

10163-220

08/16/2007

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U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs  
Registration Division (7505P)  
Ariel Rios Building  
1200 Pennsylvania Ave., NW  
Washington, D.C. 20460

EPA Reg. Number:

10163-220

Date of Issuance:

AUG 16 2007

NOTICE OF PESTICIDE:

Registration  
 Reregistration  
(under FIFRA, as amended)

Term of Issuance:

Name of Pesticide Product:

MSR ® Spray Concentrate

Name and Address of Registrant (include ZIP Code):

Andrea Winburn  
Registration Specialist  
Gowan Company  
P.O. Box 5569  
Yuma, AZ 85366-5569

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

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

Based on your response to the Reregistration Eligibility Decision, EPA has reregistered the product listed above. This action is taken under the authority of section 4(g)(2)(C) of the Federal Insecticide, Fungicide, and Rodenticide Act, as amended. Reregistration under this section does not eliminate the need for continual reassessment of pesticides. EPA may require submission of data at anytime to maintain the registration of your product.

Generic data requirements that have been identified in the RED as confirmatory data for the active ingredient contained in the subject product will continue to be tracked and assessed in the Agency's continual reassessment of pesticides.

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, is acceptable with the following comments:

1. Add "Pints/Acre" to the heading of the third column in the rates table.
2. Delete the phrase "Recommended Applications" from the top of the rates table.

Continued on Page 2

Signature of Approving Official:

*Meredith J. Laws*  
Meredith Laws, Chief  
Insecticide-Rodenticide Branch  
Registration Division (7505P)

Date:

AUG 16 2007

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Regarding the Special Local Need registrations associated with the parent product registration (CA950002, CA010003, FL960006, ID0100011, NY030002, WA030001, WA030002, and WA060005), the following labeling comments apply:

1. In the Restricted Use Box, the phrase must read, "Due to Reproductive Effects and Acute Toxicity."
2. The only application method allowed on FL960006 is trunk directed microjet sprinklers. Delete reference to any other application method listed on this label (e.g., airplane, mist-type equipment, etc.).
3. For NY030002, WA030001, WA030002, WA060005, and FL960006 add "pints/acre" either to the third column heading or with the rate in the third column.
4. For CA950002, CA010003, ID010011, WA030001, and WA030002 delete "Recommended Applications" at the top of the rates table.

Please forward a copy of the revised SLN labeling to the appropriate State official(s) for their comment/approval. Any additional State-stipulated wording or limitations, including reference to applicable State Rules or Regulations or updates to them, must appear on the labeling. Please notify the Agency by e-mail to [nguyen.stephanie@epa.gov](mailto:nguyen.stephanie@epa.gov) when you actually do forward the revised SLN label(s) to the State(s). When submitting each label to the State, please request the State to forward a copy of the revised SLN label (including their additions, if any) to the Agency for official confirmation of their receipt and approval since Agency approval of the State's notification is required to finalize the action.

The Agency has completed the cumulative assessment for the organophosphate pesticides (OPs) and finalized the Interim Reregistration Eligibility Decisions (IREDs) for the OP pesticides. The assessment and supporting documents may be found on the Agency's website at [www.epa.gov/pesticides/cumulative](http://www.epa.gov/pesticides/cumulative) and in the docket (EPA-HQ-OPP-2006-0618).

You must submit one (1) copy of the final printed label before you release the product for shipment. Products shipped after 12 months from the date of this Notice or the next printing of your label, which ever occurs first, must bear the new revised label.

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

If you have any questions or comments regarding this letter, please contact Stephanie Nguyen at (703) 605-0702 or via e-mail at [Nguyen.Stephanie@epa.gov](mailto:Nguyen.Stephanie@epa.gov).

Meredith F. Laws, Chief  
Insecticide-Rodenticide Branch  
Registration Division (7505P)

Enclosure

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**RESTRICTED USE PESTICIDE**

**Due to Reproductive Effects and Acute Toxicity**

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.

ATTENTION: THIS PRODUCT CONTAINS A CHEMICAL KNOWN TO THE STATE OF CALIFORNIA TO CAUSE BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

# MSR<sup>®</sup> SPRAY CONCENTRATE

**SYSTEMIC INSECTICIDE  
FOR EFFECTIVE SYSTEMIC CROP PROTECTION**

**ACTIVE INGREDIENT:**

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

**OTHER INGREDIENTS** ..... 75.0%

**TOTAL 100.0%**

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

(This product contains aromatic petroleum distillates.)

**-STOP-**

**READ THE LABEL BEFORE USE**

**KEEP OUT OF REACH OF CHILDREN**

## DANGER/PELIGRO

### ☠ POISON ☠

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.)

**FIRST AID  
ORGANOPHOSPHATE**

<b>If swallowed</b>	<ul style="list-style-type: none"> <li>• Immediately call a poison control center or doctor.</li> <li>• Do not induce vomiting unless told to do by a poison control center or doctor.</li> <li>• Do not give any liquid to the person.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<b>If on skin or clothing</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If inhaled</b>	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>
<b>If in eyes</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>

**HOT LINE NUMBER**

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact **1-888-478-0798** for emergency medical treatment information.

**NOTE TO PHYSICIAN**

This product may pose an aspiration pneumonia hazard. Contains petroleum distillates. This product is an organophosphate insecticide. If symptoms of cholinesterase inhibition are present, atropine sulfate by injection is antidotal. 2-PAM is also antidotal and may be administered, but only in conjunction with atropine. Probable mucosal damage may contraindicate the use of gastric lavage.

**ACCEPTED  
with COMMENTS**

**In EPA Letter Dated  
AUG 16 2007**

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

**10163-220**

**NET CONTENTS 2.5 GALLONS**



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

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

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

**PRECAUTIONARY STATEMENTS  
Hazards to Humans and Domestic Animals  
DANGER/PELIGRO  
POISON**

Corrosive. Fatal if swallowed. Fatal if absorbed through skin. Fatal if inhaled. Causes skin burns. Causes moderate eye irritation. Do not get in eyes, on skin, or on clothing. Do not breathe spray mist.

See Side/Back Panel for additional precautionary statements.

**PERSONAL PROTECTIVE EQUIPMENT (PPE)**

Some materials that are chemical-resistant to this product are barrier laminate or butyl rubber. If you want more options, follow the instructions for category B on an EPA chemical-resistance category selection chart.

**Mixers, loaders, applicators, and flaggers using engineering controls must wear:**

- Long-sleeved shirt and long pants,
- Shoes plus socks.

**In addition, mixers and loaders using engineering controls also must wear:**

- Chemical-resistant gloves, and
- Chemical-resistant apron.

See engineering controls for additional requirements.

**Handlers performing tasks, such as cleaning equipment or spill clean-up, for which engineering controls are not feasible must wear:**

- Coveralls over long-sleeved shirt and long pants,
- Chemical-resistant gloves,
- Chemical-resistant footwear plus socks,
- Chemical-resistant apron, if exposed to the concentrate,
- Chemical-resistant headgear for overhead exposure, and
- A respirator with 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), or a NIOSH-approved respirator with an organic vapor (OV) cartridge or canister with any R, P, or HE prefilter.

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

**USER SAFETY RECOMMENDATIONS**

**Users should:**

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing/PPE 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.

**ENGINEERING CONTROLS**

Mixers and loaders must use a closed system that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4)], and must:

- Wear the personal protective equipment required for mixers/loaders using engineering controls
- Wear protective eyewear if the system operates under pressure
- Be provided chemical-resistant footwear and must have it immediately available for use in an emergency, such as a broken package, spill, or equipment breakdown.

Applicators using motorized ground equipment and flaggers supporting aerial applications must use an enclosed cab that meets the definition in the Worker Protection Standard for Agriculture Pesticides [40 CFR 170.240(d)(5)] for dermal protection. In addition, such applicators and flaggers must:

- Wear the personal protective equipment required for applicators using engineering controls
- Be provided and must have immediately available for use in an emergency when they must exit the cab in the treated area, coveralls, chemical-resistant gloves, and chemical-resistant footwear
- Take off any PPE that was worn in the treated area before reentering the cab
- Store all such PPE in a chemical-resistant container, such as a plastic bag, to prevent contamination of the inside of the cab

Pilots must use an enclosed cockpit in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(6)]. When entering or leaving an aircraft contaminated with pesticide residues, pilots must wear chemical-resistant gloves and must store used gloves in a chemical-resistant container, such as a plastic bag, to prevent contamination of the inside of the cockpit.

**ENGINEERING CONTROLS FOR PRODUCT PACKAGED IN WATER-SOLUBLE BAGS**

Water-soluble packets when used correctly qualify as a closed mixing/loading system under the Worker Protection Standard for Agricultural Pesticides [40 CFR 170.240(d)(4)]. Mixers and loaders using water-soluble packets must:

- Wear the personal protective equipment required for mixers/loaders using engineering controls
- Be provided chemical-resistant footwear and must have it immediately available for use in an emergency, such as a broken package, spill, or equipment breakdown

Applicators using motorized ground equipment and flaggers supporting aerial applications must use an enclosed cab that meets the definition in the Worker Protection Standard for Agricultural Pesticides [40 CFR 170.240(d)(5)] for dermal protection. In addition, ground applicators and flaggers must:

- Wear the personal protective equipment required above for applicators using engineering controls
- Be provided and must have immediately available for use in an emergency when they must exit the cab in the treated area, coveralls, chemical-resistant gloves, and chemical-resistant footwear
- Take off any PPE that was worn in the treated area before reentering the cab
- Store all such PPE in a chemical-resistant container, such as a plastic bag, to prevent contamination of the inside of the cab

Pilots must use an enclosed cockpit in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(6)]. When entering or leaving an aircraft contaminated with pesticide residues, pilots must wear chemical-resistant gloves and must store used gloves in a chemical-resistant container, such as a plastic bag, to prevent contamination of the insides of the cockpit.

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**ENVIRONMENTAL HAZARDS**

This pesticide is toxic to fish and wildlife. 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.

Refer to the directions for use for required buffer zones around permanent water bodies.

**DECLARACIONES DE PRECAUCION  
RIESGOS PARA HUMANOS Y ANIMALES DOMESTICOS**

**PELIGRO  
VENENO**

Corrosivo. Fatal si se ingiere. Fatal si es absorbido a través de la piel. Fatal si se inhala. Causa quemaduras en la piel. Ocasiona moderada irritación a los ojos. No lo aplique a los ojos, la piel, o la ropa. No respire los vapores ni el. **MANTENGASE FUERA DEL ALCANCE DE LOS NIÑOS.**

Vea el panel de lado/parte posterior para declaraciones preventivas adicionales.

**EQUIPO DE PROTECCIÓN PERSONAL (EPP)**

Algunos materiales que tienen resistencia química a este producto son Laminados-barrera y Viton. Si desea más opciones, siga las instrucciones proporcionadas para la categoría B en una tabla de selección de categorías de resistencia química de la EPA.

**Los mezcladores, cargadores, aplicadores y ayudantes de señalización que utilizan controles de Ingeniería tienen que llevar:**

- Camisa de manga larga y pantalón largo
- Zapatos y calcetines

**Además, los mezcladores y cargadores que utilizan controles de ingeniería tienen que llevar también:**

- Guantes resistentes a productos químicos
- Delantal resistente a productos químicos

Consulte los requisitos adicionales estipulados en Controles de Ingeniería.

**Los manipuladores que realizan tareas tales como la limpieza de equipos o la limpieza de vertidos, para los cuales no son viables los controles de ingeniería, tienen que llevar:**

- Mono sobre camisa de manga larga y pantalón largo
- Guantes resistentes a productos químicos
- Calzado resistente a productos químicos y calcetines
- Delantal resistente a productos químicos, si está expuesto al concentrado
- Sombrero resistente a productos químicos para proteger exposición por encima de la cabeza y
- Un respirador con un filtro para remover vapores orgánicos y con un prefiltro aprobado para uso con pesticidas (prefijo TC-23C con número de aprobación de MSHA/NIOSH), o un cartucho aprobado para los pesticidas (con número de aprobación de MSHA/NIOSH- prefijo TC-14G), o un respirador NIOSH-aprobado con un filtro para remover vapores orgánicos (OV) o un cartucho con prefiltros R, P, o HE.

Siga las instrucciones del fabricante para limpiar/mantener el EPP. Si no existen instrucciones de lavado, utilice detergente y agua caliente. Mantenga y lave el EPP por separado, no con otras prendas. Deseche las prendas y otros materiales absorbentes que hayan sido empapados o fuertemente contaminados con el concentrado de este producto. No los vuelva a utilizar.

**RECOMENDACIONES DE SEGURIDAD PARA USUARIOS**

- Lavar las manos antes de comer, beber, mascar chicle, usar tabaco, o usar el baño.
- Quitar la ropa/EPP inmediatamente si ha habido contacto con el plaguicida. Bañarse bien 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.

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### CONTROLES DE INGENIERÍA

Los mezcladores y cargadores tienen que utilizar un sistema cerrado que cumpla los requisitos de la Norma de Protección del Trabajador (Worker Protection Standard - WPS) relativos a los pesticidas agrícolas [40 CFR 170.240(d)(4)], y tienen que:

- Llevar el equipo de protección personal requerido para mezcladores/cargadores que utilicen controles de ingeniería
- Llevar protección ocular si el sistema funciona bajo presión
- Disponer de calzado resistente a productos químicos y tenerlo disponible inmediatamente para su uso en un caso de emergencia, tales como la rotura de un paquete, un vertido o la avería de un equipo.

Los aplicadores que utilicen equipos terrestres motorizados y los ayudantes de señalización que trabajen en apoyo de aplicaciones aéreas tienen que utilizar una cabina cerrada que cumpla la definición de la Norma de Protección del Trabajador relativos a los pesticidas agrícolas [40 CFR 170.240(d)(5)] para la protección dérmica. Además, dichos aplicadores y ayudantes de señalización tienen que:

- Llevar el equipo de protección personal requerido para aplicadores que utilicen controles de ingeniería
- Disponer de y tener inmediatamente disponible para su uso en caso de emergencia cuando tienen que salir de la cabina en una zona tratada, monos, guantes resistentes a productos químicos, y calzado resistente a productos químicos
- Quitarse cualquier EPP que tenía puesto en la zona tratada antes de volver a entrar en la cabina
- Guardar todos los EPP en un recipiente resistente a productos químicos, tal como una bolsa de plástico, para evitar contaminar el interior de la cabina

Los pilotos tienen que utilizar una cabina cerrada de una manera que cumpla los requisitos de la Norma de Protección del Trabajador (WPS) relativos a los pesticidas agrícolas [40 CFR 170.240(d)(6)]. Al entrar en o salir de un avión contaminado con residuos de pesticida, los pilotos tienen que llevar guantes resistentes a productos químicos, y tienen que guardar los guantes usados en un recipiente resistente a productos químicos, tal como una bolsa de plástico, para evitar la contaminación del interior de la cabina.

### CONTROLES DE INGENIERÍA PARA EL PRODUCTO EMPAQUETADO EN PAQUETES SOLUBLES EN AGUA

Cuando los paquetes solubles en agua se usan correctamente se consideran un sistema de circuito cerrado para mezclar y cargar el producto bajo los estándares de la Norma de Protección del Trabajador (Worker Protection Standard - WPS) con relación al pesticida agrícola [40 CFR 170.240(d)(4)]. Los mezcladores y los cargadores que usan estos paquetes solubles en agua tienen que:

- Llevar el equipo de protección personal requerido para mezcladores/cargadores que utilicen controles de ingeniería
- Llevar protección ocular si el sistema funciona bajo presión
- Disponer de calzado resistente a productos químicos y tenerlo disponible inmediatamente para su uso en un caso de emergencia, tales como la rotura de un paquete, un vertido o la avería de un equipo.

Los aplicadores que utilicen equipos terrestres motorizados y los ayudantes de señalización que trabajen en apoyo de aplicaciones aéreas tienen que utilizar una cabina cerrada que cumpla la definición de la Norma de Protección del Trabajador relativos a los pesticidas agrícolas [40 CFR 170.240(d)(5)] para la protección dérmica. Además, dichos aplicadores y ayudantes de señalización tienen que:

- Llevar el equipo de protección personal requerido para aplicadores que utilicen controles de ingeniería
- Disponer de y tener inmediatamente disponible para su uso en caso de emergencia cuando tienen que salir de la cabina en una zona tratada, monos, guantes resistentes a productos químicos, y calzado resistente a productos químicos
- Quitarse cualquier EPP que tenía puesto en la zona tratada antes de volver a entrar en la cabina
- Guardar todos los EPP en un recipiente resistente a productos químicos, tal como una bolsa de plástico, para evitar contaminar el interior de la cabina

Los pilotos tienen que utilizar una cabina cerrada de una manera que cumpla los requisitos de la Norma de Protección del Trabajador (WPS) relativos a los pesticidas agrícolas [40 CFR 170.240(d)(6)]. Al entrar en o salir de un avión contaminado con residuos de pesticida, los pilotos tienen que llevar guantes resistentes a productos químicos, y tienen que guardar los guantes usados en un recipiente resistente a productos químicos, tal como una bolsa de plástico, para evitar la contaminación del interior de la cabina.

### PHYSICAL AND CHEMICAL HAZARDS

Flammable. Keep away from heat and open flame.

### DIRECTIONS FOR USE

#### General Precautions and Restrictions

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. Not for Use in Greenhouses.

### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries and greenhouses and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard. Do not enter or allow entry into treated areas during the restricted-entry interval (REI). The REI for each crop is listed in the directions for use associated with each crop. ODM is a double notification chemical. Notify workers of the application by warning them orally and by posting warning signs at entrances to treated areas. 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 made of any waterproof material
- Chemical-resistant footwear plus socks
- Chemical-resistant headgear (if overhead exposure)

**REQUISITOS PARA USO AGRICOLA**

Solamente utilice este producto conforme las instrucciones en la etiqueta y conforme a la Norma de Protección del Trabajador, 40 "CFR" Parte 170. Esta norma contiene los requisitos para la protección de trabajadores agrícolas en fincas, bosques, viveros, invernaderos y manipuladores de plaguicidas agrícolas. Contiene los requisitos para entrenamiento, descontaminación, notificación y ayuda de emergencia. También contiene instrucciones específicas y excepciones pertinentes para lo mencionado en esta etiqueta sobre Equipo de Protección Personal (EPP) e intervalo de entrada restringida. Los requisitos en este cuadro sólo son aplicables a los usos del producto que están contenidos en la Norma de Protección del Trabajador. No entre ni permita la entrada de trabajadores a las áreas tratadas durante el intervalo de entrada restringida, (IER). Este dato se incluye en las direcciones de uso asociadas con cada cosecha. ODM es un producto químico de doble notificación. Notifique a trabajadores de que ha sido aplicado diciéndoles verbalmente y también poniendo señales de peligro en las entradas a las áreas tratadas. Se tiene que usar el siguiente equipo de protección personal cuando la Norma de Protección del Trabajador permita entrar a áreas tratadas antes de que termine el intervalo de entrada restringida y cuando involucre el contacto con lo que haya sido tratado, por ejemplo, las plantas, la tierra, y el agua:

- Mameluco (overol) sobre camisa de manga larga y pantalón largo
- Guantes resistentes a productos químicos, así como protector laminado, hule (butilado o nitrilo) o vitón
- Calcetines (medias) y zapatos resistentes a productos químicos
- Sombrero o gorro resistente a productos químicos en caso de aplicaciones por encima de la cabeza

**IMPORTANT:** Read the entire Directions and Conditions of Sale before using MSR Spray Concentrate Systemic Insecticide. MSR Systemic Insecticide penetrates by absorption and is translocated in the plant. The best time to apply MSR 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**

MSR 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 MSR 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.

**If this product is packaged in WATER-SOLUBLE BAGS, please read and observe the following directions for use:**

- To prepare the spray mixture, begin with the spray tank filled at least 1/3 full with water. Turn on spray tank agitation prior to adding water-soluble bags.
- First determine the amount of MSR Spray Concentrate to be added to the spray tank based on the recommended rates. Then determine the number of inner bags necessary to meet that required amount of product. **Note:** Two (2) pints = One (1) quart. *For example: If it is determined that 8 pints should be added to the spray tank, use 4 one-quart inner water soluble-bags. Where the amount of MSR Spray Concentrate is expressed as a fraction of a bag, prepare the tank mix load to the lower of the nearest whole bag. For example: If 10½ pints (5¼ quarts) are needed, use 5 one-quart bags. Do not break bags.*
- Open the required number of protective outer packages, which must not be added to the spray tank. Only the inner bags containing MSR Spray Concentrate are water-soluble. Avoid exposing inner bags to moisture or allow them to become wet prior to adding to the spray tank. Do not handle inner bag with wet hands.
- Add the required number of intact inner bags of MSR Spray Concentrate to the spray tank while filling with water to the desired level (whenever possible direct the fill water over the top of the packets to increase the rate of solubility).
- Maintain continuous agitation during initial mixing to ensure complete bag dissolution. Depending on the water temperature and the degree of agitation, the packets should be completely dissolved within approximately three to five minutes from the time they were added to the spray tank.
- Once the inner bags have completely dissolved, add other chemicals following conventional mixing order practices.

**IMPORTANT NOTE ABOUT BORON:** Tank-mix solutions containing boron will affect the solubility of the water-soluble film. Thoroughly rinse the spray tank of any boron-containing spray solution prior to adding any water-soluble packets. When preparing tank mixes containing boron, add the correct amount of MSR Spray Concentrate to the spray tank first. Make sure that the water-soluble packets are completely dissolved. Add boron preparations to the spray tank last. High concentrations of boron may cause dissolved water-soluble bag material to precipitate and form insoluble residue in the spray tank system and potentially clog filters and nozzles.

**DOSAGE**

Use specified dosage of MSR Spray Concentrate in the recommended amount of water or 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 amount of water required. Use the higher rates of MSR Spray Concentrate per acre under conditions of severe pest pressure.

**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.

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### 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. Do not apply within 150 feet by air or 100 feet by ground of an unprotected person or occupied building.

#### For ground boom applications:

Do not apply within 25 feet of any area managed for wildlife or wildlife habitat.

Apply with nozzle height no more than 2 feet above the ground or crop canopy, and when the wind speed is 10 mph or less at the application site as measured by an anemometer. Use a coarse or coarser spray (ASAE definition 572) for standard nozzles, or a volume median diameter (VDM) of 385 microns or greater for spinning atomizer nozzles.

#### For overhead chemigation:

Do not apply within 25 feet of any area managed for wildlife or as wildlife habitat.

Apply only when wind speed is 10 mph or less.

#### For airblast applications:

For orchard and other airblast applications, do not apply within 50 feet of any area managed for wildlife or wildlife habitat

Do not direct spray above trees and vines, and turn off outward pointing nozzles at row ends and when spraying the outer 2 rows. Apply only when the wind speed is 3-10 mph at the application site as measured by an anemometer outside of the orchard or vineyard on the upwind side.

#### For aerial application:

Do not apply within 100 feet of any area managed for wildlife or wildlife habitat.

The boom width must not exceed 75% of the wingspan or 90% of the rotary blade. Apply only when the wind speed is 3-10 mph as measured by an anemometer. Use coarse or coarser spray for standard nozzles (ASAE definition 572), or a volume median diameter (VDM) of 385 microns or greater for spinning atomizer nozzles. If the application includes a no-spray zone, do not release spray at a height greater than 10 feet above the ground or the crop canopy. When applications are made with a cross-wind, the swath will be displaced downwind. The applicator must compensate for his displacement at the downwind edge of the application area by adjusting the path of the aircraft upwind.

The applicator also must use all other measures necessary to control drift.

### RESISTANCE MANAGEMENT

MSR is an organophosphate insecticide. Based on historical use patterns in some areas, certain pest species listed on this label may have developed resistance to organophosphate insecticides. Consult your local agricultural advisor, State Cooperative Extension Service, or regional Gowan Company representative for recommendations

### USE IN CHEMIGATION SYSTEMS

**Types of Irrigation Systems:** Apply MSR Spray Concentrate only through sprinkler (including center pivot, lateral move, side roll, overhead solid set or low pressure) irrigation systems. Do not apply MSR 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 MSR 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.

MSR 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.



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#### AGITATION

For application of MSR Spray Concentrate alone, a chemical supply tank is not necessary for premixing since MSR Spray Concentrate mixes well with water in the irrigation line. If a chemical supply tank is used, for application of MSR 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 amount of MSR Spray Concentrate and water to mix in the tank.

The amount of MSR Spray Concentrate needed equals the number of pints of MSR 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 MSR Spray Concentrate needed.

For example, if you want to apply 1 pint of MSR Spray Concentrate per acre to 130 acres in 20 hours and your injection pump delivers 15 gallons per hour, you need 1 pint MSR Spray Concentrate per acre X 130 acres = 130 pints or 16.25 gallons of MSR Spray Concentrate. And, you need, 15 gallons per hour X 20 hours = 300 gallons of emulsion, minus 16.25 gallons of MSR 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 owner's 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 - 60 minutes of the regular irrigation period or as a separate 30 - 60 minute application not associated with a regular irrigation. **DO NOT USE END GUNS.**

**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 systems.

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

Injection should be during the last 30-60 minutes of a regular irrigation period or as a separate 30 - 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.

#### DRIP OR TRICKLE 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 drip or trickle irrigation systems. In addition, the following directions apply to drip or trickle irrigation systems.

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

Injection should generally be during the last 30 to 60 minutes of a regular irrigation period. However, the application interval should be such that at one period of time during the injection, the first and last emitters in the system contain MSR Spray Concentrate treated water. Injection can also be made as a separate application, not associated with a regular irrigation.

When applying MSR through drip or trickle irrigation systems for chemigation, all labeled crops which allow for application by sprinkler irrigation systems will also allow for application by drip and trickle irrigation systems.

#### PREHARVEST AND RESTRICTED ENTRY INTERVALS

The required days between the last application and harvest, Preharvest Interval (PHI) and Restricted Entry Interval (REI) are given after each crop name.

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**RECOMMENDED APPLICATIONS  
FIELD CROPS**

CROP	PEST	PINTS	COMMENTS
<b>COTTON</b> (Arizona and California only) REI = 7 days PHI = 14 days	Aphids, Thrips, Fleahoppers (Except CA)	½ - 1	Permitted application methods: chemigation and groundboom. Aerial application is prohibited. Apply specified dosage per acre in sufficient water for complete coverage but not less than one gallon per acre. For application by irrigation systems, apply specified dosage per acre. Follow all directions given under the CHEMIGATION section of this label.
	Mites (Except California)	1½ - 2	
	Aphids, Mites, Lygus Bugs (California only)	1½ - 2	
<ul style="list-style-type: none"> <li>Do not apply more than 1 time per crop cycle</li> <li>Do not graze or feed gin trash to dairy or meat animals</li> </ul>			
<b>CORN (Sweet only)</b> (permitted only in states west of the Rocky Mountains, including Hawaii) REI = 13 days PHI = 26 days	Aphids, Leafhoppers, Mites, Thrips, Corn Rootworm Beetles	1½ - 2	Permitted application method: aerial, chemigation and groundboom. 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. For application by irrigation systems, apply specified dosage per acre. Follow all directions given under the CHEMIGATION section of this label.
	<ul style="list-style-type: none"> <li>Do not apply more than 2 times per crop cycle</li> <li>Minimum of 7 days between applications</li> <li>Do not harvest corn fodder or use for forage within 26 days of application</li> <li>Prohibition: do not hand harvest or allow workers to perform hand harvesting tasks for 26 days after application. Prohibition: hand detasseling is prohibited. Notify workers of these prohibitions</li> </ul>		
<b>PEPPERMINT, SPEARMINT</b> REI = 19 days PHI = 14 days	Aphids, Mites	¾	Permitted application methods: chemigation and groundboom. Aerial application is prohibited. Mechanical harvesting is required. Apply specified dosage in at least 20 gals. of water per acre with ground equipment. For established infestations, make 2 applications 10-14 days apart. For application by irrigation systems, apply specified dosage per acre. Follow all directions given under the CHEMIGATION section of this label.
	<ul style="list-style-type: none"> <li>Do not apply more than 2 times per crop cycle</li> <li>Minimum of 10 days between applications</li> </ul>		
<b>SAFFLOWER</b> (California and Arizona only) REI = 15 days PHI = 7 days	Aphids	2	Permitted application methods: aerial, chemigation and groundboom. Mechanical harvesting is required. Apply specific dosage per acre in sufficient water for complete coverage, but not less than 10 gallons per acre.
	Lygus bugs	2	
<ul style="list-style-type: none"> <li>Do not apply more than 2 times per crop cycle</li> <li>Minimum of 7 days between applications</li> </ul>			
<b>SUGAR BEETS</b> REI = 30 days PHI = 30 days	Aphids, Leafhoppers, Mites	1½ - 2	Permitted application methods: aerial, chemigation, and groundboom. Mechanical harvesting is required. Apply specified dosage per acre in sufficient water for complete coverage but not less than one gallon per acre. For application by irrigation systems, apply specified dosage per acre. Follow all directions given under the CHEMIGATION section of this label.
	<ul style="list-style-type: none"> <li>Do not apply more than 1 time per crop cycle</li> <li>Do not harvest beets or use beet tops for feed or forage within 30 days of application</li> </ul>		

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**SEED FIELD CROPS**

CROP	PEST	PINTS	COMMENTS
<b>ALFALFA, CLOVER</b> REI = 15 days PHI = 21 days	Aphids, Leafhoppers, Mites, Thrips, Lygus bugs	1½-2	Permitted application methods: aerial, chemigation, and groundboom. Apply in early morning or evening to avoid exposure to bees. Mechanical harvesting is required. Apply specified dosage per acre in sufficient water for complete coverage but not less than one gallon per acre. Chaff from seed crop may be used for feed or forage, but the cut green crop may not be used for these purposes. For application by irrigation systems apply specified dosage per acre. Follow all directions given under the CHEMIGATION section of this label.
<ul style="list-style-type: none"> <li>Do not apply more than 2 times per crop cycle</li> <li>Minimum of 14 days between applications</li> </ul>			

**NON-BEARING FRUITS**

CROP	PEST	PINTS	COMMENTS
<b>FRUIT TREES, NON-BEARING</b> (Apples, Apricots, Cherries, Crab Apples, Nectarines, Peaches, Plums, Prunes, Quinces) REI = 16 days	Aphids, Mites	¾	Permitted application method: airblast. For airblast applications, turn off outward pointing nozzles at row ends and when spraying the outer two rows. Aerial application and chemigation is prohibited. As a full coverage spray, apply specified dosage in 100 gals. of water on non-bearing trees; but do not exceed 300 gals. of finished spray per acre per application.
<ul style="list-style-type: none"> <li>Do not apply more than 2 times per crop cycle</li> <li>Minimum of 7 days between applications</li> <li>Do not apply to trees that will bear fruit within the next 12 months</li> <li>Retail sale of treated plants is prohibited for 16 days after application</li> </ul>			
<b>GRAPES, NON-BEARING</b> REI = 18 days	Aphids, Mites	¾	Permitted application method: airblast. For airblast applications, turn off outward pointing nozzles at row ends and when spraying the outer two rows. Aerial application and chemigation is prohibited. As a full coverage spray, apply specified dosage in 100 gals. of water on non-bearing trees; but do not exceed 300 gals. of finished spray per acre per application.
<ul style="list-style-type: none"> <li>Do not apply more than 2 times per crop cycle</li> <li>Minimum of 7 days between applications</li> <li>Do not apply to trees that will bear fruit within the next 12 months</li> <li>Retail sale of treated plants is prohibited for 16 days after application</li> </ul>			

**VEGETABLES**

CROP	PEST	PINTS	COMMENTS
<b>BEANS (Lima)</b> REI = 17 days PHI = 21 days	Leafhoppers, Mites Lygus bugs (California Only)	2	Permitted application methods: aerial, chemigation, and groundboom. Apply specified dosage in at least 4 gals. of water per acre. For application by irrigation systems, apply specified dosage per acre. Follow all directions given under the CHEMIGATION section of this label.
<ul style="list-style-type: none"> <li>Do not apply more than 2 times per crop cycle</li> <li>Minimum of 7 days between applications</li> <li>Do not graze or cut treated vines for feed or forage within 21 days of application</li> </ul>			
<b>BROCCOLI, BROCCOFLOWER, BROCCOLINI, CAULIFLOWER</b> REI = 7 days* PHI = 7 days	Aphids	1½-2	Permitted application methods: aerial, chemigation, and groundboom. Apply specified dosage per acre in sufficient water for complete coverage but not less than one gallon per acre. For application by irrigation systems, apply specified dosage per acre. Follow all directions given under the CHEMIGATION section of this label.
<ul style="list-style-type: none"> <li>Do not apply more than 2 times per crop cycle</li> <li>Minimum of 7 days between applications</li> </ul> <p>* In addition to the early entry exceptions allowed by the Worker Protection Standard, you may enter or allow workers to enter treated areas to irrigate immature plants 3 days following application as long as the worker wears long pants, long sleeved shirt, and shoes plus socks. Notify workers of this exception</p>			
<b>BRUSSEL SPROUTS</b> REI = 7 days* PHI = 10 days	Aphids	1½-2	Permitted application methods: aerial, chemigation, and groundboom. Apply specified dosage per acre in sufficient water for complete coverage but not less than one gallon per acre. For application by irrigation systems, apply specified dosage per acre. Follow all directions given under the CHEMIGATION section of this label.
<ul style="list-style-type: none"> <li>Do not apply more than 3 times per crop cycle</li> <li>Minimum of 7 days between applications</li> </ul> <p>* In addition to the early entry exceptions allowed by the Worker Protection Standard, you may enter or allow workers to enter treated areas to irrigate immature plants 3 days following application as long as the worker wears long pants, long sleeved shirt, and shoes plus socks. Notify workers of this exception</p>			

<b>CABBAGE</b> (Includes tight-heading varieties of Chinese cabbage) REI = 7 days* PHI = 7 days	Aphids, Thrips	1½-3	Permitted application method: aerial, chemigation and groundboom. Apply specified dosage per acre in sufficient water for complete coverage but not less than one gallon per acre. For application by irrigation systems, apply specified dosage per acre. Follow all directions given under the CHEMIGATION section of this label.
	<ul style="list-style-type: none"> <li>Do not apply more than 3 times per crop cycle</li> <li>Minimum of 7 days between applications</li> </ul> * In addition to the early entry exceptions allowed by the Worker Protection Standard, you may enter or allow workers to enter treated areas to irrigate immature plants 3 days following application as long as the worker wears long pants, long sleeved shirt, and shoes plus socks. Notify workers of this exception		
<b>CUCURBITS</b> (includes cucumbers, pumpkins, summer squash, winter squash, watermelons, muskmelons (cantaloupes), other melons) REI = 14 days PHI = 14 days	Aphids, Mites, Cucumber Beetles	1½-2	Permitted application methods: aerial, chemigation and groundboom. Apply specified dosage per acre in sufficient water for complete coverage but not less than one gallon per acre. For application by irrigation systems, apply specified dosage per acre. Follow all directions given under the CHEMIGATION section of this label.
	<ul style="list-style-type: none"> <li>Do not apply more than 1 time per crop cycle</li> </ul>		
<b>HEAD LETTUCE</b> REI = 3 days PHI = 21 days for all of US, except Arizona and California = 14 days for 1 application = 21 days for 2 applications	Aphids, Mites	2	Permitted application methods: aerial, chemigation and groundboom. Apply specified dosage per acre in sufficient water for complete coverage but not less than one gallon per acre. For application by irrigation systems, apply specified dosage per acre. Follow all directions given under the CHEMIGATION section of this label.
	<ul style="list-style-type: none"> <li>Do not apply more than 3 times per crop cycle</li> <li>Minimum of 7 days between applications</li> <li>Prohibition: hand harvesting is prohibited until 14 days following application. Notify workers of this prohibition</li> </ul>		
<b>ONIONS, SPANISH (BULB)</b> (permitted only in states west of the Mississippi River) REI = 10 days PHI = 30 days	Thrips (population suppression only)	1½-2  Or  3 (single application)	Permitted application methods: aerial, chemigation and groundboom. Apply specified dosage per acre in sufficient water for complete coverage but not less than 10 gallon per acre. For application by irrigation systems, apply specified dosage per acre. Follow all directions given under the CHEMIGATION section of this label.
	<ul style="list-style-type: none"> <li>Do not apply more than 2 times per crop cycle</li> <li>Minimum of 14 days between applications</li> <li>Prohibition: hand weeding is prohibited for 10 days following an application of this product.</li> <li>Prohibition: hand thinning and hand harvesting are prohibited following an application of this product. Notify workers of this prohibition</li> </ul>		

**NUTS**

CROP	PEST	PINTS	COMMENTS
<b>FILBERTS</b> (Oregon and Washington only) REI = 17 days PHI = 116 days	Aphids	2	Permitted application method: airblast. For airblast applications, turn off outward pointing nozzles at row ends and when spraying the outer two rows. Aerial application and chemigation are prohibited. Use of handheld application equipment is prohibited. Mechanical harvesting is required. Apply either undiluted or diluted with an equal volume of water. For undiluted application apply ⅓ fluid ounce of product per inch of trunk diameter. For diluted application apply ⅔ fluid ounce of mixture per inch of trunk diameter. Apply specified dosage with a 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.
	<ul style="list-style-type: none"> <li>Do not apply more than 1 time per crop cycle</li> <li>Do not use on heavily stressed trees or on young trees with trunk diameters less than 2 inches</li> <li>Grazing or feeding of cover crops to livestock is prohibited</li> </ul>		
<b>WALNUTS</b> REI = 17 days PHI = 30 days	Aphids, Mites	¾	Permitted application method: airblast. For airblast applications, turn off outward pointing nozzles at row ends and when spraying the outer two rows. Aerial and chemigation applications are prohibited. Mechanical harvesting is required. As a full coverage spray, apply specified dosage in 100 gals. of water; but do not exceed 400 gals. of finished spray per acre per application.*
	<ul style="list-style-type: none"> <li>Do not apply more than 1 time per crop cycle</li> <li>Hand harvesting is prohibited</li> <li>Grazing or feeding cover crops to livestock is prohibited</li> </ul>		

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**TREES**

CROP	PEST	PINTS	COMMENTS
<b>CHRISTMAS TREES</b> (field grown or in outdoor nurseries) Use is prohibited in California. REI = 18 days	Adelgids, Aphids, Leafminers, Gypsy Moths, Mites, Thrips, White Pine Weevil	1 - 2	Permitted application method: aerial and airblast. Apply specified dosage per acre in sufficient water for complete coverage. For aerial application use a minimum of 5 gallons of water per acre. For airblast applications, turn off outward pointing nozzles at row ends and when spraying the outer two rows. Use of handheld application equipment is prohibited. Mechanical harvesting is required.
	Pine Needle Scale	2	
	<ul style="list-style-type: none"> <li>Do not make more than 2 applications per crop cycle</li> <li>Minimum of 7 days between applications</li> <li>Retail sale of treated plants is prohibited for 18 days after application</li> </ul>		
<b>FIELD GROWN NURSERY STOCK</b> (except California) REI = 10 days*	Adelgids, Aphids, Leafminers, Gypsy Moths, Mites, Thrips, White Pine Weevil	1 - 2	Permitted application method: aerial, airblast and groundboom. For airblast applications, turn off outward pointing nozzles at row ends and when spraying the outer two rows. Use of handheld application equipment is prohibited. For use only on seedling trees and non-bearing fruit trees in commercial nurseries. Outdoor use only. Use in greenhouses is prohibited.
	Pine Needle Scale	2	
	<ul style="list-style-type: none"> <li>Do not make more than 2 applications per crop cycle</li> <li>Minimum of 7 days between applications</li> <li>Retail sale of treated plants is prohibited for 10 days after application</li> </ul>		

\*This dosage of MSR 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 MSR Spray Concentrate in the spray mixture in order to apply amount of MSR 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.

**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 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.  
**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 an 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 run-off. 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 of 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 OF CONDITIONS OF SALE AND WARRANTY AND LIABILITY LIMITATIONS**

Important: Read the entire Directions for Use and Notice of Conditions of Sale and Warranty and Liability Limitations before using this product. If terms are not acceptable return the unopened container for a full refund.

Our directions for use of this product are based on tests believed to be reliable. However, it is impossible to eliminate all risk associated with the use of this product. Crop injury, inadequate performance, or other unintended consequences may result due to soil or weather conditions, off target movement, presence of other materials, method of use or application, and other factors, all of which are beyond the control of Gowan Company. All such risks shall be assumed by the Buyer and User.

Gowan Company warrants that this product conforms to the specifications on the label when used in strict conformance with Direction for Use, subject to the above stated risk limitations. GOWAN COMPANY MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY

TO THE FULLEST EXTENT PERMITTED BY LAW, GOWAN COMPANY'S EXCLUSIVE LIABILITY FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, OR ANY OTHER LEGAL THEORY IS STRICTLY LIMITED TO THE PURCHASE PRICE PAID OR REPLACEMENT OF PRODUCT, AT GOWAN COMPANY'S SOLE DISCRETION.

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