

**ACCEPTED**  
**DEC 2 - 1994**  
 Under the Federal Insecticide,  
 Fungicide, and Rodenticide Act,  
 as amended, for the pesticide  
 registered under  
 EPA Reg. No. 10163-220

# MASTER LABEL

## FOR

# EPA REG. NO.: 10163-220

### RESTRICTED USE PESTICIDE

#### Due to Reproductive Effects

For retail sale to and use only by certified applicators or persons under their direct supervision and only for those uses covered by the certified applicator's certification. Direct supervision for this product is defined as the certified applicator being physically present during mixing, loading, equipment repair, and equipment cleaning. Certified applicators must ensure that all persons involved in these activities under their direct supervision are informed of the precautionary statements.

# METASYSTOX-R<sup>®</sup>

## SPRAY CONCENTRATE

and

# METASYSTOX-R<sup>®</sup> 2

## ORNAMENTAL INSECTICIDE

#### ACTIVE INGREDIENT:

S-[2-(Ethylsulfinyl) ethyl] O,O-dimethyl phosphorothioate..... 25.0%

INERT INGREDIENTS ..... 75.0%

**TOTAL 100.0%**

Contains 2 lbs S-[2-(Ethylsulfinyl) ethyl] O,O-dimethyl phosphorothioate per U.S. gallon  
 (This product contains aromatic petroleum distillates.)

# Gowan

EPA Reg. No.: 10163-220  
 EPA Est. No.: 67545-AZ-1

Gowan Company  
 P.O. Box 5569  
 Yuma, AZ 85366-5569

**RESTRICTED USE PESTICIDE**

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# METASYSTOX-R®

## SPRAY CONCENTRATE

### SYSTEMIC INSECTICIDE

**FOR EFFECTIVE SYSTEMIC CROP PROTECTION**

ACTIVE INGREDIENT:	% By Wt.
S-[2-(Ethylsulfinyl) ethyl] O,O-dimethyl phosphorothioate.....	25.0%
INERT INGREDIENTS .....	75.0%
TOTAL	100.0%

Contains 2 lbs. S-[2-(Ethylsulfinyl) ethyl] O,O-dimethyl phosphorothioate per U.S. gallon  
(This product contains aromatic petroleum distillates.)

**Gowan**

Net Contents: \_\_\_\_\_ U. S. Gallons

EPA Reg. No.: 10163-220  
EPA Est. No.: 67545-AZ-1

Gowan Company  
P.O. Box 5569  
Yuma, AZ 85366-5569

**-STOP-**

**READ THE LABEL BEFORE USE**

**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 the label, find someone to explain it to you in detail.)

**FLAMMABLE! KEEP AWAY FROM HEAT AND OPEN FLAME**

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

**WARNING** - Causes moderate eye irritation. May be fatal if swallowed, inhaled, or absorbed through the skin. Prolonged or frequently repeated skin contact causes allergic reactions in some individuals. Avoid contact with eyes. Do not get on skin or clothing. Do not breathe spray mist. Avoid contamination of feed or food.  
**KEEP OUT OF REACH OF CHILDREN.**

**PRECAUCION  
RIESGOS PARA HUMANOS  
Y ANIMALES DOMESTICOS**

**AVISO** - Causa irritacion moderada de ojos. Puede ser fatal si es tragado, inhalado, o absorbido a travez del la piel. El contacto prolongado y frecuente con la piel puede causar reacciones de alergia en algunos individuos. Evite el contacto con ojos, evite el contacto con la piel y la ropa. No inhale sus vapores. Evite la contaminacion de forrajes y alimentos.  
**MANTENGASE FUERA DEL ALCANCE DE LOS NINOS.**

**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 selection chart.

Applicator and other handlers must wear:

- Coveralls worn over long-sleeved shirt and long pants
- Chemical-resistant gloves, such as barrier laminate or butyl rubber or nitrile rubber or Viton
- Chemical-resistant footwear plus socks
- Protective eyewear
- Chemical-resistant headgear for overhead exposure
- Chemical-resistant apron when cleaning equipment, mixing, or loading
- For exposures in enclosed areas, a respirator with either an organic vapor-removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G)
- For exposures outdoors, dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C)

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 wash PPE separately from other laundry.

**ENGINEERING CONTROLS STATEMENTS**

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

Human flaggers must be in enclosed cabs. The enclosed cabs must be used in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)]. The handler PPE requirements may be reduced or modified as specified in the WPS.

**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.

**EQUIPO DE PROTECCION PERSONAL (EPP)**

Algunos materiales que son químicamente resistentes a este producto están señalados abajo. Si usted quiere más opciones siga las instrucciones para categoría F de la tabla de EPA sobre categorías de resistencia química.

Aplicadores y otros usuarios deben vestir:

- Overol sobre camisa de manga larga y pantalón
- Guantes resistentes a productos químicos
- Calcetines y zapatos resistentes a productos químicos
- Lentes de seguridad
- Gorra o casco resistente a productos químicos
- Overol químico-resistente cuando limpie el equipo, mezcle o cargue materiales
- Para aplicaciones en áreas cerradas, usar mascarilla provista de filtro para vapores orgánicos con un pre-filtro para pesticidas (aprobado por MSHA/NIOSH con #TC-23C), o un equipo de respiración tipo "canister" aprobado para pesticidas (aprobado por MSHA/NIOSH con #TC-14G)
- Para aplicaciones en áreas abiertas, usar mascarilla con filtros para polvo y niebla (aprobado MSHA/NIOSH con #TC-21C)

Eliminar la ropa y otros materiales absorbentes que han sido contaminados con el producto concentrado. No reuse estos materiales. Siga las instrucciones del fabricante para la limpieza y mantenimiento del Equipo de Protección Personal. Utilice detergente y agua caliente para el lavado. Mantener y lavar EPP por separado de cualquier otra ropa.

**DECLARATION DE CONTROLES DE INGENIERIA**

Cuando los operadores usan sistemas cerrados, cabinas cerradas, o aviones de una manera que reúnan los requerimientos especificados en la Norma de Protección para Trabajadores para pesticidas agrícolas [40 CFR 170.240(d)(4-6)], los requerimientos de EPP para el aplicador pueden ser reducidos o modificados conforme se especifica en la Norma (WPS). Los bandereros deben estar protegidos en cabinas. Las cabinas deben ser usadas de una manera que reúnan los requerimientos enlistados en la Norma de Protección para Trabajadores (WPS) para pesticidas agrícolas [40 CFR 170.240(d)(4-6)]. Los requerimientos para las personas que manejan EPP pueden ser reducidos o modificados como es especificado en los WPS.

**RECOMENDACIONES DE SEGURIDAD PARA USUARIOS**

- Lavar las manos antes de comer, beber, mascar chicle, fumar, o usar el baño.
- Quitarse la ropa inmediatamente si ha habido contacto con el pesticida. Lavar la piel con abundante agua y jabón y ponerse ropa limpia.
- Quitarse el Equipo de Protección Personal inmediatamente después de usar este producto. Lavar los guantes por fuera antes de quitárselos. Tan pronto como sea posible lavarse y cambiar su ropa de trabajo por ropa limpia.

## STATEMENT OF PRACTICAL TREATMENT

### Organophosphate Insecticide

**IF IN EYES**, flush with plenty of water. Call a physician if irritation persists.

**IF SWALLOWED**, vomiting should be induced. Administer water freely and induce vomiting by giving one dose (½ 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 pesticide is toxic to fish and wildlife. For terrestrial uses, do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water by cleaning of equipment or disposal of wastes. Drift and runoff from treated areas may be hazardous to aquatic organisms in adjacent aquatic sites.

This product is toxic to bees exposed to direct treatment. Do not apply this product while bees are actively visiting the treatment area.

## PHYSICAL AND CHEMICAL HAZARDS

Flammable. Keep away from heat and 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). The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 48 hours. The 48 hour REI is increased to 72 hours in outdoor areas where average rainfall is less than 25 inches a year.

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 worn over long-sleeved shirt and long pants
- Chemical-resistant gloves, such as barrier laminate or butyl rubber or nitrile rubber or Viton
- Chemical-resistant footwear plus socks
- Chemical-resistant headgear for overhead exposure

### REQUISITOS PARA USO AGRICOLA

Solamente utilice este producto conforme las instrucciones en la etiqueta y conforme la Norma de Proteccion del Trabajador, 40 CFR Parte 170. Este standard contiene los requisitos para la proteccion de trabajadores agricolas en ranchos, bosques, invernaderos, y operadores de pesticidas agricolas. Contiene los requisitos par capacitacion, descontaminacion, notificacion, y ayuda de emergencia. Tambien contiene instrucciones especificas y excepciones pertinentes para lo mencionado en esta etiqueta sobre equipo de proteccion personal (EPP). Los requisitos en este cuadro solo son aplicables a los usos del producto que estan cubiertos por la Norma de Proteccion del Trabajador.

No entre ni permita la entrada de trabajadores a las areas tratadas durante el intervalo de entrada restringida, (IER) de 48 horas. El IER de 48 horas se incrementa a 72 horas en areas abiertas donde el promedio anual de lluvia es inferior a 25 pulgadas.

El EPP necesario para la entrada temprana a las areas tratadas que esta permitido bajo la Norma de Proteccion del Trabajador y que involucra el contacto con cualquier material tratado, por ejemplo, plantas, tierra o agua, es:

- Overall sobre camisa de manga larga y pantalón
- Guantes resistentes a productos quimicos, asi como protector laminado, hule (butilado o nitrilo) o viton
- Calcetines y zapatos resistentes a productos quimicos
- Sombreros, gorros resistente a productos quimicos

**IMPORTANT:** Read the entire Directions and Conditions of Sale before using METASYSTOX-R Spray Concentrate, Systemic Insecticide.

METASYSTOX-R Spray Concentrate penetrates by absorption and is translocated in the plant. The best time to apply METASYSTOX-R Spray Concentrate 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. **CLOSED SYSTEMS FOR MIXING AND LOADING MUST BE USED FOR ALL AERIAL APPLICATION AND CHEMIGATION SYSTEMS.** Closed systems for mixing and/or loading this product must be capable of removing the pesticide from the shipping container, rinsing the container, and transferring the pesticide and rinsate into mixing tanks and/or application equipment. Protective clothing and equipment, specified in the pesticide labeling must also be used when mixing and/or loading this pesticide.

#### 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 of equipment used will determine the concentration required.

#### SPRAYING

Work to windward. When low volumes of spray are applied, complete coverage and thorough application are essential for the 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.

#### SPRAY DRIFT MANAGEMENT

**AVOIDING SPRAY DRIFT IS THE RESPONSIBILITY OF THE APPLICATOR.** The interaction of many equipment and weather related factors determine the potential for spray drift. The applicator is responsible for considering all these factors when making decisions.

The following spray drift management requirements must be followed to avoid off-target movement from aerial applications:

- Do not apply within 150 feet by air or 100 feet by ground of an unprotected person or occupied building.
- All application equipment must be properly maintained and calibrated using appropriate carriers.
- The spray boom should be mounted on the aircraft so as to minimize drift caused by wing tip vortices. The boom length must not exceed  $\frac{1}{4}$  of the wing or rotor length (i.e., the distance of the outermost nozzles on the boom must not exceed  $\frac{1}{4}$  the length of the wingspan or rotor).
- Nozzles must always point backward and never be pointed downwards more than 45 degrees.
- Do not apply at a height greater than 10 feet above the crop canopy unless a greater height is required for aircraft safety.
- Make applications when wind velocity favors on-target product deposition (approximately 3 to 10 mph). Do not apply when gusts or sustained winds exceed 15 mph.

#### USE IN CHEMIGATION SYSTEMS

**Types of Irrigation Systems:** Apply METASYSTOX-R Spray Concentrate only through sprinkler, including center pivot, lateral move, side roll, overhead solid set or low pressure irrigation systems. Do not apply METASYSTOX-R Spray Concentrate through any other type of irrigation system. **CLOSED SYSTEMS FOR MIXING AND LOADING MUST BE USED FOR ALL CHEMIGATION SYSTEMS.**

#### GENERAL DIRECTIONS FOR ALL RECOMMENDED TYPES OF IRRIGATION SYSTEMS

**Uniform Water Distribution and System Calibration:** The irrigation system must provide uniform distribution of treated water. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.

The system must be calibrated to uniformly apply the rates specified for chemigation application for specific crops. If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

**Chemigation Monitoring:** A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

**Drift:** Do not apply when wind speed favors drift beyond the area intended for treatment.

#### **REQUIRED SYSTEM SAFETY DEVICES**

The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.

The pesticide injection pipeline must contain a functional, automatic quick-closing check valve to prevent the flow of fluid back toward the injection pump.

The pesticide injection pipeline must also contain a functional, normally-closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

#### **USING WATER FROM PUBLIC WATER SYSTEMS**

**DO NOT APPLY METASYSTOX-R SPRAY CONCENTRATE THROUGH ANY IRRIGATION SYSTEM PHYSICALLY CONNECTED TO A PUBLIC WATER SYSTEM.** Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.

METASYSTOX-R Spray Concentrate may be applied through any of the recommended types of irrigation systems which may be supplied by a public water system only if the water from the public water system is discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet, and the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe. Before beginning chemigation, always make sure that the air gap exists and that there is no blockage of the overflow of the reservoir tank.

Any irrigation system using water supplied from a public water system must also meet the following requirements.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

The pesticide injection pipeline must contain a functional, normally-closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.

Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Do not apply when wind speed favors drift beyond the area intended for treatment.

#### **AGITATION**

For application of METASYSTOX-R Spray Concentrate alone, a chemical supply tank is not necessary for premixing since METASYSTOX-R Spray Concentrate mixes well with water in the irrigation line. If a chemical supply tank is used, for application of METASYSTOX-R Spray Concentrate alone or in combination with other chemicals, constant strong mechanical or hydraulic agitation must be maintained in the chemical supply tank during the entire period of application.

#### **CHEMICAL SUPPLY TANK DILUTION**

If a chemical supply tank is used, you must determine the required amounts of METASYSTOX-R Spray Concentrate and water to mix in the tank.

The amount of METASYSTOX-R Spray Concentrate needed equals the number of pints of METASYSTOX-R Spray Concentrate to be applied per acre multiplied by the number of acres to be chemigated.

The amount of emulsion needed equals the gallons of emulsion delivered per hour by the injection pump multiplied by the number of hours chemigation will take place.

The amount of water needed equals the amount of emulsion needed minus the amount of METASYSTOX-R Spray Concentrate needed.

For example, if you want to apply 1 pint of METASYSTOX-R Spray Concentrate per acre to 130 acres in 20 hours and your injection pump delivers 15 gallons per hour, you need 1 pint METASYSTOX-R Spray Concentrate per acre X 130 acres = 130 pints or 16.25 gallons of METASYSTOX-R Spray Concentrate. And, you need, 15 gallons per hour X 20 hours = 300 gallons of emulsion, minus 16.25 gallons of METASYSTOX-R Spray Concentrate = 283.75 gallons of water.

**Cleaning the Chemical Injection System:** In order to accurately apply pesticides, the chemical injection system must be kept clean, free from chemical or fertilizer residues and sediments. Refer to your owners manual or ask your equipment supplier for the cleaning procedure for your injection system.

**Flushing the Irrigation System:** At the end of the application period, allow time for all lines to flush the pesticide through all nozzles before turning off irrigation water. To ensure the lines are flushed and free of pesticides, a dye indicator may be injected into the lines to mark the end of the application period.

#### **SPRINKLER IRRIGATION SYSTEMS**

All directions and requirements listed under the GENERAL DIRECTIONS AND REQUIREMENTS FOR ALL RECOMMENDED TYPES OF IRRIGATION SYSTEMS section of this label must be followed for sprinkler irrigation systems. In addition, the following directions apply to sprinkler irrigation systems.

Do not apply when wind speed favors drift beyond the area intended for treatment.

It is recommended that nozzles in the immediate area of control panels, chemical supply tanks, pumps and system safety devices be plugged to prevent chemical contamination of these areas.

**Center-Pivot and Automatic-Move Linear Systems:** Inject the specified dosage per acre continuously for one complete revolution or move of the system. DO NOT USE END GUNS. The system should be run at maximum speed.

**Solid Set and Manually Controlled Linear Systems:** Injection should be during the last 30 to 60 minutes of the regular irrigation period or as a separate 30 to 60 minutes of the application not associated with a regular irrigation. DO NOT USE END GUNS.

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**Low Pressure Irrigation Systems (Mini-sprinkler systems only):** All directions and requirements listed under the GENERAL DIRECTIONS AND REQUIREMENTS FOR ALL RECOMMENDED TYPES OF IRRIGATION SYSTEMS section of this label must be followed for low pressure mini-sprinkler systems. In addition, the following directions apply to low pressure irrigation system.

Do not apply when wind speed favors drift beyond the area intended for treatment.

Injection should be during the last 30 to 60 minutes of a regular irrigation period or as a separate 30 to 60 minute application not associated with a regular irrigation.

For systems which do not wet the entire crop area, apply proportionately less than the specified broadcast rate per acre based on the area wetted. For example, if 50% of the crop area is wetted by the irrigation system, apply one-half of the specified broadcast rate per acre.

### RECOMMENDED APPLICATIONS

CROP	INSECT	PINTS	REMARKS
<b>FIELD CROPS</b>			
Cotton (Except California)	Aphids, Thrips, Fleahoppers	½ 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.
	Mites	1½ to 3	Do not graze or feed gin trash to dairy or meat animals.
Cotton (California only)	Aphids, Mites, Lygus Bugs	1½ to 2	For application by sprinkler irrigation systems, apply specified dosage per acre. Follow all directions given under the CHEMIGATION section of this label.
Corn (Sweet only)	Aphids, Leafhoppers, Mites, Thrips, Corn rootworm beetles	1½ to 2	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.  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.  Do not apply more than three times per season.  For application by sprinkler irrigation systems, apply specified dosage per acre. Follow all directions given under the CHEMIGATION section of this label.
	Aphids, Mites	3	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.  For application by sprinkler irrigation systems, apply specified dosage per acre. Follow all directions given under the CHEMIGATION section of this label.
Peppermint, Spearmint	Aphids, Mites		



CROP	INSECT	PINTS	REMARKS
<b>FIELD CROPS continued</b>			
Sugar beets	Aphids, Leafhoppers, Mites	1½ to 3	<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 harvest beets or use beet tops for feed or forage within 30 days of last application.</p> <p>For application by sprinkler irrigation systems, apply specified dosage per acre. Follow all directions given under the CHEMIGATION section of this label.</p>
<b>SEED FIELD CROPS</b>			
Alfalfa, Clover	Aphids, Leafhoppers, Mites, Thrips, Lygus bugs (California only)	1½ 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 nor within 21 days of seed harvest. Chaff from seed crop may be used for feed or forage, but do not cut green crop for these purposes.</p> <p>For application by sprinkler irrigation systems, apply specified dosage per acre. Follow all directions given under the CHEMIGATION section of this label.</p>
<b>NON-BEARING FRUITS</b>			
Apples, Apricots, Cherries, Crab Apples, Grapes, Nectarines, Peaches, Plums, Prunes, Quinces	Aphids, Mites	1 to 1½	<p>As a full coverage spray, apply specified dosage in 100 gallons of water on non-bearing trees; but do not exceed 300 gallons of finished spray per acre per application. * Do not apply more than 3 times per season. Do not apply to trees that will bear fruit within the next 12 months.</p> <p>For application by sprinkler irrigation systems, apply specified dosage per acre. Follow all directions given under the CHEMIGATION section of this label.</p>
<b>VEGETABLES</b>			
Beans (Lima)	Leafhoppers, Mites, Lygus bugs (California only)	2	<p>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.</p> <p>For application by sprinkler irrigation systems, apply specified dosage per acre. Follow all directions given under the CHEMIGATION section of this label.</p>
Broccoli, Brussels Sprouts, Cauliflower	Aphids	1½ 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 3 times per season nor within 10 days of harvest for Brussels sprouts or 7 days of harvest for broccoli and cauliflower.</p> <p>For application by sprinkler irrigation systems, apply specified dosage per acre. Follow all directions given under the CHEMIGATION section of this label.</p>
Cabbage (includes tight-heading varieties of Chinese cabbage)	Aphids	1½ to 3	<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 3 times per season nor within 7 days of harvest.</p> <p>For application by sprinkler irrigation systems, apply specified dosage per acre. Follow all directions given under the CHEMIGATION section of this label.</p>

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**MASTER LABEL FOR EPA REG. NO.: 10163-220**

CROP	INSECT	PINTS	REMARKS
<b>VEGETABLES continued</b>			
Cucumbers	Aphids, Mites	1½ 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 3 days of harvest.</p> <p>For application by sprinkler irrigation systems, apply specified dosage per acre. Follow all directions given under the CHEMIGATION section of this label.</p>
Eggplant	Aphids, Mites	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 3 times per season nor within 7 days of harvest. For application by sprinkler irrigation systems, apply specified dosage per acre. Follow all directions given under the CHEMIGATION section of this label.</p>
Head Lettuce	Aphids, Mites	1½ to 2	<p>Apply specified dosage per acre in sufficient water for complete coverage but not less than one gallon per acre. A maximum of 3 applications may be made per season.</p> <p>The following preharvest intervals based on number of applications applies only to California's spring and summer crops:</p> <p style="margin-left: 40px;">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> <p>For application by sprinkler irrigation systems, apply specified dosage per acre. Follow all directions given under the CHEMIGATION section of this label.</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. Do not apply within 3 days of harvest.</p> <p>For application by sprinkler irrigation systems, apply specified dosage per acre. Follow all directions given under the CHEMIGATION section of this label.</p>
Pumpkin, Squash (Winter & Summer)	Aphids	1½ 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 3 days of harvest of summer squash.</p> <p>For application by sprinkler irrigation systems, apply specified dosage per acre. Follow all directions given under the CHEMIGATION section of this label.</p>
<b>MELONS</b>			
Muskmelon (Cantaloupes), Other melons	Aphids, Mites	1½ 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 3 times per season nor within 14 days of harvest.</p> <p>For application by sprinkler irrigation systems, apply specified dosage per acre. Follow all directions given under the CHEMIGATION section of this label.</p>

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**MASTER LABEL FOR EPA REG. NO.: 10163-220**

CROP	INSECT	PINTS	REMARKS
<b>MELONS continued</b>			
Watermelons	Aphids, Mites	1½ 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.  For application by sprinkler irrigation systems, apply specified dosage per acre. Follow all directions given under the CHEMIGATION section of this label.
<b>NUTS</b>			
Filberts (Oregon & 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 teaspoons full) 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.
Walnuts	Aphids, Mites	1½	As a full coverage spray, apply specified dosage in 100 gallons of water; but do not exceed 400 gallons of finished spray per acre per application.* Do not apply more than once per season nor within 30 days of harvest.

\* This dosage of METASYSTOX-R Spray Concentrate 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 Spray Concentrate in the spray mixture in order to apply amount of METASYSTOX-R Spray Concentrate per acre equivalent to a full coverage spray but in no case less than one gallon of water per acre.

### **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.

### **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 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:** Non-refillable Metal: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by any procedure approved by State and local authorities. Non-refillable Plastic: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by State and local authorities by burning. If burned, stay out of smoke. Returnable Refillable Sealed Container: Do not rinse container. Do not break seals. Replace the dust cover cap and return container intact to point of purchase.

**STORAGE:** 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.

**FOR 24-HOUR EMERGENCY ASSISTANCE (SPILL, LEAK, OR FIRE), CALL CHEMTREC (800) 424-9300.**

For other product information, contact Gowan Company or see Material Safety Data Sheet.

### **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 safe practice. The buyer must assume all responsibility, including injury or damage, resulting from its misuse as such, or in combination with other materials.

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**SUPPLEMENTAL LABELING: GOWAN AGREES NOT TO MARKET DUE TO INTERIM RISK MITIGATION**

CROP	INSECT	PINTS	REMARKS
<b>FIELD CROPS</b>			
Corn (Field), Popcorn	Aphids, Corn rootworm beetles Leafhoppers, Mites, Thrips,	1½ -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> <p>For application by sprinkler irrigation systems, apply specified dosage per acre. Follow all directions given under the CHEMIGATION section of this label.</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	<p>For application by sprinkler irrigation systems, apply specified dosage per acre. Follow all directions given under the CHEMIGATION section of this label.</p>
Sorghum	Banks grass mites (Southwest only including Arizona, Colorado, Kansas, Oklahoma, New Mexico, and Texas) Corn leaf aphids, Greenbugs, Yellow Sugarcane aphids	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> <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>For application by sprinkler irrigation systems, apply specified dosage per acre. Follow all directions given under the CHEMIGATION section of this label.</p> <p>Note: Due to greenbug resistance in certain areas, METASYSTOX-R Spray Concentrate used alone may not provide satisfactory control. Consult your local agricultural advisor or Extension Service for recommendations.</p>
<b>FRUITS</b>			
Grapefruit, Lemons, Oranges	Aphids, Texas citrus mite	1 to 1½	<p>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.</p>
Pears	Aphids, Mites	1	<p>Apply specified dosage in 100 gallons of water as a full coverage spray*. Do not apply more than twice per season nor within 30 days of harvest.</p>

**SUPPLEMENTAL LABELING: GOWAN AGREES NOT TO MARKET DUE TO INTERIM RISK MITIGATION**

CROP	INSECT	PINTS	REMARKS
<b>NON-BEARING FRUITS</b>			
Citrus	Aphids, Texas citrus mites	1 to 1½	<p>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.</p> <p>For application by sprinkler irrigation systems, apply specified dosage per acre. Follow all directions given under the CHEMIGATION section of this label.</p>
<b>VEGETABLES</b>			
Snap beans	Leafhoppers, Mites, Lygus bugs (California only)	2	<p>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.</p> <p>For application by sprinkler irrigation systems, apply specified dosage per acre. Follow all directions given under the CHEMIGATION section of this label.</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> <p>For application by sprinkler irrigation systems, apply specified dosage per acre. Follow all directions given under the CHEMIGATION section of this label.</p>
Turnips	Aphids, Mites	1½ 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 or within 7 days of harvest if tops are not to be utilized.</p> <p>For application by sprinkler irrigation systems, apply specified dosage per acre. Follow all directions given under the CHEMIGATION section of this label.</p>

\* This dosage of METASYSTOX-R Spray Concentrate 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 Spray Concentrate in the spray mixture in order to apply amount of METASYSTOX-R Spray Concentrate per acre equivalent to a full coverage spray but in no case less than one gallon of water per acre.

**RESTRICTED USE PESTICIDE****Due to Reproductive Effects**

For retail sale to and use only by certified applicators or persons under their direct supervision and only for those uses covered by the certified applicator's certification. Direct supervision for this product is defined as the certified applicator being physically present during mixing, loading, equipment repair, and equipment cleaning. Certified applicators must ensure that all persons involved in these activities under their direct supervision are informed of the precautionary statements.

# **METASYSTOX-R® 2**

## **ORNAMENTAL INSECTICIDE**

**FOR EFFECTIVE SYSTEMIC PROTECTION**

<b>ACTIVE INGREDIENT:</b>	<b>% By Wt.</b>
S-[2-(Ethylsulfinyl) ethyl] O,O-dimethyl phosphorothioate .....	25.0%
<b>INERT INGREDIENTS</b> .....	<u>75.0%</u>
<b>TOTAL</b>	<b>100.0%</b>

Contains 2 lbs. S-[2-(Ethylsulfinyl) ethyl] O,O-dimethyl phosphorothioate per U.S. gallon  
(This product contains aromatic petroleum distillates.)

**Gowan**  
Net Contents: \_\_\_\_\_ U. S. Gallons

EPA Reg. No.: 10163-220  
EPA Est. No.: 67545-AZ-1

Gowan Company  
P.O. Box 5569  
Yuma, AZ 85366-5569

**-STOP-**

**READ THE LABEL BEFORE USE**

**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 the label, find someone to explain it to you in detail.)

**FLAMMABLE! KEEP AWAY FROM HEAT AND OPEN FLAME**

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

**WARNING** - Causes moderate eye irritation. May be fatal if swallowed, inhaled, or absorbed through the skin. Prolonged or frequently repeated skin contact causes allergic reactions in some individuals. Avoid contact with eyes. Do not get on skin or clothing. Do not breathe spray mist. Avoid contamination of feed or food.  
**KEEP OUT OF REACH OF CHILDREN.**

**PRECAUCION****RIESGOS PARA HUMANOS  
Y ANIMALES DOMESTICO**

**AVISO** - Causa irritacion moderada de ojos. Puede ser fatal si es tragado, inhalado, o absorbido a travez del la piel. El contacto prolongado y frecuente con la piel puede causar reacciones de alergia en algunos individuos. Evite el contacto con ojos, evite el contacto con la piel y la ropa. No inhale sus vapores. Evite la contaminacion de forrajes y alimentos.  
**MANTENGASE FUERA DEL ALCANCE DE LOS NINOS.**

**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 selection chart.

Applicator and other handlers must wear:

- Coveralls worn over long-sleeved shirt and long pants
- Chemical-resistant gloves, such as barrier laminate or butyl rubber or nitrile rubber or Viton
- Chemical-resistant footwear plus socks
- Protective eyewear
- Chemical-resistant headgear for overhead exposure
- Chemical-resistant apron when cleaning equipment, mixing, or loading
- For exposures in enclosed areas, a respirator with either an organic vapor-removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G)
- For exposures outdoors, dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C)

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 wash PPE separately from other laundry.

**ENGINEERING CONTROLS STATEMENTS**

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

Human flaggers must be in enclosed cabs. The enclosed cabs must be used in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)]. The handler PPE requirements may be reduced or modified as specified in the WPS.

**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.

**EQUIPO DE PROTECCION PERSONAL (EPP)**

Algunos materiales que son químicamente resistentes a este producto están señalados abajo. Si usted quiere más opciones siga las instrucciones para categoría *F* de la tabla de EPA sobre categorías de resistencia química.

Aplicadores y otros usuarios deben vestir:

- Overol sobre camisa de manga larga y pantalón
- Guantes resistentes a productos químicos
- Calcetines y zapatos resistentes a productos químicos
- Lentes de seguridad
- Gorra o casco resistente a productos químicos
- Overol químico-resistente cuando limpie el equipo, mezcle o cargue materiales
- Para aplicaciones en áreas cerradas, usar mascarilla provista de filtro para vapores orgánicos con un pre-filtro para pesticidas (aprobado por MSHA/NIOSH con #TC-23C), o un equipo de respiración tipo "canister" aprobado para pesticidas (aprobado por MSHA/NIOSH con #TC-14G)
- Para aplicaciones en áreas abiertas, usar mascarilla con filtros para polvo y niebla (aprobado MSHA/NIOSH con #TC-21C)

Eliminar la ropa y otros materiales absorbentes que han sido contaminados con el producto concentrado. No reuse estos materiales. Siga las instrucciones del fabricante para la limpieza y mantenimiento del Equipo de Protección Personal. Utilice detergente y agua caliente para el lavado. Mantener y lavar EPP por separado de cualquier otra ropa.

**DECLARATION DE CONTROLES DE INGENIERIA**

Cuando los operadores usan sistemas cerrados, cabinas cerradas, o aviones de una manera que reúnan los requerimientos especificados en la Norma de Protección para Trabajadores para pesticidas agrícolas [40 CFR 170.240(d)(4-6)], los requerimientos de EPP para el aplicador pueden ser reducidos o modificados conforme se especifica en la Norma (WPS). Los bandereros deben estar protegidos en cabinas. Las cabinas deben ser usadas de una manera que reúnan los requerimientos enlistados en la Norma de Protección para Trabajadores (WPS) para pesticidas agrícolas [40 CFR 170.240(d)(4-6)]. Los requerimientos para las personas que manejan EPP pueden ser reducidos o modificados como es especificado en los WPS.

**RECOMENDACIONES DE SEGURIDAD PARA USUARIOS**

- Lavar las manos antes de comer, beber, mascar chicle, fumar, o usar el baño.
- Quitarse la ropa inmediatamente si ha habido contacto con el pesticida. Lavar la piel con abundante agua y jabón y ponerse ropa limpia.
- Quitarse el Equipo de Protección Personal inmediatamente después de usar este producto. Lavar los guantes por fuera antes de quitárselos. Tan pronto como sea posible lavarse y cambiar su ropa de trabajo por ropa limpia.



## STATEMENT OF PRACTICAL TREATMENT

### Organophosphate Insecticide

IF IN EYES, flush with plenty of water. Call a physician if irritation persists.

IF SWALLOWED, vomiting should be induced. Administer water freely and induce vomiting by giving one dose (½ 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 pesticide is toxic to fish and wildlife. For terrestrial uses, do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water by cleaning of equipment or disposal of wastes. Drift and runoff from treated areas may be hazardous to aquatic organisms in adjacent aquatic sites.

This product is toxic to bees exposed to direct treatment. Do not apply this product while bees are actively visiting the treatment area.

## PHYSICAL AND CHEMICAL HAZARDS

Flammable. Keep away from heat and 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.

**NOTE:** Not for use on plants being grown for sale or other commercial use, or for commercial seed production, or for research purposes. For use on plants intended for aesthetic purposes or climatic modification and being grown in interior plantscapes, ornamental gardens or parks, or on golf courses or lawns and grounds.

**IMPORTANT:** Read the entire Directions and Conditions of Sale before using METASYSTOX-R 2 Ornamental Insecticide.

## ORNAMENTAL USE BY SOIL INJECTION

METASYSTOX-R 2 Ornamental Insecticide is translocated upward in the plant. Due to this method of movement in the plant, non-target or beneficial insects will be unaffected by the use of METASYSTOX-R 2.

## MIXING

The preparation of the solution to be used in all soil injection equipment must be done only at a central loading site having all appropriate protective equipment. Mix the recommended amount of METASYSTOX-R 2 Ornamental Insecticide in the solution to be injected in the soil using adequate agitation to ensure a uniform mixing of the product.

Closed systems for mixing and/or loading this product must be capable of removing the pesticide from the shipping container, rinsing the container, and transferring the pesticide and the rinsate into mixing tanks and/or application equipment. Protective clothing and equipment, specified in the pesticide labeling must also be used when mixing and/or loading this pesticide.

## DOSAGE

Use specified dosage of METASYSTOX-R 2 Ornamental Insecticide in the amount of water necessary to give complete coverage in the area being injected.

## SOIL INJECTION

When injecting the solution of METASYSTOX-R 2 Ornamental Insecticide in the soil, splash guards or similar devices should be used. Do not pressurize or turn on the injector unit prior to placing the injector probe in the soil. Inject only the amount of solution which can be absorbed into the soil.

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

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**MASTER LABEL FOR EPA REG. NO.: 10163-220**

CROP	INSECT	PINTS	REMARKS
<b>ORNAMENTAL SOIL INJECTION</b>			
Shade and Nursery Trees, Shrubs	Aphids, Elm leaf beetle, European elm scale, Mites, Leafminers	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 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 diameter at breast height measurement (DBH). (See Note).

**NOTE:** Applications to non-container trees, shrubs and other ornamentals should be made around the general area of the drip line. Watering of the treated area should follow application to activate and promote uptake of METSYSTOX-R 2 Ornamental Insecticide. 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. Measurement to determine rate on shrubbery should be obtained by estimating total diameter of individual shrub stems at or near soil level.

\* See MIXING instructions

**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 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:** Non-refillable Metal: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by any procedure approved by State and local authorities. Non-refillable Plastic: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by State and local authorities by burning. If burned, stay out of smoke. Returnable Refillable Sealed Container: Do not rinse container. Do not break seals. Replace the dust cover cap and return container intact to point of purchase.

**STORAGE:** 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.

**FOR 24-HOUR EMERGENCY ASSISTANCE (SPILL, LEAK, OR FIRE), CALL CHEMTREC (800) 424-9300.**  
For other product information, contact Gowan Company or see Material Safety Data Sheet.

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