Directions for Use* of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and should be followed carefully. However, it is impossible to eliminate all risks inherently associated with use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of MARMAN USA, INC. or the Seller. All such risks shall be assumed by the Buyer.

MARMAN USA, INC. warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the *Directions for Use* subject to the inherent risks referred to above. MARMAN USA, INC. makes no other express or implied warranty of fitness or merchantability or any other express or implied warranty. In no case shall MARMAN USA, INC. or the Seller be liable for consequential, special or indirect damages resulting from the use or handling of this product. MARMAN USA, INC. and the Seller offer this product, and the Buyer and User accept it, subject to the foregoing *Conditions of Sale and Warranty*, which may be varied only by agreement in writing signed by a duly authorized representative of MARMAN USA, INC.