

BLD28

Base Reg. (EPA)

U.S. LABEL

Reason to Issue: To delete use on
grapes.

Date of Draft: 2/13/86 (S)

Supersedes Draft Dated: 10/24/85

EPA Reg. No. 3125-111-AA

® METASYSTOX-R

SPRAY CONCENTRATE

SYSTEMIC INSECTICIDE

ONLY FOR AGRICULTURAL USE, OR FOR SALE TO, USE, AND STORAGE BY
COMMERCIAL APPLICATORS, AND OTHER SERVICEPERSONS

FOR EFFECTIVE SYSTEMIC CROP PROTECTION

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

ACTIVE INGREDIENTS:

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

INERT INGREDIENTS: 61%
100%

KEEP OUT OF REACH OF CHILDREN
WARNING

(See Rear Panel for Statements of
Practical Treatment and Additional
Precautionary Statements)

EPA Reg. No. 3125-111-AA

FLAMMABLE! KEEP AWAY FROM HEAT AND OPEN FLAME

AVISO

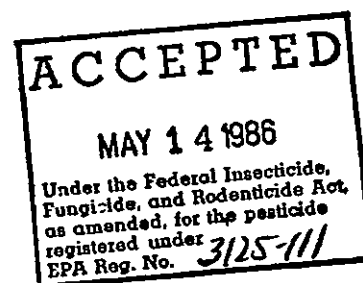
PRECAUCION AL USUARIO: Si usted no puede
leer o entender inglés, no use este producto
hasta que la etiqueta le haya sido explicada
ampliamente.

(TO THE USER: If you cannot read or understand
English, do not use this product until the label
has been fully explained to you.)

STOP - READ THE LABEL BEFORE USE

NET CONTENTS _____ U.S. GALLONS

MOBAY CORPORATION
AGRICULTURAL CHEMICALS DIVISION
Box 4913, Kansas City, Mo. 64120



Note: Underlined letters in chemical nomenclature should be italicized when printed,
not underlined.

METASYSTOX-R Spray Concentrate

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 Conditions of Sale before using METASYSTOX-R Spray Concentrate.

CONDITIONS OF SALE: THE DIRECTIONS ON THIS LABEL WERE DETERMINED THROUGH RESEARCH TO BE THE DIRECTIONS FOR CORRECT USE OF THIS PRODUCT. THIS PRODUCT HAS BEEN TESTED FOR A RANGE OF WEATHER CONDITIONS SIMILAR TO THOSE WEATHER CONDITIONS THAT ARE ORDINARY AND CUSTOMARY IN THE GEOGRAPHIC AREA WHERE THE PRODUCT IS USED. INSUFFICIENT CONTROL OF PESTS AND/OR INJURY TO THE CROP TO WHICH THE PRODUCT IS APPLIED MAY RESULT FROM THE OCCURRENCE OF EXTRAORDINARY OR UNUSUAL WEATHER, OR FROM FAILURE TO FOLLOW LABEL DIRECTIONS. IN ADDITION, FAILURE TO FOLLOW LABEL DIRECTIONS MAY CAUSE INJURY TO OTHER CROPS, ANIMALS, MAN, OR THE ENVIRONMENT. MOBAY OFFERS, AND THE BUYER ACCEPTS AND USES, THIS PRODUCT SUBJECT TO THE CONDITIONS THAT EXTRAORDINARY OR UNUSUAL WEATHER, OR FAILURE TO FOLLOW LABEL DIRECTIONS ARE BEYOND THE CONTROL OF MOBAY AND ARE, THEREFORE, THE RESPONSIBILITY OF THE BUYER.

METASYSTOX-R systemic insecticide, penetrates by absorption and is translocated in the plant. The best time to apply METASYSTOX-R is early morning or evening, especially when crops such as alfalfa and cotton are in bloom. This practice will minimize the possibility of beneficial pollinating insects, including honeybees, coming into contact with the spray.

MIXING: METASYSTOX-R Spray Concentrate forms an emulsion when diluted with water and is suitable for use in all power-operated ground sprayers and aircraft sprayers. To mix with water, pour the required amount of METASYSTOX-R Spray Concentrate into full amount of water and then agitate.

DOSAGE: Use specified dosage of METASYSTOX-R Spray Concentrate in the amount of water necessary to give complete coverage of foliage but in no case use less than one gallon of water per acre. 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	Pints METASYSTOX-R SC	REMARKS
FIELD CROPS			
Cotton (Except Calif- ornia)	Aphids	1/2 to 1	Apply specified dosage per acre in sufficient water for complete coverage but not less than one gallon per acre. Do not apply more than 3 times per season nor within 14 days of picking. Do not graze or feed gin trash to dairy or meat animals.
	Thrips		
	Flea hoppers		
Cotton (Calif- ornia Only)	Mites	1-1/2 to 2	
Cotton (Calif- ornia Only)	Aphids	1-1/2 to 2	
	Mites		
	Lygus bugs		

METASYSTOX-R Spray Concentrate

RECOMMENDED APPLICATIONS (Continued)

CROP	INSECT	Pints METASYSTOX-R SC	REMARKS
FIELD CROPS (Cont.)			
Corn Field, Sweet, Popcorn	Aphids Leafhoppers Mites Thrips Corn rootworm beetles	1-1/2 to 2	<p>Apply specified dosage per acre in sufficient water for complete coverage but not less than one gallon per acre. For control of corn rootworm beetles apply as needed in accordance with established economic thresholds in your locality.</p> <p>When using one application per season, do not apply within 7 days of harvest of corn, or within 7 days of foraging or harvest of corn fodder. When using two or three applications per season, do not make the last application within 21 days of harvest of corn, or within 21 days of foraging or harvest of corn fodder.</p> <p>Do not apply more than three times per season.</p>
Pepper- mint Spearmint	Aphids Mites	3	<p>Apply specified dosage in at least 20 gallons of water per acre with ground equipment. For established infestations make 2 applications 10 to 14 days apart. Do not apply within 14 days of harvest.</p>
Safflower	Aphids	2	<p>Apply specified dosage per acre in sufficient water for complete coverage, but not less than ten gallons per acre. Do not apply more than 3 times per season nor within 7 days of harvest.</p>
	Lygus bugs	4	
Sorghum	Greenbugs Corn leaf aphids Yellow Sugarcane aphid	1 to 2	<p>Apply specified dosage per acre by air or ground equipment in sufficient water for complete coverage but not less than one gallon per acre. Use the higher dosage for control of mites. Do not apply more than 3 times per season nor within 45 days of harvest of grain or 21 days of grazing or cutting for forage. Do not use on sweet sorghum.</p>
	Banks grass mites (Southwest only includ- ing Kansas, Oklahoma, Texas, Colorado, New Mexico, and Arizona)		<p>CAUTION: Since certain sorghum varieties may be sensitive to organophosphate insecticides, METASYSTOX-R Spray Concentrate should be applied to a small area of the field and observed for a few days to determine if any crop injury will occur.</p> <p>NOTE: Due to greenbug resistance in certain areas METASYSTOX-R used alone may not provide satisfactory control. Consult your local agricultural advisor or Extension Service for recommendations.</p>

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METASYSTOX-R Spray Concentrate

RECOMMENDED APPLICATIONS (Continued)

CROP	INSECT	Pints METASYSTOX-R SC	REMARKS
<u>FIELD CROPS (Cont.)</u>			
Sugar Beets	Aphids Leafhoppers Mites	1-1/2 to 3	Apply specified dosage per acre in sufficient water for complete coverage but not less than one gallon per acre. Do not apply more than 6 times per season. Do not harvest beets or use beet tops for feed or forage within 30 days of last treatment.
<u>SEED FIELD CROPS</u>			
Alfalfa Clover	Aphids Leafhoppers Mites Thrips Lygus bugs (California Only)	1-1/2 to 2	Apply specified dosage per acre in sufficient water for complete coverage but not less than one gallon per acre. Repeat as necessary up to 21 days before seed harvest. Chaff from seed crop may be used for feed or forage, but do not cut green crop for these purposes.
<u>FRUITS</u>			
Black- berries Rasp- berries	Aphids Mites	1 to 1-1/2	Apply specified dosage in 100 gallons of water as a full coverage spray* applying not more than 600 gallons dilute spray per acre. Do not apply more than once per season nor within 7 days of harvest.
Grape- fruit Lemons Oranges	Aphids Texas citrus mite	1 to 1-1/2	Apply specified dosage in 100 gallons of water 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 100 gallons of water as a full coverage spray*. Do not apply more than once per season nor within 30 days of harvest.
Plums Prunes	Aphids Mites	1	Apply specified dosage in 100 gallons of water as a full coverage spray*. Do not apply more than twice per season nor within 35 days of harvest.

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METASYSTOX-R Spray Concentrate

RECOMMENDED APPLICATIONS (Continued)

CROP	INSECT	Pints METASYSTOX-R SC	REMARKS
NON-BEARING FRUITS			
Apples Apricots Cherries Crab Apples Grapes Nectarines Peaches Plums Prunes Quinces	Aphids Mites	1 to 1-1/2	Apply specified dosage in 100 gallons 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		
VEGETABLES			
Beans (snap and lima)	Leafhoppers Mites Lygus bugs (California Only)	2	Apply specified dosage in at least 4 gallons 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.
Broccoli Brussels Sprouts Cauliflower	Aphids	1-1/2 to 2	Apply specified dosage per acre in sufficient water for complete coverage but not less than one gallon per acre. Do not apply more than 3 times per season nor within 10 days of harvest for brussels sprouts or 7 days of harvest for broccoli and cauliflower.
Cabbage (Includes tight heading varieties of Chinese cabbage)	Aphids	1-1/2 to 3	Apply specified dosage per acre in sufficient water for complete coverage but not less than one gallon per acre. Do not apply more than 3 times per season nor within 7 days of harvest.
Cucumbers	Aphids Mites	1-1/2 to 2	Apply specified dosage per acre in sufficient water for complete coverage but not less than one gallon per acre. Do not apply more than twice per season.
Eggplant	Aphids Mites	2	Apply specified dosage per acre in sufficient water for complete coverage but not less than one gallon per acre. Do not apply more than 3 times per season nor within 7 days of harvest.

METASYSTOX-R Spray Concentrate

RECOMMENDED APPLICATIONS (Continued)

CROP	INSECT	Pints METASYSTOX-R SC	REMARKS
VEGETABLES (Continued)			
Head Lettuce	Aphids Mites	1-1/2 to 2	<p>Apply specified dosage per acre in sufficient water for complete coverage with a minimum of one gallon per acre. A maximum of 3 applications may be made per season. The following preharvest intervals based on number of applications applies only to California's spring and summer crops:</p> <p>1 application 14 days 2 applications 21 days 3 applications 28 days</p> <p>All crops in Arizona, and California's fall and winter crops require a 28 day PHI (regardless) of the number of applications.) All other states require a 21 day PHI.</p>
Spanish Onions (bulb) (West of the Mississippi River only)	Thrips (Population suppression only)	3	<p>Apply specified dosage per acre in sufficient water for complete coverage but not less than ten gallons per acre. For best results make 3 applications at 10 to 14 day intervals with the last application no later than 30 days before harvest.</p>
Peas (North Central)	Aphids	1-1/2	<p>Apply specified dosage in at least 4 gallons of water 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.</p>
Peppers	Aphids	2	<p>Apply specified dosage per acre in sufficient water for complete coverage but not less than one gallon per acre. Do not apply more than twice per season.</p>
Potatoes	Aphids Flea beetle Leafhoppers	1-1/2 to 2	<p>Apply specified dosage per acre in sufficient water for complete coverage but not less than one gallon per acre. Repeat as necessary. Do not apply within 7 days of harvest.</p>
Pumpkin Squash (Winter and Summer)	Aphids	1-1/2 to 2	<p>Apply specified dosage per acre in sufficient water for complete coverage but not less than one gallon per acre. 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.</p>
Turnips	Aphids Mites	1-1/2 to 2	<p>Apply specified dosage per acre in sufficient water for complete coverage but not less than one gallon per acre. 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.</p>

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METASYSTOX-R Spray Concentrate

RECOMMENDED APPLICATIONS (Continued)

CROP	INSECT	Pints METASYSTOX-R SC	REMARKS
<u>MELONS</u>			
Musk-melon (Cantaloupe) Other melons	Aphids Mites	1-1/2 to 2	Apply specified dosage per acre in sufficient water for complete coverage but not less than one gallon per acre. Do not apply more than 3 times per season nor within 14 days of harvest.
Water melons	Aphids Mites	1-1/2 to 2	Apply specified dosage per acre in sufficient water for complete coverage but not less than one gallon per acre. Do not apply more than twice per season nor within 7 days of harvest.
<u>NUTS</u>			
Filberts (Oregon and Washington only)	Aphids	1 pint per 10 trees (average 4-1/2 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 4-1/2 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.
Walnuts	Aphids Mites	1-1/2	Apply specified dosage per 100 gallons of water as a full coverage spray.* Do not apply more than once per season nor within 30 days of harvest.

*This METASYSTOX-R dosage is calculated for conventional sprayers. When lower volumes of spray are applied per acre, as with low-pressure low-volume, airplane or mist-type equipment, increase the concentration of METASYSTOX-R in the spray mixture in order to apply amount of METASYSTOX-R per acre equivalent to a full coverage spray but in no case use less than one gallon of water per acre.

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METASYSTOX-R Spray Concentrate

RECOMMENDED APPLICATIONS

CROP	INSECT	Pints METASYSTOX-R SC	REMARKS
<u>ORNAMENTALS</u>			
<u>FOLIAR SPRAY</u>			
Flowers, Shrubs, & Trees	Aphids Birch leaf miner Holly leaf miner Leafhoppers Leaf miners Mealybugs Mites Thrips Whiteflies	1-1/2	Apply specified dosage by ground in 100 gallons (0.25 fl. oz or 1-1/2 teaspoonsfuls per gallon) of water as a full coverage spray. Repeat as necessary. Do not handle treated plants until spray deposit has dried. Injury has occurred 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.
	Scales	1 1/2 to 2	
<u>SOIL DRENCH</u>			
Chrysanthemum Dahlia Roses	Aphids Mites Thrips	3/4	Nursery, or Garden Plants: Mix specified dosage in 50 gallons (0.25 fl. oz. or 1.5 teaspoons per gallon) of water to form an emulsion. For potted plants apply 1/2 cup (4 fluid ounces) of the emulsion per 6 to 8 inch pot. For other plants apply 1 gallon of emulsion per 0.25 inch of stem diameter as necessary to maintain insect control. (See *NOTE.)
Cuban laurel	Aphids Cuban laurel thrips Mites Scale spp.	1/2	For plants in nursery cans, boxes or other containers: Mix specified dosage in 50 gallons (0.16 fl. oz. or 1 teaspoon per gallon) of water to form an emulsion. Use 1 quart of emulsion for each 5 gallons of plant container capacity.
		1-1/4	For established trees: (Street trees, trees in parks, etc. where basin method of irrigation is used). Mix specified dosage in 50 gallons (0.5 fl. oz. or 5 teaspoons per gallon) 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. (See *NOTE)

METASYSTOX-R Spray Concentrate

RECOMMENDED APPLICATIONS (Cont'd)

CROP	INSECT	Pints METASYSTOX-R SC	REMARKS
<u>ORNAMENTALS</u>			<u>For established trees:</u> (Street trees, trees in parks, etc. where basin method of irrigation is used.) Mix specified dosage in 50 gallons (0.25 fl. oz. or 1.5 teaspoons/gallon) water to form an emulsion. Use 4 gallons of emulsion per inch of trunk diameter. Keep children and pets away from the basin until material has soaked into soil. Penetration may be aided by drilling holes in the soil. (See *NOTE)
Shade and Nursery Trees	Aphids Leaf-miners Mites	3/4	
<u>ORNAMENTALS</u> <u>SOIL INJECTION</u>			Mix product in equal or greater volumes of water as needed for equipment used. Apply using equipment capable of injecting material 6 inches or more below surface, and carefully metering volume used to reach recommended dose. Make two times as many probe insertions as inches of circumference.
Shade and Nursery Trees	Aphids European elm scale Elm leaf beetle Mites Leaf miner	1 to 1.5 fl. oz. per inch of trunk diameter	

*NOTE: Applications to non-container trees, shrubs and other ornamentals should be made between the trunk or stem and the drip line. Watering of the treated area should follow application to activate and promote uptake of METASYSTOX-R. Watering should be sufficient to reach the roots (12 to 24 hours of slow soaking), but should not cause run-off from the treated area.

RESTRICTIONS

Do not use on other crops used for food or forage. Use only according to label directions. Application at rates above those shown may result in illegal crop residues. Do not treat food crops grown in the greenhouse.

RE-ENTRY STATEMENTS

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. Do not enter treated areas without protective clothing until 48 hours after application. Because certain states may require more restrictive reentry intervals for various crops treated with this product, consult your State Department of Agriculture for further information.

(The following may appear on supplemental labeling accompanying the product)

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. Oral warnings should include those statements found under the label heading "Precautionary Statements" and "Re-entry Statements" included on this label. 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 warnings must include the following information: WARNING, area treated with METASYSTOX-R Spray Concentrate on (date of application). Do not enter without appropriate protective clothing until 48 hours after application. If on skin, remove contaminated clothing and wash skin immediately with soap and warm water. If eyes are contaminated, wash with flowing water for at least 15 minutes. If swallowed, vomiting should be induced. (See Precautionary Statements on label).

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

WARNING

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.

STATEMENTS 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 water freely and induce vomiting by giving one dose (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.

PHYSICAL OR CHEMICAL HAZARDS

Flammable. Keep away from heat and open flame.

STORAGE AND DISPOSAL

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

Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate 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 at the nearest EPA Regional Office for guidance.

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.

Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, and feed. Store away from heat and open flame. Store in original container and out of the reach of children, preferably in a locked storage area.

Handle and open container in a manner as to prevent spillage. If container is leaking invert to prevent leakage. If the container is leaking or material spilled for any reason or cause, carefully dam up spilled material to prevent runoff. Refer to Precautionary Statements on label for hazards associated with the handling of this material. Do not walk through spilled material. Absorb spilled material with absorbing type compounds and dispose of as directed for pesticides above. In spill or leak incidents, keep unauthorized people away. You may contact the Mobay Emergency Response Team for decontamination procedures or any other assistance that may be necessary. The Mobay Kansas City Emergency Response Telephone No. is 816-242-2582, or contact Chemtrec at 800-424-9300.

METASYSTOX is a Reg. TM of the Parent Company of Farbenfabriken Bayer GmbH, Leverkusen.

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19 JAN 1984

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Mobay Chemical Corp.
Chemagro Agricultural Division
P.O. Box 4913
Kansas City, MO 64120

Gentlemen:

Subject: Metasystox-R Spray Concentrate
EPA Registration No. 3125-111
Your Application Dated December 27, 1984

The amendment referred to above, submitted in connection with registration under FIFRA sec. 3(c)(7)(A) is acceptable provided that you:

1. Make the labeling changes listed below before you release the product for shipment bearing the amended labeling:

- a. Specify "(street trees, trees in parks, etc., where basin method of irrigation is used)" in the directions for use.
- b. Specify "Metasystox-R Spray Concentrate" as the product name. We do not stamp labeling for brand name products.

2. Submit five (5) copies of your final printed labeling 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 bearing the amended labeling constitutes acceptance of these conditions.

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

Sincerely yours,



William H. Miller
Product Manager (16)
Insecticide-Rodenticide Branch
Registration Division (29-767)

Enclosure

Miller/Goads:RD-IRB:CM#2:RD-15:557-2600-1/16/84:del-1/28/84:bje

CONCURRENCES

SYMBOL							
SURNAME							
DATE							

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YLD4

U.S. LABEL

Reason to Issue: To add claims for use on turf grasses and revise claims for use on ornamental flowers, shrubs and trees; 10/12/83 Draft: Product Development revisions; to show alternate product name; 11/29/83 Draft: to delete use on turf and in greenhouses; 12/20/83 Draft: to delete aerial applications, and use on Douglas-fir seed and breeding orchards.

Date of Draft: 12/20/83 (Pre-Reg) (S)
Supersedes Pre-Reg Drafts Dated: 6/20/83, 7/27/83, 10/12/83, & 11/29/83

ACCEPTED
with COMMENTS
in EPA Letter Dated:

JAN 19 1984

Under F.F.D. Insecticide,
Fungicide, and Rodenticide Act
as amended for the pesticide
registered under EPA Reg. No.

EPA Reg. No. 3125-111-AA

3125-111

® METASYSTOX-R 2
Ornamental Insecticide

ONLY FOR PROFESSIONAL USE, OR FOR SALE TO, USE, AND STORAGE BY
COMMERCIAL APPLICATORS, AND OTHER SERVICEPERSONS

ACTIVE INGREDIENTS:
S-[2-(Ethylsulfinyl)ethyl]O,O-
dimethyl phosphorothioate 25%
Aromatic Petroleum Distillate 14%

AMENDMENT TO PREVIOUSLY REGISTERED LABELING

REVISE TO READ AS FOLLOWS:

RECOMMENDED APPLICATIONS

CROP	INSECT	Pints METASYSTOX-R 2 Ornamental Insecticide	REMARKS
ORNAMENTALS FOLIAR SPRAY			
Flowers, Shrubs, & Trees	Aphids Birch leaf miner Holly leaf miner Leafhoppers Leaf miners Mealybugs Mites Thrips Whiteflies	1-1/2	Apply specified dosage by ground in 100 gallons (0.25 fl. oz or 1-1/2 tea-spoonfuls per gallon) of water as a full coverage spray. Repeat as necessary. Do not handle treated plants until spray deposit has dried. Injury has occurred 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.
	Scales	1 1/2 to 2	

RECOMMENDED APPLICATIONS (Continued)

CROP	INSECT	Pints METASYSTOX-R 2 Ornamental Insecticide	REMARKS
<u>SOIL DRENCH</u>			<u>Nursery, or Garden Plants:</u> Mix specified dosage in 50 gallons (0.25 fl. oz. or 1.5 teaspoons per gallon) of water to form an emulsion. For potted plants apply 1/2 cup (4 fluid ounces) of the emulsion per 6 to 8 inch pot. For other plants apply 1 gallon of emulsion per 0.25 inch of stem diameter as necessary to maintain insect control. (See *NOTE.)
Chrysanthemum Dahlia Roses	Aphids Mites Thrips	3/4	
Cuban laurel	Aphids Cuban laurel thrips Mites Scale spp.	1/2	<u>For plants in nursery cans, boxes or other containers:</u> Mix specified dosage in 50 gallons (0.16 fl. oz. or 1 teaspoon per gallon) of water to form an emulsion. Use 1 quart of emulsion for each 5 gallons of plant container capacity.
		1-1/4	<u>For established trees:</u> (Street trees, trees in parks, etc.) Mix specified dosage in 50 gallons (0.5 fl. oz. or 5 teaspoons per gallon) 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. (See *NOTE)
Shade and Nursery Trees	Aphids Leaf- miners Mites	3/4	<u>For established trees:</u> (Street trees, trees in parks, etc.) Mix specified dosage in 50 gallons (0.25 fl. oz. or 1.5 teaspoons/gallon) water to form an emulsion. Use 4 gallons of emulsion per inch of trunk diameter. Keep children and pets away from the basin until material has soaked into soil. Penetration may be aided by drilling holes in the soil. (See *NOTE)

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METASYSTOX-R 2 Ornamental Insecticide

RECOMMENDED APPLICATIONS (Continued)

CROP	INSECT	Pints METASYSTOX-R 2 Ornamental Insecticide	REMARKS
<u>ORNAMENTALS</u> <u>SOIL INJECTION</u>			
Shade and Nursery Trees	Aphids European elm scale Elm leaf beetle Mites Leaf miner	1 to 1.5 fl. oz. per inch of trunk diameter	Mix product in equal or greater volumes of water as needed for equipment used. Apply using equipment capable of in- jecting material 6 inches or more below surface, and carefully metering volume used to reach recommended dose. Make two times as many probe insertions as inches of circumference.

*NOTE: Applications to non-container trees, shrubs and other ornamentals should be made between the trunk or stem and the drip line. Watering of the treated area should follow application to activate and promote uptake of. Watering should be sufficient to reach the roots (12 to 24 hours of slow soaking), but should not cause run-off from the treated area.

