

ACCEPTED
NOV 15 1982
EPA Reg. No. 70-241

R I G O

MSR

Systemic Insecticide Spray

Emulsifiable Concentrate

For Effective Systemic Protection
Of Fruits, Vegetables and Ornamentals

ACTIVE INGREDIENTS:

S-[2-(Ethylsulfinyl)ethyl] 0,0-dimethyl phosphorothioate..... 25%
Aromatic Petroleum Distillate..... 14%

INERT INGREDIENTS:..... 61%
TOTAL 100%

Contains 2 lbs. S-[2-(Ethylsulfinyl)ethyl] 0,0-dimethyl phosphorothioate
per U.S. gallon.

WARNING: KEEP OUT OF REACH OF CHILDREN

(See rear panel for warning statements)

WARNING - FLAMMABLE! KEEP AWAY FROM HEAT AND OPEN FLAME

EPA Reg. No. 70-241
EPA Est. No. 70-KY-1

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Manufactured by

RIGO COMPANY

BUCKNER, KENTUCKY 40010

PRECAUTIONARY STATEMENTS
WARNING
HAZARDS TO HUMANS

Causes eye irritation. May be fatal if swallowed, inhaled or absorbed through the skin. Do not get in eyes, on skin, or on clothing. Do not breathe spray mist. Wash thoroughly with soap and warm water after handling. Wash clothing with soap and hot water before reuse.

Avoid contamination of feed or food. Keep out of reach of children.

STATEMENT OF PRACTICAL TREATMENT

If splashed in eyes, immediately flush eyes with plenty of water for at least 15 minutes. For further treatment, call a physician.

If swallowed, vomiting should be induced. Administer milk or water freely and induce vomiting by giving one dose ($\frac{1}{2}$ oz. or 15 ml.) of syrup of ipecac. If vomiting does not occur within 10 to 20 minutes, administer second dose. If syrup of ipecac is not available, induce vomiting by sticking finger down throat. Repeat until vomit fluid is clear. Never give anything by mouth to an unconscious person. Professional medical assistance should be secured immediately.

If poisoning occurs, obtain prompt medical aid.

NOTE TO PHYSICIAN: May cause cholinesterase depression. Atropine sulfate is antidotal. 2-PAM is also antidotal and may be administered in conjunction with atropine.

ENVIRONMENTAL HAZARDS

This product is toxic to fish and wildlife. Birds and other wildlife in treated areas may be killed. This product is toxic to bees and should not be applied when bees are actively visiting the area. Keep out of lakes, streams, ponds, tidal marshes and estuaries. Do not apply where runoff is likely to occur. Do not apply when weather conditions favor drift from areas treated. Do not contaminate water by cleaning of equipment or disposal of wastes. Apply this product only as specified on this label.

CONTAINER DISPOSAL

Do not reuse empty container. Wrap container and put in trash collection.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

IMPORTANT: Read these entire Directions and Notice before using MSR Systemic Insecticide Spray.

MSR Systemic Insecticide penetrates by absorption and is translocated in the plant. The best time to apply MSR is early morning or evening, especially when plants such as those listed below are in bloom. This practice will minimize the possibility of beneficial pollinating insects, including honeybees, coming into contact with the spray.

MIXING: MSR Systemic Insecticide forms an emulsion when diluted with water and is suitable for use in all pressure-type sprayers. To mix with water, pour the required amount of MSR into full amount of water and then agitate.

DOSAGE: Use specified dosage of MSR in the amount of water necessary to give complete coverage of foliage but in no case use less than ¼ cup of water per 1000 sq.ft. The type equipment used will determine the concentration required.

SPRAYING: Work to windward. Protect sprayer operators from drift or mist. When low volumes of spray are applied, complete coverage and thorough application are essential for most effective results. Schedule applications in accordance with local conditions. Consult your State Agricultural Experiment Station or Extension Service for specific use information and for State regulations which may contain additional restrictions or requirements.

RECOMMENDED APPLICATIONS

CROP	INSECT	Teaspoons MSR Systemic Insecticide Spray	REMARKS
<u>FRUITS</u>			
Blackberries	Aphids	1 - 1½	Apply specified dosage in one gallon of water (1-1½ pt. per 100 gal.) as a full coverage spray applying not more than 14 gallons of dilute spray per 1000 sq.ft. Do not apply more than once per season nor within 7 days of harvest.
Raspberries	Mites		
Grapes	Aphids Leafhoppers Mites	1 to 1½	Apply specified dosage in one gallon of water (1-1½ pt. per 100 gal.) as a full coverage spray using not more than 7 gallons per 1000 sq.ft. Do not apply more than 2 times per season nor within 90 days of harvest.

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RECOMMENDED APPLICATIONS

CROP	INSECT	Teaspoons MSR Systemic Insecticide Spray	REMARKS
Grapefruit Lemons Oranges	Aphids Texas citrus mite	1 to 1½	Apply specified dosage in one gallon of water (1-1½ pt. per 100 gal.) as a full coverage spray. Do not apply more than twice per season nor within 7 days of harvest.
Pears	Aphids Mites	1	Apply specified dosage in one gallon of water (1 pt. per 100 gal.) as a full coverage spray. Do not apply more than once per season nor within 30 days of harvest.
Plums Prun	Aphids Mites	1	Apply specified dosage in one gallon of water (1 pt. per 100 gal.) as a full coverage spray. Do not apply more than twice per season nor within 35 days of harvest.
Strawberries	Aphids Mites	3½ to 6½	Apply specified dosage per 1000 sq.ft. (1½-3 pts. per acre) in sufficient water for complete coverage but not less than ½ cup per 1000 sq. ft. Do not apply more than twice per season nor within 3 days of harvest.
<u>NON-BEARING FRUITS</u>			
Apples Apricots Cherries Crab apples Grapes Nectarines Peaches Plums Prunes Quinces	Aphids Mites	1 to 1½	Apply specified dosage (1-1½ pt. per 100 gal.) in one gallon of water as a full coverage spray on non-bearing trees. Repeat as necessary. Do not apply to trees that will bear fruit within the next 12 months.
Citrus	Aphids Texas citrus mite		
<u>VEGETABLES</u>			
Beans (snap and lima)	Leafhoppers Mites	2	Apply specified dosage in at least one pint of water per 1000 sq.ft. (2 pt. in 4 gal. of water per acre). Three applications may be made per picking season with the last application no later than 21 days before harvest. Do not graze or cut treated vines for feed or forage within 21 days of application.
	Lygus bugs (California only)		

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RECOMMENDED APPLICATIONS

CROP	INSECT	Teaspoons MSR Systemic Insecticide Spray	REMARKS
<u>VEGETABLES cont.</u> 'd			
Broccoli Brussels Sprouts Cauliflower	Aphids	3½ to 4½	Apply specified dosage per 1000 sq.ft. (1½-2 pt. per acre) in sufficient water for complete coverage but not less than ¼ cup per 1000 sq. ft. Do not apply more than 3 times per season nor within 3 days of harvest for brussels sprouts or 7 days of harvest for broccoli and cauliflower.
Cabbages	Aphids	3½ to 6½	Apply specified dosage per 1000 sq.ft. (1½-3 pt. per acre) in sufficient water for complete coverage but not less than ¼ cup per 1000 sq.ft. Do not apply more than 3 times per season nor within 7 days of harvest.
Corn Field, Sweet, Popcorn	Aphids Leafhoppers Mites Thrips	3½ to 4½	Apply specified dosage per 1000 sq.ft. (1½-2 pt. per acre) in sufficient water for complete coverage but not less than ¼ cup per 1000 sq. ft. Do not apply more than once per season nor within 7 days of harvest of corn, or within 7 days of foraging or harvest of corn fodder.
Cucumbers	Aphids Mites	3½ to 4½	Apply specified dosage per 1000 sq.ft. (1½-2 pt. per acre) in sufficient water for complete coverage but not less than ¼ cup per 1000 sq. ft. Do not apply more than twice per season.
Eggplant	Aphids Mites	4½	Apply specified dosage per 1000 sq.ft. (2 pt. per acre) in sufficient water for complete coverage but not less than ¼ cup per 1000 sq. ft. Do not apply more than 3 times per season nor within 7 days of harvest.
Head Lettuce	Aphids Mites	3½ to 4½	Apply specified dosage per 1000 sq.ft. (1½-2 pt. per acre) in sufficient water for complete coverage but not less than ¼ cup per 1000 sq. ft. Do not apply more than 3 times per season. In California and Arizona do not apply within 28 days of harvest. In other states do not apply within 21 days of harvest.

RECOMMENDED APPLICATIONS

CROP	INSECT	Teaspoons MSR Systemic Insecticide Spray	REMARKS
<u>VEGETABLES cont.</u>			
Spanish Onions (bulb) (West of the Mississippi River only)	Thrips (Population suppression only)	6½	Apply specified dosage per 1000 sq.ft. (3 pt. per acre) in sufficient water for complete coverage but not less than one quart per 1000 sq.ft. For best results make 3 applications at 10 to 14 day intervals with the last application no later than 30 days before harvest.
(North Central)	Aphids	3½	Apply specified dosage in at least one pint of water per 1000 sq.ft. (1½ pt. per acre). Up to 3 applications may be made per season with the last application no later than 21 days before harvest. Do not graze or cut treated vines for feed or forage within 21 days of application.
Peppers	Aphids	4½	Apply specified dosage per 1000 sq.ft. (2 pt. per acre) in sufficient water for complete coverage but not less than ¼ cup per 1000 sq. ft. Do not apply more than twice per season.
Peppermint Spearmint	Aphids Mites	3	Apply specified dosage in at least ½ gallon of water per 1000 sq.ft. (3 pt. per acre) with ground equipment. For established infestations make 2 applications 10 to 14 days apart. Do not apply within 14 days of harvest.
Potatoes	Aphids Flea beetle Leafhoppers	3½ to 4½	Apply specified dosage per 1000 sq.ft. (1½-2 pt. per acre) in sufficient water for complete coverage but not less than ¼ cup per 1000 sq. ft. Repeat as necessary. Do not apply within 7 days of harvest.
Pumpkin Squash (Winter and Summer)	Aphids	3½ to 4½	Apply specified dosage per 1000 sq.ft. (1½-2 pt. per acre) in sufficient water for complete coverage but not less than ¼ cup per 1000 sq. ft. Do not apply more than once per season. Do not apply within 14 days of harvest of pumpkins or winter squash nor within 1 day of harvest of summer squash.

RECOMMENDED APPLICATIONS

CROP	INSECT	Teaspoons MSR Systemic Insecticide Spray	REMARKS
<u>VEGETABLES cont.'d</u>			
Turnips	Aphids Mites	3½ to 4½	Apply specified dosage per 1000 sq.ft. (1½-2 pt. per acre) in sufficient water for complete coverage but not less than ½ cup per 1000 sq. ft. Do not apply more than twice per season. Do not apply within 21 days of harvest if tops are to be used for food nor within 7 days of harvest if tops are not to be utilized.
<u>MELON</u>			
Muskmelon (Cantaloupe) Other melons	Aphids Mites	3½ to 4½	Apply specified dosage per 1000 sq.ft. (1½-2 pt. per acre) in sufficient water for complete coverage but not less than ½ cup per 1000 sq. ft. Do not apply more than 3 times per season nor within 14 days of harvest.
Watermelons	Aphids Mites	3½ to 4½	Apply specified dosage per 1000 sq.ft. (1½-2 pt. per acre) in sufficient water for complete coverage but not less than ½ cup per 1000 sq. ft. Do not apply more than twice per season nor within 7 days of harvest.
<u>NUTS</u>			
Walnuts (Oregon and Washington only)	Aphids	1 pint per 10 trees (average 4½ inches diameter)	Apply either undiluted or diluted with an equal volume of water. For undiluted application apply 1/3 fluid ounce (2 teaspoonsful) of product per inch of trunk diameter. For diluted application apply 2/3 fluid ounce of mixture per inch of trunk diameter. One pint of product is sufficient to treat 10 trees averaging 4½ inches in diameter when applied diluted or undiluted. Apply specified dosage with a paint brush or low pressure sprayer in a band completely around the trunk. On trees with extremely short trunks it may be necessary to treat bases of scaffold limbs in order to apply the correct dosage. Width of the treated band will vary with trunk diameter. Do not apply more than once per season nor within 105 days of harvest. Do not use on heavily stressed trees or on young trees with trunk diameters less than 2 inches.

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RECOMMENDED APPLICATIONS

CROP	INSECT	Teaspoons MSR Systemic Insecticide Spray	REMARKS
<u>FRUIT CROPS</u>			
<u>Walnuts cont. 'd</u>			
Walnuts	Aphids Mites	1½	Apply specified dosage in one gallon of water (1½ pt. in 100 gal.) as a full coverage spray. Do not apply more than once per season nor within 30 days of harvest.
<u>ORNAMENTALS</u>			
<u>Flower Sprays</u>			
Flowers, Shrubs, Trees	Aphids Birch leaf miner Holly leaf miner Leafhoppers Mites Thrips Whiteflies	1½	Apply specified dosage in one gallon (1-1½ pt. per 100 gallons) of water as a full coverage spray. Repeat as necessary. Do not handle treated plants until spray has dried. Injury has occurred in greenhouses on chrysanthemum varieties: Hurricane, Iceburg, Whitetop, and Pennant and on Easter lilies. When large plantings of chrysanthemums or Easter lilies are to be sprayed, treat only a few plants and observe for varietal sensitivity before treating the entire planting.
Shade & Nursery trees (including Christmas trees grown under cultivation)	Aphids Birch leaf miner Holly leaf miner Leafhoppers Mites Thrips	1 to 1½	Apply specified dosage in one gallon (1-1½ pt. per 100 gal.) of water as a full coverage spray (approximately 200 to 300 gallons per acre). Repeat as necessary. NOTE: This dosage is calculated for conventional sprayers. When lower volumes of spray are applied per acre, as with low-pressure low-volume equipment, increase the concentration of MSR in the spray mixture in order to apply amount of MSR per acre equivalent to a full coverage spray but in no case use less than one gallon of water per acre. Do not apply by aircraft or mist-type ground equipment.
	Sitka Spruce weevil White pine weevil	8	Mix specified amount in one quart (one gallon per 24 gallons) of water. This is equivalent to a 1.0% concentration. Apply using ground equipment only that will provide uniform coverage (2 to 4 gallons of water emulsion per acre). Repeat as necessary. Do not apply by aircraft or mist-type ground equipment.

RECOMMENDED APPLICATIONS

CROP	INSECT	Teaspoons MSR Systemic Insecticide Spray	REMARKS
<u>SOIL DRENCH</u>			
Chrysanthemum	Aphids Mites Thrips	1½	<u>Potted Plants:</u> Mix specified dosage in one gallon (½ pt. per 50 gallons) of water to form an emulsion. For potted plants, apply ½ cup (4 fl. oz.) of the emulsion per 6 to 8 inch pot. Repeat as necessary to maintain insect control.
Dahlia	Mites		
Roses	Aphids		
Cuban laurel	Cuban laurel thrips	1	<u>For plants in nursery cans, boxes or other containers:</u> Mix specified dosage in one gallon (½ pt. per 50 gallons) of water for form an emulsion. Use 1 quart of emulsion for each 5 gallons of plant container capacity.
		1½-2½	<u>For established trees:</u> (Street trees, trees in parks, etc. where basin method or irrigation is used.) Mix specified dosage in one gallon (1½ pt. per 50 gallons) of water to form an emulsion. Use 4 gallons of emulsion per inch of trunk diameter. Keep children and pets away from basin until material has soaked into soil. Penetration may be aided by drilling holes in the soil.

RESTRICTIONS

Do not use on other crops used for food or forage. Use only according to label directions.

NOTICE: Seller makes no warranty, expressed or implied, concerning the use of this product other than indicated on the label. Buyer assumes all risk of use and/or handling of this material when such use and/or handling is contrary to label instructions.

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